

EVALUATION OF A COMMUNITY-BASED DIABETIC RETINOPATHY SCREENING INITIATIVE

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BACKGROUND

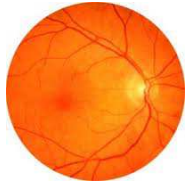
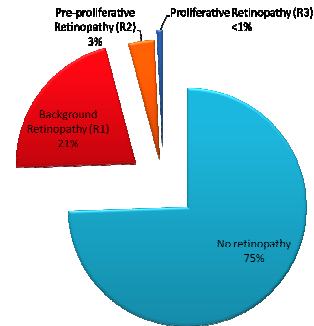


FIGURE 1: Normal eye



FIGURE 2: Diabetic proliferative retinopathy

FIGURE 4: Percentage of patients with retinopathy detected by the screening initiative



OBJECTIVES

METHODS

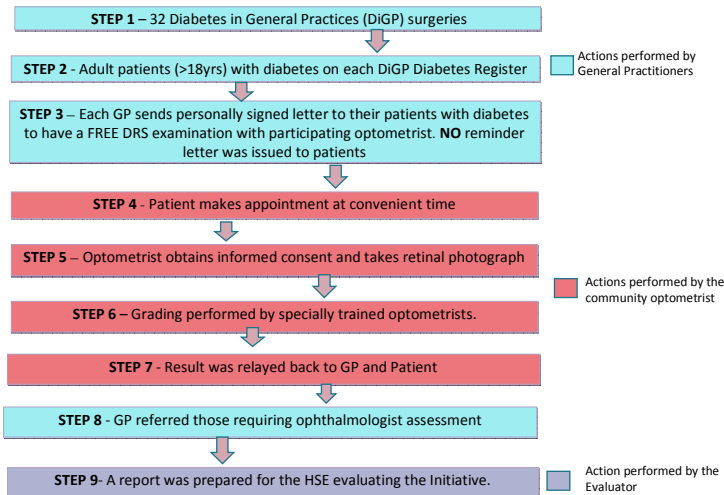


FIGURE 3: Flowchart of Diabetic Retinopathy Screening methodology.

RESULTS

OBJECTIVE	CRITERIA	MINIMUM STANDARD	ACHIEVED STANDARD AT THE TIME OF EVALUATION	
1	To invite all eligible persons with known diabetes to attend for the DR screening test	Completeness of database: Proportion of GPs participating % of known people with diabetes on register Percentage of eligible people with diabetes invited. Single collated list of all people with diabetes Systematic call/recall from a single centre of all people eligible for screening	90% 90% 100% No NA (1 st screening)	94% 100% 100% No NA (1 st screening)
2	To maximise the number of invited persons accepting the test	Percentage of eligible persons accepting the test: 1. Initial screen 2. Repeat screening (NA)	70%	49%
3	To ensure photographs are of adequate quality	Percentage ungradable patients in at least one eye	Raw ungradable, U <10%	6%
4	To ensure grading is accurate	Inter- and intra-grader agreement 1. For referable images 2. For non-referable images 3. Ungradable images	Programmes must provide evidence of internal QA activity in annual reports	30% of images were sent for arbitrary grading. As a QA mechanism, all images were graded by a secondary grader. Where discrepancy occurred between primary and secondary graders, such images was sent for arbitrary grading.
5	To ensure optimum workload for graders, to maintain expertise	Optometrists /ophthalmologists	Each optometrist or ophthalmologist should grade a minimum of 500 patient image sets per annum	4 out of 5 Graders (80%) graded more than 500 images.
6	To ensure timely referral of patients with R3 (fast-track) screening results (e-mailed or faxed)	Time between screening encounter and issue of referral request: 1. For referable images 2. Flagged by screener/grader as R3 fast-track referral, where secondary grading and appropriate referral action within 1 week	100% referred within 2 calendar week	100%
7	To ensure GP and patient are informed of all test results	Time between screening encounter and issuing of result letters to GP and patient.	70% <3 weeks 100% <6 week	100% 100%
Standards regarding appropriate treatment and referral for treatment have been omitted as data from secondary care were not available for inclusion in the evaluation.				
8	To ensure the public and health care professionals are informed of performance of the screening programme at regular intervals	Production of annual report		Evaluation report
9	To optimise Programme efficiency and ensure ability to assure quality of service.	Minimum programme size	Population including 12,000 people diagnosed with diabetes on current patient list (across 4 HSE areas)	Population size of 3447
10	To ensure that screening and grading of retinal images are provided by a trained and competent workforce	Accreditation of screening and grading staff in accordance with national standards	All staff should be accredited for their role within two years of appointment	Achieved

CONCLUSION