Diabetic RetinaScreen

An Clár Náisiúnta Scagthástála Reitiní do Dhiaibéitigh
The National Diabetic Retinal Screening Programme

Clinical Practice Guidelines for Treatment Clinics

Revision 4

Contents

Foreword

The National Screening Service (NSS), part of the Health Service Executive (HSE), has significant expertise in developing, implementing and delivering organised population-based screening programmes. The NSS encompasses BreastCheck – The National Breast Screening Programme, CervicalCheck – The National Cervical Screening Programme, BowelScreen – The National Bowel Screening Programme and Diabetic RetinaScreen – The National Diabetic Retinal Screening Programme.

Since its introduction in 2013, Diabetic RetinaScreen has been providing regular, free diabetic retinopathy screening and treatment to those with diabetes aged 12 and over. This document provides guidelines for treatment centres providing support to the Diabetic RetinaScreen programme. These updated guidelines are a culmination of the work of the Clinical Advisory Group, under the guidance of the National Screening Service.

Contributions have been made from its diverse membership. The members are Ms Helen Kavanagh, Programme Manager, Diabetic RetinaScreen; Dr Margaret Morgan, Medical Ophthalmologist; Prof Derek O'Keeffe, National Clinical Lead for HSE Diabetes Programme, Consultant Endocrinologist and lecturer of Medical Device Technology; Triona Culliton, Optometrist; Dr Mark James, Consultant Ophthalmologist, Cork University Hospital; Ms Deirdre Townley, Consultant Ophthalmologist, University Hospital Galway. Mr Donal Donnelly, Treatment Centre Co-ordinator, Diabetic RetinaScreen; and Prof David Keegan, National Clinical Lead for Diabetic RetinaScreen, Consultant Ophthalmologist.

These guidelines serve as a support for the treatment centres in the administration of the treatment arm of the national screening and treatment programme. They are evidence-based and adhere to best international practice. The guidelines form part of the National Clinical Programme for Ophthalmology and form an important bridge between the two programmes.

The committee recognises that there is constant evolution of care in this field and the need for ongoing development of these guidelines.

Professor David Keegan

Chair, Clinical Advisory Group

Diabetic RetinaScreen

1. Introduction

Diabetes mellitus (DM) is associated with the development of a number of complications. One of these is the development of diabetic retinopathy, potentially resulting in blindness. Diabetic retinopathy is the leading cause of new cases of preventable blindness in the working age population (20-75 years) in developed nations[1].

Retinopathy screening for patients with diabetes is an internationally accepted standard of diabetes care, and the development of population-based screening programmes has been prioritised by national and international policy makers.

In 2011 the Health Service Executive (HSE) National Diabetes Programme tasked the National Screening Service (NSS) with the development and implementation of a national diabetic retinal screening programme. The NSS has extensive experience of developing and implementing population-based screening programmes and is responsible for BreastCheck – The National Breast Screening Programme, CervicalCheck – The National Cervical Screening Programme and BowelScreen – The National Bowel Screening Programme.

Diabetic RetinaScreen – The National Diabetic Retinal Screening Programme became available in early 2013. It is underpinned by quality assured standards which were developed to take into consideration existing successful screening programmes in Ireland and recognised international best practice. The programme which is Government-funded, offers free access to annual screening for people with diabetes, aged 12 and over. Diabetic RetinaScreen uses specialised digital photography to look for changes that could affect the eyesight. Any follow-up, further assessment or treatment of diabetic retinopathy that is recommended as part of the screening programme is free of charge.

1.1 Purpose and scope

This document specifies how treatment clinics will deliver services as part of the Diabetic RetinaScreen programme and sets out the administrative and clinical supports required by the programme.

Our aim is to provide all those who require further investigation or treatment with the highest possible standard of care, and to ensure that each person is offered comprehensive information in relation to their diagnosis which is clear, objective and readily available.

2. Treatment clinic guidelines

2.1 Facilities and access

All Diabetic RetinaScreen treatment clinics are located in a dedicated outpatient facility and provide the following:

- Clear signage from the hospital entrance to the Diabetic RetinaScreen treatment clinic
- An appropriate reception area
- An appropriate waiting area
- Adequate restroom facilities

2.2 Administration room

Administrative support should be provided with:

- Dedicated office space for administrative support
- Appropriate computer and printer hardware
- Telephone and fax facilities
- Space for medical record storage
- A facility to update the OptoMize system

2.3 Clinical room

The clinical room should provide:

- A dedicated area for visual acuity measurement
- The potential to record LogMAR visual acuity
- A facility to enter the results of the clinical assessment/procedures performed on OptoMize system
- Adequate size with good ventilation
- A secure space

2.4 Equipment

Each clinic room must be equipped with the following:

- Access to a LogMAR chart
- Snellen chart
- Adjustable patient chair
- Examination couch
- Slit lamp
- Indirect ophthalmoscope
- Lenses for slit lamp and indirect fundoscopy
- Laser lens for macular and panretinal laser
- Tonometer
- Disposable tonometer prisms
- Computer and IT networks

There should be access to:

- Fundus Camera and Fluorescein Camera
- Optical coherence tomography (OCT)

2.5 Surveillance clinic (if present)

A dedicated area for visual acuity measurement requires the following:

- LogMAR chart
- Snellen chart
- Adjustable patient chair
- Fundus camera
- Optical coherence tomography (OCT)

2.6 Intravitreal injection room

The intravitreal injection rooms must comply with standards as outlined in the Royal College of Ophthalmologists (2018) Guidance on Intravitreal Injection Therapy[2].

2.7 Staffing

The Diabetic RetinaScreen treatment clinic requires the following resources:

- Lead clinician, with sessional support in their absence
- Dedicated nurse assigned to the clinic
- Administrative support
- Ophthalmologist trained in the delivery of laser treatment
- Ophthalmologist trained in the delivery of intravitreal injections
- Appropriate medical staff

Where there is a surveillance clinic in place there should be an ophthalmologist assigned with clinical responsibility for the delivery and quality assurance of this service.

3. Management of new referrals

3.1 Administration

All new referrals should be acknowledged and validated through the referral validation process on OptoMize, with the screening service provider. Urgent new referrals are offered an appointment within 12-24 business days after notification of screening result, as outlined in the 'Standards for Quality Assurance in Diabetic Retinopathy Screening[3].Non-urgent new referrals are offered an appointment within 78-108 business days after notification of screening result.[3] All new referrals received are reviewed by a clinician. A dedicated telephone number and email address must be provided to clients for appointment scheduling.

4. Management of treatment clinics

4.1 Administration

- Where a client has previously attended an eye clinic in the treatment clinic, access to their clinical records is to be provided to the treating clinician.
- A dedicated telephone contact number must be provided to patients following treatment.
- Any change to demographic details while the client is in treatment should be sent to the photography and grading provider and to the Diabetic RetinaScreen programme to ensure accuracy.
- The hospital will operate a clear policy on management of patient complaints and concerns in compliance with HSE complaints policy.

4.2 Information technology

Diabetic RetinaScreen uses a systematic screening package called OptoMize. The OptoMize system must be accessible to relevant staff, including administrative and clinical staff members. Training is required for all OptoMize users with unique log-in credentials assigned to each. Details of all clinical encounters for assessment and treatment are recorded on the OptoMize system.

5. Clinical guidelines

5.1 Management of referrals for proliferative diabetic retinopathy

The following steps must be adhered to for effective management of referrals for proliferative diabetic retinopathy.

5.1.1 Initial assessment

12-24 business days after notification of screening result[3]

5.1.2 History

Review and document history with specific emphasis on and consideration given to:

- Control of blood glucose and blood pressure

5.1.3 Examination

- Visual acuity
- Slit lamp assessment
- Gonioscopy in presence of neovascularisation (NVI)

5.1.4 Imaging

- OCT in presence of coexisting diabetic macular oedema (DMO)
- Fundus Fluoresciein Angiography (FFA) if indicated to assess extent of ischaemia

5.1.5 Management

- Address control of systemic risk factors, namely:
  - Blood glucose
  - Hypertension

5.1.6 Photocoagulation

- Treatment to commence within 12 business days after initial assessment, to comply with the Standards for Quality Assurance in Diabetic Retinopathy Screening[3]. Treatment may include the following:
  - Neovascularisation of the disc (NVD) – pan-retinal photocoagulation (PRP)
  - Neovascularisation of the retina elsewhere (NVE) – PRP
  - 300-400µm burns, 10-50 ms duration spaced 1-1.5 burn widths apart over 1-3 sessions Primary PRP 1200-1800 burns with further laser dictated by level of activity of neovascularisation. More spots (~3000) will need to be applied if using a multi-spot laser.
  - Extensive neovascularisation, vitreous/preretinal haemorrhage, tractional retinal detachment increase number of burns up to 3000 for primary PRP (5000 if multi-spot).
  - Neovascularisation of iris (NVI) no NVA or NVG – PRP
  - NVI + NVA/NVG consider intravitreal anti-VEGF agent soon after diagnosis in addition to PRP

5.1.7 Review post completion of pan-retinal photocoagulation (PRP)

- 8-12 weeks, dependent on severity at presentation

5.1.8 Indications for referral for assessment for vitrectomy

- Non resolving vitreous haemorrhage
- Tractional retinal detachment
- Rhegmatogenous retinal detachment
- Symptomatic epiretinal membrane
- Non resolving DMO with vitreo-macular traction

5.2 Management of stable treated proliferative diabetic retinopathy

Record as R3 on OptoMize and select stable treated retinopathy in advanced eye disease option. Annual review if no DMO or nondiabetic eye disease present; requiring more frequent review if significant systemic risk factors present.

5.3 Management of referrals for pre-proliferative diabetic retinopathy

Initial assessment should take place within 78-108 business days after notification of screening result[3].

5.3.1 History

Review and document history with specific emphasis on and consideration given to:

- Control of blood glucose and blood pressure.
- Preproliferative diabetic retinopathy in pregnancy should be referred to the eye clinic for urgent assessment and ongoing management.

5.3.2 Examination

- Visual acuity (preferably LogMAR)
- Slit-lamp assessment

5.3.3 Imaging

- OCT in presence of coexisting DMO
- FFA if indicated to assess extent of ischaemia

5.3.4 Management

- Address control of systemic risk factors:
  - Blood glucose
  - Hypertension

5.3.5 Follow-up

Consider ocular and systemic risk factors when scheduling follow-up appointment, which should be made at a time appropriate to ETDRS grade.

5.3.6 Photocoagulation

- Consider in the following situations:
  - Where there is a history of poor clinic attendance
  - At the clinician's discretion in exceptional cases deemed to be at high risk of progression to PDR, particularly if an eye has been lost as result of PDR

5.4 Management of referrals for diabetic macular oedema (DMO)

Maculopathy referrals from Diabetic RetinaScreen are deemed non-urgent and should be seen within 78-108 business days of notification[3].

5.4.1 History

Review and document history with specific emphasis on and consideration given to:

- Control of blood glucose and blood pressure.

5.4.2 Examination

- Visual acuity (preferably LogMAR)
- Slitlamp assessment

If any one or more of the four criteria listed below is present in an eye on clinical examination, maculopathy level on the OptoMize clinical system must be entered as M1 to assess the appropriateness of the screening programme referral.

- The presence of exudate within a radius of 1 disc diameter of the center of the fovea.
- The presence of a group of exudates within the macula.
- The presence of any microaneurysm or haemorrhage within a radius of 1 disc diameter of the centre of the fovea, only if associated with a visual acuity (VA) of ≤6/12.
- Retinal thickening within 1 disc diameter of the centre of the fovea.

5.4.3 Investigations

OCT (Optical coherence tomography)

- Colour photography with an appropriate camera. Avoid use of pseudo colour.
- Fundus Fluorescein Angiography if indicated ahead of focal laser treatment.

5.4.4 Management

- Address control of systemic risk factors, namely:
  - Blood glucose
  - Hypertension

5.4.5 Photocoagulation

- Treatment to commence within 60 days of initial assessment.
  - Non centre involving CSMO (clinically significant macular oedema) regardless of the visual acuity level – Modified ETDRS focal/grid laser.
  - Centre involving CSMO and visual acuity >20/32 (6/9.5) – Modified ETDRS focal/grid laser may be applied. In cases where there is centre involving CSMO and visual acuity >20/32 (6/9.5)with no defined source of leakage observation is indicated.
- Review is required three to four months after the laser treatment has been performed.

5.4.6 Injection schedule

Indication for intraocular injection:

- Centre involving CSMO with Visual Acuity ≤ 20/32 (6/9.5)

5.4.6.1 Treatment Naive Patients

Six initial injections should be given at four week intervals followed by review. Injections should be continued at four week intervals while visual acuity continues to improve until visual acuity is stable over three consecutive visits, regardless of persistent thickening[4]. The addition of laser should also be considered in patients receiving treatment with intravitreal anti-VEGF agents[4].

5.4.6.2 Previously Treated Patients

Three initial injections should be given at four week intervals followed by review. Injections should be continued at four week intervals while visual acuity continues to improve until visual acuity is stable over three consecutive visits, regardless of persistent thickening[4].

The addition of laser should also be considered in patients receiving treatment with intravitreal anti-VEGF agents.

5.4.6.3 Switching treatment in “non-responders”

Non Responder (define at 6 months treatment after 4 weekly injection schedule applied)

- Vison gain ≤ 5 Letters
- OCT change < 50um

All second line agent use cases to be discussed with Treatment Centre Clinical Lead

- NO Ranibizumab or Aflibercept if HbA1C level ≥ 12% / 107 MMOL.
- NO Ranibizumab or Aflibercept if vision ≤ 3/60 and fibrosis / Disorganisation of retinal inner layers (DRIL) on OCT.

5.4.6.4 Intravitreal Steroid

One can consider intravitreal steroids in the treatment of centre-involving DMO as an alternative to intra-vitreal anti-VEGF therapy in patients:

- Without glaucoma
- Who are pseudo-phakic
- History of recent (< 6 months) stroke
- Have chronic DMO refractory to other treatment modalities
- Who are not able to commit to the more frequent injection schedule typical of anti-VEGF therapy

5.5 Management of pregnant women with retinopathy

- Referrals for pregnant women will be highlighted in purple on OptoMize.
- Referrals for pregnant women will be prioritised and seen within 12-24 business days.

Progression of retinopathy occurs at approximately double the rate in pregnant women than non pregnant[5]. Pregnancy itself is an independent risk factor for worsening of DR[6, 7].

In T1DM pregnancies:

- DR progresses predominantly during the first and second trimesters[8-10]
- Worst at the end of second trimester
- Regress during the third trimester
- Increase in microaneurysms in later stages, including period between 28 and 35 weeks and 3 month post delivery

Risk Factors

- **Type of Diabetes**

  Women with Type 1 Diabetes have a higher risk of developing new DR during pregnancy, but once a woman has DR, her risk of DR progression is similar in pregnancy irrespective of diabetes type[11].

- **Baseline level of DR**

  The worse DR is at the beginning of the pregnancy, the more likely it is to progress[12]. Women with no retinopathy at conception had a 10.3% risk of DR progression (>UK Diabetic Eye Screening grades),compared with those with moderate non proliferative DR who had a 58% risk of progression[13].

  Note: One reported case of no DR to PDR[14]

- **Duration of diabetes[15]**

- **Older maternal age[15]**

- **Hypertension**

  Pre-eclampsia and hypertension requiring treatment during pregnancy are associated with a (more than two-fold) increased risk of progression or development of DR. Hypertension treatment before pregnancy is not an identified risk[12].

- **Glucose control**[12]

  DR progression is higher in conventionally treated group compared to the intensively treated group[6].

  The routine practice of instituting tight glycemic control in early pregnancy may also contribute to worsening retinopathy[13]. In unplanned pregnancies with poor glycemic control, optimal glycemic control should be prioritized as the risks in maternal and fetal outcomes associated with poor glycemic control during pregnancy outweigh the risks of DR progression as a result of prompt decrease in HBA1C[16] (Hemachandra et al., 1995). Diabetic retinopathy should not be considered a contraindication to rapid optimisation of glycaemic control in women who present with a high HbA1c in early pregnancy but retinal assessment is essential[17, 18].

Preconception counselling

Preconception counselling is recommended[19].

5.5.1 Screening Visit for Diabetic Patients that are pregnant

- A first trimester eye screening is recommended by all guidelines[17, 20-22]
- Second and third trimester retinal examinations are recommended:
  - dependent on the level of DR detected in the first trimester exam
  - presence of clinical risk factors
    - poor glycaemic control[10]
    - longer duration of diabetes
    - hypertension developing during pregnancy[12]
    - pre-eclampsia

Recommendation

First Screening Visit at 10 (+/- 2) weeks

Second trimester screen if initial grade is R1M0 at 24 (+/-2) weeks

Third trimester screen (R0M0 and R1M0) at 34 (+/- 2 weeks)

If retinopathy Grade > R1M0 (by grading matrix) refer to treatment centre to be seen in 2-4 weeks

5.5.2 Management of diabetic patients that are pregnant in treatment centre

5.5.2.1 Mydriaisis

Dilated ophthalmic examinations using mydriatic agents are relatively contraindicated during early pregnancy as categorized as Category C. by the FDA.

However UK specifies Tropicamide can be used, but alone[18, 17]. Phenylephrine should not be used.

Recommendation

Use Tropicamide 0.5% or 1.0% with caution.

Do not use phenylephrine.

5.5.2.2 Imaging

Angiography (Fluorescein and indocyanine Green)

- Contraindicated in pregnancy

Ocular Coherence Tomography (including OCT-Angiography)

- These are non-invasive and safe

Recommendation

Use colour photography and OCT (OCT-A) to monitor patients during pregnancy.

5.5.2.3 Management of R1M1 / R2M0 / R2M1 referrals

Monitor every 4-6 weeks in DRT watching for signs of progression to R3a (PDR) or R2 subgroup (severe NPDR) OR M1 subgroup (severe maculopathy – Central Subfield thickness > 400um).

Recommendation

Monitor non-treatable but referrable retinopathy/maculopathy every 4-6 weeks.

5.5.2.4 Management of proliferative / severe non proliferative diabetic retinopathy

Recommendation

Scatter laser photocoagulation is indicated in pregnancy where level of DR is severe NPDR or worse[21, 23–26].

5.5.2.5 Management of maculopathy

The use of anti-VEGF drugs during pregnancy is controversial because they may potentially cause systemic side effects in the mother and fetal harm, such as spontaneous miscarriage and preeclampsia[27].

It is recommended that women wait at least 3 months after their last treatment with anti-VEGF medications prior to conceiving[28].

Anti-VEGF medications should only be administered during pregnancy if the potential benefit justifies the risk to the foetus, and women should be appropriately informed of these risks[27].

Focal / grid laser therapy

This should be considered as an alternative to anti-VEGF.

Intra-ocular Steroid

This should be considered as an alternative to anti-VEGF[29].

Recommendation

Withhold anti-VEGF treatment for 6 to 9 months during pregnancy as unlikely to result in long-term visual loss in most cases.

Focal laser can be used safely

Steroid use can be considered in exceptional circumstances

5.5.3 Delivery

Diabetic retinopathy should not be considered a contraindication to vaginal birth[17].

5.5.4 Need for ophthalmic follow-up post-partum

Progression after pregnancy is less certain. Data from the DCCT cohort suggested that deterioration of retinopathy may continue for some months after pregnancy[6]. Another study showed DR progression to be rare post delivery[8]. Recommendations differ in that the American Diabetes Association recommends an eye exam in pregnant women with diabetes in the first trimester with close follow-up throughout pregnancy up to 1 year post-partum[19]. The Royal College of Ophthalmologists advises that women who have pre-proliferative diabetic retinopathy diagnosed during pregnancy should have ophthalmological follow-up for at least 6 months following the birth of the baby[17]. Another study showed DR was more likely to progress 4 months after delivery, rather than during pregnancy[30].

The increased risk of DR progression continued for 1 year postnatally, (some women requiring laser photocoagulation up to 12 months after delivery).

Recommendation

Post-partum ophthalmic assessments to be performed depending on severity of retinopathy but at least to 20 (+/-2) weeks post partum

5.5.5 Summary recommendations pregnancy including grading matrix (see table below)

Conversion to R/M grading nomenclature

	1st trimester	2nd trimester	3rd trimester	Post-partum
R0M0	Digital Screening at 10 (+/-) 2weeks	As needed for visual complaints	Digital Screening at 34 (+/-) 2weeks	Screening image at 20 (+/-2 weeks)
R1M0	Digital Screening at 10 (+/-) 2weeks	Digital Screening at 24 (+/- 2 weeks)	Digital Screening at 34 (+/-) 2weeks	Screening image at 20 (+/-2 weeks)
R1M1 (in treatment centres)	Refer to **treatment centres** Dilated eye exam Fundus photography	Mild NPDR - one dilated eye exam Moderate NPDR - dilated eye exam every 4-6 weeks (or more frequently as needed)	Dilated eye exam every 4-6 weeks (or more frequently as needed)	TC monitor to 20 (+/-2) weeks post-partum
R2 M0 / R2 M1 (in treatment centres)	Refer to **treatment centres** Dilated eye exam Fundus photography Strongly consider laser photocoagulation (if severe NPDR and other risks such as Raised Blood Pressure or High BMI)	Dilated eye exam exam every 4 (+/- 2) weeks Strongly consider laser photocoagulation (if severe NPDR and other risks such as Raised Blood Pressure or High BMI)	Dilated eye exam every 4 (+/- 2) weeks Strongly consider laser photocoagulation (if severe NPDR and other risks such as Raised Blood Pressure or High BMI)	This DR grade would remain under the care of the treatment centre until regressed to R1 status, then to be discharged to screening as per the grading matrix. TC monitor to 20 (+/-2) weeks post-partum at least
R3M0 / R3M1 (in treatment centres)	Refer to **treatment centres** Dilated eye exam Fundus photography Laser photocoagulation	Dilated eye exam every 4 (+/- 2) weeks Fundus photography Laser photocoagulation	Dilated eye exam every 4 (+/- 2) weeks Fundus photography Laser photocoagulation	This DR grade would remain under the care of the treatment centre until regressed to R3SP1 status, then to be discharged to screening as per the grading matrix. TC monitor to 20 (+/-2) weeks post-partum

5.6 General assessment and treatment guidelines

- There should be information leaflets available detailing the procedure and associated risks and benefits. Leaflets are available to order free of charge at www.healthpromotion.ie.
- For all procedures performed there must be informed consent obtained and recorded from the patient.
- All planned procedures must be recorded on the OptoMize system.
- All procedures performed must be recorded on the OptoMize system.
- Where there is no option in the 'drop down menu' for a specific procedure, the procedure must be recorded as 'other procedure' with details recorded in the comment field.

5.7 Management of non-diabetic eye disease referrals

Clinician review will determine those that may require a more timely assessment.

All referrals found to have non-diabetic eye disease at screening are deemed to require further assessment.

Following confirmation of the diagnosis, each centre should check if patient is under the care of another ophthalmologist.

- If so, refer back to that ophthalmologist for ongoing care and discharge patient back to screening for annual recall with discharge images entered on OptoMize.
- If patient is not under the care of another ophthalmologist, book care plan as per local standard e.g. to cataract clinic or glaucoma clinic in the patient's immediate catchment area and discharge patient back to screening for annual recall with discharge images entered on Optomize.

5.8 Communication of results

It is the responsibility of the treatment clinic to communicate the result of the examination and all treatments performed to:

- Relative diabetes care clinicians in primary and secondary care.
- Current ophthalmologist if recorded by patient.
- Maternity hospital if the patient is currently pregnant. Details of the relevant maternity hospital will be supplied to the treatment centre by the DRS Treatment Coordinator.

6. Management of attendance

There should be a departmental attendance policy to include a 'did not attend' (DNA) / cancellation policy. The programme recommends following up-to-date HSE guidelines in the management of DNA cases.

Medical records of patients who DNA or cancel appointments, should be reviewed by a clinician, to decide on the timing of future appointments.

Appointment non-attendance is recorded on the OptoMize system.

7. Governance

The management of Diabetic RetinaScreen requires regular operational meetings between hospital administration, clinic nursing staff and clinical leads. Regular management reports include waiting times, capacity of the service, management of DNAs in addition to reports on administrative workloads, including backlogs or as required by the programme.

Quarterly multi-disciplinary team (MDT) meetings are required. These can take place virtually between the treatment center clinicians and Diabetic RetinaScreen to review referrals and the failsafe process.

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Review and development of the Clinical Practice Guidelines for Diabetic RetinaScreen

Multi-stakeholder involvement is a key requirement for the effective review and development of this guideline. The stakeholders involved in the development of this document are outlined in the Authors & Contributors section on page 23. The steps involved in the review and development of this document are outlined below in the review and process section.

Budget and Resource Implication

This revision of the guidelines document reflects the updated guidance to the Treatment Centres who deliver services for the Diabetic RetinaScreen (DRS) programme on the management of screening and treatment for diabetic retinopathy for women with diabetes who become pregnant, when referred by the DRS programme.

No new technologies have been recommended in this revision. Stakeholder Resourcing is the responsibility of the treatment centres and is defined within the terms of Memorandums of Understanding (MOUs), Service Level Agreements (SLA), and contracts with stakeholders.

Implementation plan

Stakeholders are notified of the reviewed document and are provided with the new revision of the guidelines when they are published. Stakeholders are required by MOU to ensure that their staff are aware of and trained on implementing the guidelines relevant to their area of practice. On-going assistance is provided by the programme and treatment centre coordinator for Diabetic RetinaScreen.

Communication and Dissemination

External to NSS

The NSS communications team will update the website with the new revision. Stakeholders are provided with a copy of the revised guidelines once approved within the NSS.

Internal to NSS

This document is a controlled document and dissemination internally is managed via the distribution list assigned on the NSS Quality Management Information system (Q pulse). The system will automatically email each person on the distribution list, and they must acknowledge they have read and understood the document.

Governance and approval

The document was revised in line with documented governance arrangements as outlined in the Clinical Practice Guidelines for Diabetic RetinaScreen review and development process below.

Monitoring and Evaluation

Ongoing monitoring of compliance with these guidelines will be conducted by the treatment centre coordinator for Diabetic RetinaScreen. The evaluation shall aim to determine adherence to the process and identify any challenges to implementation.

Review and Update

This guideline will be reviewed and updated every three years or more frequently if necessary to ensure that any changes to the process, relevant legislation, technology and/or the HSE's organisation structure and business practices are properly reflected in the document.

Internally within the NSS, an alert is sent to the document owner when a review is due via NSS Quality Management Information system (Q pulse). The guidelines will be kept under review and comments and feedback are welcome to inform this process. Any change requests raised against the document throughout the period of each revision is stored on NSS Quality Management Information system (Q pulse).

Clinical Practice Guidelines for Diabetic RetinaScreen review and development process

Step 1. Review of the latest version of appropriate literature and guidance documents available

Step 2. Gap analysis, amendment of existing content and incorporation additional guidance

Step 3. Review, amendment, and approval of content by the Advisory Committee for Pregnancy Pathway

Step 4. Review, amendment, and approval of content by CAG, which includes international experts. Final draft prepared

Step 5. Review, amendment, and approval of content by Diabetic Retina Screen Executive Management Team (EMT)

Step 6. Approved document submitted to Q-Pulse QMS for approval, communication and dissemination.

Step 7. Approved document published online and circulated to the relevant Stakeholders.

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