


Emerging from the first COVID-19 wave: archotyping the new NHS ophthalmic waiting room

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Received 8 June 2020

Accepted 22 September 2020

Published Online First

6 October 2020



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To cite: Loh GK, Bhalla M, Ah-kye L. *BMJ Innov* 2021;**7**:240–242.

INTRODUCTION

The COVID-19 global pandemic has brought the world to a relative standstill, dampening the fervour of eye care specialists hoping to make 2020 the year of championing ocular health. Even so, the seemingly insurmountable challenges we find ourselves facing as a specialty in this dark period have the potential to bring about long-term solutions to age-old problems. Enter the ophthalmic waiting room.

In the UK, NHS Digital's 2019 report on outpatient attendances placed ophthalmology as the busiest outpatient specialty, seeing 7.9 million patients a year.¹ This translated to nearly 10% of all outpatient visits coming through the ophthalmic waiting room. Additionally, alongside our ageing population, the improving community detection of eye conditions contributes to an increased need for ophthalmic outpatient care year on year. The 2018 RCOphth Workforce Census estimated that eye service demand will increase by 40% over the next 30 years.² That is a staggering statistic, considering we already see more patients than any other specialty. Certain heavily subscribed ophthalmic subspecialties, including retina, glaucoma and cornea, are often reliant on same-day outpatient investigations, such as photographs, optical coherence tomography (OCT) and perimetry. The treadmill of multiple investigations at each outpatient visit lengthens the patient journey through the clinic, and patients are subsequently kept waiting hours before eventually seeing a doctor. This is a pervasive issue despite local initiatives to streamline and improve the outpatient experience.

With the hopes of an efficacious and widely available COVID-19 vaccine still

more than a year away, social distancing and other measures to reduce the R number in crowded waiting rooms will have to be implemented. The average patient density in ophthalmic waiting rooms prior to the COVID-19 outbreak is suboptimal in helping to limit the spread of the virus.

The 2019 Estates Return Information Collection report paints a worrying picture of the current state of NHS infrastructure across the UK.³ It makes the physical expansion of existing outpatient waiting rooms and consulting areas highly unlikely. Ophthalmology will therefore have to adapt by radically overhauling our approach to conducting outpatient consultations. This paradigm shift can only be achieved through digital innovations and staff flexibility. In addition, as the UK looks to exit lockdown, the main goal of any outpatient department will be to reduce contact time between patients and healthcare staff. We propose the following measures to create the archetypical NHS ophthalmic waiting room to meet the challenges of preventing the spread of COVID-19 and to increase capacity to meet long-term demand.

ANTECEDENT REMOTE TRIAGE

The first step to optimising the outpatient journey lies with rigorous and effective remote triage—the sorting of patients before they arrive to an outpatient appointment. For existing patients requiring ongoing care, electronic patient records (EPRs) enable clinicians to determine complexity of cases and will allow risk stratification to be carried out. For new patients, EPR allows for referral scrutiny and deciding on preliminary tests. With triage occurring in advance of the patient visit, this will permit prioritisation

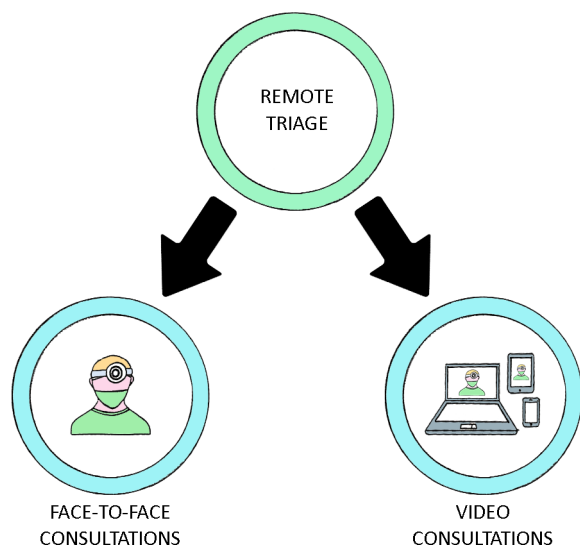


Figure 1 Antecedent remote triaging leads to either face-to-face or video consultations.

of those who will need a face-to-face consultation and those who can be scheduled for a video consultation (see [figure 1](#)).

Alongside risk screening, requests for investigations will be made in advance, including requirements for basic measurements such as visual acuity and intraocular pressure, and further tests such as photographs, OCT, perimetry or corneal topography. Preparation ahead of time can ultimately help in workforce planning so clinic staff, including nurses and technicians, can be profiled effectively. Patients requiring additional investigations should be scheduled earlier in the clinic to enhance patient throughput, reduce patient waiting time and to lessen the number of patients in the clinic at any one time.

Antecedent clinic triage can be easily profiled into employee work schedules during administrative sessions, and this can be done remotely from home. With an acclimatised triage framework, we can dampen the surge of anticipated outpatient appointments from the habitual overcrowded waiting room to a streamlined service that can be managed efficiently.

APPOINTMENT DECOUPLING

The typical waiting room prior to the COVID-19 outbreak is unable to respect social distancing due to the large numbers of patients. Considering this and the preferred limit in face-to-face exposure during a consultation, we propose a contemporary system of patient flow to manage the considerable numbers ([figure 2](#)).

First, those patients who were screened to attend an outpatient appointment will arrive to an improved waiting room set-up with a long-range pager system. All patients will be issued with the pager at registration and will commence their predetermined baseline

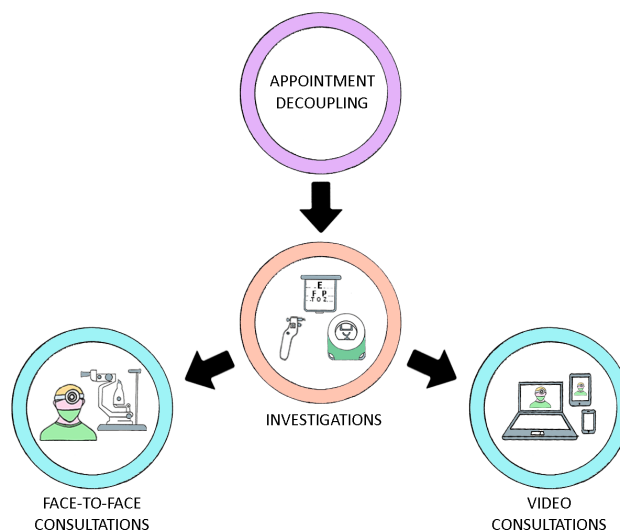


Figure 2 Appointment decoupling allows senior clinicians to scrutinize investigation results and either keep patients within the department for face-to-face consultations or send them out of the department to have a video consultation on the same day.

measurements and investigations (deliberated during antecedent remote triage). The pager system will allow the outpatient department to streamline the waiting room, whereby mobile patients leave to make space for immobile patients who will have waiting room priority. This encourages mobile patients to wait away from the outpatient department, and the pager will inform patients when to return to the clinic for their investigations. This change will be technologically simple and inexpensive to implement in the outpatient setting. Pager models should be chosen for their ease of disinfecting in between use.

Once relevant investigations have been performed, a consultant or senior clinician will inspect and scrutinise the results and decide if the patient requires a face-to-face consultation on the same day or can be sent home for a telephone or video consultation. Numerous NHS approved video consulting systems already exist, such as Attend Anywhere and accuRx, and these can be easily implemented.^{4 5} If the most senior clinician decides a patient needs to be seen face-to-face, the pager will instruct the patient to return to be seen by a clinician. Ultimately, the most senior clinician will thereby gain effective oversight over all patients in their clinic.

Decoupling the appointment in this manner allows patients to be seen over a shorter space of time. With the current implementation of widespread video consultations during the COVID-19 period, the proposed patient flow integrates a bridge between the rigid remote work that was acutely implemented across healthcare departments and what we should accept as the ‘new normal’.

CONCLUSION

Accepting a new normal that remodels the overcrowded waiting room presents a unique opportunity during the COVID-19 pandemic. The authors appreciate that not all measures proposed will work for individual eye units, and some concepts may already be in use to varying degrees within the NHS. It is, however, clear that the status quo will not be adequate in the short and longer term. Eye departments must move swiftly to implement new systems to keep their waiting rooms safe for both patients and healthcare staff and to accept the push to integrate telemedicine. Being a small, nimble and highly technological specialty, ophthalmologists can exploit these advantages and become innovators of the NHS waiting room.

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Contributors All authors have equally contributed to the design, construction and editing of this viewpoint.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

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