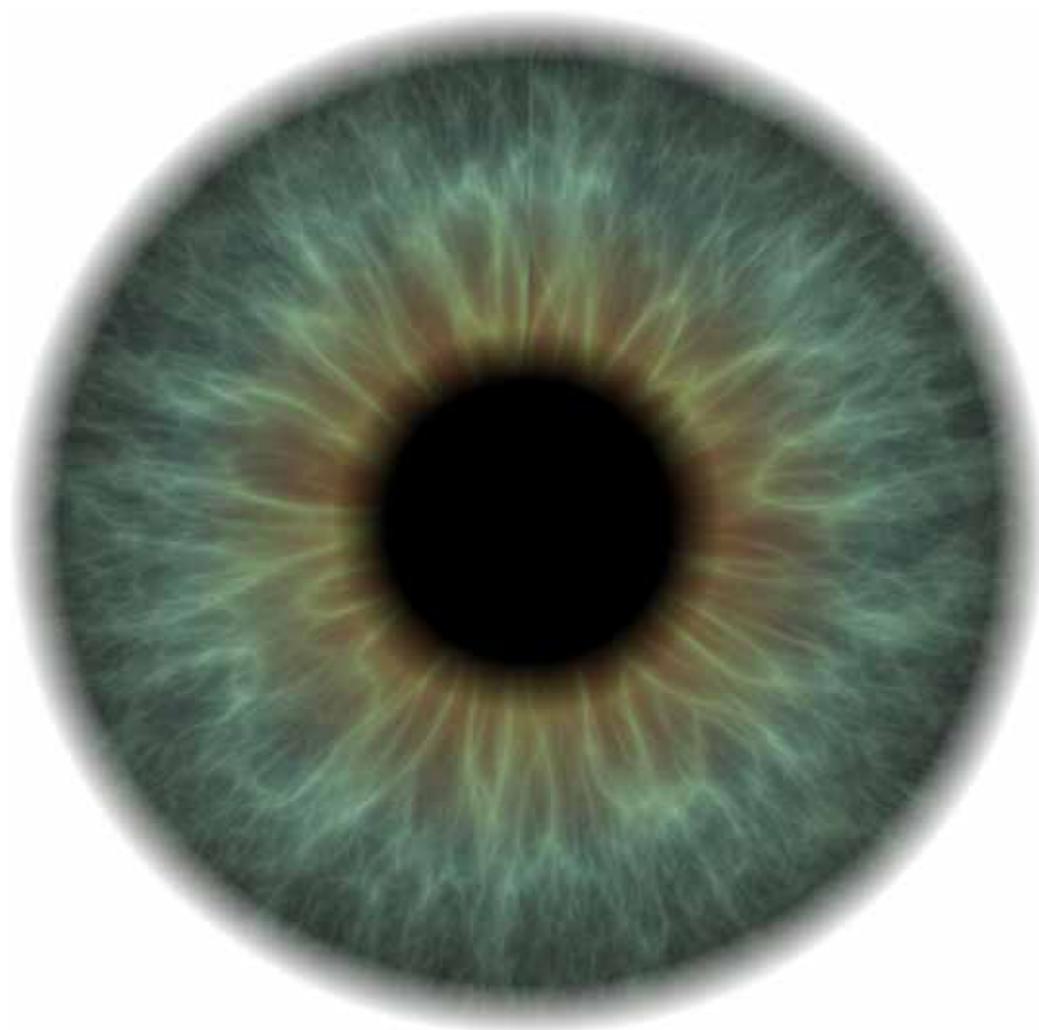


Level 3 Qualifications in Diabetic Retinopathy Screening (7360)

Qualification handbook for centres

500/6895/7, 500/6892/1, 500/6891/X,
500/6897/0, 500/6896/9



About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management, which provides management qualifications, learning materials and membership services), City & Guilds NPTC (which offers land-based qualifications and membership services), City & Guilds HAB (the Hospitality Awarding Body), and City & Guilds Centre for Skills Development. City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

Equal opportunities

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* (which can be found on the City & Guilds website) also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Publications

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)20 7294 2850 or faxing +44 (0)20 7294 3387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds

1 Giltspur Street

London EC1A 9DD

T +44 (0)20 7294 2800

F +44 (0)20 7294 2400

www.cityandguilds.com

centresupport@cityandguilds.com

Level 3 Qualifications in Diabetic Retinopathy Screening (7360)

Qualification handbook for centres

www.cityandguilds.com
September 2009
Version 1.0

Qualification title	Number	Ofqual ref.
Level 3 Certificate in Diabetic Retinopathy Screening (Imaging)	7360-01	500/6895/7
Level 3 Certificate in Diabetic Retinopathy Screening (Grading)	7360-01	500/6892/1
Level 3 Certificate in Diabetic Retinopathy Screening (Administration)	7360-01	500/6891/X
Level 3 Diploma in Diabetic Retinopathy Screening	7360-01	500/6897/0
Level 3 Diploma in Diabetic Retinopathy Screening	7360-01	500/6896/9

City & Guilds
Skills for a brighter future



www.cityandguilds.com

Contents

1	Introduction to the qualifications	5
1.1	Qualification structure	6
1.2	Opportunities for progression	7
1.3	Qualification support materials	7
1.4	Expert reference group	8
2	Centre requirements	9
2.1	Resource requirements	9
2.2	Candidate entry requirements	10
3	Units	11
Unit 301	National Diabetic Retinopathy Screening Programmes, principles, processes and protocols	12
Unit 302	Diabetes and its relevance to retinopathy screening	18
Unit 303	Anatomy, physiology and pathology of the eye and its clinical relevance	23
Unit 304	Preparing the patient for retinopathy screening	29
Unit 305	Measuring visual acuity and performing pharmacological dilatation	35
Unit 306	Imaging the eye for the detection of diabetic retinopathy	44
Unit 307	Detecting retinal disease	49
Unit 308	Classifying Diabetic Retinopathy	55
Unit 309	Administration and management systems in a retinopathy screening programme	60
4	Assessment	73
4.1	Summary of assessment methods	73
4.2	Assignments	73
4.3	Recording forms	73
Form 1	Candidate and centre details	75
Form 2A	Summary of unit and qualification achievement	76
Form 2B	Summary of unit and qualification achievement	78
Form 3	Assessment plan, review and feedback	80
Form 4	Performance evidence record	82
Form 5	Evidence location sheet	84
Form 6	Unit assessment and verification declaration	85
4.4	Accreditation of prior learning and experience (APEL)	86
5	Course design and delivery	88
5.1	Initial assessment and induction	88
5.2	Recommended delivery strategies	89
Relationships to other qualifications		90
Appendix 1	Sources of general information	93

City & Guilds
Skills for a brighter future



www.cityandguilds.com

1 Introduction to the qualifications

This document contains the information that centres need to offer the following qualifications:

Qualification titles and levels	City & Guilds qualification number	Ofqual accreditation numbers	Last registration date	Last certification date
Level 3 Certificate in Diabetic Retinopathy Screening (Imaging)	7360-01	500/6895/7	31/12/2010	31/12/2013
Level 3 Certificate in Diabetic Retinopathy Screening (Grading)	7360-01	500/6892/1	31/12/2010	31/12/2013
Level 3 Certificate in Diabetic Retinopathy Screening (Administration)	7360-01	500/6891/X	31/12/2010	31/12/2013
Level 3 Diploma in Diabetic Retinopathy Screening	7360-01	500/6897/0	31/12/2010	31/12/2013
Level 3 Diploma in Diabetic Retinopathy Screening	7360-01	500/6896/9	31/12/2010	31/12/2013

The Level 3 Qualifications in Diabetic Retinopathy Screening are designed to meet the learning needs for all personnel involved in the identification of sight threatening diabetic retinopathy in a National Screening Programme for Diabetic Retinopathy. They are designed to encourage a multi-disciplinary and interprofessional focus for learners from a diverse range of backgrounds.

These qualifications allow candidates to learn, develop and practise the skills required with the aim of improving people's practice in whatever form that might take. They aim to provide a clear, coherent framework that relate to the type of complex, practical issues encountered in screening for diabetic retinopathy.

Learners will be able to contribute knowledge and understanding towards the related Level 3 Qualifications in Diabetic Retinopathy Screening, and will be able to demonstrate competence, thereby safeguarding patients.

These qualifications offer Certificates and Diplomas on the Qualifications and Credits Framework (QCF) and are intended to be a response to the UK Four Nations requirements to provide systematic quality assured screening for diabetic retinopathy. They have been specifically developed to meet policy requirements for new and existing workers, for example, those contained in the National Service Framework (NSF) for Diabetes.

These qualifications were developed to provide valuable accreditation of skills and knowledge for candidates. They replace the City & Guilds Level 3 Certificate in Diabetic Retinopathy Screening 7359-13/83 which expires on 31/08/2010.

These qualifications were developed in association with the English National Screening Programme for Diabetic Retinopathy and in collaboration with the clinical leads and subject experts in Wales, Scotland and Northern Ireland.

1.1 Qualification structure

The Level 3 Qualifications in Diabetic Retinopathy Screening have a different qualification structure to the previous Certificate in Diabetic Retinopathy Screening but retain the same units. Learners can now achieve a Diploma or a Certificate on the QCF and there is an opportunity for greater flexibility and a higher level of achievement. The table below shows the qualifications available; their credit value and the units required for achievement.

It should also be noted that this qualification has the registration set up in a way which allows learners to access all the qualifications available within this suite by registering only once. In order to claim full certificates, centres should additionally enter the 'Component module' codes (i.e. 901 – 905) on Form 'S' or via Walled Garden as shown below.

Title of Qualification	Mandatory Units	Credit value	Component module
Level 3 Certificate in Diabetic Retinopathy Screening (Imaging)	301, 302, 303, 304, 305, 306	35	901
Level 3 Certificate in Diabetic Retinopathy Screening (Grading)	301, 302, 303, 307, 308	33	902
Level 3 Certificate in Diabetic Retinopathy Screening (Administration)	301, 302, 309	21	903
Level 3 Diploma in Diabetic Retinopathy Screening	301, 302, 303, 304, 305, 306, 307	44	904
Level 3 Diploma in Diabetic Retinopathy Screening	301, 302, 303, 304, 305, 306, 307, 308	48	905

The diagram below illustrates the unit titles and the credit value of each unit.

Accreditation unit reference	City & Guilds unit number	Unit title	Mandatory/ optional for full qualification	Credit value	Excluded combination of units (if any)
R/600/2560	Unit 301	National Diabetic Retinopathy Screening Programmes, Principles, Processes and Protocols	Mandatory	5	N/A
J/600/2667	Unit 302	Diabetes and its relevance to retinopathy screening	Mandatory	6	N/A
T/600/2700	Unit 303	Anatomy, physiology and pathology of the eye and its clinical relevance	Mandatory	9	N/A

L/600/2704	Unit 304	Preparing the patient for retinopathy screening	Mandatory	4	N/A
R/600/2705	Unit 305	Measuring visual acuity and performing pharmacological dilatation	Mandatory	4	N/A
F/600/2747	Unit 306	Imaging the eye for the detection of diabetic retinopathy	Mandatory	7	N/A
A/600/2763	Unit 307	Detecting retinal disease	Mandatory	9	N/A
Y/600/2768	Unit 308	Classifying diabetic retinopathy	Mandatory	4	N/A
A/600/2777	Unit 309	Administration and management systems in a retinopathy screening programme	Mandatory	10	N/A

1.2 Opportunities for progression

On completion of these qualifications, candidates will have achieved the competences necessary for continued employment in a National Screening Programme for Diabetic Retinopathy. Opportunities for progression to higher level grading positions, supervisory posts, screening programme management and national quality assurance roles within their National Screening Programme should be possible. Alternatively candidates may wish to move into vision science or public health roles in line with the emerging Department of Health recommendations on Modernising Scientific Careers. Higher level qualifications may be developed in the future and the attainment of this qualification also allows entry into the MSc course on “Retinal Screening – Diabetes” offered at Warwick University.

1.3 Qualification support materials

City & Guilds also provides the following publications and resources specifically for these qualifications:

Description	How to access
Information leaflet	www.cityandguilds.com
fast track approval forms/generic fast track approval form	www.cityandguilds.com
Assignment Guide	www.cityandguilds.com
FAQ's	www.cityandguilds.com

1.4 Expert reference group

Development of the Award

The original Certificate in Diabetic Retinopathy Screening was developed by educationalists from NHSU, NOCN and City and Guilds and an Expert Reference Group comprising the following subject experts:

Deborah Broadbent, Training and Education Lead, ENSPDR*
Steve Aldington, Retinopathy Grading Centre, Imperial College, London
Susan Blakeney, Optometric Advisor, College of Optometrists
Shirley Burnett, British Association of Retinal Screeners
Grant Duncan, British Association of Retinal Screeners
John Talbot, Royal College of Ophthalmologists
Pat Hart, Consultant Ophthalmologist and Hon Senior Lecturer, Clinical Lead NI DRSP***
Roderick Harvey, Diabetic Retinopathy Screening Collaborative Clinical Lead, Scotland
Rosemarie Keigwin-Harris, Service Director for DRSSW**
Mo Lewis, Diabetes Nurse Specialist for DRSSW**
David Owens CBE, Clinical Director for DRSSW**

In order to comply with the requirements for migration to the new QCF the award was reviewed and revised by the following representatives from all 4 Nations:

Deborah Broadbent, Consultant on Training and Education to the ENSPDR*
Steve Aldington, Education & Research Development Manager, ENSPDR*
Clare Bailey, Consultant Ophthalmologist, Bristol Eye Hospital
Chris Brand, Consultant Ophthalmologist, Sheffield
Margaret Clarke, Consultant Diabetologist, Heart of England NHS
Richard Clark, Senior Retinal Screener, NHS Tayside
John Doig, Consultant Diabetologist, Scotland
Angela Ellingford, Diabetic Retinopathy Programme Manager, Dundee, Scotland
Linda Garvican, Consultant in Public Health and National Quality Assurance Director, ENSPDR*
Pat Hart, Consultant Ophthalmologist and Hon Senior Lecturer, Clinical Lead NI DRSP***
Mr M Histed
Doreen Horsfall, Administration Manager & Data Analyst, Gloucestershire Diabetic Eye Screening
Rosemarie Keigwin-Harris, Service Director for DRSSW**
Mo Lewis, Diabetes Nurse Specialist for DRSSW**
Tunde Peto, Head of Reading Centre, Moorfields Eye Hospital NHS Foundation Trust
Ken Swa, Lead Clinician, Diabetic Retinopathy Screening Programme, NHS Lothian & Borders, Scotland
Trevor Warburton, Lead Optometrist, South Manchester DRSS
William Wykes, DRS Clinical Lead, Glasgow and Clyde, Scotland

**English National Screening Programme for Diabetic Retinopathy*

***Diabetic Retinopathy Screening Service for Wales*

**** Northern Ireland Diabetic Retinopathy Screening Programme*

In addition we would like to acknowledge the invaluable input to the administration of the award from Helen Ward, Sue Ackland, Clare Waite, Laura Prosser, Tanya Langley and Kath Prescott.

2 Centre requirements

This section outlines the approval processes for Centres to offer these qualifications and any resources that Centres will need in place to offer the qualifications including qualification-specific requirements for Centre staff.

Centres already offering City & Guilds qualifications in this subject area

Centres approved to offer the qualification Level 3 Certificate in Diabetic Retinopathy Screening (7359-13/83) may apply for approval for the new Level 3 Qualifications in Diabetic Retinopathy Screening (7360-01) using the **fast track approval form**, available from the City & Guilds website. Centres may apply to offer the new qualifications using the fast track form

- providing there have been no changes to the way the qualifications are delivered, and
- if they meet all of the approval criteria specified in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After this time, the qualification is subject to the **standard** Qualification Approval Process. It is the centre's responsibility to check that fast track approval is still current at the time of application.

2.1 Resource requirements

Human resources

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent in the areas of expertise that they will be assessing in these qualifications.
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but must never internally verify their own assessments.

The following professions should be able to assess each of the units. This information is for guidance only and individual Curricula Vitae (CVs) will be scrutinised for applicability.

Unit	Profession
301	Experienced clinical lead, public health consultant
302	Diabetologist, diabetes specialist nurse
303	Ophthalmologist, optometrist, ophthalmic trained nurse
304	Ophthalmologist, optometrist, ophthalmic trained nurse
305	Ophthalmologist, optometrist, ophthalmic trained nurse
306	Ophthalmic photographer, experienced photographer in retinal screening
307	Ophthalmologist, senior diabetic retinopathy grader
308	Ophthalmologist, senior diabetic retinopathy grader
309	Senior administrator from a retinopathy screening programme

Assessors and internal verifiers

While the Assessor/Verifier (A/V) units are valued as qualifications for centre staff, they are not currently a requirement for these qualifications.

Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge remains current of the occupational area and of best practice in delivery, mentoring, training, assessment and verification, and that it takes account of any national or legislative developments.

2.2 Candidate entry requirements

Learners should not be entered for a qualification of the same type, content and level as that of a qualification they already hold.

The UK four Nations specifications, although varying in detail, require that all staff involved in the respective National Screening Programmes are properly trained and accredited.

As part of the assessment for this qualification, learners must have access to a work setting/placement. Consequently learners will normally be engaged to work in retinopathy screening and will be referred by the organisation contracted by the NHS to provide screening. This will presuppose the necessary literacy, numeracy and care skills required to undergo the training.

Age restrictions

These qualifications are not approved for use by learners under the age of 16, and City & Guilds cannot accept any registrations for learners in this age group.

3 Units

Availability of units

The learning outcomes and assessment criteria are also viewable on the National Database of Accredited Qualifications (NDAQ) www.accreditedqualifications.org.uk

Structure of units

The units in these qualifications are written in a standard format and comprise the following:

- City & Guilds reference number
- title
- level
- credit value
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment and grading
- learning outcomes which are comprised of a number of assessment criteria

Summary of units

City & Guilds unit number	Title	Credits
301	National Diabetic Retinopathy Screening Programmes, Principles, Processes and Protocols	5
302	Diabetes and its relevance to retinopathy screening	6
303	Anatomy, physiology and pathology of the eye and its clinical relevance	9
304	Preparing the patient for retinopathy screening	4
305	Measuring visual acuity and performing pharmacological dilatation	4
306	Imaging the eye for the detection of diabetic retinopathy	7
307	Detecting retinal disease	9
308	Classifying diabetic retinopathy	4
309	Administration and management systems in a retinopathy screening programme	10

Unit 301

National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Level: 3

Credit value: 5

Unit aim

Understanding how a national screening programme for diabetic retinopathy developed and functions is a key requirement for all personnel involved in the identification and management of diabetic retinopathy.

This unit covers the principles, processes, protocols and targets for national screening for diabetic retinopathy.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will be able to:

1. Understand the purpose of screening
2. Understand the impact that screening may have on the patient
3. Understand the procedures in their National Screening Programme
4. Understand quality assurance in their National Screening Programme
5. Understand the factors which lead to effective screening

Guided learning hours

It is recommended that **30** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC1, HC2, HC3, HC4, HC5, HC6, HC7, HC8, HC9 and HC10

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Communication
- Information Technology

Assessment and grading

This unit will be assessed by:

- an assignment covering underpinning knowledge and its application

Unit 301 National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Outcome 1 Understand the purpose of screening

Assessment Criteria

The learner can:

- 1.1 Explain what screening means.
- 1.2 Explain the prime purpose of screening for diabetic retinopathy.
- 1.3 Explain why it is important to screen for diabetic retinopathy and the limitations of the screening test and process.

Unit 301

National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Outcome 2

Understand the impact that screening may have on the patient

Assessment Criteria

The learner can:

- 2.1 Describe the psychological impact that screening might have on the patient.
- 2.2 Describe the process for patients' informed decision making in a screening programme.

Unit 301

National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Outcome 3

Understand the procedures in their National Screening Programme

Assessment Criteria

The learner can:

- 3.1 Describe the components of any national screening programme for diabetic retinopathy.
- 3.2 Describe the advantages and disadvantages of the methods chosen in their National Screening Programme and how these methods may be implemented.

Unit 301

National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Outcome 4

Understand quality assurance in their National Screening Programme

Assessment Criteria

The learner can:

- 4.1 Explain what is meant by internal and external quality assurance and why it is necessary to implement effective measures.
- 4.2 List the service objectives in their National Screening Programme, and understand the importance of measuring each one.
- 4.3 Describe how their own performance will be monitored in the programme and how this will influence the overall performance of the programme.
- 4.4 Understand the importance of failsafe systems.

Unit 301

National Diabetic Retinopathy Screening Programmes, principles, processes and protocols

Outcome 5

Understand the factors which lead to effective screening

Assessment Criteria

The learner can:

- 5.1 Explain the importance of maintaining accurate registers on patients with diabetes.
- 5.2 Describe the factors that might lead to non compliance with screening and why this might be important.
- 5.3 Understand why it is important to monitor the progress of patients referred to ophthalmology.

Unit 302

Diabetes and its relevance to retinopathy screening

Level: 3

Credit value: 6

Unit aim

This unit covers the knowledge base about the types and management of diabetes and the risk factors for the development and progression of diabetic retinopathy required by anyone involved in the screening process.

Learning outcomes

There are **four** learning outcomes to this unit. The learner will be able to:

1. Understand the difference between type 1 and type 2 diabetes
2. Recognise the symptoms of hypoglycaemia
3. Be aware of the long-term complications of diabetes
4. Understand the relevance of risk factors in development of diabetic retinopathy

Guided learning hours

It is recommended that **30** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC1, HC2, HC3, HC4, HC5, HC6, HC7, HC8, HC9 and HC10.

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Communication

Assessment and grading

This unit will be assessed by:

- an assignment covering underpinning knowledge and its application

Unit 302

Diabetes and its relevance to retinopathy screening

Outcome 1

Understand the difference between type 1 and type 2 diabetes

Assessment Criteria

The learner can:

- 1.1 Explain the differences between type 1 and type 2 diabetes in terms of basic symptomatology, pathology and diagnostic criteria.
- 1.2 Describe the treatment options for diabetes.

Unit 302

Diabetes and its relevance to retinopathy screening

Outcome 2

Recognise the symptoms of hypoglycaemia

Assessment Criteria

The learner can:

- 2.1 Describe the signs and symptoms of hypoglycaemia.
- 2.2 Explain how to manage a patient if it is suspected that they could be hypoglycaemic.

Unit 302

Diabetes and its relevance to retinopathy screening

Outcome 3

Be aware of the long-term complications of diabetes

Assessment Criteria

The learner can:

- 3.1 Describe the macrovascular and microvascular complications of diabetes, including heart disease and stroke, nephropathy, neuropathy and retinopathy.

Unit 302

Diabetes and its relevance to retinopathy screening

Outcome 4

Understand the relevance of risk factors in development of diabetic retinopathy

Assessment Criteria

The learner can:

- 4.1 Explain the risk factors, including duration of diabetes, glycaemic control, blood pressure control and smoking in the development of retinopathy.
- 4.2 Explain the importance of monitoring patients regularly for these risk factors.
- 4.3 Evaluate the role of the retinal screener in enabling the patient to obtain advice to help them with the self-management of their diabetes.

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Level: 3

Credit value: 9

Unit aim

This unit covers the anatomy, physiology, pathology of the eye, and their clinical relevance in relation to diabetic retinopathy and other defined ophthalmic conditions.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will be able to:

1. Know the basic anatomy of the eye
2. Know how the physiology of the eye is affected in patients with diabetes
3. Recognise the abnormal changes involved in, or that are part of, or that constitute, diabetic retinopathy
4. Know how diabetes may cause or be associated with abnormal changes in structures in the eye other than the retina
5. Recognise other significant diseases of the retina

Guided learning hours

It is recommended that **60** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC2, HC3, HC4, HC5, HC6, HC7.

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Communication

Assessment and grading

This unit will be assessed by:

- an assignment covering underpinning knowledge and its application

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Outcome 1

Know the basic anatomy of the eye

Assessment Criteria

The learner can:

- 1.1 Describe the anatomy of the anterior segment of the eye, including the cornea, iris and lens.
- 1.2 Describe the anatomy of the posterior segment of the eye, including the vitreous body, the retina, the retinal vasculature, the retinal pigment epithelium, the optic nerve, Bruch's membrane and the choroids.
- 1.3 Describe the normal appearance of the fundus and identify the macula and the area of the fundus image within one disc diameter of the centre of the fovea.
- 1.4 Explain the potential significance of changes within one disc diameter of the centre of the fovea.
- 1.5 Explain the potential significance of changes in the peripheral retina.

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Outcome 2

Know how the physiology of the eye is affected in patients with diabetes

Assessment Criteria

The learner can:

- 2.1 Explain how diabetes may affect the function of the retinal vasculature and the retina and the consequences for vision.

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Outcome 3

Recognise the abnormal changes involved in, or that are part of, or that constitute, diabetic retinopathy

Assessment Criteria

The learner can:

- 3.1 Describe changes in the fundus appearance that are not normal.
- 3.2 Describe the abnormal changes seen in the retina in diabetic retinopathy.
- 3.3 Identify the individual features of diabetic retinopathy including retinal haemorrhages, microaneurysms, cotton wool spots, venous abnormalities, intraretinal microvascular anomalies, new vessels, fibrovascular proliferation, pre-retinal haemorrhage, vitreous haemorrhage and retinal exudates.
- 3.4 Describe the clinical features of diabetic retinopathy and explain their significance.

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Outcome 4

Know how diabetes may cause or be associated with abnormal changes in structures in the eye other than the retina

Assessment Criteria

The learner can:

- 4.1 Describe the changes that may occur in the lens in diabetes including transient refractive changes and cataract.
- 4.2 Explain the relevance of these conditions.
- 4.3 Describe and identify the changes that may occur in the retinal vasculature (other than diabetic retinopathy) in diabetes.
- 4.4 Explain the significance of changes that may occur in the retinal vasculature (other than diabetic retinopathy) in diabetes.

Unit 303

Anatomy, physiology and pathology of the eye and its clinical relevance

Outcome 5

Recognise other significant diseases of the retina

Assessment Criteria

The learner can:

- 5.1 Identify the following conditions on a retinal image; drusen, age-related macular degeneration, choroidal neovascular membrane, choroidal naevus, choroidal melanoma, myelinated nerve fibres, myopic degeneration, old choroiditis, rhegmatogenous retinal detachment, asteroid hyalosis and optic disc cupping.
- 5.2 Describe the relevance of these conditions.

Unit 304

Preparing the patient for retinopathy screening

Level: 3

Credit value: 4

Unit aim

This unit covers the preparation of the patient for screening for diabetic retinopathy in a variety of settings and where patients have particular needs.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will be able to:

1. Check patient's identity
2. Understand the ways in which screening is affected by patient needs and the environment
3. Communicate effectively with the patient in preparation for screening
4. Understand the requirements and processes relating to confidentiality
5. Understand their role within the procedure for handling complaints throughout the screening process

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC1

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Working with Others
- Improving own learning and performance

Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge.

Unit 304

Preparing the patient for retinopathy screening

Outcome 1

Check patient's identity

Assessment Criteria

The learner can:

- 1.1 Explain the importance of correctly confirming patient identity.
- 1.2 Demonstrate how to confirm patient identity.

Unit 304

Preparing the patient for retinopathy screening

Outcome 2

Understand the ways in which screening is affected by patient needs and the environment

Assessment Criteria

The learner can:

- 2.1 Explain how the results of the examination may be influenced by factors such as patient age, co-operation, ability or special needs.
- 2.2 Describe how lack of privacy can affect an eye test.
- 2.3 Explain why it is important to modify the examination if factors which might influence the results of the examination are identified.
- 2.4 Demonstrate how to record that the examination has been modified.

Unit 304

Preparing the patient for retinopathy screening

Outcome 3

Communicate effectively with the patient in preparation for screening

Assessment Criteria

The learner can:

- 3.1 Explain why it is important that the patient understands why they are undergoing the particular procedures.
- 3.2 Describe obstacles to understanding and how to overcome them.
- 3.3 Explain how to ensure that the patient has understood the nature of the particular tests to be performed.
- 3.4 Explain the importance of patient consent to procedures and how to confirm and record that the patient has given consent.
- 3.5 Explain how to proceed if the patient did not understand the procedures or did not wish to proceed.

Unit 304

Preparing the patient for retinopathy screening

Outcome 4

Understand the requirements and processes relating to confidentiality

Assessment Criteria

The learner can:

- 4.1 Describe the requirements and processes for the use and storage of patient information and why it is important.
- 4.2 Inform the patient who will receive the results of the examination.
- 4.3 Establish that the patient has understood how the information they have given will be used and stored and who will have access to this information.

Unit 304

Preparing the patient for retinopathy screening

Outcome 5

Understand their role within the procedure for handling complaints throughout the screening process

Assessment Criteria

The learner can:

- 5.1 Describe the local procedure for handling complaints within the organisation.
- 5.2 Describe how they would deal with patient complaints.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Level: 3

Credit value: 4

Unit aim

This unit covers the ability to accurately record the visual acuity using a variety of visual acuity charts and in patients with particular needs, and the ability to safely dilate the pupils.

Learning outcomes

There are **eight** learning outcomes to this unit. The learner will be able to:

1. Understand the purpose of visual acuity measurement
2. Select the most appropriate test
3. Know the importance of patient's posture and position
4. Measure the visual acuity in each eye separately
5. Understand the purpose of dilatation of the pupils
6. Understand the action of the drops and contra-indications to their use
7. Know the correct procedures for storage of eye drops
8. Know the correct way to instil eye drops

Guided learning hours

It is recommended that **30** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC1, HC2, HC3

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Numeracy
- Working with others
- Improving own learning and performance
- Problem Solving
- Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 1

Understand the purpose of visual acuity measurement

Assessment Criteria

The learner can:

- 1.1 Explain why the accurate measurement and recording of visual acuity may be used in a National Screening Programme for diabetic retinopathy.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 2

Select the most appropriate test

Assessment Criteria

The learner can:

- 2.1 Select the appropriate visual acuity test to be used depending on the individual's age, co-operation, ability, special needs or local protocols.
- 2.2 Explain the strengths and limitations of the different visual acuity tests.
- 2.3 Explain the significance of the use of an individual's spectacles and/or pinhole in testing visual acuity.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 3

Know the importance of patient's posture and position

Assessment Criteria

The learner can:

- 3.1 Explain why it is important for the patient to be comfortable.
- 3.2 Explain why it is important to position the patient at the correct distance from the test chart.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 4

Measure the visual acuity in each eye separately

Assessment Criteria

The learner can:

- 4.1 Use the occluder effectively to completely cover the eye not being tested.
- 4.2 Demonstrate how visual acuity is measured.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 5

Understand the purpose of dilatation of the pupils

Assessment Criteria

The learner can:

- 5.1 Explain the reasons for pupil dilatation in their screening programme for diabetic retinopathy.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 6

Understand the action of the drops and contra-indications to their use

Assessment Criteria

The learner can:

- 6.1 Explain the action of mydriatic eye drops and contra-indications to their use.
- 6.2 Explain how to identify a situation in which pupil dilatation is contra-indicated.
- 6.3 Demonstrate how to determine which eye drop should be used.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 7

Know the correct procedures for storage of eye drops

Assessment Criteria

The learner can:

7.1 Explain the correct procedures for storage of eye drops.

Unit 305

Measuring visual acuity and performing pharmacological dilatation

Outcome 8

Know the correct way to instil eye drops

Assessment Criteria

The learner can:

- 8.1 Explain the infection control procedures necessary in the instillation of eye drops.
- 8.2 Explain how to confirm that the eye drop is safe to use.
- 8.3 Demonstrate how to instil eye drops correctly.
- 8.4 Explain how to identify and manage an adverse or critical incident.

Unit 306

Imaging the eye for the detection of diabetic retinopathy

Level: 2

Credit value: 7

Unit aim

This unit covers the knowledge and skills required to carry out imaging of the retina and anterior segment, so as to support the accurate detection of possible features of diabetic retinopathy and includes practical demonstrations of the necessary skills.

Learning outcomes

There are **four** learning outcomes to this unit. The learner will be able to:

1. Prepare the retinal camera and associated environment and equipment for obtaining images of the eye
2. Understand the criteria for assessment of images for clarity, positioning and gradability
3. Obtain images of the retina
4. Obtain images of the fundus reflex

Guided learning hours

It is recommended that **60** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC4

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Numeracy
- Working with others
- Improving own learning and performance
- Problem Solving

Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge.

Unit 306

Imaging the eye for the detection of diabetic retinopathy

Outcome 1

Prepare the retinal camera and associated environment and equipment for obtaining images of the eye

Assessment Criteria

The learner can:

- 1.1 Ensure that the working environment is suitable and safe for the screening episode.
- 1.2 Verify that the equipment is working correctly.
- 1.3 Open the appropriate imaging software package on the retinal camera's computer.
- 1.4 Prepare and align the retinal camera for a specific patient imaging session.
- 1.5 Prepare a patient's record for the current imaging visit.

Unit 306

Imaging the eye for the detection of diabetic retinopathy

Outcome 2

Understand the criteria for assessment of images for clarity, positioning and gradability

Assessment Criteria

The learner can:

- 2.1 Describe the criteria for assessment of images for clarity, field position and gradability according to national and local standards.
- 2.2 Assess images for clarity, field position and gradability according to national and local standards.
- 2.3 Describe how assessment of images for gradability relates to national and local targets for quality assurance.
- 2.4 Explain why imaging may be unsuccessful and how they may overcome or document the reason(s) for this.

Unit 306

Imaging the eye for the detection of diabetic retinopathy

Outcome 3

Obtain images of the retina

Assessment Criteria

The learner can:

- 3.1 Describe the field position for imaging in their National screening programme.
- 3.2 Obtain colour retinal image(s) of sufficient quality and quantity and in the correct position(s) for both eyes.
- 3.3 Explain why it might be appropriate to take additional retinal images to inform diagnosis, according to local protocols.
- 3.4 Save the images and complete the session.

Unit 306

Imaging the eye for the detection of diabetic retinopathy

Outcome 4

Obtain images of the fundus reflex

Assessment Criteria

The learner can:

- 4.1 Explain the reasons why it may not be possible to obtain retinal images of sufficient quality or quantity for assessment.
- 4.2 Obtain a colour anterior segment image of the fundus reflex suitable for subsequent assessment of possible media opacities and small pupil size.

Unit 307

Detecting retinal disease

Level: 4

Credit value: 9

Unit aim

This unit covers the ability to recognise the normal appearance of the retina and changes in the retina due to diabetic retinopathy, and how the results of the examination will affect the patient.

Learning outcomes

There are **five** learning outcomes to this unit. The learner will be able to:

1. Prepare the equipment for grading for disease
2. Use grading software to record result
3. Understand the criteria for assessment of images for clarity, positioning and gradability
4. Identify the presence or absence of diabetic or other eye disease according to defined standards
5. Record and communicate the results of image assessment

Guided learning hours

It is recommended that **60** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC5, HC6, HC7.

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Numeracy
- Improving own learning and performance
- Problem Solving

Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge.

Unit 307

Detecting retinal disease

Outcome 1

Prepare the equipment for grading for disease

Assessment Criteria

The learner can:

- 1.1 Verify that equipment is working correctly.
- 1.2 Ensure that the working environment is suitable for grading.
- 1.3 Open the appropriate software package.

Unit 307

Outcome 2

Detecting retinal disease

Use grading software to record result

Assessment Criteria

The learner can:

- 2.1 Navigate correctly through the grading software according to their access rights.
- 2.2 Enter grading results in the software.
- 2.3 Check and save work.
- 2.4 Describe the importance of correct data entry.
- 2.5 Manage software problems within their own area of competency and authority.
- 2.6 Explain the course of action if software problems arise outside their own area of competency and authority.

Unit 307

Outcome 3

Detecting retinal disease

Understand the criteria for assessment of images for clarity, positioning and gradability

Assessment Criteria

The learner can:

- 3.1 Describe the criteria for assessment of images for clarity, field position and gradability according to national and local standards.
- 3.2 Assess images for clarity, field position and gradability according to national and local standards.
- 3.3 Explain how the interpretation of images for disease may be compromised if the clarity or field position of the images does not meet national or local criteria.
- 3.4 Describe how assessment of images for gradability relates to national and local targets for quality assurance.
- 3.5 Manage the results of assessment for clarity, field position and gradability appropriately.

Unit 307

Outcome 4

Detecting retinal disease

Identify the presence or absence of diabetic or other eye disease according to defined standards

Assessment Criteria

The learner can:

- 4.1 Identify all the lesions of diabetic retinopathy.
- 4.2 Identify images with diabetic retinopathy.
- 4.3 Identify images with diabetic retinopathy requiring urgent referral.
- 4.4 Identify images with other eye disease as required in their programme.
- 4.5 Identify images without diabetic retinopathy and without other eye disease.

Unit 307

Outcome 5

Detecting retinal disease

Record and communicate the results of image assessment

Assessment Criteria

The learner can:

- 5.1 Record the presence or absence of diabetic retinopathy and other eye disease.
- 5.2 Describe the internal quality assurance processes in their organisation.
- 5.3 Describe the grading pathway in their programme.
- 5.4 Describe how the results of a final assessment will affect the referral and management of the patient.
- 5.5 Explain their National and local targets for examination of images for disease.

Unit 308

Classifying Diabetic Retinopathy

Level: 4

Credit value: 4

Unit aim

This unit covers the ability to identify and classify the lesions of diabetic retinopathy according to national and local protocols and how to manage the patient according to the grade allocated.

Learning outcomes

There are **four** learning outcomes to this unit. The learner will be able to:

1. Understand the process for grading the level of eye disease in people with diabetes
2. Classify the level of diabetic retinopathy
3. Record the level of diabetic or other eye disease according to defined standards
4. Understand the process for communicating grading results and the impact on patient referral and management

Guided learning hours

It is recommended that **20** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC2, HC5, HC6, HC7

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Numeracy
- Improving own learning and performance
- Problem Solving

Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge.

Unit 308

Outcome 1

Classifying Diabetic Retinopathy

Understand the process for grading the level of eye disease in people with diabetes

Assessment Criteria

The learner can:

- 1.1 Assess how their role influences the ability of their screening programme to meet their National performance indicators.
- 1.2 Describe their National and local grading protocol(s) for diabetic retinopathy.

Assessment Criteria

The learner can:

- 2.1 Distinguish the clinical signs and symptoms which may act as surrogate markers for the presence of clinically significant macular oedema.
- 2.2 Explain how levels of diabetic retinopathy are allocated by grouping of individual lesions.
- 2.3 Explain why review of images from a previous screen event may occasionally help in the assessment process.

Unit 308

Outcome 3

Classifying Diabetic Retinopathy

Record the level of diabetic or other eye disease according to defined standards

Assessment Criteria

The learner can:

- 3.1 Demonstrate how to correctly identify the lesions and record the level of diabetic retinopathy, or verify that an appropriate level has been ascribed by the computer software programme they are using.

Unit 308

Outcome 4

Classifying Diabetic Retinopathy

Understand the process for communicating grading results and the impact on patient referral and management

Assessment Criteria

The learner can:

- 4.1 Analyse how the level of retinopathy influences patient management.
- 4.2 Discuss the advantages and disadvantages of who will receive the results of the final examination of images.

Unit 309

Administration and management systems in a retinopathy screening programme

Level: 3

Credit value: 10

Unit aim

This unit covers the knowledge and skills required in order to administrate a retinopathy screening programme using electronic information programmes.

Learning outcomes

There are **eleven** learning outcomes to this unit. The learner will be able to:

1. Understand how to obtain information on who has diabetes in the area covered by the screening programme
2. Understand how the electronic information system works
3. Understand why it is important to keep the database up to date and how to input information
4. Understand the system for making and changing appointments
5. Provide information to patients and colleagues
6. Know the procedure for dealing with patient complaints
7. Know how to provide information to screening centres
8. Input data from screening centres
9. Generate audit reports for internal and external audit
10. Understand the necessity to maintain the integrity of the information system
11. Understand the requirements for data processing and patient consent

Guided learning hours

It is recommended that **60** hours should be allocated for this unit. This may be on a full-time or part-time basis.

Details of the relationship between the unit and relevant national occupational standards (if appropriate)

This unit is linked to the National Service Framework for Diabetes: HC8, HC9, HC10.

Endorsement of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Information Technology
- Numeracy
- Working with others
- Improving own learning and performance
- Problem Solving

Assessment and grading

This unit will be assessed by:

- an assignment covering practical skills and underpinning knowledge.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 1

Understand how to obtain information on who has diabetes in the area covered by the screening programme

Assessment Criteria

The learner can:

- 1.1 Explain how a diabetes register is compiled for diabetic retinopathy screening.
- 1.2 Assess the gaps in the records and give the reasons for these gaps.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 2

Understand how the electronic information system works

Assessment Criteria

The learner can:

- 2.1 Describe the operations that can be performed by the database software.
- 2.2 Identify faults in the operations of the system and either rectify the fault or contact professional expertise when necessary.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 3

Understand why it is important to keep the database up to date and how to input information

Assessment Criteria

The learner can:

- 3.1 Explain why it is important to keep the database up to date.
- 3.2 Explain the importance of accurate data input eg NHS numbers, complex surnames.
- 3.3 Explain how to obtain accurate information eg from GPs.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 4

Understand the system for making and changing appointments

Assessment Criteria

The learner can:

- 4.1 Describe the appointments system (this may include a variety of centres) and the system for changing appointments.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 5

Provide information to patients and colleagues

Assessment Criteria

The learner can:

- 5.1 Handle enquiries from patients and colleagues in an efficient and helpful manner.
- 5.2 Explain to patients the importance of attending for retinopathy screening.
- 5.3 Explain to patients what exactly happens and what to expect during the retinopathy screening appointment.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 6

Know the procedure for dealing with patient complaints

Assessment Criteria

The learner can:

6.1 Describe the procedure for dealing with patient complaints.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 7

Know how to provide information to screening centres

Assessment Criteria

The learner can:

7.1 Describe how to provide relevant information to screening centres.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 8

Input data from screening centres

Assessment Criteria

The learner can:

- 8.1 Identify and audit non attendance at screening appointment.
- 8.2 Explain importance of checking patient identity.
- 8.3 Input data accurately.
- 8.4 Save data appropriately.
- 8.5 Generate letters and reports for GPs and referrals to ophthalmology.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 9

Generate audit reports for internal and external audit

Assessment Criteria

The learner can:

- 9.1 Explain their National quality assurance systems.
- 9.2 Explain how to generate audit reports.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 10

Understand the necessity to maintain the integrity of the information system

Assessment Criteria

The learner can:

- 10.1 Describe the procedures for ensuring the security and confidentiality of data.
- 10.2 Explain the procedures for checking data validity.
- 10.3 Manage software problems within their own area of competency and authority.
- 10.4 Explain the course of action if software problems arise outside their own area of competency and authority.

Unit 309

Administration and management systems in a retinopathy screening programme

Outcome 11

Understand the requirements for data processing and patient consent

Assessment Criteria

The learner can:

- 11.1 Describe the requirements of the Data Protection Act in relation to their programme.
- 11.2 Understand the current implications of the Freedom of Information legislation.
- 11.3 Describe the issues around patient consent to store patients' records on a central database.
- 11.4 Describe the importance of appropriate levels of access to the screening database.

4 Assessment

4.1 Summary of assessment methods

Each unit can be assessed and certificated individually using a variety of assessment methods.

Invigilated tests

The invigilated tests in units 303, 307 and 308 are set as online tests. These are accessed through **www.drstdiploma.org**. Learners are able to complete practice questions and also sit the online tests via this website. When learners are ready to complete the online test they must contact the City & Guilds centre through which they are registered.

Time constraints

All assignments must be completed and assessed within the learner's period of registration. Centres should advise learners of any internal timescales for the completion and marking of individual assignments.

4.2 Assignments

Assessment will include practical demonstration of skills, case studies, feature identification and grading tests, diagram labelling, written short answer tests and scenario-based questions.

Evidence should be presented in a portfolio, with all evidence signed and dated by the assessor using the appropriate recording forms.

Learners should be aware that the Qualifications in Diabetic Retinopathy Screening are UK wide awards. There are small differences in the implementation of screening in each devolved Nation (England, Scotland, Wales and Northern Ireland) and learners should be aware of this when answering the questions in units 301, 304, 305, 306, 307, 308 and 309. Where answers are applicable to all Nations the term "national" will be used. Where answers are specific to individual Nations the terms "your National" or "their National" will be used.

Marking and grading

The assignments are marked by the assessors and each assignment will be graded as either Pass or Fail.

Pass: when an assignment has been completed to the required standard.

Fail: when after a second attempt, an assignment is still not completed to the required standard.

Resubmission: normally candidates may resubmit their assignment work once if tasks were failed on the first submission. However, should centres think that a further assessment opportunity would result in a positive outcome for the candidate, the centre should seek the approval of their external verifier.

4.3 Recording forms

Evidence should be presented in a portfolio and signed and dated by the assessor using the appropriate recording form.

City & Guilds provides the following forms to help learners and assessors working towards the qualification. They should be photocopied as required.

Although it is expected that new centres will use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier before they are used by learners and assessors at the centre.

Candidate and centre details (Form 1)

Form used to record learner and centre details, and the units/qualification(s) being assessed and details and signatures of assessor(s) and internal verifier(s).

This should be the first page of the learner portfolio.

Summary of unit and qualification achievement (Form 2)*

Form used to record the learner's on-going completion of units and progress to final achievement of the complete unit and/or qualification.

This form is available in portrait (2A) and landscape (2B) format.

Assessment plan, review and feedback (Form 3)*

Form used to record unit assessment plans, reviews and feedback to the learner. The form allows for a dated, ongoing record to be developed.

Performance evidence record (Form 4)*

Form used to record details of activities observed, witnessed or for which a reflective or self account has been produced. For some, a customised alternative record may be provided in the qualification handbook.

Evidence location sheet (Form 5)*

Form used to identify what requirements each piece of evidence covers and where it is located, including questioning records which are held elsewhere (for example, because they were conducted online).

Unit assessment and verification declaration (Form 6)*

Form used on completion of each unit to meet the QCA requirement for a statement on authenticity. If this form is not used, there must be a written declaration, at unit level, signed by the assessor and the learner, that the evidence is authentic and that the assessment was conducted under the specified conditions or context.

Centres are reminded that forms 2, 3 and 4 must be safeguarded by the centre throughout the learner's period of assessment and then kept by the centre for a period of three years after completion of the qualification. Learners should be given a photocopy of these completed forms to keep in their file/portfolio.

*Forms 3, 4, 5 and 6 or approved alternatives, are requirements. The other forms have been designed to support the assessment and recording process.

Form 1 Candidate and centre details

Keep a record of relevant contact details in the space provided below:

City & Guilds qualification title:			
Qualification number:		Level:	

Candidate details			
Name:		Signature:	
City & Guilds registration / unique learner number (ULN):			
Date enrolled with centre:			
Date registered with City & Guilds:			

Centre details			
Name:		Number:	
Contact number:			
Quality assurance co-ordinator name and contact (QAC) number:			

Internal verifier details			
Name:		Signature:	
Contact number:		Position:	

Assessor details			
(1) Name:		Signature:	
Contact number:		Position:	
Type (please tick):	Work-based <input type="checkbox"/> Peripatetic <input type="checkbox"/> Independent <input type="checkbox"/>		
Assessing unit(s):			
(2) Name:		Signature:	
Contact number:		Position:	
Type (please tick):	Work-based <input type="checkbox"/> Peripatetic <input type="checkbox"/> Independent <input type="checkbox"/>		
Assessing unit(s):			

Form 2A Summary of unit and qualification achievement

Candidate name: _____ Signature: _____
 City & Guilds registration number: _____ Date: _____
 Centre name: _____ Centre number: _____

Unit	Title	Internal verification		Grade achieved <i>(if appropriate)</i>	Signatures			
		Date	Types of evidence <i>(see key)</i>		Assessor*	Candidate	IV*	EV <i>(if sampled)</i>
301	National Diabetic Retinopathy Screening Programmes, Principles, Processes and Protocols							
302	Diabetes and its relevance to retinopathy screening							
303	Anatomy, physiology and pathology of the eye and its clinical relevance							
304	Preparing the patient for retinopathy screening							
305	Measuring visual acuity and performing pharmacological dilatation							
306	Imaging the eye for the detection of diabetic retinopathy							
307	Detecting retinal disease							
308	Classifying diabetic retinopathy							

309	Administration and management systems in a retinopathy screening programme						
-----	--	--	--	--	--	--	--

*If there is a second line assessor/IV, both must sign.

Key for types of evidence (please extend if necessary):

O = Observation; Q = Questioning; P = Work products; C = Candidate/Reflective account; S = Simulation;
 PD = Professional discussion; A = Assignments, projects/case studies; WT = Witness testimony;
 ET = Expert witness testimony; RPL = Recognition of prior learning

Competence has been demonstrated in all of the units/the qualification recorded above using the required assessment procedures and the specified conditions/contexts. The evidence meets the requirements for validity, authenticity, currency, reliability and sufficiency.

Internal verifier signature: _____ Date: _____

Form 2B Summary of unit and qualification achievement



Candidate name: _____ Signature: _____

City & Guilds registration number: _____ Date: _____

Centre name: _____ Centre number: _____

Unit	Title	Internal verification		Grade achieved (if appropriate)	Signatures			
		Date	Types of evidence <i>(see key)</i>		Assessor*	Candidate	IV*	EV (if sampled)
301	National Diabetic Retinopathy Screening Programmes, Principles, Processes and Protocols							
302	Diabetes and its relevance to retinopathy screening							
303	Anatomy, physiology and pathology of the eye and its clinical relevance							
304	Preparing the patient for retinopathy screening							
305	Measuring visual acuity and performing pharmacological dilatation							
306	Imaging the eye for the detection of diabetic retinopathy							

307	Detecting retinal disease							
308	Classifying diabetic retinopathy							
309	Administration and management systems in a retinopathy screening programme							

Key for types of evidence

(please extend if necessary):

O = Observation; Q = Questioning; P = Work products; C = Candidate/Reflective account; S = Simulation; PD = Professional discussion; A = Assignments, projects/case studies; WT = Witness testimony; ET = Expert witness testimony; RPL = Recognition of prior learning

*If there is a second line assessor/IV, both must sign.

Competence has been demonstrated in all of the units/the qualification recorded above using the required assessment procedures and the specified conditions/contexts. The evidence meets the requirements for validity, authenticity, currency, reliability and sufficiency.

Internal verifier signature: _____ Date: _____

Form 3 Assessment plan, review and feedback

Candidate name: _____

Assessor name: _____

Unit number(s) and title(s): _____

This record can be used for single and multiple unit planning. Remember that all planning should be SMART – Specific, Measurable, Achievable, Realistic and Time Bound.

Date action agreed	What has to be done / What has been reviewed and the feedback / Record of judgment or outcome	Date to be done by / Date done	Candidate and assessor signatures	Evidence reference

Date action agreed	What has to be done / What has been reviewed and the feedback / Record of judgment or outcome	Date to be done by / Date done	Candidate and assessor signatures	Evidence reference

The above is an accurate record of the discussion.

Candidate signature: _____ Date: _____

Assessor signature: _____ Date: _____

Form 4 Performance evidence record

Qualification/unit: _____
 Candidate name: _____

Use this form to record details of activities (tick as appropriate)

- observed by your assessor**
- seen by expert witness**
- seen by witness**
- self / reflective account**

Evidence ref(s):
Unit number(s):

NB Your assessor may wish to ask you some questions relating to this activity. There is a separate sheet for recording these. The person who observed/witnessed your activity must sign and date overleaf.

Unit(s)	Learning outcome(s)	Assessment criteria	Evidence

Unit(s)	Learning outcome(s)	Assessment criteria	Evidence

I confirm that the evidence listed is my own work and was carried out under the conditions and context specified in the standards.

Candidate signature: _____ Date: _____

Assessor/Expert Witness* signature: _____ Date: _____

*delete as appropriate

Internal Verifier signature (if sampled): _____ Date: _____

Form 5 Evidence location sheet



Candidate name: _____

Unit number/title: _____

Item of evidence	Loc*	Ref	Link to assessment criteria (✓)																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

- Location key: P = portfolio, O = office (add further categories as appropriate)

Form 6 Unit assessment and verification declaration



Qualification title: _____
Unit number and title: _____

Candidate declaration

I confirm that the evidence listed for this unit is my own work.

Candidate name: _____
Signature: _____ Date: _____
City & Guilds registration / unique learner number (ULN): _____

Assessor declaration

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. (Where there is more than one assessor, the co-ordinating assessor for the unit should sign this declaration.)

Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name: _____
Assessor signature: _____ Date: _____
Countersignature: (if relevant) _____ Date: _____
(For staff working towards the assessor qualification)

Internal verifier declaration

I have internally verified the assessment work on this unit by carrying out the following (please tick):

- | | |
|--|--------------------|
| <input type="checkbox"/> sampling candidate and assessment evidence | Date: _____ |
| <input type="checkbox"/> discussion with candidate | Date: _____ |
| <input type="checkbox"/> observation of assessment practice | Date: _____ |
| <input type="checkbox"/> other – please state: _____ | Date: _____ |

I confirm that the candidate's sampled work meets the standards specified for this unit and may be presented for external verification and/or certification.

Not sampled

Internal verifier name: _____
Internal verifier signature: _____ Date: _____
Countersignature: (if relevant) _____ Date: _____
(For staff working towards the internal verifier qualification)

4.4 Accreditation of prior learning and experience (APEL)

Learners holding qualifications which already cover skills and knowledge for individual units may enable them to have their work acknowledged through the process of APEL. Evidence of the relevant qualification and current practice of skills will be required. Currently, optometrists registered with the General Optical Council (GOC) will be considered for APEL in relation to unit 303 (Anatomy, Physiology, Pathology of the Eye and its Clinical Relevance); unit 304 (Preparing the Patient for Retinopathy Screening) and units 305 (Measuring Visual Acuity and Performing Pharmacological Dilatation).

Please refer to the table below for mapping of learning outcomes in units 303-305 to the GOC competences.

Learning Outcome	GOC competencies
Unit 303	
Know basic anatomy of the eye	6.2, 6.3, 6.5, 6.6, 6.7, 6.9, 6.10, 6.11, 6.12, 6.13, 6.14, 6.15.
Know how the physiology of the eye is affected in patients with diabetes	6.12
Recognise the abnormal changes involved in, or that are part of, or that constitute, diabetic retinopathy	6.12
Know how diabetes may cause or be associated with abnormal changes in structures in the eye other than the retina	6.12
Recognise other significant diseases of the retina	6.5, 6.10, 6.11, 6.13, 6.18
Unit 304	
Check patient's identity	1.1, 2.1, 2.2, 2.3, 2.5
Understand the ways in which screening is affected by patient needs and the environment	1.6, 1.7, 1.8, 1.9, 1.10
Communicate effectively with the patient in preparation for screening	1.4, 1.6, 1.7, 1.8, 1.9, 1.10
Understand the requirements and processes relating to confidentiality	2.1
Understand their role within the procedure for handling complaints throughout the screening process	1.10, 2.4, 2.5
Unit 305	
Understand the purpose of visual acuity measurement	3.1, 3.5, 3.6, 5.15
Select the most appropriate test	3.5, 3.8, 3.9
Know the importance of patient's posture and position	5.1, 5.5, 5.7
Measure the visual acuity in each eye separately	5.15
Understand the purpose of dilatation of the pupils	5.1, 5.6, 5.7, 5.11
Understand the action of the drops and contra-indications to their use	5.6, 6.19
Know the correct procedures for storage of eye drops	5.6

5 Course design and delivery

5.1 Initial assessment and induction

Centres will need to make an initial assessment of each learner prior to the start of their programme to ensure they are entered for an appropriate type and level of qualification.

The initial assessment should identify:

- any specific training needs the learner has, and the support and guidance they may require when working towards their qualifications. This is sometimes referred to as diagnostic testing.
- any units the learner has already completed, or credit they have accumulated which is relevant to these qualifications they are about to begin.

City & Guilds recommends that centres provide an induction programme to ensure the learner fully understands the requirements of these qualifications they will work towards, their responsibilities as a learner, and the responsibilities of the centre. It may be helpful to record the information on a learning contract.

Further guidance about initial assessment and induction, as well as a learning contract that centres may use, are available on the City & Guilds website.

5 Course design and delivery

5.2 Recommended delivery strategies

In terms of delivering the qualification, the emphasis is on learner learning by doing, and on building and accrediting a learner's knowledge and skills acquired in the work sector. Learners will be expected to carry out practical activities and to demonstrate knowledge and understanding. Provided that the requirements for the qualification are met, centres may design course programmes of study in any way that they feel best meets the needs and capabilities of their learners. It is the responsibility of screening programmes to provide resources, mentors and assessors. Assessments must meet the learning outcomes of the qualification.

Mentors and assessors must familiarise themselves with the structure, content and assessment requirements of the qualifications before designing a course programme.

Duration of programme

This programme is an in-service, work-based qualification. The duration of the programme will be determined, to some extent, by the number of clinics in which the learner can work to gain the learning outcomes. It is anticipated that the qualification will take no longer than 2 years to achieve for a new-entrant worker and a shorter period for an existing, experienced worker.

All assignments must be completed and assessed within the learner's period of registration. Centres should advise learners of any internal timescales for the completion and marking of each assignment.

The Wider Curriculum

It is recommended that centres and screening programmes consider the following:

- Key Skills (Communication, Application of Number, Information Technology, Working with Others, Improving Own Learning and Performance, Problem Solving)
- Health and Safety Considerations, in particular to impress upon learners that they must preserve the health and safety of others as well as themselves.

Centres may design course programmes of study in any way which:

- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualifications.

In particular, staff should consider the skills and knowledge related to the national occupational standards.

City & Guilds recommends that centres address the wider curriculum, where appropriate, when designing and delivering the course. Centres should also consider links to the National Occupational Standards, Key/Core Skills and other related qualifications.

Centres may wish to include topics as part of the course programme which will not be assessed through the qualifications.

Relationships to other qualifications

Links to other qualifications and frameworks

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications. For example, units within a QCF qualification may be similar in content to units in the NQF qualification which the candidate may have already undertaken and this may present opportunities for APL.

In fulfilling the learning outcomes for this qualification, dependent on personal job description, the participant, would also meet some or all of the following National Occupational Standards:

- HC1 Confirm that the patient and the equipment are ready for screening for diabetic retinopathy
- HC2 Measure visual acuity
- HC3 Instil eye drops to dilate the pupil prior to image capture
- HC4 Obtain images of the retina
- HC5 Assess images of the fundus for evidence of disease
- HC6 Assess images of the fundus to establish the degree of diabetic retinopathy or other abnormality
- HC8 Maintain an information system to support retinal screening for patients
- HC9 Arrange appointments to suit patient and organisational needs
- HC10 Receive individuals and carers who attend appointments

The wider curriculum

Unit	Spiritual	Moral	Ethical	Social	Legal	Econ	Cultural	H&S	Europe
001	√		√	√	√	√	√		
002	√		√	√			√		
003									
004	√	√	√	√	√	√	√	√	√
005	√	√	√	√	√	√	√	√	√
006	√	√	√	√	√	√	√	√	√
007					√	√		√	√
008					√	√		√	√
009	√	√	√	√	√	√	√	√	√

Key Skills Signposting

The qualification provides opportunities to gather evidence for the accreditation of Key skills as shown in the table below. However, to gain Key Skills certification the Key Skills would need to be taken as additional qualification/s.

D indicates that the unit content provides opportunities for developing and practising a key skill.

E indicates that the unit or assignment provides opportunities for evidencing the Key Skill.

Information technology

e.g All units provide opportunities to develop and practise or evidencing this key skill.

Communication

e.g The tasks that are assessed through written assignments and may provide evidence for the written aspects of communication.

Application of number

e.g There is an opportunity for candidates to evidence the use of number in units 5 -10.

Working with others

e.g Units 4, 5, 6, and 9 provide opportunities for evidencing this key skill.

Problem solving

e.g Units 4 -9 provide opportunities for developing and practising or evidencing this key skill.

Improving own learning and performance

e.g Units 4 -9 provide opportunities for developing and practising or evidencing this key skill.

Key Skill	001	002	003	004	005	006	007	008	009
ICT1	E	E	E	E	E	E	E	E	E
ICT2	D	D	D						E
ICT3									E
C1	E	E	E						
C2									
C3					E	E	E	E	E
N1									D
N2									D
N3				E	E	E			E
WWO1				E	E	E			E
WWO2				E	E	E			E
WWO3				E	E	E	E	E	E
IOLP1				D	D	D	D	D	D
IOLP2									
IOLP3				E	E	E	E	E	E
PS1									D
PS2									D
PS3									D

Functional Skills (England only)

The Key Skills qualifications are expected to be phased out in England from 2010, and will be largely replaced by the Functional Skills awards. More information about these qualifications is available from www.cityandguilds.com/functionalskills.

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on www.cityandguilds.com.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Providing City & Guilds qualifications – a guide to centre and qualification approval contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Ensuring quality contains updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document contains information on:

- Management systems
- Maintaining records
- Assessment
- Internal verification and quality assurance
- External verification.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden**
Find out how to register and certificate candidates on line

- **Qualifications and Credit Framework (QCF)**
Contains general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**
Contains dates and information on the latest Centre events
- **Online assessment**
Contains information on how to register for GOLLA assessments.

This page is intentionally blank

www.cityandguilds.com

Useful contacts

Type	Contact	Query
UK learners	T: +44 (0)20 7294 2800 E: learnersupport@cityandguilds.com	<ul style="list-style-type: none"> • General qualification information
International learners	T: +44 (0)20 7294 2885 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com	<ul style="list-style-type: none"> • General qualification information
Centres	T: +44 (0)20 7294 2787 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com	<ul style="list-style-type: none"> • Exam entries • Registrations/enrolment • Certificates • Invoices • Missing or late exam materials • Nominal roll reports • Results
Single subject qualifications	T: +44 (0)20 7294 8080 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com	<ul style="list-style-type: none"> • Exam entries • Results • Certification • Missing or late exam materials • Incorrect exam papers • Forms request (BB, results entry) • Exam date and time change
International awards	T: +44 (0)20 7294 2885 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com	<ul style="list-style-type: none"> • Results • Entries • Enrolments • Invoices • Missing or late exam materials • Nominal roll reports
Walled Garden	T: +44 (0)20 7294 2840 F: +44 (0)20 7294 2405 E: walledgarden@cityandguilds.com	<ul style="list-style-type: none"> • Re-issue of password or username • Technical problems • Entries • Results • GOLLA • Navigation • User/menu option problems
Employer	T: +44 (0)121 503 8993 E: business_unit@cityandguilds.com	<ul style="list-style-type: none"> • Employer solutions • Mapping • Accreditation • Development Skills • Consultancy
Publications	T: +44 (0)20 7294 2850 F: +44 (0)20 7294 3387	<ul style="list-style-type: none"> • Logbooks • Centre documents • Forms • Free literature

If you have a complaint, or any suggestions for improvement about any of the services that City & Guilds provides, email: feedbackandcomplaints@cityandguilds.com

**Published by City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)20 7294 2800
F +44 (0)20 7294 2400
www.cityandguilds.com**

**City & Guilds is a registered charity
established to promote education
and training**