The Impact of COVID-19 on Ophthalmic Care

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Introduction

- In January 2020 the first cases of COVID-19 emerged in the UK. By March 2020 cases surged and we were plummeted into lockdown.[1]
- This caused widespread effects on ophthalmic care, with thousands of routine clinic appointments and elective theatre lists cancelled[2]
- Serious eye conditions remained prioritised, but many patients were too fearful to attend essential clinic appointments.[3] These unprecedented times required novel adaptations, to protect staff and patients, and maintain sight-saving care provision.

Teleophthalmology and Virtual Clinics

- Teleophthalmology derives from the Greek prefix *'tele'* meaning *'far away',* and refers to ophthalmology delivered remotely
- A burgeoning field pre-pandemic,[4] teleophthalmology was vital during the pandemic as a means of avoiding unnecessary patient contact.
- Virtual clinics were delivered via telephone or video conferencing platforms[5], in conjunction with new technology, such as smart phone assisted slit lamps[6] (figure 1).
- Moorfields Eye Hospital created an accoladed video A&E service, used in over ¼ of appointments, reducing hospital attendance by over 80%[7] (figure 2)

Community Partnerships

- The pandemic highlighted reliance upon community partners, particularly optometrists
- Optometrist-led community hubs such as the COVID-19 Urgent Eyecare Service (CUES)[8] (figure 3) and Emergency Eye Treatment Centres (EETC)[9] were central to the provision of acute eye care without the need for hospital attendance
- In conjunction with smartphone assisted slit lamps and OCT mirroring, patients could be effectively assessed by a remote ophthalmologist[10].
- Novel community initiatives were developed, such as drive-through IOP screening[11]

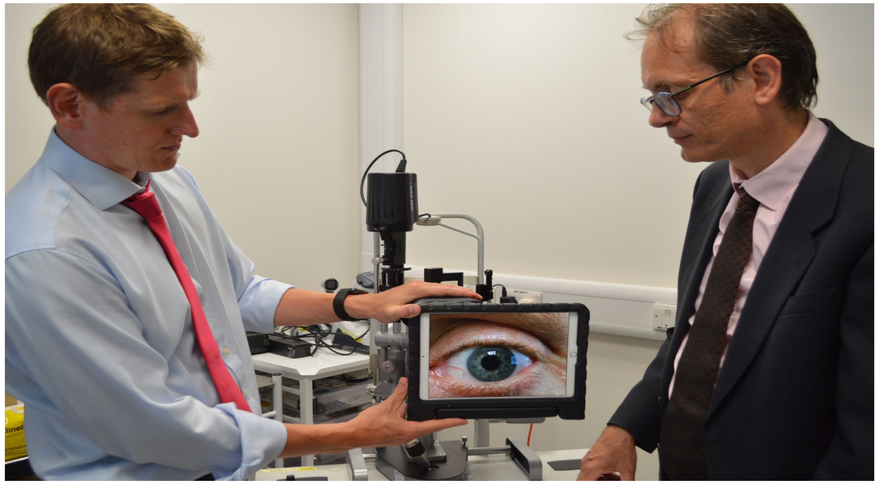


Figure 1: The world's first 5G tele-examination of an eye, NHS Forth Valley

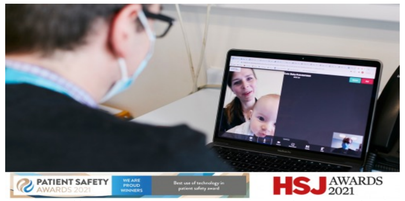


Figure 2: Moorfields Eye Hospital created a successful video A&E service



Figure 3: Optometrist-led services



Figure 4: Drive through IOP screening for glaucoma

Effects upon Trainees

- As well as patient care, ophthalmology training was also affected.
- Trainees were redeployed to unfamiliar clinical areas, forfeiting educational experiences which would ordinarily be considered fundamental to training[12].
- Virtual learning environments, although beneficial, could not replace essential practical experience.
- GMC 2021 National Training Survey revealed that more than twice the number of ophthalmology trainees were affected by burnout in 2021 compared with 2019[13].

Conclusions

- COVID-19 had unprecedented effects upon ophthalmology services and training.
- With so many training opportunities lost, increased surgical exposure for trainees must be a priority, along with increased support for trainees suffering the effects of burnout.
- Silver lining perhaps is that the pandemic allowed innovation, collaborative partnerships and technology to flourish.
- More efficient and streamlined services were long overdue pre-pandemic.
- The improved efficiency and cost saving benefits of teleophthalmology present an opportunity to revolutionise post-pandemic ophthalmic care.

References

1. British Foreign Policy Group. https://bfpg.co.uk/2020/04/covid-19-timeline/
2. Royal College of Ophthalmologists. Management of Ophthalmology Services during the Covid pandemic [Internet]. https://www.rcophth.ac.uk/wp-content/uploads/2020/03/RCOphth-Management-of-Ophthalmology-Services-during-the-Covid-pandemic-280320.pdf (accessed October 10, 2021).
3. BBC News. Coronavirus: 'Eyesight of thousands at risk due to missed care' https://www.bbc.com/news/health-52968845 (accessed October 10, 2021)
4. NHS Long Term Plan. https://www.longtermplan.nhs.uk/online-version/chapter-5-digitally-enabled-care-will-go-mainstream-across-the-nhs/ (Accessed October 11 2021)
5. Golash V, Athwal S, Khandwala M. Teleophthalmology and COVID-19: the patient perspective. Future Healthcare Journal. 2021 Mar;8(1):e54.
6. NHS Forth Valley https://nhsforthvalley.com/worlds-first-5g-tele-examination-of-an-eye/
7. Kilduff CL, Thomas AA, Dugdill J, et al.: Creating the Moorfields' virtual eye casualty: video consultations to provide emergency teleophthalmology care during and beyond the COVID-19 pandemic. BMJ Health Care Inform. 2020, 27:e100179. 10.1136/bmjhci-2020-100179
8. College Optometrists www.college-optometrists.org/the-college/media-hub/news-listing/nhs-england-covid-19-urgent-eyecare-service-cues.html
9. https://www.grampianonline.co.uk/news/new-emergency-eye-care-centres-help-reduce-the-need-to-attend-hospital-197885/
10. Ghazala FR, Hamilton R, Giardini ME, Ferguson A, Poyser OB, Livingstone IA. Live teleophthalmology avoids escalation of referrals to secondary care during COVID-19 Lockdown. Clinical and Experimental Optometry. 2021 May 23:1-6.
11. https://www.bbc.com/news/uk-northern-ireland-52786237
12. Ferrara M, Romano V, Steel DH, Gupta R, Iovino C, van Dijk EH, Romano MR. Reshaping ophthalmology training after COVID-19 pandemic. Eye. 2020 Nov;34(11):2089-97
13. GMC. National Training Survey Results 2021. https://www.gmc-uk.org/-/media/documents/national-training-survey-results-2021---summary-report_pdf-87050829.pdf. Last accessed 11 October 2021 .