DRAFT PAPER – 8 June 2007

Diabetes Retinopathy screening in Hertfordshire – current situation and future plans for the service

Diabetes reduces life expectancy and is associated with a number of medical complications including diabetic retinopathy which is the commonest cause of blindness in people aged 30 to 69 years. Twenty years after the onset of diabetes, almost all patients with type 1 diabetes and over 60% of patients with type 2 diabetes will have some degree of retinopathy. Even at the time of diagnosis of type 2 diabetes, about a quarter of patients have established background retinopathy. Treatment can prevent blindness in the majority of cases, so it is essential to identify patients with retinopathy before their vision is affected. This is done by retinopathy screening. The NHS has two targets for retinopathy screening – by March 2006 80% of people with diabetes[1] should be offered retinopathy screening, and by December 2007, 100% of patients should be offered retinopathy screening.

1. Background

Hertfordshire does not currently have a diabetic retinopathy screening programme which meets national standards. The purpose of this paper is to describe the current arrangements for diabetic retinopathy screening in the county and to discuss ways in which the service can be improved. In recent years factors including previous NHS commissioning arrangements, several changes to NHS organisational structures and different locally based approaches has meant that the service has developed separately in West Hertfordshire and East & North Hertfordshire.

3 services none fit for purpose

Missed target already (SHA got wrong year)

Janet Lewis taken it over

How to merge 2 services

Clin Gov lead one step away from litigation

We think ~ 70,000

£18/pt/yr leaves gap of 1900,000

can either { bring up to standard or shut it (PCT runs in Wherts)

JH

One static site or camera moving round as backup

E & N Commissioned service – more robust could bring up to target if enough money

7.11 – Household pathetic – JH don't know

[1] There are an estimated 17,000 patients with diabetes in West Hertfordshire and 18,000 in East & North Hertfordshire

2. Expectations of a retinopathy screening service

The National Screening Programme for Diabetic Retinopathy[2] describes in detail what should be expected from a systematic screening programme. Key points include:

where is money coming from? Before do any more work know if spend to save

2.1 Programme size: minimum 12,000 patients

This is the critical mass to produce robust statistical data in order to determine whether or not you are likely to have a problem in any particular area of a screening programme. In addition graders need to see a sufficiently large number of each degree of disease to enable them to maintain a good level of expertise. There are also economies of scale -smaller programmes tend to have higher unit costs.

60,000 Watford N 50,000 Dacorum

2.2 Central management of call / recall lists and administration.

A frequently updated, full and accurate database for all patients is the cornerstone of a secure programme. Fragmentation of this area of administration, including managing call and recall through GP surgeries, is associated with failures in screening programmes and avoidable progression of disease. The call/recall centre should be able to tell at any one time, amongst other things, which patients have been offered screening, which patients have accepted the offer, the place and date of screening, who has not attended and actions taken, who has graded the imagesets, and the result, whether or not they have been referred to ophthalmology, whether ophthalmology has seen them quickly enough and the outcome.

Most costs next year but want to go away

2.3 Implementation and effective use of appropriate software

new

Secure collection and analysis of data is a continuing process, both to assess internal progress and to check performance against national standards and trends. This way it is possible to identify problems early and take steps to put them right before the consequences are too far reaching. For instance one of the quality standards relates to the performance of graders against one another. Appropriate software will enable this to be checked swiftly in order to indicate whether one or more grader is, for instance, identifying far fewer (or more) patients with referable retinopathy.

11 – Janet to start up accurate costing

2.4 Screening method

This is by digital photography, using approved cameras and capture software. Ophthalmoscopy is not acceptable. The reason why digital photography is preferred is that a) it is possible to retain the evidence of progression of disease b) it enables the grader to take time and to magnify and manipulate images to identify the whole spectrum of disease and c) it is amenable to quality assurance and second opinions.

Can't continue to provide service way it was – eg mobile START will be fixed site

2.5 Secure and efficient links to eye departments

This must be tracked at all stages to ensure that patients do not fall through the net. The central call/recall centre needs to know who is responsible for care, the outcome of any assessments in ophthalmology, and to check these if there is no feedback within an appropriate period of time.

@ no. of sites (not van) Furthermore will be loss of optometry service

2.6 Identified clinical lead and programme administrator / manager

Clear lines of accountability and responsibility should be identified so that all key responsibilities are clearly located with the appropriate person who should have necessary authority to act. It should be clear who is to take overall responsibility for all the actions in the programme.

ME – says works well

[2] http://www.nscretinopathy.org.uk/resources/Diabetic%20Retinopathy%20Screening%20Workbook,%20Release%204.0%202007-01-10.pdf

good working relationships Concerns about fitting in with diabetic annual care review

JH – doesn't meet quality stds

2.7 Trained, accredited and competent staff

It is important that staff being used to identify disease have specialist training in diabetic retinopathy. It cannot be assumes that because someone is medically or optometrically qualified that they are also sufficiently trained in this particular area. National standards have to be applied by them in both the level of disease identification and the grading pathway, including quality assurance activities.

2.8 Quality Assurance

Disease will be missed by graders, no matter how experienced. It is not because an individual is negligent but because we are human and research indicates that the way the human eye scans images results in some data being seen and other data being overlooked from time to time. Effective quality assurance, external and internal (including the second full grade of all disease imagesets and 10% of the normals, and arbitration level grading where there are disagreements between the first two grades) will reduce but not eliminate error. It is the patients, the graders and the programmes risk reduction process.

JH - can't make optometrists sup to std
- wrong camera in some cases
- not enough rd numbers
- charging too much - would need to do screen for £9/screen!

JH - Initially expanding services we have as PCT

MMCG - PCT not meeting quality stds
- mixing up funding/commissioning risk to PCT provider

JH - pts wouldn't commission from PCT eventually
Concerned (RE) W, D, ST A, rather than Harpenden

NE provide tender clear contract provider services sa
- if you want a robust service this is what it will cost

3. East & North Hertfordshire – summary of current arrangements[3]

The clinical lead for East & North Herts diabetic retinal screening service is Stella Waller. The programme has been running for five years and is based at Queen Elizabeth II Hospital at Welwyn Garden City. There is a central call / recall system that uses appropriate Orion (Clinisys) software. The server that runs the software is managed by E&N Herts Hospital Trust IT department. Screening cameras[4] are based at QEII Hospital (Welwyn Garden City), Lister Hospital (Stevenage) and Hertford County Hospital (Hertford). Primary and secondary grading is carried out by current screeners / graders at E&N Herts who are fully trained[5]. Arbitration grading is carried out by the senior screener who is also the assistant manager of the programme. Tertiary and referral grading is carried out by the clinical lead for the service. Positive recalls (for sight threatening retinopathy) and technical recalls (where clear photographs cannot be taken) are seen by an ophthalmologist with laser treatment at that visit if required. The ophthalmologist is required to see the patient within recommended time limits and is required to inform the programme by letter of the outcome of that visit. The current screening interval is approximately 2.5 years. The population of the former PCT area of Royston Buntingford & Bishops Stortford (79,000, approximately 2,800 patients with diabetes) is not covered by the programme.

Non staff spend (annual)		**Staff spend (annual)**		
			WTE	**cost**
Orion Server software annual maintenance	6,302	Screener / graders (band 4)	2.1	47,308
Orion Service agreement	1,575	Senior screener / grader / assistant manager Band 7 (only 0.4 charged to screening)	0.6	16,776
Capture Software annual maintenance	2,177	Programme Lead / manager	0.3	26,061
Camera annual maintenance	1,600	Ophthalmologist grader / clinical lead	0.175	15,200
Stationery	1,000	Ophthalmologist biometry clinic & recalls / laser	0.125	10,855
Phone	1,586	Office staff (band 4)	0.9	20,274
Training	1,120	secretary	bank	200
Travel	5,200			
Drops/tissues	1,470			
Total non-pay	**22,127**	**Total pay**		**128,743**

East & North Hertfordshire total spend (pay and non pay) **161,870**

MMCG — community matron
— Lucentis
— audiology
this service

4 cost pressures at least

APacker required to do this national must d be judged as commissioners4 PCT & PBC

[3] Summary and costings from a paper by Stella Waller 25 January 2007
[4] These meet National Screening Committee standards
[5] City and Guilds Diploma in Retinal Screening

Julie Carie

JH is Pub Health

raising issues of risks & provide arm

holding them to account on behalf

of commissioners

" Quadrant boards representatives

across care pathways

want more engagement from 1° care "

CC — but how doing it

MG — PBC needs to be in groups

" Must have detail

JH will ~~brief~~ provide service specifics