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 Remote consultation: the new norm?

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Remote consultation – The new norm?

Abstract

Remote consultations are now part of everyday clinical practice. The extent to which these are person focused and how well practitioners are able to meet patient needs in a safe and effective way using technology are fundamental to successful clinical outcomes. In order for this to become a reality, both patients and practitioners need to be adequately prepared, equipped and supported for the challenges of these emerging forms of patient/clinician interaction. This article looks at a range of critical perspectives and discussions which underpin this emerging clinical practice as increased use of remote consultations takes place at this point in the coronavirus pandemic and beyond.

Introduction

The National Health Service (NHS) is constantly evolving to meet emergent health challenges. During the COVID-19 pandemic and the subsequent need to avoid face to face meetings, NHS staff have been required to abandon traditional in-person models of care and adopt alternative remote means of assessment and monitoring. This wholesale introduction of online consultation whilst challenging, has demonstrated that effective care can be delivered remotely when supported by appropriate information and communication technology. Whilst some services had already integrated this mode of communication into existing pathways (Toon, 2002; Cooper and Alexander, 2019) and others were intending to adopt this approach in the longer term, the COVID-19 pandemic accelerated this transition with little time for preparation, training or opportunities to test the systems. It is therefore timely to appraise the benefits and shortcomings of using this type of technology to facilitate healthcare consultations.

Telephone and video consultations enable patients to discuss their needs with a healthcare professional from the comfort of their own home (Almathami, Win and Vlahu-Gjorgievska, 2020; Elliott et al., 2020) or workplace etc. The environmental comfort that this approach allows increases the accuracy of the information provided and the uptake of the information received, increasing treatment adherence (Car and Sheikh, 2003). Moreover, remote consultations protect the patient from the monetary, time and potential health cost of travelling to a distant location (Hirschmann et al., 2020). In addition, providing greater appointment flexibility and causing less disruption to the patient's daily routine is likely to increase uptake

and provide support to those who are struggling to balance their health and social needs. These patients are often labelled as 'did not attend' (Roberts and Partridge, 2007; Duncan and Russell, 2019) and can be stigmatised as a consequence.

Moreover, telephone and video consultations are able to facilitate wider expert discussions and multi-agency working, enabling both peer support and the optimisation of care (Chatrath, Attri and Chatrath, 2010). In addition, the efficiencies that they generate lead to the reduction of waiting times, which in turn leads to greater flexibility in the system to see patients quickly and reduce unnecessary face to face visits (Brough et al., 1996; Pinnock et al., 2003), further reducing estate costs (Giordano et al., 2009; Buvik et al., 2019). Furthermore, one rarely considered benefit of the telephone and video consultation is the protection of the environment. In the midst of a climate emergency, the reduction in the need for the use of fossil fuel transportation and the reduced need to power large outpatient departments must be welcomed.

However, without appropriate infrastructure and training, telephone/video consultations can be problematic. The availability of a reliable and high-quality telephone/broadband system along with immediate and reliable access to the patients' healthcare records is essential. Poor telephone or broadband connection negatively impacts the quality of the audio and video conversation making it extremely difficult to be understood and almost impossible to undertake any meaningful assessment. In addition, the storage of health records across multiple systems can reduce the fluidity of the consultation (Almathami, Win and Vlahu-Gjorgievska, 2020) whilst increasing its complexity. Whilst many patients and staff have some experience of telephone consultations, gaining a full clinical history and formulating a diagnosis over the telephone can be a challenging process. In traditional consultations Heath Care Professionals (HCPs) are sensitive to the use of verbal interactions, with most staff trained to pick up on non-verbal cues and body language in order to offer appropriate responses (Greenhalgh et al., 2016). In addition, practitioners are accustomed to the tactile method of examination to compliment a history and without this, the consultation increases in complexity with the cognitive load and stress to reach a diagnosis increasing dramatically. This can sometimes lead to an incomplete assessment. However, the preparation for embracing these challenges requires adequate training (Kennedy and Yaldren, 2017)

Telephone and video consultations require a range of additional skills that are not routinely taught in undergraduate and post graduate nursing programmes. Practitioners engaged in remote monitoring are required to place a greater emphasis on interpreting the tone of the patient's voice and the language used, whilst also contextualising background noises (Purc-Stephenson and Thrasher, 2010) to compensate for the total or partial loss of nonverbal cues

inherent in telephone and video consults. This lack of physical interaction and limited information gathering may increase the likelihood of unreliable assessment increasing the medico-legal burden on the clinician (Schlachta-Fairchild, Elfrink and Deickman, 2008). The practitioner should therefore ensure that all the necessary information is collected and a face to face meeting should be requested if this is not feasible using remote methods.

In addition, whilst telephone and video consultation have many benefits, the practitioner should be aware that the patient may not raise their concerns during telephone and video consultations. Qualitative studies using conversation analysis have found that compared with traditional face to face consultation, the telephone consultation has a more linear format and tends to focus on a narrow range of pre-planned themes with less opportunity for the patient to raise issues spontaneously (Hewitt, Gafaranga and McKinstry, 2010). It is therefore necessary for the clinician to allow breaks in the conversation to enable the patient to express their thoughts and to allow adequate time at the end of the discussion for the patient to raise any concerns that have not been covered within the conversation.

When planning the consultation, it is imperative that communication and/or language barriers are identified, and solutions sought prior to the meeting taking place (NICE 2020).In a survey of 153 older Australians,, Nguyen and colleagues (2014) reported that older people relied very much on family and friends to receive appropriate advice and information to use mobile technology. It may therefore be necessary to include patient's relatives in the consultation. Moreover, patients who are hearing impaired may need access to specialist telephony equipment whereas those with reduced cognition may need access to specialist support workers to facilitate communication. What is more, 1.6% of the UK population are unable to speak English proficiently (Office for National Statistics, 2013). It is therefore essential that where needed interpreters are made available for telephone consultations and that patients are made aware, prior to the meeting that they will be provided with this support.

Whilst the majority of patients will conduct the consultation in the privacy of their own home, workplace, vehicle etc, there is a genuine risk that as these consultations become more accepted such discussions will take place in public settings thus risking the patient sharing information more openly than they had originally anticipated. Consequently, HCPs need to consider how they ensure that patients maintain their own confidentiality and are not seduced by the apparent private nature of the consultation (Sokol and Car, 2006). Furthermore, as the scale of telephone consultations increases, patients can become victims of fraud and abuse being asked to share their personal information with criminals posing as health professionals. It is therefore critical that NHS services develop ways of contacting patients in a safe and secure way that reduces the risk of such criminality.

Despite these challenges, patient satisfaction studies that have compared telephone and traditional consultations have reported similar outcomes (O'Byrne, Roberts and Partridge, 2012 & Barsom et al 2021). Nevertheless, whilst it is understandable that our safeguarding concerns are centred on the patient, it is also essential that we consider the emotional labour of providing this kind of care on individual staff members. There is some evidence that healthcare workers can develop a feeling of isolation due to increased 'lone working' when working remotely and physical interactions are reduced (Purc-Stephenson and Thrasher, 2010). It may therefore be necessary to provide regular group meetings to provide support and maintain social interaction within the teams.

Whilst as a consequence of the social containment mandates introduced in the UK, it is generally accepted that some clinicians will interact with patients remotely, most clinicians are still required to undertake consultations from a clinical setting. However for some HCPs who are at greatest risk of the effects of covid-19, such as those with immune deficiency this approach is not feasible. In order for these professionals to continue to support front-line clinical care it has been necessary to enable them to "work from home". To our knowledge there is no evidence to support or oppose home working but it is essential that all the resources that we have outlined previously are available for home working to be feasible. For some organisations, providing these resources outside the physical environment will be unachievable and consequently supporting staff to work from home will not be possible. However, many NHS Trusts are now using electronic patient records (Hayes 2020) so home working may be more realistic in these areas, subject to robust cyber security and data protection protocols. Though this paradigm shift has occurred out of clinical necessity, like many of the changes outlined in this paper, the introduction of home working during the pandemic could expedite the transition to a more climate and family friendly healthcare system.

Virtual multi-disciplinary meetings (MDT) have also been introduced to support collaborative working whilst adhering to social containment mandates (Oeppen et al. 2020). Aston et al (2018) demonstrated that Virtual MDT meetings with inter speciality discussion and collaboration are valued by clinicians and patients alike.

The growth in the adoption of telecare has been well documented through case studies and local evaluation (DH Care Network 2008). NICE guidance (2012) concerning patient experience in adult NHS service revealed that the NHS Direct telephone number provided the

public with access to healthcare advice over the telephone and, if necessary, directed them to the NHS service most appropriate to their health needs. Public satisfaction with this service in 2012 was high: 90 per cent of those using the telephone service said they were satisfied with the way their call was handled, and 90 per cent followed the advice the service gave them(politics.co.uk, 2012) .

The introduction of telephone reminders has also been shown to significantly improve attendance of children, adolescents, and adults. One study also found that patient initiated confirmation of an appointment by telephone significantly reduced the proportion of missed appointments (Sawyer et al., 2002).

In chronic disease management, cognitive behaviour therapy administered by telephone for the treatment of depressive symptoms in patients with multiple sclerosis significantly improved adherence to treatment and clinical outcomes (Mohr et al. 2000). Standardised telephone case management in the early months after admission for heart failure has been shown to reduce readmission rates and healthcare costs compared with routine models of care and is comparable to other disease management approaches (Riegel et al., 2002).Telephone support also increased adherence to drug treatment and to foot care instructions and behavioural recommendations in patients with type 2 diabetes mellitus (Piette et al., 2000). Patients with a patient-held record may also have greater control over their own health, disease and treatment, can access online patient support groups, and request consultations when needed rather than at intervals dictated by protocols (Cunniffe et al., 2012).

These studies demonstrate that remote healthcare can provide an effective and accepted means of supporting patients. Rather than question the merit of such an approach, healthcare professionals will be asked to explore new and novel ways in which remote care can be delivered, However, a word of caution, there is some evidence that patients with cardiovascular disease find it significantly harder than both the general population, and patients with other chronic conditions, to understand health information or engage with providers (Walters et al., 2020). It may therefore become necessary to undertake a cognitive assessment prior to engaging in remote consultation. Those with poor cognition may require longer consultations or may prefer to resort to face to face. Such an approach may need to be delivered on a case by case basis but in the desire to move to a technologically driven model of care it must be recognised that this might not be suitable for all and a hybrid approach of remote and face-to-face care will still be needed

The New Norm

According to the clinical guide for the management of remote working in secondary care during the coronavirus pandemic (NHS, 2020), remote consultations can be used for a range of

patients and appointment types. In general, they are suitable for people who do not need a physical examination or test and who can communicate via phone or video. If there is a benefit to seeing the patient or their surroundings, then a video consultation is preferred. In all cases, the relevant clinical team should carry out a risk assessment in conjunction with their managers to stratify services and individual patients, moving to remote consultations only when there is low risk of impact upon patient safety and outcome. This guideline also recommends considering implementing remote consultations for all appointments except those that meet locally defined exception criteria. Even for those cases, a video or tele-triage may be booked in before the appointment. Remote consultations are vital to avoid prolonged waiting lists during the pandemic. In addition, members of the health care team who are shielding whilst not able to undertake face-to-face consultations can make a considerable contribution to a remote service.

There is no doubt that the transition away from face-to-face consultations has been challenging, however, this change presents us with an opportunity to use improved technology to address the ever-increasing demands on the NHS.

The Future of the Consultation

The NHS Long Term Plan advocates that by 2023/24 every patient in England will be able to access a digital-first primary care offer. Digital-first aims to promote the use of digital technology to ensure that people can access appropriate health and care services consistently as and when they need them and in a way that meets their needs. This will be driven by a process of change and adopted through digital platforms and products (Bakhai et al., 2020) with access to primary care online consultations being a key part of achieving this commitment (Bakhai et al. 2020).

Conclusion -

Remote consultations are here to stay. The most promising approaches include prevention and lifestyle interventions; chronic disease management including hypertension, diabetes and heart failure. Telephone consultations have the potential to improve access, convenience and choice. Virtual consultation allows the flexibility of staff working from home particularly in the current pandemic and will become normal practice in the future. However, a word of caution, remote care can only be effectively delivered if there is a significant educational and infrastructure investment and it is therefore vital that organisations develop a strategic plan to outline how care will be managed and how the staff and their environment will be prepared for this paradigm shift.

References

Almathami, H. K. Y., Win, K. T. and Vlahu-Gjorgievska, E. (2020) Barriers and Facilitators That Influence Telemedicine-Based, Real-Time, Online Consultation at Patients 'Homes: Systematic Literature Review, *Journal of Medical Internet Research,* 22(2): e16407

DOI: https://doi.org/10.2196/16407

Aston, J.S., Reade, S., Peterson, B., Ward, C., Duffy, A. & Nsutebu, E. (2018). Digital Technology Extraordinary virtual multidisciplinary team meetings – a novel forum for the coordinated care of patients with complex conditions within a secondary care setting, *Future Healthcare Journal*, 5(3): 218-223

DOI : https://dx.doi.org/10.7861%2Ffuturehosp.5-3-218

Bakhai, M., Croney, L., Waller, O., Henshall, N. and Felstead, C. (2020) *Using Online Consultations In Primary Care*: *Implementation Toolkit,* NHS England, Primary Care Digital Transformation Expert Advisory Group.

Barsom E.Z., van Dalen, A.S.H.M., Blussé van Oud-Alblas, M.*,* Buskens, C.J., van de Ven, A.W.H., Tanis, P.J., Schijven, M.P. & Bemelman, W.A. (2021) Comparing video consultation and telephone consultation at the outpatient clinic of a tertiary referral centre: patient and provider benefits *BMJ Innovations,* 7**:** 95-102.

Brough, R. J., Pidd, H., O'Flynn, K.J. and Payne, S.R. (1996) Identification of patients requiring out-patient follow-up after transurethral prostatectomy: Is there a role for nurse-led screening of post-operative outcomes by telephone? *British Journal of Urology,* 78(3): 401-404,

DOI: https://doi.org/10.1046/j.1464-410X.1996.00087.x

Buvik, A., Bergmo, T.S., Bugge, E., Smaabrekke, A., Wilsgaard, T. and Abel Olsen, J. (2019) Cost-effectiveness of telemedicine in remote orthopedic consultations: Randomized controlled trial, *Journal of Medical Internet Research,* 21(2): e11330

DOI: https://doi.org/10.2196/11330

Car, J. and Sheikh, A. (2003) Telephone consultations, *British Medical Journal,* 326(7396): 966-969, DOI: https://dx.doi.org/10.1136%2Fbmj.326.7396.966

Chatrath, V., Attri, J. P. and Chatrath, R. (2010) Telemedicine and anaesthesia, *Indian Journal of Anaesthesia*, 54(3): 199-204,

DOI: https://doi.org/10.4103/0019-5049.65357

Cooper, K. and Alexander, L. (2019) Conducting initial telephone consultations in primary care: a scoping review, *International Journal of Evidence-Based Healthcare*, Jun; 17 Suppl 1: S38-40,

DOI: https://doi.org/10.1097/xeb.0000000000000179

Cunniffe ,N. G., Robson, J., Mazhar, D., Williams, M. V. (2012) Clinical Examination Does Not Assist in the Detection of Systemic Relapse of Testicular Germ Cell Tumour, *Clinical Oncology (Royal College of Radiologists (Great Britain))*, 24(1): 38-42

DOI: https://doi.org/10.1016/j.clon.2011.06.002

Department of Health (DH) Care Networks (2008). *Telecare Outcomes 2008* [online]. Available at: www.dhcarenetworks.org.uk/telecareoutcomes [accessed on 17 November 2020]

Duncan, H. and Russell, R. K. (2019) 'Role for structured telephone clinics in paediatric gastroenterology: Reflections, lessons and patient feedback', *BMJ Open Gastroenterology*, 6(1): e000245,

DOI: http://dx.doi.org/10.1136/bmjgast-2018-000245.

Elliott, T., Tong, I., Sheridan, A. and Lown, B.A. (2020) 'Beyond Convenience: Patients 'Perceptions of Physician Interactional Skills and Compassion via Telemedicine', *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*,

DOI: https://dx.doi.org/10.1016%2Fj.mayocpiqo.2020.04.009

Giordano, A., Scalvini, S., Zanelli, E., Corra, U., Longobardi, G.L., Ricci, V.A., Baiardi, P. and Glisenti, F. (2009) Multicenter randomised trial on home-based telemanagement to prevent hospital readmission of patients with chronic heart failure, *International Journal of Cardiology*, 131(2):192-199

DOI: https://doi.org/10.1016/j.ijcard.2007.10.027

Greenhalgh, T., Vijayaraghavan, S., Wherton, J., Shaw, S., Byrne, E., Campbell-Richards, Desiree, Bhattacharya, S., Hanson, P., Ramoutar, S., Gutteridge, C., Hodkinson, I., Collard, A. and Morris, J. (2016) Virtual online consultations: Advantages and limitations (VOCAL) study, *BMJ Open*, 6 : e009388

DOI: http://dx.doi.org/10.1136/bmjopen-2015-009388

Hayes, B. (2020) Working from home in medicine during coronavirus : What equipment do you need to get started and what can you do to help from home? *Future Healthcare Journal*, 7(2) : 163-164

DOI: https://doi.org/10.7861/fhj.2020-0025

Hewitt, H., Gafaranga, J. and McKinstry, B. (2010) Comparison of face-to-face and telephone consultations in primary care: Qualitative analysis, *British Journal of General Practice*, 60(574): e201-212,

DOI: https://doi.org/10.3399/bjgp10x501831

Hirschmann, M. T., Hart, A., Henckel, J., Sadoghi, P., Seil, R. and Mouton, C. (2020) COVID-19 coronavirus: recommended personal protective equipment for the orthopaedic and trauma surgeon, *Knee Surgery, Sports Traumatology, Arthroscopy*, 28(6): 1690-1698,
DOI: https://doi.org/10.1007/s00167-020-06022-4

Kennedy, S. and Yaldren, J. (2017) A look at digital literacy in health and social care, *British Journal of Cardiac Nursing,* 12(9):428-432,

DOI: https://doi.org/10.12968/bjca.2017.12.9.428

Mohr, D.C., Likosky, W., Bertagnolli, A., Goodkin, D.E., Van Der Wende,J., Dwyer, P. and Dick, L.P. (2000) Telephone-administered cognitive-behavioral therapy for the treatment of depressive symptoms in multiple sclerosis, *Journal of consulting and clinical psychology*, 68 (2):356-61.) DOI: https://doi.org/10.1037//0022-006x.68.2.356

politics.co.uk (2012) NHS Direct [online] available at: https://www.politics.co.uk/reference/nhs-direct [Accessed on 26ᵗʰ November 2020]

NHS England and NHS Improvement (2020) *Clinical guide for the management of remote consultations and remote working in secondary care during the coronavirus pandemic*, Publications approval reference: 001559

National Institute for Health and Care Excellence (NICE) (2012) *Patient experience in adult NHS services: improving the experience of care for people using adult NHS services*. Available at: https://www.nice.org.uk/guidance/cg138 [accessed 23 November 2020]

National Institute for Health and Care Excellence (NICE) (2020) Clinical *guide for the management of remote consultations and remote working in secondary care during the coronavirus pandemic* https://www.nice.org.uk/media/default/about/covid-19/specialty-guides/specialty-guide-virtual-working-and-coronavirus.pdf [accessed 17 February 2021]

Nguyen, T., Irizarry, C., Gattett, R. & Downing, A. (2014) Access to mobile communications by older people: Mobile phone use by older people, *Australasian Journal on Ageing*, 34(2): E7-E12 DOI: https://doi.org/10.1111/ajag.12149

O'Byrne, L., Roberts, N. J. and Partridge, M. R. (2012) Preclinic telephone consultations: An observational cohort study, *Clinical Medicine, Journal of the Royal College of Physicians of London*, 12(2): 140-145,

DOI: https://doi.org/10.7861/clinmedicine.12-2-140

Office for National Statistics (ONS) (2013) *Detailed analysis - English language proficiency in England and Wales: Main language and general health characteristics, Census 2011*, Office for National Statistics.

Oeppen, R.S., Shaw.G & Brennan. P.A (2020) Human factors recognition at virtual meetings and video conferencing: how to get the best performance from yourself and others, *Britis*h *Journal of Oral and Maxillofacial Surgery*. July, 58(6): 643–646
DOI: http://doi.org/10.1016/j.bjoms.2020.04.046

Piette, J.D., Weinberger, M. and McPhee, S.J. (2000) The effect of automated calls with telephone nurse follow-up on patient-centered outcomes of diabetes care: a randomized, controlled trial, *Medical Care*, 38(2): 218-30, DOI: https://doi.org/10.1097/00005650-200002000-00011

Pinnock, H., Bawden, R., Proctor, S., Wolfe, S., Scullion, J., Price, D. and Sheikh, A. (2003) Accessibility, acceptability, and effectiveness in primary care of routine telephone review of asthma: Pragmatic, randomised controlled trial, *British Medical Journal*. Mar 1; 326(7387): 477-479,
DOI: https://doi.org/10.1136/bmj.326.7387.477

Purc-Stephenson, R. J. and Thrasher, C. (2010) Nurses ʼexperiences with telephone triage and advice: A meta-ethnography, *Journal of Advanced Nursing*. 66(3): 482-94,
DOI: https://doi.org/10.1111/j.1365-2648.2010.05275.x

Riegel, B., Carlson, B., Kopp, Z., LePetri, B., Glaser, D. and Unger, A. (2002) Effect of a standardized nurse case-management telephone intervention on resource use in patients with chronic heart failure*, Archives of Internal Medicine*, 162 (6):705-12,

DOI: https://doi.org/10.1001/archinte.162.6.705

Roberts, N. J. and Partridge, M. R. (2007) Telephone consultations in secondary care, *Respiratory Medicine*, 101(8): 1665-1669,

DOI: https://doi.org/10.1016/j.rmed.2007.03.003

Sawyer, S.M., Zalan, A. and Bond, L.M. (2002) Telephone reminders improve adolescent clinic attendance: a randomized controlled trial, Journal *of Paediatrics and Child Health*, 38(1):79-83
DOI: https://doi.org/10.1046/j.1440-1754.2002.00766.x

Schlachta-Fairchild, L., Elfrink, V. and Deickman, A. (2008) Patient Safety, Telenursing, and Telehealth in Burgess R.G (ed.) *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville (MD): Agency for Healthcare Research and Quality (US), [on-line] Available from:
https://www.ncbi.nlm.nih.gov/books/NBK2687/

Sokol, D. K. and Car, J. (2006) Patient confidentiality and telephone consultations: Time for a password, *Journal of Medical Ethics*, Dec: 32(12) [on-line]
DOI: https://doi.org/10.1136/jme.2005.014415

Toon, P. D. (2002) Using telephones in primary care, *British Medical Journal,* 2002 : 324: 1230.
DOI: https://doi.org/10.1136/bmj.324.7348.1230

Walters, R., Leslie, S.J., Polson, R., Cusack, T. and Gorely, T. (2020) Establishing the efficacy of interventions to improve health literacy and health behaviours: a systematic review', *BMC Public Health*, 20 : 1040.

DOI: https://doi.org/10.1186/s12889-020-08B991-0