REGISTRATION FOR VISION IMPAIRMENT IN PATIENTS WITH DIABETIC RETINOPATHY – AN UNMET CLINICAL NEED?

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INTRODUCTION

As diabetic retinopathy is one of the leading causes for sight impairment in working age adults, certification of vision impairment (CVI) is crucial for unlocking access to services and improve quality of life. Registration can be considered on the basis of visual acuity alone or alongside visual field loss (see table below).

This study aimed to evaluate the proportion of eligible patients with complications from diabetic retinopathy, who are registered as sight impaired (SI) or severely sight impaired (SSI), under the care of Royal United Hospitals Bath NHS Foundation Trust.

Using Medisoft electronic records, patients with diabetes and recorded visual acuity in their better eye of 6/18 or worse, seen from November 2019 to November 2021, were included.

	Visual Acuity in better eye – best corrected (LogMAR)	*Visual Field*
Sight Impaired (SI)	1.0 or worse	Full
	0.6 or worse	Moderately restricted field
	0.5 or better	Marked field defect
Severely Sight Impaired (SSI)	1.4 or worse	Full
	1.1 or worse	Marked field defect
	1.0 or better	Severely restricted field defect

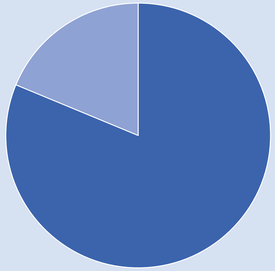
RESULTS



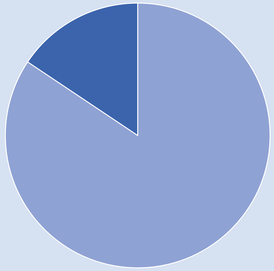
Of 406 patients with VA in their better eye of 6/18 or worse:

- 350 were not registrable as sight impaired (86.2%)
- 32 were applicable for registration but were not registered (7.8%)
- 14 were registered as sight impaired (3.4%)
- 10 were registered as severely sight impaired (2.6%)

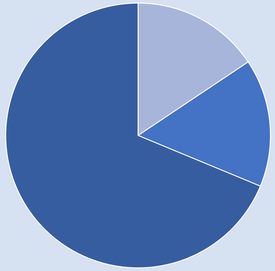
Of those 32 patients who were eligible for registration, but not registered:



81% were registrable as SI, and 19% were registrable as SSI



16% had full visual fields, 84% had significant visual field defects



69% were still under regular follow up, 16% had been transferred to another unit, and 16% were deceased

Mean age in registered group: **67 years**

Mean age in non-registered group: **69 years**

Number of eligible patients in the working age group (16-64 years): **22**

Ocular co-morbidities in eligible group

Cataract	2
POAG	4
CRVO	1
CVA	2
Keratoconus	1
Aphakia	1

CONCLUSION

This study identified the population of patients within our cohort who had vision loss secondary to diabetic retinopathy who were eligible to be registered as sight impaired.

There were a number of ocular complications that led to visual impairment, including neovascular glaucoma, ischaemic maculopathy and tractional retinal detachment.

In our population, this group represented 14% of the patients with diabetes with VA in their better eye of 6/18 or worse.

Of these 56 patients, 57% were not registered as sight impaired, despite being eligible.

RECOMMENDATIONS FOR CHANGE

Of the non-registered patients, 84% had significant visual field loss, mostly commonly due to extensive PRP scarring or peripheral retinal ischaemia.

Buckley et al found that after PRP treatment (1464-6088 burns), 50% of patients failed DVLA Estermann visual fields.

It is probable that clinicians are under-recognising the visual field component of the CVI criteria, particularly in those patients with extensive PRP scarring

References:

Muqit, M., Wakely, L., Stanga, P. et al. Effects of conventional argon panretinal laser photocoagulation on retinal nerve fibre layer and driving visual fields in diabetic retinopathy. Eye 24, 1136–1142 (2010).