Evaluation of the Manchester COVID-19 Urgent Eyecare Service (CUES)

Rahul Kanabar[1], Wendy Craven[2], Helen Wilson[3], Rebecca Rietdyke[2], Felipe Dhawahir-Scala[3], Matthew Jinkinson[2], William D Newman[3], Emma Williams[3], Robert A Harper[3,4]

[1]Manchester Medical School, The University of Manchester, Oxford Road, Manchester, M13 9PL, UK. [2]Primary Eyecare Service, 2.3 Waulk Mill, 51 Bengal Street, Manchester, M4 6LN, UK. [3]Manchester Royal Eye Hospital and Manchester Academic Health Sciences Centre, Manchester University NHS Foundation Trust Manchester, Manchester, M13 9WL, UK. [4]Division of Pharmacy and Optometry, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Manchester, M13 9PL, UK.

Background

- Pressure on capacity in ophthalmology alongside the coronavirus (COVID-19) pandemic lead to the development of the COVID-19 Urgent Eyecare Service (CUES), allowing patients to receive a prompt ophthalmic consultation, including remotely.
- Overall, the intended benefit of CUES was to reduce ophthalmology attendances in the HES and eye-related general practice (GP) appointments, allowing HES clinicians to focus on more urgent eye-care cases, and initially at least to contribute to the frontline efforts within critical care relating to COVID-19.

Aim: The aim of this study was to conduct a service evaluation of CUES in Manchester. This occurred generically in Greater Manchester (GM) for primary care activity and then in both Manchester and Trafford specifically in respect of secondary care activity where MREH is the main provider hospital and where we were able to collate referral data.

Methods

- The CUES pathway is summarised in **Figure 1**.
- Data was collected both prospectively and retrospectively from both primary and secondary care over an 8-week period within June to August 2020.
- Data for false negatives was collected retrospectively from August to October 2020.

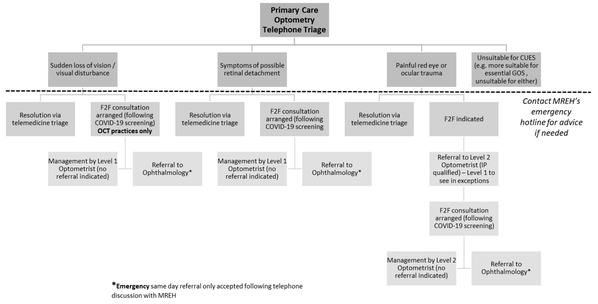


Fig. 1 Summary clinical pathway for the Manchester CUES.

Results

- A total of 2,461 patient assessments within GM CUES were undertaken throughout the 8-week timeline of this evaluation; 68.7% of these appeared to have self-referred to the CUES service.
- 85.7% of CUES cases seen within primary care were also managed within primary care, without the requirement to be referred to secondary care.
- 91.7% of cases initially screened for CUES were deemed eligible and given a telemedicine appointment in GM; 53.3% of these cases required face to face consultation.
- 14.3% of cases seen within in GM CUES (351 out of 2461) were provisionally referred to secondary care.
- A detailed breakdown of the pathway for the 98 provisional CUES referrals received by MREH is shown in **Figure 2**.

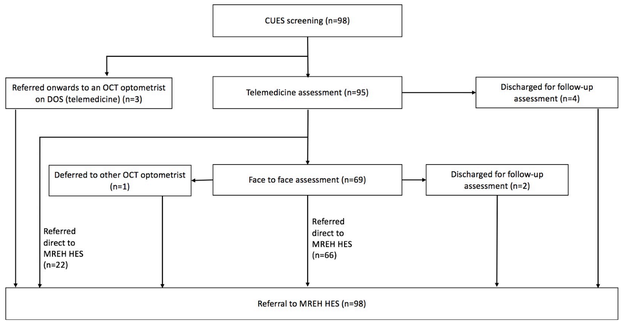


Fig. 2 Flowchart for the pathway of the 98*(of 101) provisional CUES referrals received by MREH EED over the course of an 8-week period between June 2020 and August 2020. *3 provisional referral forms could not be attained.

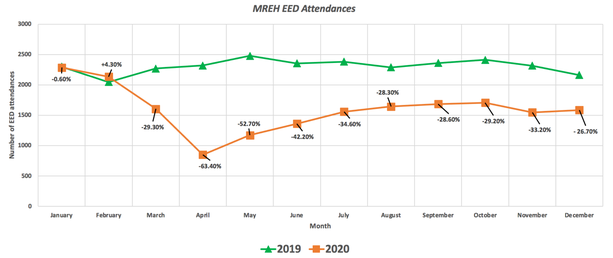


Fig. 3 Graph displaying a summary of the number of MREH EED attendances from 2019 and 2020.

- MREH Emergency Eyecare Department (EED) attendances were reduced by 37.7% per month between April and December 2020 inclusive, compared to the same months in 2019 **(Figure 3)**.
- 23.9% of accepted referrals were ultimately categorised as being cases that may not have needed referral (i.e. based upon a comparison of primary care and secondary care diagnoses).
- Patients attending a CUES face to face assessment were more likely to have a diagnosis in agreement with secondary care, compared to patients referred in from telemedicine assessment only (P<0.05).
- 2.1% of patients were identified as having attended the MREH EED within 28 days after discharge from CUES without referral, between August to October 2020 inclusive.
- The false-negative rate for moderate-to-high risk of sight loss cases in the cohort reviewed was 0.2%.

Conclusions

- This early evaluation of CUES demonstrates a high level of activity in CUES in primary care, alongside a sustained reduction in patient numbers attending secondary care acute services during the monitored timeline.
- Although developed for the unique situation of COVID-19, it is evident that there is a requirement for CUES to evolve into a longer term primary care service.
- Further evaluation will be important in refining the service, including how best to optimise the role that the guidance element within the pathway can provide at the interface of primary and secondary care, as well as investigating the enhancements that can be conferred to CUES by expanding the critical mass of those practitioners trained and accredited with independent prescribing.
- Additional ongoing assessment of EED activity is needed with wider growing pressure on acute services.
- The evaluation of a non-referred population seen in primary care CUES supports the view that the service is clinically safe.

Correspondence to: rahulkanabar@gmail.com