

# NHS England Diabetic eye screening: Patient grading referral surveillance

Guidance updated 02.07.2024.

Diabetic retinopathy is one of the most common causes of sight loss among people of working age. Diabetic eye screening is a way of detecting the condition early before someone notices any changes to their vision. Detecting retinopathy early means treatment can prevent it getting worse.

Screening is offered once every 24 months for those individuals with diabetes aged 12 years and over with two consecutive negative test results, and once every 12 months to those individuals with a positive, non-referrable result or a single negative result. The screening test involves examining the back of the eyes and taking digital photographs of the retina.

Prior to implementation of the 'common pathway' for diabetic eye screening between April 2013 and March 2014, there was little consistency between local screening programmes. There was variation in grading and referral processes, as well as commissioning in terms of what activities were part of screening and what activities were part of diagnostic and treatment services.

Important elements of the common pathway for diabetic eye screening pathway include:

- provision of primary, secondary and arbitration grading
- only retaining annual recall individuals with a positive non-referrable result (R0M0) in the screening service
- management of individuals who:
  - require more frequent monitoring (such as 3 or 6 monthly) or screening in pregnancy in surveillance clinics outside the routine screening pathway.
  - have unassessable images in slit lamp biomicroscopy surveillance clinics.
- reviewing all images with referable disease by the clinical lead or designated senior grader to decide a referral outcome grade that provides the referral outcome.

The common pathway will enable many R1M1 individuals to be kept in a surveillance service delivered by the screening programme without the need for a referral. A consultant ophthalmologist with medical retina experience will supervise individuals within these surveillance clinics according to local protocols and based on best evidence.

The common pathway clarifies circumstances in which individuals can be suspended or excluded from screening. Individuals under care of ophthalmology for diabetic retinopathy should be suspended and not be invited for annual screening. The local programme's clinical lead or a designated clinician will assess individuals who are considered to have an ungradable image according to the NHS Diabetic Eye Screening Programmes (DESP's) exclusions and suspensions



guidance.

The introduction of features-based grading at the same time as the common pathway emphasised the relationship between features and screening outcomes.

The changes to the grading criteria include:

- defining the R2 pre-proliferative level
- defining groups of exudates
- introduction of a stable treated R3 grade (R3s)
- simplification of image quality into adequate and inadequate



## Patient pathway for retinal screening

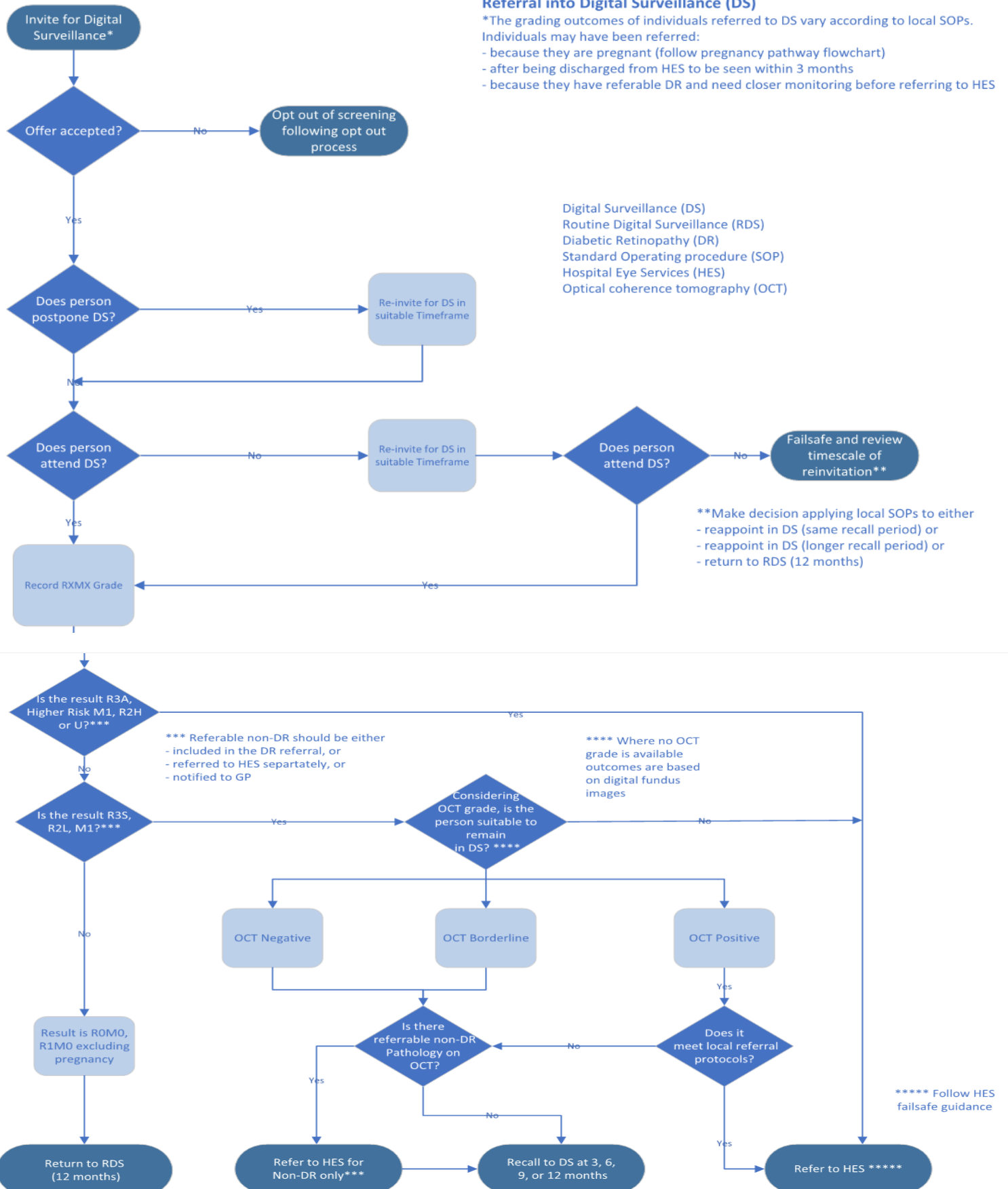


## Referral pathway for digital surveillance

### Referral into Digital Surveillance (DS)

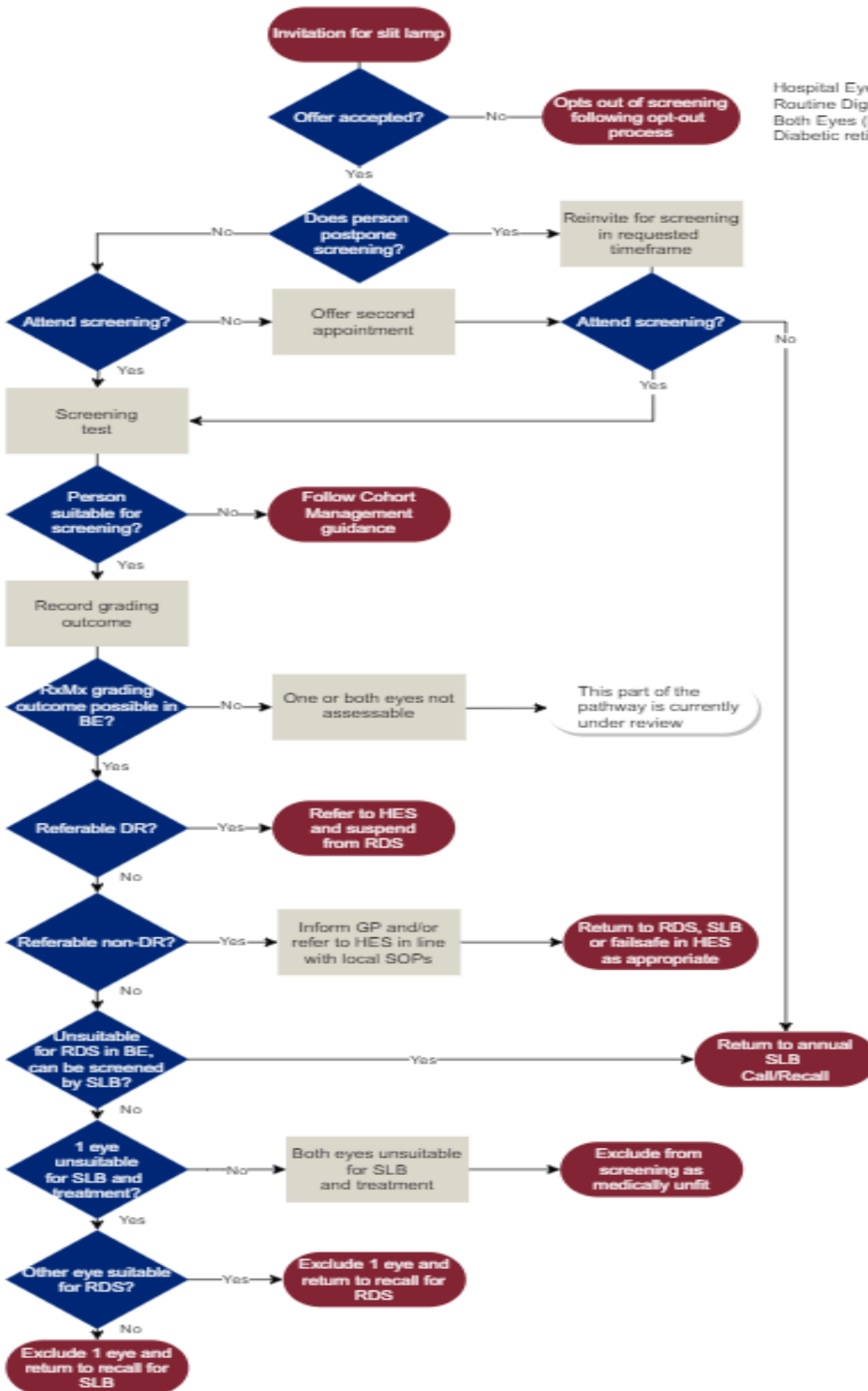
\*The grading outcomes of individuals referred to DS vary according to local SOPs. Individuals may have been referred:

- because they are pregnant (follow pregnancy pathway flowchart)
- after being discharged from HES to be seen within 3 months
- because they have referable DR and need closer monitoring before referring to HES

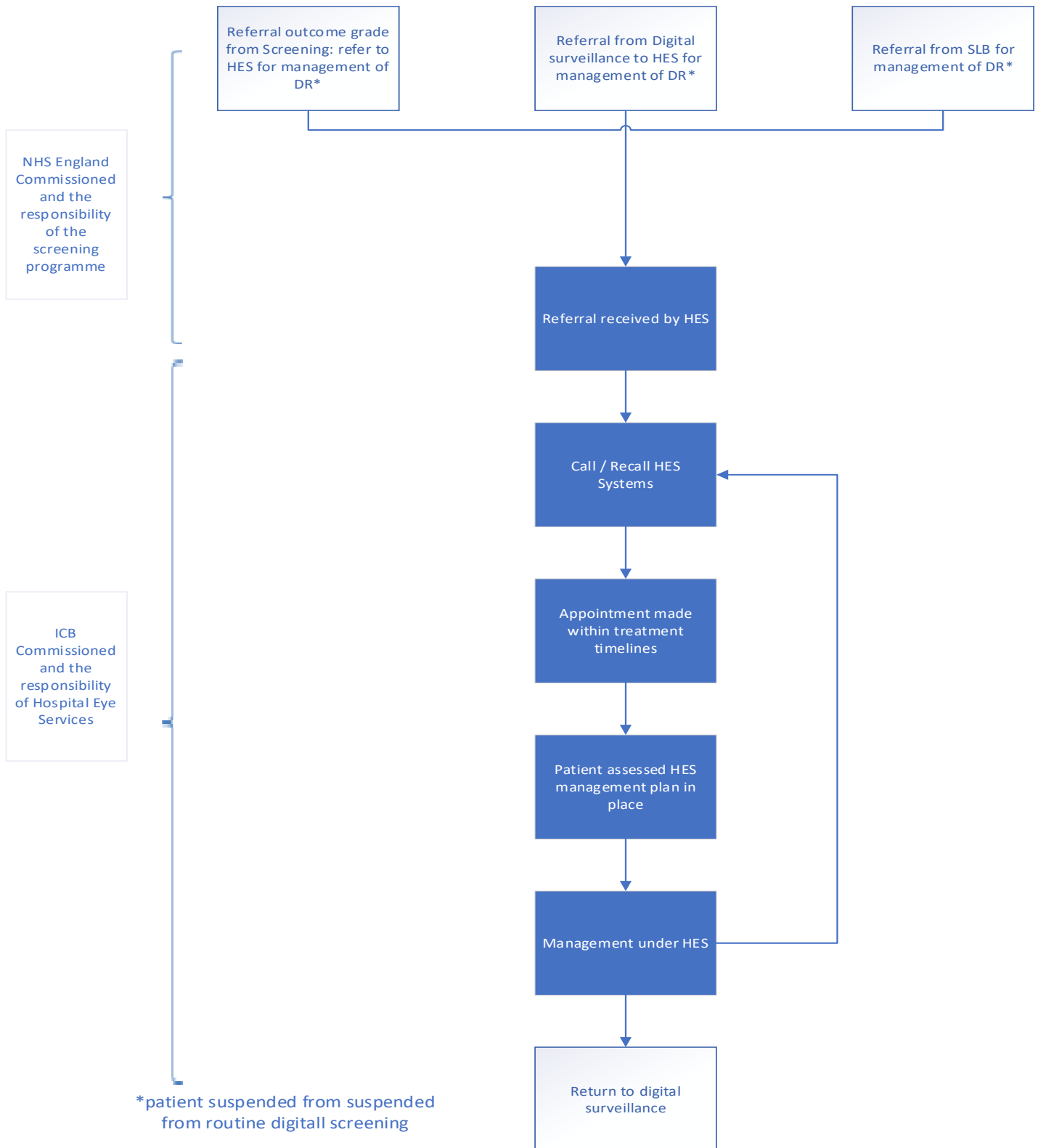


## Referral pathway for slit lamp biomicroscopy surveillance.

Hospital Eye Services (HES)  
Routine Digital Screening (RDS)  
Both Eyes (BE)  
Diabetic retinopathy (DR)

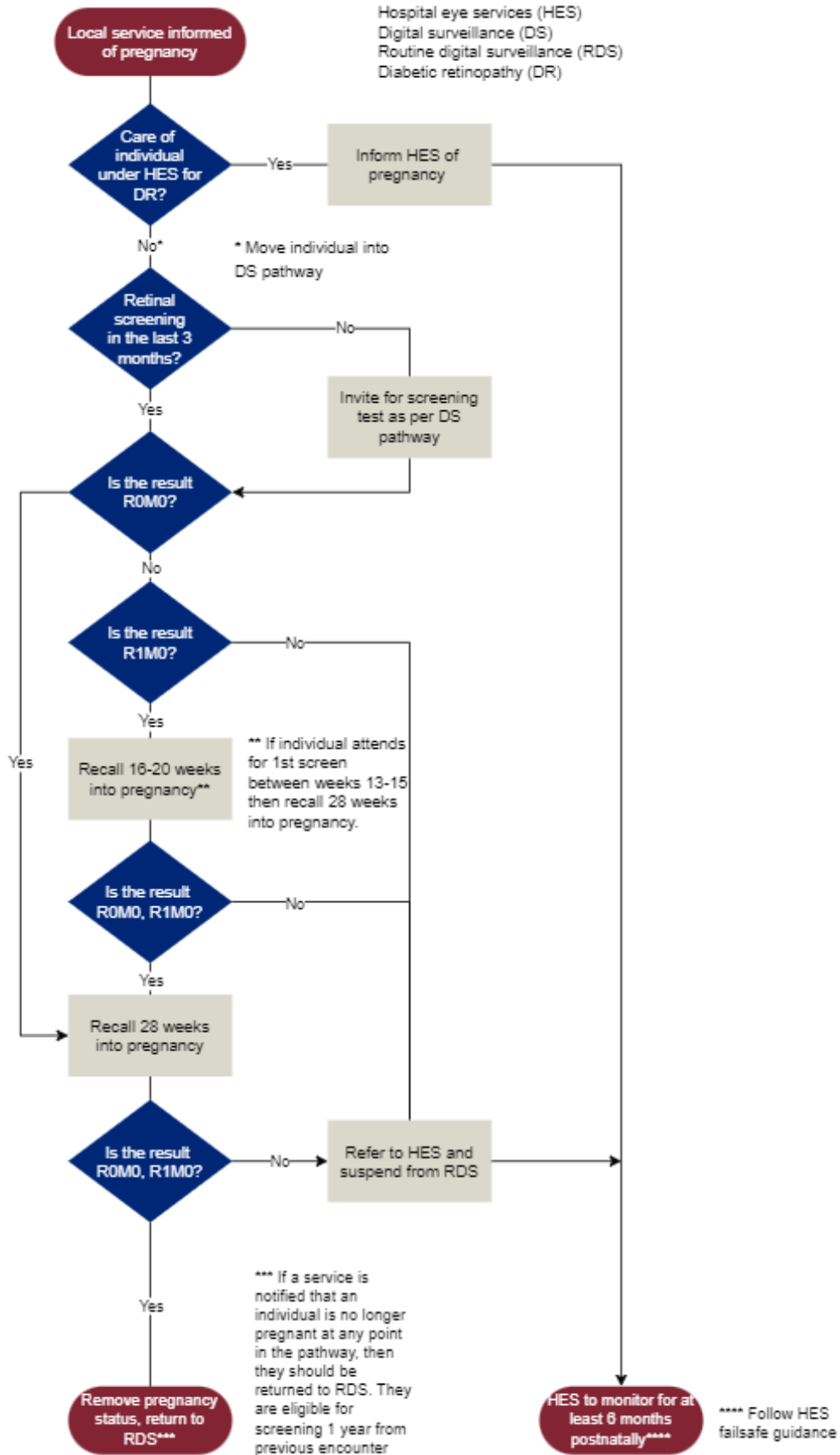


## Referral pathway for management of diabetic retinopathy



## Pathway for pregnant patients

The NHS Diabetic Eye Screening programme screening guidelines in pregnancy follows the NICE guidelines <http://www.nice.org.uk/guidance/ng3/chapter/1-recommendations>



## Single common grading pathway

Graders must grade the minimum required numbers of image sets per year to maintain expertise

The agreed hierarchy for 'eye for which action is most urgently required' is  
**R3AM1 > R3AMO > R3SM1 > R2M1 > R1M1 > R2MO > U > R3SMO > R1MO > ROMO**

