around their use. Healthcare staff recognised the benefits of AI predictive tools in being able to ‘detect deterioration quicker than you would currently do’ (05-ID), which informed decisions around patient discharge: ‘can you safely send them home (...) or do you want to keep them, in case they do deterioration’ (05-ID). They found AI predictive tools useful when explaining the potential risk of cardiovascular events to patients and encouraging medication adherence ‘it does help so much convincing the patient to actually adhere to the medication’ (07-Endo).

During COVID-19, AI prediction tools helped identify patients that might potentially need mechanical ventilation and ICU admission. Healthcare staff also felt it was important that AI predictive tools provided reliable information, that was easy to understand, and integrated with the current systems. A concern raised around the use of AI predictive tools was whether they might ‘mislead junior doctors or doctors who would not have that much of a clinical sense and would totally depend on it’ (07-Endo).

Conclusion This study demonstrated opportunities for the application of AI predictive tools in clinical practice. Concerns raised around the use of these tools should be considered by developers. We recognise that the perceptions of only a small number of clinicians were included mainly due to the increased time pressures on staff during the COVID-19 pandemic. Healthcare staff described essential features that will guide the future development of AI predictive tools with higher potential for application in real practice.

**EVALUATION OF A TELEMEDICINE MODEL TO DELIVER CATARACT CARE USING IMAGING TECHNOLOGY INSTEAD OF TRADITIONAL F2F PATHWAYS**

Pei-Fen Lin. Moorfields Eye Hospital

10.1136/bmjhci-2022-FCIASC.8

**Objective** To set up and establish a sustainable teledmedicine model to deliver cataract care pathway, where the traditional face-to-face cataract assessment clinic is replaced with a teledmedicine consult with imaging technology to develop a safe, efficient teledmedicine care delivery model in contrast to the current established traditional face-to-face pathways. To study the efficacy, efficiency, safety, patient experience of the new service. To assess usability and review risk of digital exclusion with patients and staff.

**Methods** Patients referred for cataract surgery from the community are booked into a video clinic (AttendAnywhere) as per date of referral. Patients were not pre-called or pre-selected for the digital pathway. After video consultation and pt confirmed to have symptomatic cataract affecting quality of life, the patient is preliminary listed for cataract surgery and verbally consented. The patient then attends a cataract imaging hub where anterior segment and fundus high resolution photography and optical coherence scans were performed. In addition, patient blood pressure and blood sugar are obtained. The results of the assessments are reviewed by the surgeon remotely to confirm the stratification of the cataract and plan for surgery. Any patient with unexpected findings or abnormal vitals were brought back for face to face review. Post-op patients are follow-up in the community. All patient consultation and imaging were recorded in an electronic patient records (Medisfot) prospective data collected on patient demographics, access to video consult, referral date, review date, stratification, and outcome of surgery. Patient experience assessed via a post video clinic survey.

**Results** 403 patients were assessed, 42 excluded from the final data analysis due to erroneous bookings into the clinic. Total 361 patients correctly booked for new cataract assessment were included. 9 patients were brought back for further assessment in a face-to-face clinic as additional abnormalities were found on imaging. 299 listed for surgery (conversion to surgery rate of 82%). Average age of the patient is 74 yrs old. 31% >75 and 17% > 80 years old. 24% patients were the presumed digitally excluded group e.g. elderly, language barrier, care home resident, patient with partial or lack capacity, and lack of technology. To date, 166 patients have completed their surgery and 6 week post-op follow up. 96% reported improvement of vision post surgery. 7% had post-op complications and 3 patients had intraoperative complications. Cases were stratified and operated appropriately by all levels of surgeons, 52% by trainees and 48% by consultants or consultant grade surgeons.

No attendance to the emergency eye care service within 1 month post-operation. Patient survey showed 95% satisfied with care, 57% preferred the video clinic method. 82% would have come to a face to face clinic via a carbon emitting mode of transport, 60% by car.

**Conclusion** Digital cataract service (DCS) has demonstrated it is safe; patients with abnormal findings on imaging clinics were correctly stopped from proceeding with surgery. 96% of patients reported improvement of vision post surgery, this is better than the national audit standard of 95%. 4% patients had post-op complications which is lower than the 14% audit standard.

DCS is effective as it has a high conversion to surgery rate at 82% compared to the national average of 74%. The stratification of patients and their cataracts enabled surgery to be carried out safely by all levels of surgeons.

For patient experience it shortened the overall assessment time to 1.5 hours compared to a 3–4 hour wait in a face-to-face clinic. It also maximises the efficient use of staff, equipment and space; patients are consulted/assessed at time of arrival with no idle staff in the process. 24% patients with demographics traditionally included in the digitally excluded group were able to access the service by proxy, it also enabled clinicians to bring care to patients’ home environment.

Overall DCS provides a safe, effective, efficient way of delivering cataract care with reduced carbon footprint by minimising patient and staff travelling.

**FREE TEXT NOTES ADDED TO A PATIENT’S ALLERGY STATUS IN ELECTRONIC PRESCRIBING SYSTEMS DIGITALLY ANALYSED FOR BETTER USABILITY**

Ben Logan. St. Helens and Knowsley Teaching Hospitals

10.1136/bmjhci-2022-FCIASC.9

**Objective** Electronic prescribing systems often provide a drop-down list of medications and pre-specified reactions to record a patient’s allergy status. This list is non-exhaustive; less common reaction types require the user to add a free text note.

The Careflow Medicines Management EPMA system provides decision support preventing a prescriber initiating a drug a patient has a recorded reaction to. Where a free text