Efficacy of novel Medical Retina Digital Clinics

Authors: Casey M [1], Sidorowicz A [1], Demir B [1], Heng S [1].
1: Moorfields Eye Hospital NHS Foundation Trust, London, UK

Acknowledgements: Moorfields Eye Hospital, Medical Retina Service
Contacts: moorfields.medicalretina@nhs.net, ling.heng@nhs.net

Background

The rising number of patients in the Medical Retina clinic has led to longer wait times and increased pressure on resources.

To address this, Moorfields Eye Hospital established the Medical Retina Digital Clinic. Alongside this the Digital Rapid Access Clinic was created to streamline urgent wet AMD referrals.

In these clinics, patients undergo multimodal imaging—OCT, wide-field imaging, and OCT-angiography.

This study evaluates the effectiveness of the digital clinic model.

Purpose

To review patients across all digital clinics sites, including the Medical Retina Digital Rapid Access Clinic, focusing on key performance indicators (KPIs) such as:

- the percentage of face-to-face (F2F) follow-up outcome,
- identification of patients requiring treatment, and
- the most common retinal conditions prompting F2F review.

Methods

A retrospective review of 7,202 patients was conducted:

- across all Moorfields Medical Retina Digital sites,
- from July 2023 to August 2023

Details of the included sites are reported in Figure 1.

Data was extracted using SQL reports and OpenEyes.

Inclusion criteria: all patients with an appointment in the Medical Retina Digital Clinics across the sites were analysed, including those who could not wait (CNW) or did not attend (DNA).

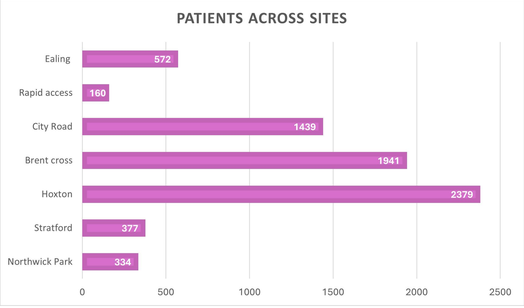


Figure 1. Bar chart representing proportion of patients seen at Moorfields Eye Hospital Medical Retina Digital Clinics which included Northwick Park, Stratford, Hoxton, Brent Cross, City Road, Rapid access and Ealing.

Results

Of 7,202 booked Digital Clinic appointments:

- 5,743 attended, yielding a 20.3% DNA rate.
- Allied Health Professionals (Optometrists, Nurses, and Medical Graders) conducted 35% of reviews.

The Medical Retina Digital Rapid Access Clinic met the key performance indicator (KPI) of cases being reviewed within 2 working days in 100% of patients.

Primary clinical outcome (Figure 2)

- Most patients (64.4%) remained in the digital pathway.
- 6.8% of patients were discharged.
- 28.9% of patients were referred for F2F follow-up.
- Among those seen F2F, 25.9% received treatment;
- in the Digital Rapid Access Clinic, 39.2% of patients received treatment.

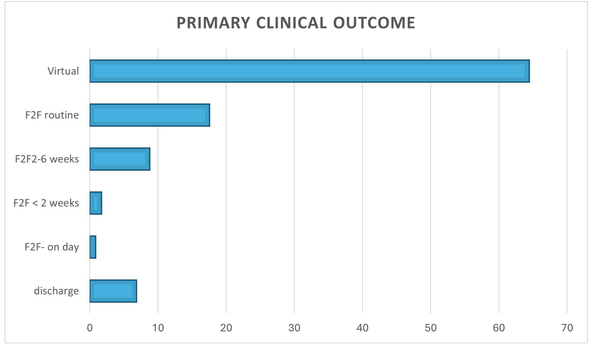


Figure 2. Bar chart representing the primary clinical outcome of patients by percentage that were reviewed in the Medical Retina Digital Clinics across all sites.

Diagnosis across all sites (Figure 3)

Out of the patients reviewed:

- 29.4% had a diagnosis of low-risk non-proliferative diabetic retinopathy (DR) without significant diabetic macular oedema (DMO).
- 51.1% of patients had an eye condition related to Diabetes (including non-proliferative DR, Proliferative DR and DMO).
- Age-related macular degeneration (wet and dry) made up a small proportion across all sites at 9.5%, making up a total of 48% of patients reviewed in the rapid access clinic.

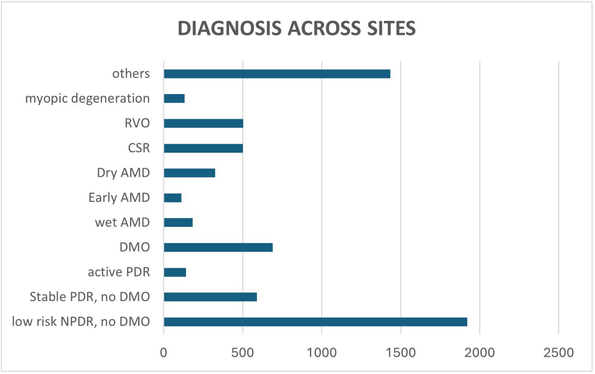


Figure 3. Bar chart representing the diagnosis of patients reviewed in the Medical Retina Digital Clinics across all sites.

Conclusions

- A low rate of F2F follow-up outcome among remotely reviewed patients demonstrates the digital clinic's effectiveness.
- Reduction in unnecessary in-person visits and prioritising those needing treatment.
- Potential for optimising resources and expanding service capacity.
- Contribution of Allied Health Professionals to free up consultant time.