



## Higher National Unit specification: general information

**Unit title:** Dental Nursing: Orthodontics

**Unit code:** H0BN 35

**Superclass:** PF

**Publication date:** January 2012

**Source:** Scottish Qualifications Authority

**Version:** 02, March 2023

### Unit purpose

This Unit is designed to enable the candidate to demonstrate the knowledge and skills required to assist with orthodontic procedures. The Unit is suitable for registered dental nurses who work in an orthodontic environment.

On completion of the Unit the candidate should be able to:

- 1 Define the anatomical structures relevant to orthodontics
- 2 Describe the process of orthodontic assessment and records required
- 3 Describe orthodontic treatments
- 4 Define the role of the dental nurse during orthodontic procedures

### Recommended prior knowledge and skills

Access to this specialist Unit is *only* upon the successful completion of a registerable primary Dental Nurse Qualification and registration with the GDC. The candidate must be working in a dental environment which delivers orthodontic treatment. Their dentist must be willing to observe them and validate the workplace cases.

### Credit points and level

2 Higher National Unit credit(s) at SCQF level 8: (16 SCQF credit points at SCQF level 8\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

## **General information (cont)**

### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or core skill components in this Unit.

### **Context for delivery**

If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes. This Unit is an optional Unit within the HND in Dental Nursing.

## Higher National Unit specification: statement of standards

**Unit title:** Dental Nursing: Orthodontics

**Unit code:** H0BN 35

The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

### Outcome 1

Define the anatomical structures relevant to orthodontics.

#### Knowledge and/or Skills

- ◆ muscles of mastication
- ◆ muscles of facial expression
- ◆ tongue
- ◆ maxilla and mandible
- ◆ structure, morphology of deciduous and permanent teeth
- ◆ principles of tooth movement

#### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ Define the muscles of mastication
- ◆ Define the muscles of facial expression
- ◆ Define the structure of the tongue
- ◆ Report the structure, growth and development of the maxilla and mandible
- ◆ Describe the structure and morphology and eruption dates of deciduous and permanent teeth
- ◆ Describe the physiological process of tooth movement

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Dental Nursing: Orthodontics

### **Outcome 2**

Describe the process of orthodontic assessment and records required.

#### **Knowledge and/or Skills**

- ◆ Assessment records
- ◆ Classification of malocclusion and
- ◆ Medical History
- ◆ Clinical Photography
- ◆ Radiographs
- ◆ Index of Orthodontic Treatment Need (IOTN)
- ◆ Peer Assessment Rating (PAR)
- ◆ Medico-legal

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ Describe the content of written orthodontic assessments undertaken
- ◆ Define and describe the classifications of malocclusion and other diagnostic terminology
- ◆ Detail frequency for the recording of medical history
- ◆ Explain the relevant clinical photography views
- ◆ Detail the radiographs required for orthodontic assessment
- ◆ Undertake cephalometric tracing, digitisation and measurement
- ◆ Describe the use of IOTN
- ◆ Describe the use of PAR scoring
- ◆ Describe the relevant medico-legal requirements including: Consent, Data Protection, Storage of Orthodontic Records, Scope of Practice

### **Outcome 3**

Describe orthodontic treatments.

#### **Knowledge and/or Skills**

- ◆ Aims and limitation of orthodontic treatment
- ◆ Active removable appliances
- ◆ Passive removable appliances
- ◆ Fixed appliances
- ◆ Extra oral traction
- ◆ Combined orthodontic /surgical cases
- ◆ Combined orthodontic/restorative cases
- ◆ Cleft lip and palate cases

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Dental Nursing: Orthodontics

### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ Describe the aims and limitations of orthodontic treatments
- ◆ Explain the indications for active and passive removable appliance
- ◆ Describe the advantages/disadvantages, components and construction of active removable appliances
- ◆ Describe the advantages/disadvantages, components and construction of passive removable appliances
- ◆ Explain the indications for fixed appliances
- ◆ Describe the advantages/disadvantages, components and construction of fixed appliances
- ◆ Describe the principles and components of extra oral traction/anchorage
- ◆ Explain the role of orthodontics in orthodontic/surgical cases
- ◆ Explain the role of orthodontics in the orthodontic/restorative cases
- ◆ Describe the aetiology and classification of cleft lip and palate

### Outcome 4

Define the role of the dental nurse during orthodontic procedures.

### Knowledge and/or Skills

- ◆ Chairside support for study model
- ◆ Chairside support for active removable appliances
- ◆ Chairside support for passive removable appliances
- ◆ Chairside support for fixed appliances
- ◆ Oral health instruction for removable and fixed appliances

### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ Describe the dental nurses role in the preparation, production and laboratory preparation for study models
- ◆ Describe the dental nurses role in the preparation and fit of active removable appliances
- ◆ Describe the dental nurses role in the preparation and fit of passive removable appliances
- ◆ Describe the dental nurses role in the preparation, fit and debond of fixed appliances
- ◆ Detail the oral health instruction and appliance maintenance given to patients for removable and fixed appliances

## Higher National Unit specification: support notes

### Unit title: Dental Nursing: Orthodontics

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours. The majority of hours will be required for cementation of the practical skills in general dental practice.

### Guidance on the content and context for this Unit

#### Outcome 1

Define the anatomical structures relevant to orthodontics.

- ◆ Muscles of mastication
- ◆ Muscles of facial expression
- ◆ Structure of the tongue
- ◆ Structure of the maxilla and mandible
- ◆ Structure and morphology of deciduous and permanent teeth
- ◆ The physiological process of tooth movement

#### Outcome 2

Describe in detail orthodontic assessment and records required.

- ◆ New patient orthodontic assessments
- ◆ Classifications of malocclusion
- ◆ Frequency and content of medical histories
- ◆ Clinical photography views
- ◆ Radiographs required for orthodontic assessment
- ◆ Cephalometric tracing, digitisation and measurement
- ◆ IOTN
- ◆ PAR scoring
- ◆ medico-legal requirements including:
  - Consent
  - Data Protection
  - Caldicott principles
  - Storage of Orthodontic Records

## Higher National Unit specification: support notes (cont)

**Unit title:** Dental Nursing: Orthodontics

### Outcome 3

Describe orthodontic treatments.

- ◆ Aim and limitations of orthodontic treatment
- ◆ Indications for active removable appliances
- ◆ Advantages/disadvantages of active removable appliances
- ◆ Components of active removable appliances
- ◆ Construction of active removable appliances
- ◆ Indications for passive removable appliances
- ◆ Advantages/disadvantages of passive removable appliances
- ◆ Components of passive removable appliances
- ◆ Construction of passive removable appliances
- ◆ Indications for fixed appliances
- ◆ Advantages/disadvantages of fixed removable appliances
- ◆ Components of fixed removable appliances
- ◆ Construction of fixed removable appliances
- ◆ Principles and components of extra oral traction
- ◆ The role of orthodontics in orthodontic/surgical cases
- ◆ The role of orthodontics in the orthodontic/restorative cases
- ◆ Aetiology and classification of cleft lip and palate

### Outcome 4

Define in detail the role of the dental nurse during the following orthodontic procedures.

- ◆ The preparation, production and laboratory preparation for study models
- ◆ The preparation and fit of active removable appliances
- ◆ The preparation and fit of passive removable appliances
- ◆ The preparation and fit of functional removable appliances
- ◆ The preparation, fit, adjustment and debond of fixed appliances
- ◆ Oral health instruction and appliance maintenance given to patients for removable and fixed appliances

## Guidance on the delivery of this Unit

The nature of this Unit requires that it be delivered over a period of time — sufficient for candidates to complete the activities and gain sufficient experience to operate competently.

Delivery should be student centred and take account of actual workplace experience. The cases covered in the assessment of Outcome 4 must be real life patient cases and be witnessed by a Dentist who can detail the candidates contribution in the procedure. A pro forma 'Record of Orthodontic Patient Case' has been produced and is available to download from the SQA website if required.

The candidate should work in a practice that regularly offers a variety of orthodontic procedures to patients, in order for the candidate to develop and cement the skills learned.

## Higher National Unit specification: support notes (cont)

**Unit title:** Dental Nursing: Orthodontics

### Guidance on the assessment of this Unit

The evidence for this Unit should have a strong practical focus with the dentist observing the work of the candidate and validating workplace cases.

The Unit should be assessed using a variety of methods, as detailed below, as evidence of underpinning knowledge is required in addition to the practical element.

### Assessment Guidelines

#### Outcome 1

This Outcome could be assessed by a series of closed-book questions designed to cover the knowledge and skills and evidence requirements.

#### Outcome 2

Candidates should produce a detailed report explaining the process of orthodontic assessment including the records required. It is recommended that candidates include evidence which supports the report, ie observation reports, two of each clinical photography view and a minimum of two cephalometric tracings

#### Outcome 3

This Outcome should be assessed by a report covering the evidence requirements. Aspects of this Outcome may be assessed in combination with completion of Outcome 4. In addition a minimum of two case studies should be produced detailing patient cases from one of the following:

- ◆ Orthodontic/Surgical case
- ◆ Orthodontic/Restorative case
- ◆ Cleft lip/palate case

#### Outcome 4

This Outcome may be assessed holistically by performance evidence from the dental practice with the candidate participating in a minimum of 24 patient cases, which should be achieved using actual patient cases.

The recording of the patient cases will evidence the practical requirements of the role of the dental nurse during:

Range of evidence:

- ◆ Fixed appliances, 4 x Fit, 4 x Adjustment, 4 x Debond
- ◆ Removable appliances, 4 x Active, 4 x Passive, 4 x Functional

In addition the candidate must produce evidence detailing aspects of oral health instruction given to orthodontic patients.



## Higher National Unit specification: support notes (cont)

**Unit title:** Dental Nursing: Orthodontics

### Online and Distance Learning

This Unit is not suitable for online or distance learning due to the practical nature of the content.

### Opportunities for developing Core Skills

There are opportunities to develop the Core Skill(s) of *Communication* (Oral and Written), *Information and Communication Technology*, *Working with Others* and *Problem Solving* in this Unit, although there is no automatic certification of Core Skills or core skill components.

### Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements)

## History of changes to Unit

Version	Description of change	Date
2	Reduction to recommended patient cases to remove over assessment and replication.	07/03/23

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## General information for candidates

### Unit title: Dental Nursing: Orthodontics

This Unit has been designed to develop your knowledge, understanding and skills required to assist with orthodontic procedures. It is an optional Unit within the HND in Dental Nursing but can also be taken as a stand alone Unit, perhaps for the purposes of continued professional development.

This specialist Unit is suitable for you if you are a registered dental nurse working in an orthodontic environment.

On completion of this Unit you will be able to:

- ◆ Define the anatomical structures relevant to orthodontics
- ◆ Describe the process of orthodontic assessment and the records required
- ◆ Describe orthodontic treatment
- ◆ Define the role of the dental nurse during orthodontic procedures

There are various methods of assessment used, including observation of your performance (by your dentist). You may be asked to produce reports and case studies and complete question papers. The Unit will be delivered to you over a period of time to allow you to complete the required activities and gain sufficient experience to operate competently in your practice.