



OUTPATIENT REMOTE CONSULTATION An appreciative enquiry



For the right person, for the right type of healthcare, at the right time, remote consultation can be hugely beneficial

Foreword

The Long Term Plan sets out the ambition to increase the adoption of remote consultations. This is to improve patient experience and support digital pathways.

Since the start of the pandemic we have seen a rapid uptake of remote consultations in outpatient services across the North West Coast. New ways of working have been adopted at pace and teams have managed substantial change. A genuine shift in outpatient care delivery has begun.



Health and care services are on the path towards providing more remote appointments, dovetailing with other digital initiatives such as remote monitoring and advice and guidance. The spread and adoption of remote consultation, however, varies significantly from location to location and the number of remote appointments is declining. For the benefit of our health and care system and patients, now is the time to build upon the progress made to date.

The good work carried out so far gives us an opportunity to learn from what is working well, helps us recognise the reasons that underpin good adoption of remote consultations, and gives us insights into how to spread these further. The principles gathered can be used to help determine how remote consultations could be delivered within pathways, supporting broader digital care pathways. That is why this appreciative enquiry has been necessary.

The Innovation Agency, the Academic Health Science Network for the North West Coast, has been delighted to work with NHS England and trust-based teams to generate insights into remote consultation. We held 40 facilitated conversations with a variety of clinical teams from across 15 different providers, providing a rich source of learning. We want to thank all the participating trusts and their teams for helping make this enquiry happen.

The enquiry aims to stimulate strategic thinking both at system and trust level around digital pathway change and inform the development of strategies to achieve this.

Dr Phil Jennings Chief Executive, Innovation Agency

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Executive summary

Below is a series of statements that summarise our conversations with clinical teams:

Remote consultation is excellent at the right time and for the right people.

Different specialties, with different appointment types and different patient groups, means that there is no one-size-fits-all approach to the adoption of remote consultation.

There is a common desire to use remote consultations where clinically suitable and appropriate for the patient cohort.

Patient profiling is necessary to identify the cohorts within a specialism that are suitable for remote consultation. There is a greater opportunity for some specialities to do remote consultations than others. However, we heard unanimously that remote consultation does have a place to some extent.

A significant volume of remote consultation are currently delivered via phone. There is a strong opinion that video is often more effective than phone, but it is much more operationally challenging to implement.

The digital confidence and preference of clinicians strongly influence adoption. Video appointments only exist when there has been the clinical drive. Many barriers to the implementation of video consultations have been noted.

Many significant process and operational changes are required to underpin the implementation of remote consultations. The scale of these should not be underestimated.

Establishing a remote consultation pathway requires substantial changes to administrative and support functions e.g. clinic template changes, different appointment booking procedures, the identification of appropriate patients. Without dedicated implementation support these process changes can deter busy clinicians who do not have the time to bring about the change.

Pockets of best practice exist in services but are not widespread.

Successful remote consultation adoption mainly occurs as pockets of best practice in services. However, it is not widespread and depends on many factors such as clinician preference, clinical suitability, leadership, equipment etc.

Remote consultations are generally more appropriate for follow-up appointments.

Recurring feedback was that remote consultations are less appropriate for new patients. Clinicians want to build a rapport with patients, physically examine and fully understand the patient's condition via a face-to-face appointment.

Turning on the software is only the start. Organisations must invest the time and effort to create a culture that supports the human factors involved in large-scale change.

Change management support is essential for implementing remote consultations, but in many cases this is lacking.

Executive and clinical leadership and a strategic plan with appropriate resources are essential.

Where remote consultation works there has been clear leadership and clinical champions in place, supported by a rollout plan and investment. In many cases there has not been coordinated corporate support which has resulted in a range of service delivery models, often with considerable variation within individual services.

Many clinicians want to offer video appointments but are hampered by inadequate technology and lack of interoperability.

Remote consultations can be a frustrating experience for clinicians and patients due to lack of hardware, bandwidth reliability and connection issues. Clinicians handling multiple systems with limited interoperability also creates challenges.

The expected workforce and productivity benefits from remote consultations are not being realised due to operational, technical and cultural complexities.

There has been mixed feedback as to whether remote consultations are saving time for the clinical workforce and increasing throughput e.g. there are cases of lower discharge rates and appointment slot times have not been shortened. However, there is some reporting of rapidly clearing backlogs and lower DNA rates. The workforce is, however, seeing benefits relating to more flexible working.

Patient choice should be central to the decision about the appointment method.

There are many benefits for patients from remote consultations. However, digital literacy and accessibility to technology remain barriers to certain patient groups and therefore choice is essential for ensuring equality.

Introduction

Rapid growth in the adoption of remote consultations in secondary care has been seen across the North West Coast. Adoption rates, however, vary greatly between trusts and specialties and within organisations. To help understand the factors that influence uptake, NHS England asked the Innovation Agency to undertake an appreciative enquiry into the adoption of remote consultations in outpatients. The enquiry is a **blend of operational and strategic insights**, drawn from a series of facilitated conversations with clinical and operational teams from across the North West Coast.

The report looks at the benefits of remote consultations, the barriers to adoption and the factors that are enabling implementation. The report aims to identify the common principles that make remote consultations work within a pathway. The goal is to see these common principles spread further.

The enquiry aims to stimulate strategic thinking around remote consultation adoption and to view this as one part of joined-up, large-scale pathway redesign.

Patient experiences are essential to build learning and inform improvements to remote consultation services. The Innovation Agency commissioned Healthwatch Lancashire to hear first-hand experiences from patients and these are reflected throughout the report. The full report can be seen in Appendix 1.

The appreciative enquiry would not have been possible without the substantial contribution from the clinical and service teams from across the North West who gave significant time in sharing their experiences. A huge thank you to you all.

Enquiry purpose

- To surface the key characteristics of successful adoption
- To understand the barriers to wider adoption and why variation exists
- To act as a reference source to inform system strategy development and trust planning
- To stimulate strategic thinking around remote consultation as one part of large-scale pathway redesign
- To stimulate thinking around the development of remote consultation within personalised care

Method

Structured conversations were held with various clinicians and allied health professionals from a broad range of specialties. Conversations were also held with service managers and digital and transformation teams from across the North West Coast.

Over 40 discovery conversations were facilitated with a variety of trusts (see Appendix 2).

Background

Current models

Overwhelmingly the reason for the move to remote consultations has been COVID-19 and the need to:

- move away from face-to-face appointments for the safety of patients and staff
- support social distancing
- support homeworking
- free up limited face-to-face appointments for the most clinically urgent

A small number of services had already adopted a form of remote consultation prepandemic. These all share similar characteristics:

- tertiary services covering a large geographical area
- trusts providing services to patients in remote areas
- specialities with long-term follow-up: the patient cohorts are well known to the clinicians and regular follow-up is often routine
- a digital plan was in place for the rollout of remote consultations

A handful of services mentioned they had started the implementation or that pilots had begun before COVID-19. Some said a shift to remote consultations was set out in a strategic plan. Although these services had some traction before the pandemic, they were much more advanced in planning and getting resources to support adoption. Consequently, adoption has often been more widespread and sustained at these trusts.

An overview of the current models and clinical preference can be summarised as:

- a shift to phone consultations during the pandemic followed by a move back to face-to-face "as soon as possible" (often in high-volume specialities with many new patients)
- first consultations being face-to-face (to ensure all diagnostics and examinations can be done) and a shift to remote consultation (usually phone, but in some cases video) for follow-ups

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• patients triaged in phone consultations and then streamed into face-to-face or remote consultation

Providing remote consultation clinics by phone is the predominant form of remote consultation. This is due to:

- lower barriers to entry
- easier clinic template structures on PAS
- easier clinic template structures on the Patient Administration System (PAS)

There are many examples of phone clinics being well established before the pandemic.

Many people said, however, that the phone is seen as less effective than video.

Due to the speed at which most trusts had to pivot to remote consultations there was a **wide variety in "starting points" for availability of hardware**. At the outset of the pandemic many trusts did not have enough hardware for remote consultation appointments. Subsequent significant investment in trusts has been reported, although the quality and availability varies. Many services mentioned that hardware still greatly influences whether remote consultation is adopted.

There is variety in the way remote consultation clinics are structured. These are either as standalone clinics or blended clinics with face-to-face and remote consultation together.

Clinicians generally prefer blended models of delivery, but these are often harder to organise due to clinic template structures and are administratively more complicated to book. **Dedicated remote consultation clinics are easier to manage and set up**. However, dedicated remote consultation clinics can be hard to fill if there are not enough patients who want such an appointment.

Many clinicians said they felt **more comfortable providing the first appointment as face-toface** and providing a full examination and carrying out tests, then moving to virtual for follow-ups.

There is a **perception that remote consultations work well for routine follow-ups**. There are examples of remote consultations being well used for initial examinations – this is often the case for triaging in mental health.

Several teams were unaware of the availability of video consultations and have not been offered the chance to use them in their trust.

All services talk about **patient choice** being the primary factor in selecting the type of appointment with many routinely asking **"how would you like your next appointment?"**.

Benefits of remote consultations

Our conversations revealed many benefits to remote consultation. These have been grouped under the following themes:

- Patient benefits
- Workforce benefits
- Operational and clinical benefits

Patient benefits

flexibility around existing commitments less stressful Saves time safer Saves money family members can join more easily more convenient reduced travel more relaxed in home environment reduced parking stress

I felt as though it was far more relaxed because I was at home. The advantage is not having to travel to the hospital and find parking, pay parking charges etc... as this takes more time than just a phone call. The consultation literally takes five minutes so there is no need to come into the hospital for it.

I would use remote appointments post-pandemic for routine check-ups – it really saves on time, travel and the environment! However, I would not use remote appointments for anything more complicated. Saved me a lot of time and travel costs because the journey to Manchester takes a long time and it means half a day off work.

If you are just checking up on someone, has anything changed, is everything OK, you want to give blood results... you don't need to see someone faceto-face, as long as it's good news. If it's something significant... then you would expect they would want to see you face-to-face.

A third of patients said they would be willing to continue with remote consultation appointments where appropriate.

Workforce benefits

encourages wider digital working e.g. virtual MDT better work-life balance flexible work base isolating staff still able to work less travel between clinical sites

improved recruitment due to greater geographical reach

Operational and clinical benefits

Backlogs triaged more efficiently seeing patient in their own environment gives better impression of health

fewer DNAs reduced infection risk quicker throughput for routine appointments

Easier for joint consultations reduced footfall in OPD

advance knowledge of complex cases can streamline F2F appointment

Some wider environmental benefits in relation to less traffic and a reduction in the carbon footprint were noted. There were also a number of specialty-specific benefits (see Appendix 3).



Barriers to remote consultations

A variety of teams, professions and process interactions are involved in the delivery of outpatient services, with patients at the centre of them all. Consequently, numerous challenges arise when implementing and providing this new service. These have been grouped under the following themes:

Patient

- Clinical
- Leadership and culture

- Workforce
- Operational
- Digital

Patient

A variety of issues relating to the patient experience were raised by clinicians and patients themselves. These include the standard of care, digital poverty, equality of access, safeguarding and communication. There was particular concern that some of these would be more prevalent in more deprived areas.

Close to half of the patients consulted raised concerns regarding the standard of care. Most of these concerns were about not being physically examined and the absence of facial cues. Some patients also said a video consultation would have eased some of these concerns.



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Workforce barriers

- 1. Service pressures from addressing backlogs, higher emergency activity and workforce shortages make it very difficult to find time and space for service improvement. **Clinicians therefore struggle for time to think about how they want remote services to look.**
- 2. Transformation, digital and operational teams often lack the capacity to drive adoption as they are now focussed on other initiatives.
- 3. Digital confidence and digital literacy of staff can be a limiting factor. Low digital confidence can contribute to a general negativity. Preferences of senior clinicians towards remote consultation have a direct impact on the uptake throughout the clinical area.
- Many clinicians say they have had inadequate training in video consultation platforms and the supporting devices and

hardware. Furthermore, clinicians have been trained in delivering face-to-face patient care over many years, whereas there has been no training or education in providing remote care.

- 5. There is a preference for **reverting back to 'normal'** as clinical staff are reporting that they **came into health care to provide direct, in-person care to patients** and that patient interaction is central to job satisfaction. Workforce retention could be at risk if the remote consultation were the primary method of care.
- 6. Video consultations are more tiring because participants must work harder on non-verbal communication and focussing on a screen. This can deter clinicians.
- 7. Some clinicians have been **subjected to verbal abuse from patients who want to have in-person appointments.**



Clinical barriers

- 1. Explaining complex medical information is more difficult. It is often helpful to draw pictures or use diagrams which is more difficult to do remotely. It is also harder to show images to the patient.
- 2. There is no clinical evidence base for this way of working. Some serious incidents have occurred where clinical issues were missed because the consultation was remote. However, a blended model of care can help in managing this risk. A lack of guidance from Royal Colleges and societies is cited as a barrier and this affects clinical confidence and assurance around providing care this way. *See Appendix 4 for medical guidance sourced
- 3. Increased diagnostic investigations due to clinicians not being physically present with the patient, lowering the threshold for clinical decision-making.
- 4. Variation exists in the skills necessary in providing a clinical assessment via remote consultation. Concerns raised around the effectiveness of care via this method.

- 5. Some clinicians say they are less confident in discharging patients during a virtual appointment.
- 6. Clinical comments that it is **necessary to see a patient in person at least once to be confident providing an informed clinical judgement.** This would preferably be as the first appointment.
- 7. Clinicians are trained to pick up on non-verbal communication and body language as part of the clinical assessment. Some therapists, for example, say that there is less human connection via remote consultations which can affect the quality of the counselling.
- 8. There were safeguarding concerns about who else could be present but not visible in the room during the appointment. This is significant in domestic violence cases, for example.
- 9. It is difficult to introduce remote consultations into services where there are one-stop shop treatment clinics.

In certain haematology and chemotherapy clinics patients require a blood test within a certain time frame close to the appointment. In both examples remote consultation complicates the pathway.

- Phone assessments can rely more heavily on the patient's perception of the issue rather than a clinical judgement. Sometimes the patient's explanation is insufficient which requires the patient to attend in person.
- 11. Remote consultations are more **challenging for patients with a language barrier**, **learning disability or requiring BSL.** In face-to-face clinics interpreters can span several appointments. This is more difficult due to the lack of integration with external translation services e.g. Language Line.
- 12. If a clinician is in a remote location there is **less access to chaperones**, resulting in staff being put in vulnerable positions or delays to care.

- 13. Patients having to attend hospital to collect medication and give blood samples defeats the object of remote consultations.
- 14. Clinicians are **unwilling to adjust medications during expensive drug review appointments** without a physical assessment. This is in line with NICE guidance.
- 15. Specialist centres see particularly complex patients and therefore have fewer appointments that would be suitable for remote consultation.
- 16. A poor-quality connection can result in **clinical information being missed** or not explained fully.

It's always important to make sure other people in the room with you are also on camera and that you introduce them, just as you would if they were sitting in the clinic room face-to-face.



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Operational barriers

- 1. Setting up a remote consultation service requires substantial time, effort and money as many steps are involved including process mapping, designing a new pathway, identifying appropriate patient groups, triaging patients, agreeing cross department procedures, new clinic templates and gaining clinical buy-in.
- 2. Remote consultations can often result in longer appointments and take up more clinician time. Appointment time can be longer due to accessing the system and overcoming connection barriers. Administrative work pre and post appointment can also increase.
- 3 Uncertainty of treatment and the need for physical assessments can lead to another face-to-face appointment being booked, doubling demand on clinic slots. This has been highlighted with less experienced clinicians.

- 4. There is a preference for hybrid clinics. However, these require greater planning and organisation. This results in remote consultation being de-prioritised or even avoided because moving between face-toface/video during a clinic is problematic.
- 5. Video appointments can be less effective for short appointments due to the time it takes to set up and connect during a busy clinic.
- 6. Complexities in setting up virtual clinic templates due to clinic structure requirements and different appointment slot types. Building new virtual clinic templates in the appointment system is very time-consuming. There are examples of trusts recruiting six-month posts to tackle this.
- Appointment communications are often driven by the clinic code on the PAS system leading to communication challenges for hybrid clinics. This is particularly problematic if a patient appointment type needs to be converted.

There are examples of patients receiving incorrect communications about their appointment, for example blood samples now needing to be taken at a GP practice due to remote consultation. Changing the blood test site involves PAS system implications and letter template changes.

- 8. Challenges and bureaucracy involved in setting up virtual appointment booking processes arising from centralised booking teams. This is because they deal with multiple specialties and are less familiar with specific service knowledge and patient cohorts
- 9. Manual administrative processes for sending joining links are inefficient. Video appointment joining links circulated within paper letters increase the chance of human error when entering into the browser.

- 10. Virtual appointments can create **more** administration for clinicians as postappointment printing and postage is required when the work would previously have been completed in clinic.
- 11. Burdensome information governance standards can prevent clinicians from providing remote consultation appointments from shared office spaces, citing confidentiality and governance concerns. Shared offices can also be noisy though and therefore more difficult to run virtual clinics.
- 12. Some services said it was more convenient to work from home to deliver remote consultation clinics as the bandwidth is more reliable and the software works better. However sometimes this has not been possible due to wider trust policies, the need for multi-disciplinary input and/or the requirement for clinicians to be on site to discharge patients.

We had some training but it was just an hour on Teams about the technical aspects - to be honest, it didn't really stick. When I trained as a clinician my learning was all geared towards face-to-face consultations. Some education about how to actually deliver care in a virtual format would be useful.



Leadership and culture barriers

- 1. There is often no strategic rollout plan for remote consultation, while limited support for clinical teams places the onus on clinicians to develop the service.
- 2. Deploying video consultations can be a lower priority for senior leaders as trusts have major challenges with recovering services. Operational managers do not have the 'head space' or time for developing remote consultation services.
- 3. If operational management do not view remote consultations as a priority then, in turn, clinical teams do not see it as important to adopt them.
- 4. The absence of clinical buy-in is a significant obstacle and video appointments are culturally seen as too difficult.
- 5. Many clinicians want to revert to faceto-face and feel it is more effective care. Clinicians are moving back to face-to-face appointments due to the limitations of telephone, however video may never have been attempted.

- 6. The fear of and resistance to change was raised as a major cultural barrier.
- 7. Some specialties see remote consultation as a response to the pandemic only and a way to mitigate infection risk, not as a mainstay of their service.
- If video consultations do not work effectively first time clinicians lose faith in the system and their own confidence in using it reduces. Negative experiences are then shared with peers.
- 9. Clinicians have not had the opportunity to learn from others.
- **10.** Some patients may perceive remote consultation appointments as less important, there have been examples of patients joining whilst doing other activities or asking to be called back later.



Digital barriers

- 1. There are cases where **inadequate and insufficient hardware is available** for clinicians to do remote consultations e.g. slow PCs, lack of headsets and microphones, no dual-screens and shared laptops. There are **examples of outpatient departments not being adequately equipped**. When equipment has been bought there are cases where the specification is not of a sufficient standard to support remote care. There are reports of clinicians buying and using their own devices to provide remote consultations.
- 2. A poor interface between hardware and software has caused many to abandon video consultations, even though these problems are easily resolved if IT support is available. For example, headphones not connecting, knowledge of microphone settings.
- 3. Connection problems are often caused by technology and WIFI quality from the patient side causing appointments to fail. Poor hospital bandwidth deters clinicians.

- 4. Technology and equipment not working correctly requires clinicians to trouble shoot, so remote consultation is seen as too onerous.
- 5. Inaccessibility of digital systems from off-site makes home-based remote clinics difficult, deterring clinicians.
- 6. There are examples of consultants using WhatsApp to overcome challenges with remote consultation technology.
- 7. Hospital phone calls to patients can appear as 'unknown caller', leading to DNAs or call-blocking.
- 8. Patients are sometimes required to use several remote consultation solutions because primary and secondary care use different platforms, creating confusion.
- 9. There is a wide variety of digital projects for trusts to resource and implement: only a certain amount of resource can be allocated to remote consultation deployment.



Enablers for adoption

Many common factors and characteristics enable successful adoption. These have been grouped under the following themes:

- Operational
- Leadership and cultural
- Digital

Always allow people to choose the mode of remote consultation that they want. Don't force video consultation upon them - it's not for everyone.



Operational enablers

- 1. **Process mapping the whole clinic pathway** and creating a new process including all the steps required to make a remote consultation appointment happen.
- 2. Administration teams are essential to correct appointment method booking and must be included in process redesign and planning. Standardised procedures are critical for identifying appropriate patients, booking appointments and ensuring correct messaging to notify patients.
- 3. Clinic template and booking processes that allow for appointment method flexibility.
- 4. De-centralised administration and clinic support teams who know the service well and are familiar with the patients makes implementation easier, because patient suitability assessments and booking processes are simpler.

- Teams with higher adoption have comprehensive digital training and support, increasing digital competency. This includes one-to-one training, standard operating procedures, tech support at golive (floor walkers), dedicated technical line and inbox to manage queries rapidly.
- 6. Implementation teams should remain in place well beyond rollout to ensure remote consultation services become embedded. The cultural changes require longer-term support than the initial set-up processes. With new specialties gradually coming on board after early adopters, these also require support in launching the new service.
- 7. Clear, standardised criteria for profiling patients to the best appointment method (video, phone, face-to-face, home visit). This uniform approach provides consistency. Examples include triage protocols and traffic light systems. However, it is recognised it is not always straightforward to categorise patients.

- 8. There is a strong preference for first appointments being face-to-face because this enables a thorough clinical assessment and builds patient rapport.
- 9. Works well for follow-up appointments where the clinician is already familiar with the patient and the patient has understanding of the care, for example long-term pathways, medication reviews, benign results, investigation results and wait list review clinics.
- 10. **Specialties with longer appointment duration** (30-60mins) are more suited to remote consultations because clinicians feel it is worth persevering through any video connection problems.
- 11. Phone clinics are helpful for information gathering before a face-to-face appointment and enable the physical appointment to be more efficient. Similarly, completing an e-form before a new remote consultation informs the clinician of the patient's condition.
- 12. Admitting patients into a virtual waiting room works effectively, with a dedicated receptionist checking details, informing the patient about wait times and acting as a checkpoint for patients. Virtual waiting rooms for each specialty is optimal.
- 13. To ensure that virtual waiting rooms are actively managed, and patients feel supported, some departments have re-purposed the role of healthcare assistants and reception teams to do this, because fewer patients are physically attending outpatient departments.

- 14. **Excellent patient communication** prior to the appointment is essential for video appointment success, for example easy to understand joining instructions, a phone call to explain the process, walk-through videos and so on.
- 15. Notifying the patient by text message before a phone clinic that they may receive a phone call from a withheld number helps improve attendance rates.
- 16. Emailing the video joining link directly to patients improves appointment connection success rate.
- 17. Collecting regular remote consultation feedback from patients and reviewing at department meetings helps improve learning.
- 18. Giving patients an approximate appointment slot window of one hour helps to manage expectations and allow for delays – works well for dedicated remote consultation clinics.
- 19. Dedicated spaces/booths equipped with high-specification technology ready for remote consultation appointments.
- 20. Examples of community hubs, secondary care providers and GPs partnering to provide blood tests and other patient support to reduce the need for patients to visit the hospital for samples/medication and so on. These could also provide access to digital appointments to help address digital poverty.



Leadership and cultural enablers

- 1. Clinicians and operational managers must lead the adoption of remote consultation collaboratively, enabled by IT and transformation teams.
- 2. Deployment should be treated with the same level of priority as any other major IT system with enough resources and executive and senior clinician leadership.
- Trusts with good adoption identify remote consultation as a trust-wide improvement goal. A strategy is usually in place with resources and time and space given to develop processes and procedures to support implementation.
- 4. Organisations should give clinical leaders dedicated time to use their experience to drive adoption and become remote consultation champions.
- 5. **Trust dashboards for tracking specialty uptake** builds knowledge about the overall position and enables targeted support.
- 6. Adoption targets tailored to specialties are better than a universal target and provide more focus.

- 7. Staff who are open to change, positive and with a common desire to use remote consultations.
- 8. A willingness to work through inevitable teething problems that can occur when deploying a new system or way of working.
- 9. A **safe learning environment**, strong team ethos and psychological safety in the team.
- 10. Challenging cultural opinions and resistance to change through a range of communications including; positive patient stories, peer-to-peer learning, e.g. clinical champions networks. Trust engagement events can help generate buy-in.
- 11. **Regular team huddles** including clinical, administrative and clinic support staff help to share learning, make improvements and improve communication. For example, a trust could form an outpatient transformation team to enable cross learning between specialties.



Digital enablers

- 1. Clinical teams prefer remote consultation platforms with **good interoperability** with other clinical systems, for instance those launched with "one click" and patient records and test results easily accessed during the consultation.
- 2. Installing **phone functionality** on laptops and PCs enables uptake of phone clinics.
- 3. Trusts that invest in **better broadband connections and bandwidth** will improve the remote consultation experience.
- 4. Trusts that have invested in robust and widely available hardware more often have good adoption and video appointments work well. Cameras, headsets, dual screens, PC/laptop speed and bandwidth are consistent enablers or blockers to adoption.

- 5. Dedicated IT resource on hand to help teams at 'go live', for example floor walkers, to ensure problems are handled in a timely manner and services are supported.
- 6. Clinicians who were able to provide remote clinics from home highlighted that **remote** access (VPN) to all clinical systems was critical.
- 7. **Digitising the paper-based administration** for an appointment enables fully remote working and reduces hand-offs, for example the digital clinic outcome form.

Clinical teams suggested several ideas to enhance software functionality:

- Subtitles or transcription services would help hearing-impaired patients.
- An option to record would help with medical and clinician training.
- A chat/resource sharing function would help communicate complex medical terminology and share links to patient resources which would be captured in the EPR for audit. If this function remained open after the appointment it would help digital messaging to continue between clinicians and patients.
- In-built, collaborative working tools and image capture, for example whiteboards or onscreen drawing would help clinicians explain medical problems.
- Functionality to enable **screen-sharing with patients**, for example sharing images/results/ diagrams/notes.
- The ability to track the patient as they enter and exit the virtual waiting room would help monitor attendance and DNAs.
- A video platform with an **Application Programming Interface to enable inter-connectivity with PAS/EPRs/portals** would transfer patient data into the care record and be a powerful method of providing integrated end-to-end care.
- The **ability to connect remote monitoring devices or systems** to provide live remote diagnostics during a consultation.
- **Easier** compatibility of video consultation platforms with several browsers and different manufacturers.
- The functionality in PAS to highlight the percentage split of appointment type to support with effective nursing and HCA staff rostering in outpatient departments to appropriately support clinics.
- Primary care to flag on the referral or summary care record patient preference and suitability for remote consultation.

Opportunities for innovation

Many of the challenges being seen in the adoption of remote consultations present opportunities for innovation to drive efficient and effective processes. Various themes where new ways of working could be targeted are highlighted below.

Coaching for culture

The move to virtual delivery is an innovative change itself and the first step is to establish an innovation-ready culture, including clear and compassionate leadership, psychological safety in teams and opportunity to learn from others. There is an opportunity to think innovatively by supporting the workforce with effective coaching to create the mindset and cultural changes required for successful adoption.

Interoperability

Lack of interoperability between systems is a challenge. A video consultation platform with interconnectivity with PAS/EPRs/patient portals would be an advantage. A variety of bi-directional patient data transfers into medical and shared care records would be a powerful method of providing integrated, end-to-end care.

Patient flow management

Digitising the whole outpatient management process and patient journey can optimise patient flow and create efficiencies in staff time. There are end-to-end solutions that maximise clinic use, enable efficient room booking and digitise workflows, improving patient throughput.

Robotic process automation

The move to remote consultation involves many administrative processes, including patient booking, patient prioritisation, clinic allocation and so on. The use of Artificial Intelligence/robotic process automation as a design principle in a digital-first pathway can automate standardised procedures.

Digital outcome forms/dictation software

A complete digital pathway including a digital clinic outcome form would help ease the administrative burden on clinicians and reduce delays. Automating appointment follow-on actions could be supported by a digital dictation app.

Community hubs/click and collect

Requiring patients to travel to hospital for diagnostics or collect medication defeats the object of remote consultation. The development of community hubs for more local testing or 'click and collect'/home delivery solutions for medications can help solve this problem.

Asynchronous communication

Communication with the patient between appointments (where appropriate) via digital messaging and linking to the patient record can better monitor and support patients, improving outcomes and potentially reducing appointment demand.

Remote monitoring platforms

Linking remote monitoring platforms to video consultation solutions can enable the live monitoring and review of medical information during a consultation, enabling faster and remote clinical decision-making.

Key steps for implementation

Patients and Pathway





To help achieve the expected pathway, workforce and productivity improvements from remote consultation the following steps could be considered:

Connect with existing programmes to create large-scale change

Many system-wide outpatient improvement programmes are in place. These could be brought together with remote consultation to create a joined-up, major pathway change programme.

Think beyond outpatient referral and appointment

Take an end-to-end pathway view to redesign the patient journey. Remote consultation complements other technologies that transform care and enable efficient patient flow. This can be best achieved when we consider the whole pathway.

Take a personalised care approach

Do what the patient needs, offer choice and involve patients in the decision about remote consultation - not what we think they need.

Trusts to create an adoption strategy including executive and clinical leadership

Development of plans that incorporate addressing barriers and consideration of operational, cultural and digital enablers to adoption.

Consider opportunities for innovation in the processes that underpin remote consultations (see Appendix 4)

Provide central funding

To support well resourced, targeted implementation NHS England to consider a funding opportunity for trusts to submit bids and be awarded funds.

Address digital exclusion

Consider using community health assets as digital access hubs for patients. These could also offer diagnostic tests to avoid patients travelling to hospital.

Share best practice

Regional outpatient transformation teams to create opportunities for sharing success stories.

Develop national guidance

Consider providing national medical guidance and assurance from royal colleges and societies in providing care in this manner. Consider clinical trials into remote consultation across a selection of specialties to build an evidence base.

Appendices

Appendix 1: Healthwatch Together patient experience report

Healthwatch remote consultation report:

healthwatchlancashire.co.uk/wp-content/uploads/2021/10/IA-Remote-Consultation-Final-Report-.pdf

Healthwatch reflections on digital outpatients:

https://healthwatchlancashire.co.uk/wp-content/uploads/2021/10/One-Page-Reflections-HWT-DIGITAL-OUTPATIENTS.pdf

Appendix 2:

Contributing trusts and professions

Cheshire and Merseyside
Liverpool University Hospitals NHS Foundation Trust
The Walton Centre NHS Foundation Trust
Countess of Chester NHS Foundation Trust
St Helens and Knowsley Teaching Hospitals NHS Trust
Southport and Ormskirk Hospital NHS Trust
Bridgewater Community Healthcare NHS Foundation Trust
Warrington and Halton Teaching Hospitals NHS Foundation Trust
Wirral University Teaching Hospital NHS Foundation Trust
Liverpool Women's NHS Foundation Trust

Lancashire and South Cumbria

Lancashire Teaching Hospitals NHS Foundation Trust

Lancashire and South Cumbria NHS Foundation Trust

University Hospitals of Morecambe Bay NHS Foundation Trust

Outside North West Coast

The Christie NHS Foundation Trust

Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust

Tameside and Glossop Integrated Care NHS Foundation Trust

Conversations have been held with the following services and professional areas

Oncology	Perinatal mental health
Psychology	Clinical genetics
Acute medicine	Neurosurgery
Respiratory	Transplant surgery
Pain management	Ophthalmology
Breast	Therapies
Orthopaedics	Urology
Dermatology	Rheumatology
Audiology	Transformation leads
Outpatient department managers	Divisional directors non-clinical support
Digital implementation teams	Chief clinical information officers
Chief information officers	Chief nurse information officers
Cancer nurse specialists	Clinical directors
Clinical geneticists	Clinical nurse specialists
Therapists	Consultants (various)

Appendix 3: Specialty-specific points

In general, those specialties that require more dialogue and less physical examination are better suited to remote consultation.

Mental Health – For people living with anxiety, mental health and learning disabilities, the ability to virtually show patients the care environment before an appointment helps to reduce stress.

For mental health crisis and emergency care remote consultation is not effective.

Autism – the flexibility to offer appointments in this way has been well received by people with autism.

Respiratory – Assessments for home ventilation can be performed virtually in most cases, reducing patient transport and clinician travel.

Sleep apnoea – most patients can be treated remotely if a home ventilator can provide remote monitoring data.

MSK – there are several examples of more efficient care, for example in the case of younger patients with acute injuries who are more straightforward to treat.

Diabetes – some patients are used to living with their condition, can self-manage and therefore remote consultation works well for their regular health assessments.

Follow-ups to emergency attendances – frequent feedback suggests that offering these appointments as remote consultations is effective, saving clinician and patient time.

Ophthalmology – remote consultations can potentially work well for plastics, orbits, squints and macular degeneration. This is a specialty where patients often require a friend/relative/carer to accompany them. Offering remote consultation appointments reduces the need for these people to take time off work.

Efficient community imaging from high street optometrists or community treatment centres enables subsequent appointments to be delivered as remote consultations.

Paediatrics – there have been some comments that children engage well with video appointments.

Dermatology – many appointments require a detailed examination of the skin which is difficult to do remotely.

Appendix 4:

Digital outpatient innovations

Resources curated by the AHSN Network

PATIENT FLOW MANAGEMENT

Company: Ampersand Health

Product: Ampersand Platform (IBD and arthritis apps)

Function: Digital patient flow management, patient communications and Patient Initiated Follow Up (PIFU)

The Ampersand platform offers digital solutions that benefit both clinicians and patients, and has digital messaging, remote monitoring and digital therapy provision capability. It has been proven to reduce outpatient visits and increase PIFU in IBD and arthritis/MSK pathways.

ampersandhealth.co.uk

Company: Cievert

Product: Penguin

Function: Digital patient flow management, patient communications and PIFU

Penguin is a web-based platform that allows clinicians to automatically ask patients systematic questions (for example PROMs, OTR) based on their diagnosis and course of treatment. The patient can answer these questions from a smartphone/tablet/computer at home, supporting clinical decision-making in real time. Increases PIFU to reduce the number of face-to-face appts, DNAs and waiting times. Can be applied across all OP specialities.

cievert.co.uk/penguin

Company: DrDoctor

Product: Follow-up management

Function: Digital patient flow management, patient communications and PIFU

DrDoctor allows clinicians to automatically ask patients systematic questions (e.g. PROMs, OTR) based on their diagnosis and course of treatment. The patient can answer these questions from a smartphone/tablet/computer at home, supporting clinical decision-making in real time. Increases PIFU to reduce the number of face-to-face appointments, DNAs and waiting times. Can be applied across all OP specialities.

www.drdoctor.co.uk

Company: Definition Health

Product: LifeBox Health

Function: Digital patient flow management and communications

LifeBox is a digital pre-operative assessment (ePOA) tool which supports pre-op patient assessment, hospital decision-making and personalised patient care. The information is then available for clinicians to securely access, allowing for early triage and risk stratification which streamline workflows and support personalised patient care. The system includes audio-visual tools for enhanced patient education and provides outcome measurement functionality.

www.definitionhealth.co.uk

Company: Health Navigator

Product: HN platform and product suite

Function: Demand management and patient activation

Health Navigator partners with NHS organisations to identify and support those patients most at risk of consuming urgent and emergency care. By combining powerful predictive analytics with nurse-led proactive patient coaching, the product can significantly reduce demand for UEC and improve patient quality of life.

www.hn-company.co.uk

Company: Ortus-iHealth

Product: Ortus-iHealth Digital Outpatients Platform

Function: Digital patient flow management and communications

Appointment management (patient and clinician), digital letters, digital questionnaires (pre and post-appointment, PROMS/PREMS), patient vital signs recording and clinician remote monitoring, recording of clinical consultations, virtual outpatient clinics – video and remote (from vital signs reporting) consultations, patient access to clinical information and two-way communication.

www.ortus-ihealth.com

Company: Induction Healthcare Ltd

Product: Induction Zesty/MyCare patient portal

Function: Digital patient flow management and communications

The Induction Zesty platform has a suite of functions that support the digitisation of outpatients, including remote registration and consent, digital patient communications, integrated appointments, patient completed digital pre-op/post-op/follow-up questionnaires, e-form builder, video consultation, async messaging, communication of test results, and fully integrates with EPR and PAS systems.

inductionhealthcare.com/zesty

Company: HCI Digital

Product: CONNECTPlus/Health and Care Video Library

Function: Digital patient flow management, patient communications and PIFU

The largest library of health and care videos in the UK (over 1,100, all developed and signed off by NHS clinicians). The videos are usually used in pathways of care to reduce demand and costs and improve the patient experience. Supporting remote prehab, rehab without having to go to hospitals, surgeries, community facilities, reducing volumes of patients in hospitals and care settings and reducing chance of cross-infection. CONNECTPlus empowers patients by enabling them to monitor progress, manage their medication, handle numerous appointments and better care for themselves from the comfort of their own homes. This means that patients will need fewer appointments and make fewer calls to the department, and it becomes much easier to run patient-initiated follow-up programmes.

www.hci.digital/

Company: In Touch with Health

Product: Patient Journey Platform

The Intouch with Health Patient Journey Platform enables NHS trusts and healthcare organisations to manage entire patient workflows and optimise flow in outpatient care in an efficient manner. The Patient Hub Solutions suite of functions includes digital check-in, outpatient flow management, mobile appointment management, digital or remote reception, waiting time management and wayfinding for patients to find clinics and treatment rooms. The Clinical Solutions Hub suite of functions includes virtual clinics, room and resource management and eOutcomes for capturing PROMs.

Pre-operative assessment solutions in the Patient Journey Platform capture pre- and postoperative data from a patient's own tablet or smart device, from initial questionnaire through to post-operative outcomes. This provides clarity, efficiency and value, reduces cancellation rates and risk, and increases patient throughput and theatre utilisation.

www.intouchwithhealth.co.uk/

REMOTE MONITORING

Company: Docobo

Product: Doc@Home

Function: Advanced digital remote patient-monitoring and case-management system

Doc@Home enables clinicians and carers to deliver better care, helps patients to be more aware of their condition and improves self-management. Easy to implement and use, this remote patient-monitoring system is used in care homes, in primary care settings, in patients' homes and hospital-to-home, enabling healthcare professionals to develop new ways of delivering care.

The technology enables healthcare providers to adopt new ways of delivering out-of-hospital care, supports patients in receiving out-of-hospital care and with the management of long-term conditions.

Company: Dignio

Function: Connected care platform

With Dignio's platform, healthcare providers can build their own virtual wards matching a wide range of patient pathways. Dignio increases self-management and improves coordination of remote care. Dignio provides user-friendly connected care platforms and devices to alert professionals if they need to act and to engage people in their care. Vital signs are communicated via Bluetooth-connected devices. Health and social care providers across a region can use Dignio to monitor a single illness or a range of conditions. This has led to significantly reduced hospital admissions and other savings.

dignio.com/en

Company: Whzan digital health

Function: Capital Healthcare monitoring systems

The Whzan Blue Box is an all-in-one telehealth case. It measures vital signs, records photos, performs multiple assessments and questionnaires including NEWS2. Signs of deterioration or illness are identified earlier for a clinical response or carer support. Whzan's systems include automated early warning triggers, NEWS2 and health and activity pattern recognition, all in a simple user interface.

www.whzan.uk

Company: Sapien Health

Function: Coaching for pre- and post-surgery

Sapien is a mobile app-based behavioural intervention for patients undergoing elective surgery. The programme uses personalised digital guidance and remote health coaching to optimise patients preoperatively and support their recovery during the postoperative phase.

sapienhealth.io

Company: Storm ID

Function: Digital dermatology service

Using a smartphone, tablet or computer patients register for the service and are invited to virtual digital appointments which are open for several days. During the appointment period the patient securely submits images of their skin condition. In addition, the patient completes questions and provides details of any treatments. The images and answers are assessed remotely by dermatologists, without having to see the patient in person or via video link. Dermatologists can 'chat' with the patient via secure two-way messaging to ask follow-up questions. They then advise the patient what action to take.

blog.stormid.com/dermatology-service-scale-up-scotland

Company: Open Medical Ltd

Product: Pathpoint SurgiCare

Function: An interoperable cloud-based platform serving the full perioperative care pathway to tackle a waiting list backlog

Linking multidisciplinary caregivers, this is a central digital hub for remote pre-assessment and postoperative monitoring. Custom-designed workflows deliver all the assessment tools of the required surgical referral standards, as well as clinical triage, admission management, patient-reported and functional outcome measures, relevant national audit submission, clinical governance, and live data reporting.

www.Pathpoint SurgiCare

ROBOTIC PROCESS AUTOMATION

Company: Blue Prism

Product: Robotic Process Automation Digital Worker

Function: Robotic process automation (RPA)

A digital worker is a super organized, multitasking software robot that works within your existing systems, technology and applications to automate business processes through RPA. From repeatable and predictable to challenging and complex, digital workers effortlessly deliver any task, creating efficiency by focussing low-complexity, time-consuming administration tasks and process steps to be undertaken by an algorithm, increasing speed and reducing errors, freeing up workforce to undertake more valuable processes and procedures.

www.blueprism.com

DIGITAL FORMS

Company: Aire Logic Ltd

Product: Forms4health

Function: Electronic forms

Forms4health is an intuitive, easily integrated, electronic smart forms platform. Branching logic, clinical decision support and pre-populated fields from PAS integrations are just some of the features that allow users to create efficient, comprehensive forms than can be used across all business operations and pathways.

www.forms4health.com

Company: Ultramed

Product: MyPreOp

A cloud-hosted programme, enabling patients to enter, own and share their pre-operative assessment. Patients can complete their assessment at any time and without a hospital appointment, meaning the clinical summary is generated as soon as the patient submits their information, ready for review by a nurse. This allows rapid screening and assessment of low-risk patients, allowing resources to be focused on high-risk patients. MyPreOp allows for better planning and throughput of patient operations, improving and reducing the RTT pathway, especially if one-stop pre-op assessment is used.

www.ultramed.co/mypreop

Company: ePAQ

Function: An "electronic Personal Assessment Questionnaire" system

ePAQ comprises a variety of validated health questionnaires designed to be completed easily by patients either in the community or in healthcare settings. It is aimed at reducing the amount of time and number of visits patients would have to make to clinic, while also aiming to help clinicians get as much information as possible about a patient's health and condition. Questionnaires can be completed via the internet in a patient's own time, or on computers or tablets in clinic. Provides the opportunity to review information about the patient before they arrive in clinic.

www.epaq.co.uk

ASYNCHRONOUS COMMUNICATIONS

Company: Healthcare Communications

Product: Envoy Messenger Platform and Product Suite

Function: Digital patient portal and communications

Envoy is a patient appointment and messaging portal which creates significant postal cost savings for NHS trusts. Appointment letters are delivered instantly to patients' smartphones, where they can access digital information anytime and anywhere, with no app download required. Test results, discharge and outcomes letters can be delivered to the portal too, creating a clearly outlined patient pathway record of all communications within the portal inbox. PROMS, video consultations and follow up e-forms can also be accessed from this hub.

healthcare-communications.com/solutions

Company: Hospify

Product: GDPR and NHS IG-compliant messaging app

Hospify is a simple and secure way of sharing sensitive and confidential health information between individuals, teams and communities via digital messaging. By securely sharing information with everyone involved in a patient's care, Hospify's easily customisable networks dissolve the silos that have traditionally slowed data-sharing and treatment pathways.

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www.hospify.com

COACHING FOR CULTURE

Company: Coaching Academy, within the Innovation Agency

Product: Coach development and qualifications

The Coaching Academy offers a range of training opportunities for health and social care professionals to develop their skills as coaches and gain coaching qualifications. The Coaching Academy can help you to create a thriving culture in your organisation, supporting colleagues to meet challenges, continually improve and deliver great care for the benefit of patients and service users.

www.innovationagencynwc.nhs.uk/coaching-academy

Appendix 5: NHSX Digital Playbooks - supporting clinical teams to reimagine and redesign care pathways

From NHS: https://www.nhsx.nhs.uk/key-tools-and-info/digital-playbooks/

Appendix 6: Medical guidance: when to offer remote consultations

From Medical Defence Union:

https://www.themdu.com/guidance-and-advice/guides/conducting-remote-consultations? gclid=CjwKCAjwt-L2BRA_EiwAacX32UVf4nyGiedKcDYfKk55SOqFfmuxXxIAfm1Bk_AKaynjHLxK-N82UxoCdtwQAvD_BwE

Appendix 7: Innovation Agency remote consultation webinar: consultant and patient experiences

From GMC:

https://www.gmc-uk.org/ethical-guidance/learning-materials/remote-consultations-flowchart

Webinar:

https://www.youtube.com/watch?v=eT2zCnhm0O4&t=100s





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