Delivering remote consultations in ophthalmology in the South West of England

Insights into clinician and operational experience

South West
Academic Health
Science Network

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Academic Health Science Network**

Transforming lives through healthcare innovation

**The South West Academic
Health Science Network**
(South West AHSN) is one of 15
AHSNs set up by NHS England
across the country in 2013.

Our purpose is to transform lives through
healthcare innovation and generate economic
growth as part of the national AHSN Network.

We are the only bodies connecting NHS and
academic organisations, local authorities,
the third sector and industry. AHSNs are
uniquely placed to identify and spread
innovation at pace and scale – driving the
adoption and spread of innovative ideas and
technologies across large populations.

Collectively, the AHSN Network plays a critical
role in supporting the health and care sector.

In the last year, our work as a
network of AHSNs has:

- **Benefited over 480,000 people.**

- **Leveraged over £455m of investment**
  into the health and life science sector.

- **Supported 2,438 companies** and created
  or safeguarded over 1,800 jobs.

Our work at the South West Academic
Health Science Network is grounded in
context of our region – supporting our
partners to identify and spread innovation
that tackles the shared challenges we face
in improving health across a complex mix
of rural, coastal and urban communities.

Our approach is built on our three core
capabilities that we have developed
since we were founded:

- **Identifying and spreading innovative
  practice** – our practical experience
  and techniques that support health
  and care systems to identify, adopt
  and spread innovative practice to
  improve health and care services.

- **Building capability** – using our knowledge
  and experience of the conditions
  required to innovate and improve to
  build the capability of partners to spread
  innovative practice and improve quality.

- **Evaluation and application of learning**
  – using our experience evaluating
  improvements and testing innovation to
  support partners to evaluate the impact
  of changes and capture learning.

Executive summary

Introduction

The overarching aim of this project was to understand how video consultation can be used within secondary care in an ophthalmological setting. Rather than be seen as a definitive guide, this work would provide a valuable contribution to an area of healthcare attracting increasing attention.

It also sought to advance the sharing of learning and best practice between ophthalmology teams in the region and involved conducting interviews with clinicians and operational managers in secondary care trusts.

The work was carried out by the South West Academic Health Science Network (South West AHSN) working with the NHS England and Improvement South West's Outpatient Transformation Team.

Background

When the first COVID-19 lockdown was imposed in the UK in March 2020, video consultations were rolled out at speed throughout the health service as an alternative to face-to-face appointments.

In the South West, video consultations across all clinical areas increased from 200 to over 10,000 per week in the initial months of the pandemic. And, in the period up to February 2021, the region showed the greatest utilisation of video consultations relative to population size in the country.

A review into this implementation process delivered by the South West Outpatient Transformation Team found that its success varied depending on the health service speciality in which it was used.

Ophthalmology

Ophthalmology was selected as an area for further study as it experiences higher levels of outpatient demand than any other speciality. COVID-19 has exacerbated these pressures.

Before the pandemic, 20 people in the UK were losing their sight every month due to delays in follow-up care – according to a 2019 study by Getting It Right First Time.

Public Health England's Atlas of Variation for Vision study (August 2021) found that, in 2019-20, there were nine million outpatient attendances (equating to approximately 3.4 million individual patients) for vision. In 2020, due to the COVID-19 pandemic, there were 2.7 million fewer visits, indicating an increase in patients with unmet needs.

However, while the number of ophthalmology video consultations increased significantly in some other areas of the country, ophthalmology teams in the South West used it with only a very small number of patients. What's more, other specialities in the region made much greater use of the technology.

Project aims and methodology

This piece of work sought to:

- Understand the barriers preventing clinicians in the South West (Cornwall, Devon and Somerset) from using remote consultations (in particular video) within ophthalmology pathways.

- Understand and document the support, enablers, and ways of working that are needed to fully embed video consultations within ophthalmology pathways

- Review how digital exclusion impacts on the use of remote consultations.

Information was gathered from interviews with ten clinicians and six operational managers, and the resulting data analysed.

Summary of findings

Headline findings:

- Local differences affect video consultation implementation: No one size fits all Trusts.

- Appropriate use: Remote and video consultations can work well within specific areas of ophthalmology.

- Barriers: Digital maturity levels, and cultural and technical barriers impact use of video consultations.

- Digital inclusion: The impacts of digital exclusion in remote/video consultations on health outcomes are not well understood and need further research.

Conditions for change

During the COVID-19 pandemic, the South West AHSN conducted a rapid learning review into how the health and care sector in the South West responded to the crisis (South West AHSN, 2020). This insight indicated that there were eight conditions that facilitated rapid change in health and social care, and these conditions have been used to present findings for this review.

1. Adaptability

With varied use and uptake across those interviewed, some clinicians felt that video consultations offered a better patient experience, whereas others reported that it would not improve the consultation process and might increase consultation time. It was suggested that using TEDS (Treat, Examine, Diagnostics, Support) was useful to identifying additional opportunities to either use remote consultations or deliver care differently.

Interviewees found that video consultation was appropriate for certain sub-specialities and elements of pathways, such as in emergency departments and anterior specialities, but that widespread use in ophthalmology was not appropriate due to the need for microscopic examination and diagnostics.

Most of the clinicians who had trialled video consultation in ophthalmology experienced technical issues. They also reported that some patients were impacted by digital exclusion, which affected their ability to use video consultations.

2. Shared purpose

Clinicians indicated that there were opportunities to develop pathways to use video and telephone consultations at different stages – particularly following diagnostic appointments, for follow-up clinics, for consent before a procedure, and for rapid access clinics.

3. Psychological safety

Feedback suggested that clinical governance and risk issues, coupled with current clinician culture and training, affect the ability and willingness to deliver video consultations.

Feedback also suggested there was opportunity for video consultations to be used more if these barriers could be overcome.

4. Removal of organisational barriers

Low digital maturity across clinical settings caused barriers to implementing and delivering video consultation clinics. A lack of dedicated space to conduct video consultations was also highlighted.

5. Resourcing

Workforce pressures affected ophthalmology teams, which sought to address backlogs by recruiting extra clinical and administrative staff. However, even with funding available, it was a challenge to recruit staff due to a skills shortage in the region. These pressures meant teams struggle to develop and implement digital solutions and to dedicate time to transforming pathways more broadly.

Nonetheless, the consensus was that virtual clinics, where the clinician uses diagnostics followed by a telephone call or letter, substantially increased capacity.

6. Cross-organisational systems

As many ophthalmology patients do not need to see a consultant, clinicians generally agreed that high volume diagnostic hubs could help reduce the backlog of patients. It could also save patients from having to attend the hospital for repeat appointments.

7. Communication

Interviewees felt patients needed support and time to adjust to a change to remote consultations – for example, increasing the availability of community hubs would enable older generations or digitally excluded groups to access video consultations.

However, interactions between patient and clinician are different during a telephone or video consultation and there is a need for further training for clinicians to manage these conversations.

8. Partnership working

The chronic nature of many ophthalmic conditions means patients are often not discharged, and need regular follow-ups. Trusts were therefore interested to find out whether 'patient-initiated follow-up' had been used effectively elsewhere in the region or country and whether video consultation may offer an opportunity to support delivery of an efficient and effective model of care.

Implementing remote consultation

This review identified the following areas to consider when implementing remote consultations in ophthalmology:

- **Clinical fit and patient choice** – video consultations are not appropriate for all areas of ophthalmology, and further work is needed to identify where usage is appropriate.

- **Flexible approach** – teams using, or planning to use, video consultations were supported and empowered to try different approaches and change processes.

- **Patient digital skills and access** – the ability to identify and capture whether patients have digital access and capability needs to be included as standard into the referral and triage process.

- **Clinician culture, training and support** – clinicians need more support and training to carry out remote consultations as part of a transformed pathway.

- **Risk** – risk and governance processes need to be reviewed so clinicians feel confident seeing patients remotely rather than face-to-face.

- **Digital maturity** – trusts are at different stages of digital maturity, and this impacts how well systems interact.

- **Workforce capacity and capability** – while workforce capacity was identified as an issue, administrative staff can carry out various digital tasks that could free up clinician time.

- **Digital inclusion** – it is important to consider patients with no or low digital engagement in pathway developments by offering flexibility, support and choice.

- **Safety netting** – greater confidence in the use of video consultations may be supported by capturing patient history, red flags and 'safety netting' elements.

- **Physical space** – The lack of appropriate space to conduct video consultations was a barrier to its utilisation.

Introduction

The South West Academic Health Science Network (SW AHSN) and NHS England and Improvement's South West Regional Outpatient Transformation Team have worked together on this piece of work as both were keen to further understand where and how video consultation can be utilised within ophthalmology, and to facilitate the sharing of learning and best practice from ophthalmology teams in the South West of England. Video consultations were rapidly deployed as a response to COVID-19, but the speed of implementation has meant that video consultation had not been fully embedded, and there was a need to further understand where and how video could be utilised along the patient pathway.

This project sought to learn from clinicians and operational managers working in ophthalmology, through qualitative research to build on existing practice and local learning about how video consultations are taking place, how they can be optimised within ophthalmology, and the scope for expanding their use. It was rapidly identified that video was one amongst several modes of consultations taking place, and to understand decision-making around local practice, the scope of the research was expanded to include these various practices.

This project forms part of the South West AHSN's Workforce commission from NHS England. The project was delivered with South West AHSN undertaking the detailed work with the NHSE&I Team providing advice, support, and review in relation to the project's scope and outputs.

Definition of terms for digital care methods

Terms for digital care methods are often used interchangeably, despite covering distinct methods. This paper uses the terms set out in the NHS Futures Ophthalmology Remote Consultation toolkit (NHS Futures 2021), which defines a range of digital care methods in eye services:

- **A remote consultation** is a real time consultation by remote telecommunications, generally for the purpose of diagnosis or treatment of a patient at a site remote from the patient or primary physician. The methods used can be telephone, video or online.

- **A telephone consultation** is when both patient and clinician communicate using audio only (i.e., neither can see the other).

- **A video consultation** is when the patient and clinician communicate remotely using the video camera in a smartphone, tablet or laptop or a webcam on a computer (i.e., both parties can see each other).

- **An online consultation** is when either one, or both, patient and clinician communicate using text through an electronic chat/messaging/email function with or without uploaded imaging. This is usually asynchronous but could be synchronous.

Additionally, in the South West, the following practice was identified and defined through feedback from interviews:

- **A virtual consultation** in ophthalmology is where a patient receives diagnostic tests, the results of which are reviewed by a clinician and communicated to the patient through either a letter, or a telephone appointment and a letter.

Background

Following the announcement of the first national COVID-19 lockdown across England in March 2020, it became apparent that the use of video consultations needed to be expanded to offer patients an alternative to face-to-face appointments. The National Outpatient Transformation Team procured Attend Anywhere licences for all trusts in England to enable a rapid rollout. With support from the South West Outpatient Transformation Team and digital regional leads, 13 providers established project teams and undertook a regionally supported training and implementation process starting in March 2020 to enable the use of video consultations. Alongside this work, the use of video consultation was accelerated in four further sites in the South West region that were already using it to some degree. The Team established a virtual collaborative forum for sharing best practice, which has been consistently well attended, as well as commissioning a simulated training package to support clinicians to deliver effective video consultations.

Figure 1

Model for support to embed video consultations as part of NHS E/I SW Benefits Review (source: NHS E/I SW Outpatient Transformation Team)

Use of the Attend Anywhere platform grew rapidly nationally. In the South West region, use in the first few months of the pandemic increased from 200 consultations to over 10,000 per week, and the South West region had the greatest utilisation regionally relative to population size up until February 2021. The number of consultations increased dramatically from March 2020, peaking in February 2021. From March 2021 to the end of August 2021 the number of consultations decreased, and during September to November 2021 these numbers have plateaued at approximately 6,300 appointments per week. Since April 2020, the greatest numbers of consultations have been undertaken in services for children and young people, adult mental health, and speech and language therapy and physiotherapy.

This was a large step change in the adoption of non-face-to-face consultations, which mirrors general trends in society as evidenced by the Lloyds Bank UK Consumer Digital Index 2021. It indicates that the number of people going online during the pandemic grew, with an additional 1.5 million people starting to use the internet., 52% of people who were already online reported a net increase in internet usage through the pandemic. However, it also showed that 8% of people in the South West are still offline and 30% have low digital engagement. More work is required to understand how to best reach and include all patients where remote and video consultations are in use.

The South West Outpatient Transformation Team conducted an Implementation and Benefits Review from July-September 2020 to understand the implementation process, benefits, and challenges, to inform next steps in supporting use of video consultation from a regional perspective. They conducted 28 interviews with 17 providers, the majority of which indicated that feedback from clinicians on the use of video had been mainly positive or very positive. Technical issues were a strong theme from a clinician perspective, and this impacted on clinician confidence when using video consultations. Some clinicians preferred face-to-face or telephone consultation as they were seen as 'simpler', and some clinicians felt it was not appropriate for all patients to be seen virtually.

Providers were asked what they needed to help support their next step plans for video consultation and recovery planning. The majority of providers expressed a view that increasing and promoting the sharing of best practice, insights and learning across Trusts is the main area of support required going forward. Further training was another area of support

identified by providers, in particular clinically focussed training around how to provide virtual consultations. Regional level support was highlighted as being important to continue to provide leadership, connections, learning and drive across the region.

The summary of the review highlighted that increasing the evidence base on the effective use of video in clinical care was key to driving up utilisation, and it became apparent that the advantages and use cases varied by speciality. It was therefore decided that it would be helpful to take a number of specialities and explore how and where video worked well, and where it didn't, from a clinical point of view. The Team agreed to start with ophthalmology, and the partnership with South West AHSN was established to deliver this report.

Ophthalmology

In conducting this more detailed work, various services and specialities were considered.

Ophthalmology was selected due to its priority focus as the highest volume outpatient speciality, with unprecedented levels of demand. Even before the COVID-19 pandemic, pressure meant that according to Getting It Right First Time, twenty people in the UK every month lose their sight due to delays in follow-up care (Getting It Right First Time 2019). These pressures have been significantly exacerbated by the pandemic with a large backlog across all of elective care, including ophthalmology.

Public Health England Atlas of Variation for Vision (August 2021) found that in 2019/20, there were nine million outpatient attendances for vision (equating to approximately 3.4 million individual patients), an increase of over 37% compared to a decade ago. In 2020, due to the COVID-19 pandemic, there was a 29% reduction in outpatients, equating to 2.7 million fewer visits (Public Health England, 2021). However, this has meant that there are patients with unmet need, and there is a significant waiting list.

In collaboration with the Royal College of Ophthalmology, NHS England (2022) recommends that ophthalmology teams should be implementing remote consultations and virtual diagnostic clinics for all appointments except those which meet locally defined exception criteria. Even then, a video or telephone triage may be useful before any face-to-face appointment. Use of a video, telephone, or online consultation in a wider system of triage and prioritisation is also recommended.

Moorfields Eye Hospital NHS Foundation Trust in London reported positive experiences of using remote consultations, and in particular video consultations for follow-up and post-operative patients (Kang et al, 2020), delivering a significant number of consultations (500 per week in July 2020) through video. During the early parts of the pandemic, it was the second largest provider in secondary care of video consultations using Attend Anywhere.

Moorfields reported that video consultations had worked well across a number of pathways, in particular Accident and Emergency, Paediatrics, Adnexal (eyelids, tear drainage and orbital tissues), Pharmacy and Medication advice, Orthoptics (vision, eye movements and binocular vision) including Strabismus (squint), Genetics, Neuro-ophthalmology as well as specialist counselling for sight loss. Kilduff et al (2020) reported high levels of patient satisfaction and engagement with video consultation in the Emergency Department at Moorfields, as well as low levels of onward referral to hospital services. However, they acknowledge that "much remains unknown about video consultations in routine teleophthalmology practice".

Bristol Eye Hospital established a diagnostic hub during the COVID-19 pandemic at the Nightingale Hospital for imaging glaucoma, medical retina, and cornea patients. Following imaging at the diagnostic hub, patients were followed up with a telephone consultation by a consultant. As well as leading to positive patient feedback, this had a significant impact of increasing the capacity of the Eye Hospital to image, review and treat more patients. Once all streams are fully operational, the hub will have the capacity to see 1,000 patients a week (UHBW case study 2020).

Kilduff et al (2020) outline that at Moorfields since the implementation of a virtual eye casualty service, patients spend significantly less time waiting for their appointment, and avoid the time usually spent travelling to an appointment. They reported that robust clinical processes allowed safe and effective running of the service, and very few patients experienced technical difficulties in accessing the service. It enabled the team to see significantly more patients, and feedback from patients was positive, reflecting time saved and local management of their condition. The paper also reported that delivering video consultation clinics in emergency eye care treatment centres supported drop-in access without a referral (as a traditional A&E does), allows low-risk patients to be managed without visiting the hospital, and accepts higher-risk patients into a less crowded A&E for traditional care.

However, while the number of video consultations increased significantly in the South West, it was not well utilised by ophthalmology teams. Figure 2 shows the number of telephone and video appointments, with the thin black bar at the top indicating those who used Attend Anywhere. Attend Anywhere is the main platform used for video in all but two trusts across the South West region, though it needs to be recognised that other platforms are also used by clinicians and these have not been captured. The point remains that many other specialities in the South West region have a much higher use of video than ophthalmology, and in this review we were keen to explore this.

Figure 2

Ophthalmology appointments by type (face-to-face, telephone and video (Attend Anywhere) August 2020 - July 2021 (source: NHS E&I SW Outpatient Transformation Team)
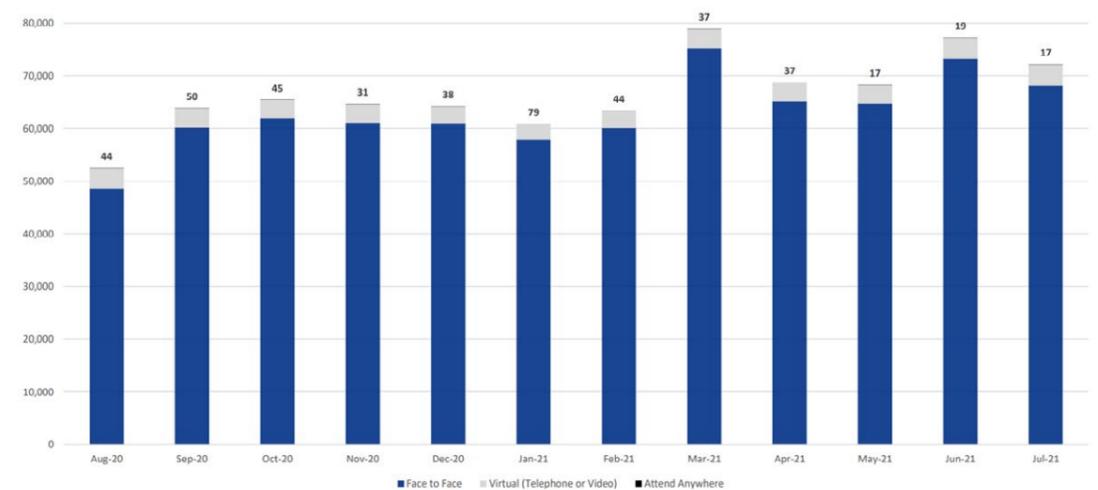
Project Aims

This piece of work sought to:

- Gather learning to understand the barriers preventing clinicians in the South West (Cornwall, Devon and Somerset) from using remote consultations (in particular video) within ophthalmology pathways.

- Understand and document the support, enablers, and ways of working that are needed to fully embed video consultations within ophthalmology pathways within the South West.

- Review how digital exclusion impacts on the use of remote consultations in ophthalmology in the South West.

Methodology

One-to-one, semi-structured interviews were conducted to gather information, with framework analysis used to analyse the data
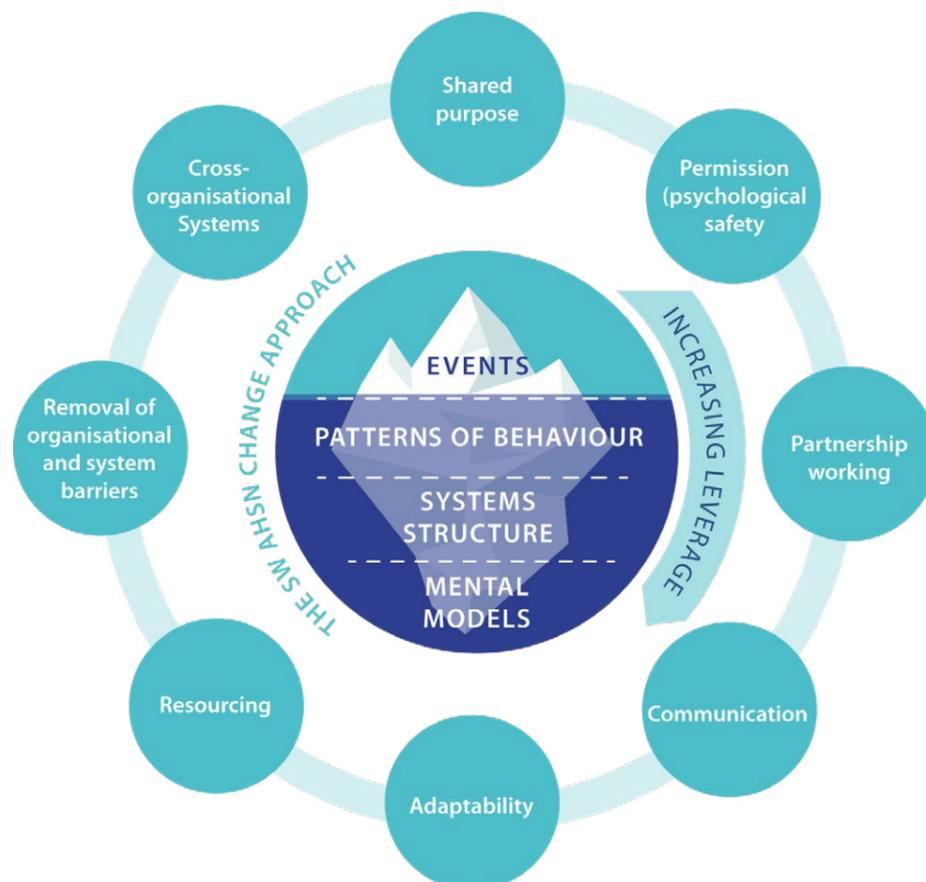
Sixteen interviews were conducted between July and September 2021 with a selection of clinicians (10 Consultant Ophthalmologists and Clinical Leads), as well as six operational managers in secondary care trusts in Cornwall, Devon, Somerset and Bristol including:

- Royal Cornwall Hospitals NHS Trust

- Northern Devon Healthcare NHS Trust

- University Hospitals Plymouth NHS Trust

- Royal Devon and Exeter NHS Foundation Trust

- Torbay and South Devon NHS Foundation Trust

- Somerset NHS Foundation Trust

- Yeovil District Hospital NHS Foundation Trust

- University Hospitals Bristol and Weston NHS Foundation Trust (UHBW)

UHBW was included in this project at the recommendation of the NHSE&I SW Outpatients Transformation Team, in addition to trusts operating within the geography covered by South West AHSN.

Figure 3

The eight conditions for change (South West AHSN, 2020)

Eight Conditions of Change model

In presenting the findings of this review, we have used a model of change to structure the findings to provide a framework for analysis.

During the COVID-19 pandemic, the South West AHSN captured rapid learning about how the health and care sector in the South West was responding to the crisis. Nearly 300 contributions were received, and the insight gathered indicated that there were eight conditions that facilitated rapid change in health and social care (Figure 3). The eight conditions for change were used to analyse the data and to understand where changes need to be made to enable appropriate use of video consultations and virtual approaches within ophthalmology pathways.

Findings

1. Adaptability

Using the most appropriate mode of delivery

Telephone consultations and virtual clinics have been well established in NHS Trusts for years. The eight trusts involved in this review had more recently used video consultations with patients as well as providing virtual clinics (diagnostic imaging followed by a telephone appointment or a letter). Most ophthalmology teams who were interviewed were trialling video consultation to explore whether its use could add value at different parts of the pathway, how clinics should be configured as community diagnostic hubs developed, and how this could impact on clinician work plans. Trusts were open to exploring how they could adapt practice in meeting patient demand and needs.

Several clinicians reported that they had not used video consultation, but did deliver remote consultations by telephone. Some clinicians fed back that video consultations would not add anything to the consultation process, and might increase consultation time as their population was older and might struggle with the technology. However, other clinicians felt a video consultation offered a better patient experience as it gave the patient the opportunity to see and connect more effectively with the clinician.

Feedback about the use of telephone follow-up following a diagnostic appointment was primarily positive, and was being used for glaucoma and retinal clinics. One Trust had audited their virtual clinics and found that they discharged 25% of their patients and then followed-up the remaining patients

using a combination of telephone or face-to-face appointments, which clinicians reported increased capacity. This meant that higher risk and more acute patients were offered face-to-face appointments.

It was suggested that using TEDS (Treat, Examine, Diagnostics, Support) was a useful approach to assessing where there were additional opportunities to either use remote consultations or deliver care differently:

- **Treat** – could be undertaken in the acute or community setting

- **Examine** – could be in the acute or community setting with opportunity to use video consultations more in the Emergency Department

- **Diagnostics** – performed in community diagnostic hubs in the future

- **Support** – could be provided in the community through high street opticians and community support groups.

Potential application of video consultation in ophthalmology

Many interviewees felt that video consultation was not appropriate in many parts of ophthalmology due to the need for microscopic examination and diagnostics. However, interviewees identified the potential for use of video for certain sub-specialities and within elements of pathways across ophthalmology:

- Anterior (front of the eye) specialities were more suited to video consultation as potential issues could be seen on a video call. This led to sub-specialties such as ocular plastics, paediatrics, and strabismus trialling video consultations with some success. However, in ocular plastics one consultant felt that they needed to be able to assess looseness in the patient's skin around the eye, which although more difficult via video consultation could be enabled through a good quality photograph for some patients. Without this information, it can be difficult to assess the time needed for surgery, which due to significant variation around the range of complexity, could impact negatively on planning theatre lists and running to time. The need to access and share electronic images in both primary and secondary care is well recognised in the National Eye Care Recovery & Transformation Programme with a programme of work under way to enable improvements in this area.

- Uveitis: One Trust was planning to trial video consultation in uveitis (inflammation of the middle layer of the eye) as they felt it would be helpful for clinicians to see the patient via video after a diagnostic test. Being able to offer a video consultation in this sub-speciality was dependent on the Trust obtaining an Optos machine, which enables ultra-wide field imaging of the eye. This would enable patients to attend for a diagnostic appointment prior to speaking to the clinician by video consultation.

- Emergency Departments, and within urgent care for minor eye services: Supporting triage to determine whether a patient needs to attend for a face-to-face appointment.

- Follow-up outpatient consultations: All of the clinicians who had trialled video consultations had used them initially for follow up outpatient appointments. Having already met the patient and established a relationship with them helped them to assess whether the patient would be able to access and attend a video consultation. Clinicians were interested in exploring how video consultations could be offered for Patient Initiated Follow-up.

- Gaining consent prior to surgery: If a patient is referred directly by an optometrist for surgery, the surgeon doesn't normally see the patient before surgery. Offering a video consultation prior to the pre-operative ward round would enable the consultant to go through the consent process and enable the patient to ask any questions. This could help alleviate anxiety for the patient and result in better patient experience, and could make the pre-operative ward round quicker, freeing up capacity for more patients.

- Rapid access clinics: A couple of Trusts reported plans for using video consultation for rapid access clinics, supported by triage nurses who would have conversations with patients to ascertain their digital access and capability before listing them for a video consultation.

Clinician confidence

Five of the interviewed clinicians had trialled video consultation in ophthalmology, and the majority of those experienced technical issues, such as poor internet connection, patients unable to engage successfully due to them holding the device in the wrong position (next to their ear), and hearing issues. This resulted in clinicians converting the majority of consultations from video to telephone, or booking the patient for a face-to-face appointment. This was time-consuming and impacted the clinicians' confidence in video consultations, resulting in them being less inclined to try it again. For example, one clinician explained they scheduled a video consultation clinic, but were unable to obtain a clear image to examine patients effectively. Another clinician felt that some patients were stressed by the experience, and therefore converted most patients to a telephone call followed by a face-to-face appointment. This led the consultant to abandon video consultations altogether.

Digital exclusion

Interviewees were asked whether digital exclusion was an issue for their patients, and the majority of respondents felt that it was an issue for some patients, especially linked to the older age profile of patients in ophthalmology. Some elderly patients struggled to position the device so the camera had a clear view of their eyes. Clinicians who had trialled video consultation reported that, in general, patients over the age of 80 may not have access to online services, and if they do, they are likely to require support to engage with a video consultation from a relative or friend.

Factors other than age, such as income, access to technology, communication ability, and confidence in using technology, also impact on digital exclusion. However, most clinicians interviewed indicated that within ophthalmology, a patient's age and their lack of digital access or capability were the main issues perceived as a barrier to patient participation in a video consultation. Some clinicians also noticed that access to digital tools was less of an issue in affluent postcodes. These barriers all contributed to clinicians' consideration of the implementation and use of remote and video consultation.

Community hubs are being planned across the peninsula, particularly in Cornwall. These are intended to enable more patients to access video consultations. However, there was feedback that for some elderly patients, accessing transport to go to a community hub can be as much of a challenge as attending the hospital for a face-to-face appointment. Charities such as Cornwall Neighbourhoods for Change are supporting digitally excluded groups to get online both through their hubs in Redruth and St Austell and through the provision of technology and WIFI access during the pandemic.

Triage

All Trusts triaged their ophthalmology referrals for video consultation, with variability in whether and how patients' digital access and capability was assessed. In some Trusts, digital access and capability was not assessed, whereas in others it was ascertained by the booking team or the clinician reviewing the patient at their first appointment. For rapid access clinics, triage nurses have conversations with patients to ascertain their digital access and capability before listing them for a video consultation. It was felt that a patient's digital maturity could be identified as part of the referral before they reached secondary care. Triage processes for ophthalmology referrals were felt to be robust, especially when using well-connected optometrists, orthoptists, and consultants, which reduced the number of inappropriate referrals or presentations. Interviewees felt that video consultation worked well for triaging patients in an open access model, but it appeared that this model was not in widespread use in the Trusts interviewed as part of this review.

2. Shared purpose

Pathway development

Feedback from clinicians indicated that there were opportunities to use video and telephone consultations at different stages of the pathway, in particular following diagnostic appointments, for follow-up clinics, for consent before a procedure, and for rapid access clinics. It was felt that reforms to pathways were needed to support more appropriate referrals and enable consultants to focus on high risk, acute and specialised patients. The changes needed to reform pathways and enable more flexibility within pathways for remote consultations involved several factors, including changes to IT systems, processes, the workforce and culture. There was some feedback that hybrid clinics, which combine video consultation and face-to-face appointments, worked well where the video consultation platform was available in clinic rooms, as it enabled the clinician to perform a video call during the time needed to clean the clinical area between patients.

3. Psychological safety

Clinical governance and risk

Much of the feedback from clinicians suggested that there are a select number of patient situations where the use of video is appropriate and works well, some of which are outlined above. However, a key point made by many of the interviewees was that as ophthalmology identifies sight-threatening, and, in some cases life-threatening, conditions, many clinicians want to see patients in person, or speak to them following diagnostic tests. This reduces the number of situations in which clinicians felt video consultations were appropriate.

In order to increase clinician confidence and trust in using video consultations when it is clinically appropriate, it was suggested that there was a need to understand the safeguards that would need to be in place. Clinicians outlined that they would like more guidance, and suggested that there was a need to review and understand risk in terms of professional practice and personal liability, both within Trusts and as a health community.

Culture of practice and professional care

Feedback suggested there was opportunity for video consultations to be used more, but the culture of reluctance to the use of video consultation would need to be addressed. There was consistent feedback across the ophthalmology teams interviewed that, in general, they prefer not to use video consultations routinely. Of those interviewed, only a small proportion had trialled video successfully.

Interviewees outlined that this was due to a complex set of interconnected elements, including clinicians' personal preferences, preference for traditional methods of delivering patient care, differing approaches to risk, and not seeing the benefits of incorporating video into the pathway. It was also influenced by clinicians being trained to examine patients face-to-face and not receiving training and supervision in how to deliver a video consultation. Clinicians also reported that it was possible to do more appointments through virtual means, but that it could become monotonous, and it was important to them that, as clinicians, they have direct patient contact.

Innovative mindset

Some clinicians were keen to test how to best use video consultations and were supported by their organisations to pilot new approaches. For example, one clinician was trialling video consultation in their strabismus clinic to show proof of concept. An opportunity was identified to hold a video consultation between the consultant and patient to discuss whether surgery was appropriate and to explain the risks and benefits involved. The clinician felt that video consultation offered a better patient experience than telephone and helped to streamline clinics and reduce footfall to the hospital. Several Trusts fed back that other staff groups such as nurses were keen to try video consultations and had plans in place to set up video consultation clinics for triage of minor eye conditions and rapid review clinics.

4. Removal of organisational barriers

IT issues

A number of clinicians interviewed reported that they felt that a lack of digital maturity in relation to hospital IT systems and digital dictation caused challenges and slowed clinicians down.

Some clinicians reported that one of the challenges of virtual review clinics was the slow opening of multiple applications for reporting on diagnostic tests, and insufficient time scheduled in the clinic to allow for this. A number of clinicians reported switching between two workstations supported by an assistant loading the next patient on one workstation, whilst they reported using another. Working practices in ophthalmology in the USA were given as an example of good practice where a consultant reviews and gives their expert opinion and diagnosis, supplemented by a physician's assistant who supports with typing and less complex work.

Clinicians also reported challenges with images being taken in scanning clinics and left orphaned, as the image would then not be seen as an episode of care within the Electronic Patient Record (EPR). If images were not selected by clinicians for review in clinic, there was a risk that they would not be connected with the correct episode of care. Patient Administration Systems (PAS) also needed development to enable the scheduling of video consultation clinics, as some did not have appointment types to support video consultation. Clinicians experienced challenges in being able to record that a video consultation had taken place within their EPR.

Dedicated space for video consultation

In some Trusts, it was difficult to perform video consultations, as the platforms weren't always available in clinic rooms. Other practical issues included a lack of dedicated space within hospitals for clinicians to hold private video consultations, with most clinicians sharing offices. In addition, some EPR systems were accessible from home for project teams, but not all. Lack of space for video consultations was identified by interviewees as a general issue. This finding is reinforced by discussion at the South West Video Consultation Forum (SW VC Forum), organised by NHS E&I South West Out Patients Transformation Team, and some Trusts are making attempts to address the challenge of the lack of dedicated space.

5. Resourcing

Workforce capacity

Feedback showed that there was pressure amongst all ophthalmology teams to address the volume of referrals and backlogs, with a need for extra clinical and administrative staff. Several Trusts had business cases under consideration for additional staff, including clinicians, Allied Health Professionals, and administrative staff. Some reported that even with funding available, it was a challenge to recruit staff due to a skills shortage in the region. Most Trusts had business cases in train for a diagnostic hub which will support increased capacity.

Workforce pressures cause ophthalmology teams to struggle to develop and implement digital solutions and to dedicate time to transforming pathways more broadly. Further, workforce pressures affecting the ability to transform the primary and secondary care interface are an additional consideration.

Increasing capacity

It was felt that using virtual clinics, where the clinician uses diagnostics followed by a telephone call or letter, substantially increased capacity, with increases in volume varying between Trusts. Some estimated the potential for change to be an increase from seeing 7-12 patients in a face-to-face clinic to between 13-24 in a virtual clinic.

Skill-mix

Greater administrative support is needed if video consultations are to be used more widely. One consultant shared that a lack of administrative support, and a clear process within the pathway to triage suitable patients for video consultation, had meant that they

themselves had triaged patients for suitability for a video consultation clinic. This was time-consuming and not best use of their time. Appropriate administrative support at the correct point in the pathway would identify suitable patients for video consultation.

A number of Trusts have upskilled, or are in the process of upskilling, Allied Health Professionals to support, triage or review diagnostics, enabling Consultants to focus on higher risk patients. Bristol Eye Hospital has established an effective diagnostic hub and upskilled optometrists to support with reporting and grading of cases for review by consultant.

Virtual receptionists

One Trust had recruited two virtual receptionists to use across outpatient specialities, applying learning from best practice in NHS Highland. Clinicians at other Trusts, who had trialled video consultation without success, indicated that it would be helpful to have an assistant who could call the patient in advance to set expectations prior to the consultation and to check they understood how to get online, discuss any data protection issues, and ensure they had adequate technology and web connection.

6. Cross organisational systems

Referrals

Ophthalmology receives referrals from various sources, and patients do not always need to see a consultant. Clinicians emphasised that pathway reform needs to be undertaken so that consultants can focus on the high risk, acute and specialised work. There was general agreement that high volume diagnostic hubs could help reduce the backlog of patients, and help see more patients in the future. It could also save patients from having to attend the hospital multiple times, and repeat appointments.

There was consistent feedback from clinicians interviewed that ophthalmologists didn't always have all the information they required to judge if a patient needed to be seen, or to make a clinical decision on a treatment approach. Referrals were often sent from primary care with unclear photos taken by the patient, and a minimal medical history, which made triage more difficult in secondary care.

Diagnostics and reporting

Several Trusts reported that their existing virtual clinics work well, delivering diagnostic imaging followed by a telephone appointment or a letter. However, there is a risk that patients can attend for diagnostics but experience a delay due to

the clinicians' capacity to review and report. To support better patient flow, imaging and decision making need to be combined with enough workforce capacity to support this.

7. Communication

Patient culture

Some interviewees felt that patients expected face-to-face appointments and needed support and time to adjust to a change to remote consultations. Increasing the availability of community hubs was felt to be an important enabler of supporting older generations or digitally excluded groups to access video consultations, as it would reduce the need to travel further to acute hospitals.

However, patients were thought to be more relaxed in their own homes, and more likely to chat during a telephone or video consultation than in a face-to-face appointment, and clinician perception was that calls were longer. This presented as a challenge for clinicians to set expectations at the beginning of the call due to short consultation times. It has been identified in the SW Implementation and Benefits Review conducted by SW NHSE&I that there is a training need to support clinicians to manage time in video consultations and to draw a video consultation to a close.

Poor internet connection

All clinicians interviewed who had used video consultation reported challenges with internet connectivity. Broadband speeds and 4/5G coverage vary across Somerset, Devon and Cornwall (Appendix A) and can be lower or patchier in rural areas, which may impact on a patient's ability to take part in a video consultation.

Sherman & Rainsbury (2020) surveyed 36 ophthalmology patients in Plymouth and found that although 58.3% could use video equipment, only 33.3% preferred it over telephone. They suggest that the cost-benefit ratio of using video consultation in a rural area may not match that of urban areas due to differing access to internet in those geographies.

There is ongoing work to improve the availability of super-fast broadband by telecom suppliers, and broadband speed and availability should improve over time. Community hubs with superfast broadband are being developed across Cornwall and this will offer more people opportunities to engage with a video consultation.

8. Partnership Working

Appropriate use of video consultation

Clinicians highlighted that one of the challenges to delivering more remote consultation post-operatively is that certain patients need to attend a face-to-face clinic appointment. For example, ocular plastics patients often need to have stitches removed, which cannot be done in primary care due to the size of the stitches and proximity to the eye. Due to the chronic nature of many ophthalmic conditions, patients are often not discharged, and need regular follow-ups. Trusts were therefore interested in understanding more about whether Patient Initiated Follow-up had been used effectively elsewhere in the region or country, and whether video consultation may offer an opportunity to support this model of care.

Concluding remarks

This report has shown that ophthalmology teams in the South West of England are to varying degrees developing and testing remote consultation options to enable non-face-to-face consultations, address capacity issues, and provide their patients with the best possible service. The use of video consultations is however limited, and the spread and use of remote consultation technologies in ophthalmology is influenced by a range of factors including clinical appropriateness, as well as cultural, behavioural and organisational factors. The findings of this report support the considerations and enablers set out in the NHS Futures Remote Consultation Tool Kit for Ophthalmology (NHS Futures 2021).

Based on insights from this project's learning from consultant ophthalmologists and clinical leads in the South West of England, the following headlines findings were identified:

- **Local differences: No one size fits all Trusts.** Implementation of remote consultation needs to consider the culture of the organisation and staff, staff preferences, and the needs of their patient group, including demographics, and geography and rurality of the area.

- **Appropriate use: Remote and video consultations can work well in specific areas of ophthalmology.** Ophthalmology clinicians reported that remote and video consultations are effective and achieving satisfactory outcomes and good patient experience for certain sub-specialities, with video consultations appropriate for a sub-set of these.

- **Barriers: Digital maturity levels, and cultural and technical barriers, impact use of video consultations.** Digital maturity across organisational IT, clinical systems, staff skills, as well as patient capacity, affects the ability to introduce and effectively run video consultations. This study found that patient and clinician cultures range from enthusiasm to scepticism, with clinicians overall motivated and comfortable to use new technologies, but often influenced by traditional thinking and practice.

- **Digital inclusion: The impact of digital exclusion in remote/video consultations on health outcomes is not well understood** and needs further research. During the pandemic there were great differences in the time it took patients to access healthcare face-to-face versus remotely. Patients who are less able to access digital/video healthcare may have experienced delays in care, and subsequently poorer health outcomes, due to being digitally excluded. There is evidence to show that in some settings in the South West, patients found video consultations to provide ease of access and reduce travel costs related to accessing health care (Bradwell, 2020).

Summary of findings

The following findings have emerged from this review. These were identified with the aims of identifying areas for teams undertaking video consultation pathway transformation to consider, to inform training opportunities in relation to video consultation, and to trigger debate and discussion about use of remote consultation and where and how it can be effective in patient care.

Areas to consider for supporting greater use of remote consultations:

1. **Clinical fit and patient choice** – Video consultations are not appropriate for all areas of ophthalmology, and further work is needed within pathways to identify where usage is appropriate, and to enable flexibility for patients to have a choice of their preferred type of appointment, whether video consultation, telephone, or face-to-face appointment.

2. **Flexible approach** – Teams who were using or planning to use video consultations had been supported and empowered to have flexibility to try different approaches and change processes if unsuccessful.

3. **Patient digital skills and access** – The ability to identify and capture whether patients have digital access and capability needs to be included as standard into the referral and triage process. Implementing a consistent approach to identifying digitally excluded individuals will help ensure that these patients are offered the appropriate form of appointment.

4. **Clinician culture, training and support** – Clinicians are trained to see patients face-to-face, and more support and training needs to be provided to ensure that clinicians feel comfortable with the changes introduced when transforming pathways, and with seeing patients in a remote context. Clinician experience of performing remote consultations is influenced by the personal preference of the clinician and confidence in not seeing the patient face-to-face.

5. **Risk** – Clear visibility of how risk and governance processes have been reviewed to support clinicians to provide remote consultations will help increase clinician confidence. Risk and governance need to be reviewed collectively by Trusts and the health community, to enable more clinicians to feel confident seeing some patients remotely rather than face-to-face.

6. **Digital maturity** – Trusts are at different stages of digital maturity, which impacts how well systems interact, the speed of IT systems, and the ability to flex pathways. Considering the digital maturity of an organisation can support prioritisation of efforts to enable increased uptake of video consultation.

7. **Workforce capacity and capability** – Workforce capacity was identified as an issue across Trusts, many of whom had business cases underway for more staff. However, increased use or availability of administrative staff to support clinicians with tasks such as digital triage, getting patients on the phone for an appointment or acting as virtual receptionists for video consultation clinics could free up clinician time.

8. **Digital inclusion** – Although more people in the South West are now online, there is still a significant proportion who are not or who have low digital literacy. It is important to consider patients with no or low digital engagement in pathway developments, by offering flexibility, support, and choice, to ensure equitable access to services across all patient groups, especially older people, as well as people with hearing and sight difficulties.

9. **Safety netting** – Greater confidence in the use of video consultations may be supported by capturing patient history, red flags and other safety netting elements. Moorfields Eye Hospital has developed a thorough process which they are happy to share (Moorfields Eye Hospital 2021).

10. **Physical space** – The lack of sufficient and appropriate physical space to conduct video consultations was a barrier to its utilisation.

Building on this review

South West AHSN are in the process of developing a remote consultation maturity tool, targeted at system and organisational level, to help secondary care leadership teams put the right supports in place for effective remote consulting. This tool aims to help organisations evaluate their maturity across seven domains of capacity to deliver remote consulting: vision, transformational capacity, operating model, technology, citizens and patients, workforce, and quality and safety. The tool will enable organisations (Trusts and ICSs) to:

- Consult staff across an organisation on the maturity level of each domain.

- Identify areas of low maturity or areas where there is low consensus on maturity.

- Provide a description of what higher levels of maturity look like and steps organisations can take to get there.

- Provide a means for organisations to engage staff in planning and delivering effective remote consultations.

This maturity tool will be ready to test in 2022 and can be made available to teams implementing video consultation on request.

South West AHSN will also continue broader work around video and remote consultations, ophthalmology, and digital maturity.

The NHS E&I SW Outpatient Transformation Team has commissioned a programme of training across the South West region to support skills development for clinician and others to support provision of remote consultations. This training will build on the findings of this report, where relevant.

Suggested areas for further learning

Building on the insights developed through this work, several areas for further learning were uncovered:

A. In which clinical specialties and contexts does video consultation work?

B. Does video consultation impact clinical efficacy?

C. Can video consultation be effectively used to provide more joined up care for patients with complex and long-term conditions?

D. Which professional practice and personal liability safeguards could be put in place within both Trusts and the wider health community to support more clinicians to use video consultations regularly?

E. Could video consultation offer an opportunity to support patients with chronic ophthalmic conditions, who are not discharged and need regular follow-ups, to use Patient Initiated Follow-up?

F. Does the use of remote consultations impact on the health outcomes of people who are digitally excluded, and in which ways?

G. What is the impact of digital exclusion on the experience of patients accessing remote consultations in ophthalmology in the South West?

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