**NHS Diabetic Eye Screening Programme Test and Train Service**

**Ref: C264090**

**BACKGROUND**

This background document explains:

1. the current arrangements for the Diabetic eye Test and Training **(Section 1)**
2. the requirements and purpose of the future contract for a DES Test and Training system **(Section 2)**

**Section 1**

1. **Background**

The Test and Train service provides a critical internal quality assurance function for the NHS Diabetic Eye Screening Programme.

The NHS diabetic eye screening programme (DESP) is a screening programme that invites over 3 million people each year for their eye screening.

The programme offers screening for everyone with diabetes who is 12 years old or over. Routine digital screening appointments are offered every 1 or 2 years.

**The aim of the NHS Diabetic Eye Screening Programme is to:**

* reduce the risk of preventable sight loss amongst people living with diabetes

People with diabetes can be affected by diabetic retinopathy (DR), where high blood sugar levels can lead to sight loss.

The retina is a layer of tissue at the back of the eye which contains light sensitive cells called rods and cones. In diabetic retinopathy, high blood sugar levels can lead to damage of the blood vessels in the retina, which in turn damages the rods and cones. This can result in irreversible sight loss.

Often, individuals will only become aware of any visual disturbance once significant damage has already occurred. Therefore, there is a need for earlier detection and treatment of the condition.

**The programme achieves this through:**

* + Maximising detection of diabetic retinopathy
  + Appropriately referring people requiring further investigations promptly to treatment services
  + Ensuring high uptake and coverage across the eligible population
  + Reducing health inequalities, both in terms of access to services, and health outcomes

Following the initiation of The NHS Diabetic Eye Screening (DES) Programme the task of commissioning this screening was delegated to the Primary Care Trusts across the country which resulted in variable patterns of screening delivery models. The need for effective Internal and External Quality Assurance (EQA) systems became evident with some high profile and public domain cases relating to poor performance of some aspect of the patient screening/grading pathway highlighting the need for ongoing QA.

In order to maintain a high quality, clinically safe service the programme currently procures the services of the Diabetes Eye Screening Test and Training Sets from Gloucester Hospitals NHS Foundation Trust.

The contract for TAT provision was novated across from PHE to NHS England on 01 October 2021 following the close down of PHE. This current contact was extended again until 30 September 2023 to ensure continuity of TAT service during the transition and to enable NHSE to undertake a re-procurement exercise.

**What is the current Test and Train (TaT) service**

The NHS DES Programme Advisory and QA Committees determined that for grading quality to be assured an on-line disease ‘grading’ test should be developed which would present the same images to all staff undertaking grading in England so that participation and performance data could be monitored locally with national oversight when appropriate. The system was funded and commissioned and called Test and Training (TAT).

Participation in monthly TAT has been included in the service specifications across the NHS Diabetic Eye Screening (DES) Programme for all staff who work as qualified, non-supervised ‘live’ graders in local screening programmes.  The system was also recommended for use by Clinical Leads and Hospital Eye staff who do not participate in ‘live’ grading, although this has not been mandated.

TAT is a web-based system which serves up sets of test images to graders on a monthly basis in order for local programmes to be able to manage the performance of their graders.

1. TAT should be a monthly quality assurance and training-support system for readers (graders) of diabetic retinopathy who work in systematic Diabetic Eye Screening Programmes. It should be available to new and experienced screening staff and to staff wishing to improve their skills in the detection of diabetic retinopathy from ophthalmic images.
2. The system should provide graders with access to sets of retinal images from to identify and classify the retinopathy features present in the ‘ground-truthed' images. Each set of cases should be randomised at the point of delivery, so no two people see cases in the same order.
3. Images for use within TAT should be taken (with consent) from real service user images and undergo a rigorous grading assessment carried out by a selection of the highest performing graders in the TAT system.
4. TAT should deliver a mechanism which allows graders to be assessed against each other locally and against a standard that removes the complexities of local variations such as service user demographics and local protocols. Each grader should be given the same set of images (in a different order to prevent collusion) and the scores should be available to the management of the programme who can then identify a grader who is below standard when compared to the ‘guide grade’. That TaT, alongside other internal quality assurance tools, aids management in identifying training needs for individuals or groups of graders.
5. TAT should provide reports which are shared with the commissioners and quality assurance services at local programme boards, along with reports on live grading, detailing the participation and performance of each qualified grader within the programme allowing any problems with grading quality to be identified and resolutions put in place to mitigate any risk to service users.
6. The Diabetic Eye Screening Test and Training (DES TAT) system is required for all staff who work as qualified, non-supervised graders in local screening programmes
7. The TAT system will also form part of the Health Screeners Diploma (Diabetic Eye) modules and will be used to assess competency prior to individuals achieving the award and being allowed to grade independently.
8. TAT participation and reporting will form part of the service specification for the Diabetic Eye Screening Programme in England.
9. TAT should enable clinical standardisation across clinicians undertaking the work, which removes the complexities of local variations such as service user demographics and local protocols
10. Although TAT should not be used by the central team as a form of performance management it is used, in conjunction with a lot of other data, to inform the central team on the overall performance of a programme, particularly when looking at implementing changes to the programme i.e. extended intervals and may help determine the suitability of a programme to progress with changes in the future.

**Section 2 Purpose of the RFI**

**The purpose of the RFI is to seek intelligence in terms of new and emerging technologies and techniques, to understand the risks of modelling and to test the interest of potential suppliers in this market. This process is not a procurement exercise and there will not be a process of evaluation or assessment in terms of delivery of this contract. A procurement process will follow this exercise but this process is not connected in terms of any assessment. We reserve the right to offer the opportunity to discuss your submission in the interest of developing a final specification and business case, during this market engagement exercise.**

Please complete the attached document Appendix A and attach as per the instructions in the e-Tendering portal. The closing dates for submissions is 12 noon on the 3rd May 2024.

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