

If virtual gynecology clinics are here to stay, we need to include everyone



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Before the COVID-19 pandemic virtual clinics in gynecology were not commonplace in the United Kingdom or most other countries. Owing to the need to reconfigure health provision to caring for COVID-19 patients, reducing footfall in hospitals and restricted movement, telemedicine was rapidly introduced at scale in hospitals throughout the United Kingdom. This happened without much consultation with service users and healthcare professionals. It is anticipated that after the pandemic, telemedicine will remain to some extent. The authors report how their hospital, a large London teaching hospital, adopted virtual phone consultations in gynecology, along with a countrywide survey of 200 service users and healthcare professionals. Now it is important to carry out a robust evaluation of outcomes (both clinician and patient experience) and also to take care that service users from disadvantaged backgrounds do not lose out.

Key words: COVID-19 pandemic, gynecology services, secondary care, telemedicine, virtual medicine

Introduction

Similar to the United States, the United Kingdom was greatly affected by the

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Received May 23, 2021; revised December 1, 2021; accepted December 7, 2021.

The authors report no conflict of interest.

No funding was received for this work.

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Cite this article as: Ball E, Rivas C, Khan R. If virtual gynecology clinics are here to stay, we need to include everyone. *Am J Obstet Gynecol Glob Rep* 2022;2:100043.

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2666-5778/\$36.00

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first and second wave of the COVID-19 pandemic, with hospitals close to being overwhelmed with patients with COVID-19. During the first wave in March 2020, gynecology outpatient services were stopped for several weeks, and patients were put on a waiting list. Doctors were utilized to help the nursing staff in the intensive care unit or support the obstetrical workload.

A serious concern to the health and well-being of the nation were the patients who were awaiting surgery for either benign or malignant conditions being placed on long waiting lists, without an appropriate allocation of elective operating facilities being available.¹ At the time of writing, elective operating remained compromised throughout the pandemic in the United Kingdom. Looking after women placed on waiting lists who were suffering from conditions that needed treatment, such as pelvic pain or menstrual disorders, added to the clinical workload. Adding to that, women's diseases, such as fibroids and endometriosis, got upstaged during the delay.²

Given that the footfall to hospitals has had to be reduced to protect ambulatory patients from exposure to COVID-19, hospitals were reconfigured into a traffic light system of safety areas, temperature checks and mask wearing were introduced, and waiting rooms were redesigned to allow for a 2-m distance between patients; moreover,

accompanying persons were not permitted.

Increasing the proportion of virtual appointments was a declared health policy vision before the pandemic, and this mode of healthcare delivery became a focus during the pandemic.³ Virtual clinics in gynecology were not commonplace in the UK National Health Service (NHS) before the pandemic; however, in the United States, they were emerging but not at scale (reviewed by Dorn et al⁴).

A rapid review in the summer of 2020 showed that telemedicine in gynecology was carried out in Canada, the United States, the United Kingdom, and Australia. However, there was no report of telemedicine in gynecology from Africa, South America, and Asia. The clinical activity assessed included counseling, evaluation, and management.⁵

During the pandemic, there was national recognition of the need to increase the number of remote consultations (and reduce face-to-face consultations), to reduce the risk of transmission within healthcare and facilitate adherence to government guidance on social distancing and "stay at home" while continuing to deliver services. An effort was made to provide 1-stop clinics, where scanning and endometrial biopsies could be obtained. The Royal College of Obstetricians and Gynecologists rapidly provided useful guidance.⁶

Although policymakers and journalists emphasized the transformative potential of video appointments, the reality for most service users (SUs) was telephone appointments as their only option.⁷ This approach may have been acceptable at the peak of the pandemic, but it was introduced at speed, often without adequate support,⁸ guidance, screening, and patient choice. To make virtual appointments “work” for the future, scrutiny is required of what worked well and what did not.

The authors discussed a small survey that was carried out in early 2021 in the context of the pandemic experience in their gynecology unit and recent literature and recommendations. Approaches to improving telemedicine in gynecology were highlighted alongside areas where more evidence is needed.

United Kingdom survey on gynecology services during the pandemic

In February 2021, E.B. conducted a nationwide qualitative survey via the platform of the charity Endometriosis UK, asking SUs which gynecology outpatient services they accessed in the pandemic, what worked well, what did not, and what would participants consider worth keeping beyond the pandemic.

Healthcare professionals (HCPs) were asked what services they could deliver, what aspects improved care, and what they would like to keep after the pandemic. The survey was undertaken through the platform of the Endometriosis UK website. There were 127 responses from SUs and 12 responses from senior gynecologists. Most respondents answered all the questions. The survey was open for 8 weeks. The nature of the questions, including free text, was such that responses were screened for themes rather than analyzed quantitatively. This was a convenience sample, and detailed demographic data were not recorded. The aim was to generate a better understanding from which to build more extensive research.

HCPs and SUs commented on 1-stop clinics (outpatient hysteroscopy and colposcopy), which were stopped

initially but soon reinstated or else kept running throughout 2020, and outpatient gynecology clinics, which were changed to virtual or phone appointments in most cases. Most comments related to general gynecology or specialist endometriosis clinics.

Common criticisms included delays in or cancellation of appointments and problems getting in touch with SUs. SUs praised the ease of access and COVID safety of virtual appointments (almost exclusively phone). Some felt that HCPs listened better and dedicated more time for discussion than face-to-face appointments before the pandemic. Having the family present during the consultation for support was seen as positive.

SUs recognized that the need for examination and scanning necessitated a face-to-face encounter. Some felt that follow-up was better delivered virtually and first appointments be done face-to-face, to build a rapport with the clinical team. SUs liked the flexibility of direct access to clinical specialist nurses who escalated questions to HCPs if required. Frustrations with phone appointments included the perception of the HCPs rushing through the conversations or conversations being purely transactional.

In the future, many SUs wished for a blend of face-to-face and virtual appointments with their preference being the determining factor. SUs called for more video consultations instead of phone appointments. It was highlighted that the virtual clinics needed to be properly organized and that the timing of consultations should be honored. There was a recognition that virtual appointments were a pandemic necessity, but several women wanted to return fully to face-to-face appointments, stating a better quality of consultation.

HCPs gave feedback on fertility, endometriosis, colposcopy, oncology, and general gynecology clinics; some of them had been converted to “1-stop clinics,” with colocated scanning. New 1-stop clinics were perceived as efficient and worthy of keeping.

Given that surgical procedures were drastically reduced (including cancer

surgery), consultations shifted toward joint decision-making and emphasizing conservative approaches or undergoing procedures in the ambulatory setting (hysteroscopy).

Referrals from family doctors were reported to be vetted more thoroughly than before the pandemic, avoiding unnecessary hospital appointments and consultants advising family doctors on treatment in the community. Many HCPs voiced their frustration that the outpatient service during the pandemic did not run well, because of the lack of administrative input in a service that was rapidly transforming. The lack of video appointments was criticized. The few HCPs who had access to video consultation systems felt they worked well and were worth keeping. For selected scenarios, such as communication of normal results, phone clinics were seen as acceptable after the COVID-19 pandemic.

HCPs acknowledged that virtual clinics were not shorter than face-to-face visits, as documentation and dictation of letters were still required. Some patients had to be contacted several times. Using the available paper-based systems, information leaflets and prescriptions had to be posted.

The benefits HCPs cited for virtual appointments included enabling patient contact despite self-isolation, vulnerability to COVID-19 infection, and locking down in places remote to the hospitals. Of note, 1 HCP felt strongly that patient choice for face-to-face appointments should remain, regardless of the need for examination.

Discussion

During the pandemic, telemedicine was practiced less commonly in gynecology than in other specialties,⁹ which may be because of the frequent need for physical assessment. A recent systematic review¹⁰ reported that in selected settings (abortion care, urogynecology, and postoperative care), telemedicine resulted in similarly favorable clinical outcomes compared with face-to-face clinics, but general gynecology clinics were not included.

A postal survey across gynecology specialties of 504 patients showed high satisfaction scores on telephone consultations during the pandemic on “convenience,” “effectiveness,” and “equivalent care,” similar to our findings. Feedback on phone clinics was best for menopause, fertility clinics, and endometriosis follow-up and worst for general gynecology and gynecology-oncology clinics.¹¹

In a content analysis of video consultations, Shaw et al¹² reported that consultations (diabetes mellitus, antenatal diabetes mellitus, and cancer surgery) were slightly shorter and less clinician dominated in face-to-face consultations, in keeping with our survey, but apart from technology-related communications, such as Internet issues, the “kinds of talk” were broadly similar. A randomized controlled trial in urogynecology comparing face-to-face clinics with telephone clinics revealed cost savings, despite a higher rate of follow-up appointments, and less embarrassment in sharing intimate issues in the telephone group.¹³ Moreover, this study demonstrated the successful incorporation of preclinic questionnaires.

Conversely, in a mixed methods UK study looking at rheumatology clinics between April 2021 and July 2021, patients and clinicians rated telemedicine consultations worse than face-to-face consultations in almost all categories, apart from convenience. Building trusting medical relationships and assessment accuracy were great concerns (93% of clinicians and 86% of patients rated telemedicine consultations as worse than face-to-face consultations for assessment accuracy). Telemedicine was perceived to have increased misdiagnoses, inequalities, and barriers to accessing care.¹⁴

It is well known that poverty and social exclusion overlap with poor overall health,¹⁵ even in the United Kingdom where healthcare is free at the point of access. Obstacles to accessing phone and video appointments for women in poverty included language barriers, either because English was not the first language or because the SUs could not verbalize their complaints well, access to

phone or video technology, lack of privacy because of domestic overcrowding, and lack of phone ownership.¹⁶ Other important obstacles were bad connectivity and access to WiFi or broadband¹⁷ and lack of education and engagement.¹⁶ Given that the current survey was performed online and through a patient charity, it is possible that there was bias against the digitally excluded. Although many women who use gynecology services are from the generation of digital natives, the acceptability of mobile phone applications remains low among women from deprived areas.¹⁷

Although accessibility issues may be overcome by providing community hubs to access virtual appointments and digital education,¹⁸ lack of engagement is more difficult to overcome. The Health Foundation¹⁹ recommends future strategies to be coproduced with those who have lived experience of digital exclusion to offer tailored approaches for meeting the needs of different groups. One of these approaches may include choice; the modality of appointments can be negotiated between the healthcare provider and service user (SU), within the boundaries of availability. Greenhalgh et al stated that if the consultation was narrowly transactional, it would result in inefficiency and exacerbation of unfairness. They call for diversity of provision (required codesign), digital access support, and provision of nondigital alternatives.

Moving forward, telemedicine needs to become a natural part of the workflow, where appropriate, but such situations are a fraction of the overall clinic workload. To achieve this, specialty-specific evidence-based guidance is required on the circumstances in which modality is recommended, along with adequate staff training and support. In the United Kingdom, initial guidance has been drawn up,²⁰ but this is mainly driven by expert opinion. Appointments require prescreening, and patient choice, lack of electronic access, and safeguarding concerns call for face-to-face appointments.

During the height of the pandemic, the senior doctors in the authors’

hospital first suggested screening patient letters before clinic appointment to determine which patients required face-to-face or phone appointments; some clinicians suggested mandatory face-to-face appointments for the first appointment, but most proceeded with phone appointments as default and arranged face-to-face appointments after doing a phone call first, if required, such as to carry out a pelvic examination or when barriers to communication on the phone were identified.

The authors believe that there are inherent difficulties with phone appointments. It can be challenging to work out what “is going on” because of the lack of facial expressions or other nonverbal cues, yet these challenges form a large part of communication. It can be challenging to pick up the global health status of the patient, as is described in the term “end-of-bed” impression, including body mass index and mental state. Particular challenges are patients who do not verbalize their concerns appropriately, which can be because of poor mental health, bereavement, language barriers, lack of privacy, or lack of ability to put complex concerns into words. Although digital inclusion has been identified as an important domain in the successful delivery of telemedicine,⁷ it is not yet known if video appointments in secondary care can compensate for some of these issues, and we plan further work to consider this. Particularly, vulnerable patients (experiencing domestic abuse or poor mental health) were more difficult to identify and signpost to the appropriate services.

In contrast, on occasions, the authors felt that phone appointments were easier than face-to-face appointments, possibly because of the removal of unconscious (implicit) bias prevalent in doctor-patient relationships (reviewed by Hall et al²¹) and a stronger focus on listening to the spoken word without visual distractions.

Before the pandemic, the authors’ hospital worked with a team of resident translators and patient advocates to cater to many non-English speakers. In phone and video consultations, it is

technically possible to include translators, but this requires technical setup, training, and funding.

Particularly, in gynecology, it is important to build a rapport when talking about private matters. Virtual consultations are of better quality when the participants know each other already.⁷

Some of the drawbacks of phone appointments may be overcome by video appointments, which are still underutilized. “Attend Anywhere,” a platform for video consultations rather than phone consultations only, has been funded by the NHS in England; however, other secure platforms remain acceptable. A comparative study reported that face-to-face appointments scored higher in quality of communication. Video appointments were popular with patients, despite technical problems.²²

Moving forward, patients ought to be given the choice of type of attendance, and there should be clear inclusion and exclusion criteria for virtual appointments specific to specialty at a local level but also backed up by national guidance.

In addition, robust evaluation of outcomes is required (both clinician and patient experience) after the widespread introduction of virtual appointments. At the time of writing, the introduction was patchy, but outcomes evaluations should be planned for now. Lessons learned need to fit into future planning as we enter recovery. It would be rewarding to study how attitudes (both staff and patient) toward virtual appointments have changed during the pandemic. Based on the pandemic experience, we would like to highlight 2 frameworks developed for the application of telemedicine: a theoretical framework, based on research findings⁷, for “planning and evaluating of remote consultation services” and a practical one, based on expert opinion.²³ The exclusion criteria for virtual clinics included the SU not being happy with remote consultations, lack of access to a phone or the Internet, and safeguarding concerns.

The authors are calling for a posthoc codevelopment piece of research. It is

particularly challenging to invite “underserved” women into codevelopment, given the experience that focus groups are often composed of educated White middle-class women, who can spare extra time in the evenings and believe that their input can make a difference.¹⁷ Of note, 1 option would be to train lay researchers to carry out interviews in underserved communities to understand obstacles and facilitators of virtual appointments.²⁴ Another aspect would be to analyze phone, video, and face-to-face consultations across gynecology services and compare the strengths and weaknesses of each modality. ■

ACKNOWLEDGMENTS

We thank Helen McLaughlin for her invaluable help with the survey. Moreover, we thank her and Misha Moore, for proofreading an earlier version of the manuscript.

REFERENCES

1. Nagpaal C. The hidden impact of COVID-19 on patient care in the NHS in England. British Medical Association 2020. Available at: https://www.bma.org.uk/media/2840/the-hidden-impact-of-covid_web-pdf.pdf. Accessed December 31, 2021.
2. Strong SM, Magama Z, Mallick R, Sideris M, Odejinmi F. Waiting for myomectomy during the COVID-19 pandemic: the vicious cycle of psychological and physical trauma associated with increased wait times. *Int J Gynaecol Obstet* 2020;151:303–5.
3. Policy paper. The future of healthcare: our vision for digital, data and technology in health and care Department of Health and Social Care. GOV.UK 2018. Available at: <https://www.gov.uk/government/publications/the-future-of-health-care-our-vision-for-digital-data-and-technology-in-health-and-care/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care>. Accessed December 31, 2021.
4. Dorn SD. Backslide or forward progress? Virtual care at U.S. healthcare systems beyond the COVID-19 pandemic. *NPJ Digit Med* 2021;4:6.
5. Grimes CL, Balk EM, Dieter AA, et al. Guidance for gynecologists utilizing telemedicine during COVID-19 pandemic based on expert consensus and rapid literature reviews. *Int J Gynecol Obstet* 2020;150:288–98.
6. Royal College of Obstetricians and Gynaecologists, British Society for Gynaecological Endoscopy, British Gynaecological Cancer Society. Joint RCOG. BSGE and BGCS guidance for the management of abnormal uterine

bleeding in the evolving coronavirus (COVID-19) pandemic. Royal College of Obstetricians and Gynaecologists; 2020. Available at: <https://www.rcog.org.uk/globalassets/documents/guidelines/2020-05-21-joint-rcog-bsge-bgcs-guidance-for-management-of-abnormal-uterine-bleeding-aub-in-the-evolving-coronavirus-covid-19-pandemic-updated-final-180520.pdf>. Accessed January 31, 2020.

7. Greenhalgh T, Rosen R, Shaw SE, et al. Planning and evaluating remote consultation services: a new conceptual framework incorporating complexity and practical ethics. *Front Digit Health* 2021;3:726095.
8. Webster P. Virtual health care in the era of COVID-19. *Lancet* 2020;395:1180–1.
9. Bestseny O, Gilbert G, Harris A, Rost J. Telehealth: a quarter-trillion-dollar post-COVID-19 reality? McKinsey & Company; 2021. Available at: <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>. Accessed December 31, 2021.
10. Murugesu S, Galazis N, Jones BP, et al. Evaluating the use of telemedicine in gynaecological practice: a systematic review. *BMJ Open* 2020;10:e039457.
11. Khan ZM, Kershaw V, Madhuvrata P, Radley SC, Connor ME. Patient experience of telephone consultations in gynaecology: a service evaluation. *BJOG* 2021;128:1958–65.
12. Shaw S, Wherton J, Vijayaraghavan S, et al. Advantages and limitations of virtual online consultations in a NHS acute trust: the VOCAL mixed-methods study. Southampton, United Kingdom: NIHR Journals Library; 2018.
13. Jones G, Brennan V, Jacques R, Wood H, Dixon S, Radley S. Evaluating the impact of a ‘virtual clinic’ on patient experience, personal and provider costs of care in urinary incontinence: a randomised controlled trial. *PLoS One* 2018;13:e0189174.
14. Sloan M, Lever E, Harwood R, et al. Telemedicine in rheumatology: a mixed methods study exploring acceptability, preferences and experiences among patients and clinicians. *Rheumatology (Oxford)*; 2021 [Epub ahead of print].
15. OECD/WHO. *Poverty and Health*, DAC Guidelines and Reference Series, OECD Publishing, Paris: 2003. <https://doi.org/10.1787/9789264100206-en>. Accessed December 31, 2021.
16. Davies AR, Honeyman M, Gann B. Addressing the digital inverse care law in the time of COVID-19: potential for digital technology to exacerbate or mitigate health inequalities. *J Med Internet Res* 2021;23:e21726.
17. Ball E, Newton S, Rohricht F, et al. mHealth: providing a mindfulness app for women with chronic pelvic pain in gynaecology outpatient clinics: qualitative data analysis of user experience and lessons learnt. *BMJ Open* 2020;10:e030711.
18. Stone E, NP, Shapiro R. Digital inclusion in healthcare: lessons learned from the NHS

Widening Digital Participation Programme. Good Things Foundation; 2020. Available at: <https://www.goodthingsfoundation.org/insights/digital-participation-lessons-learned/>. Accessed December 31, 2021.

19. Bowyer G, Grant A, White D. Learning from lockdown. 12 steps to eliminate digital exclusion. Carnegie United Kingdom Trust; 2020. Available at: <https://www.carnegieuk-trust.org.uk/publications/learning-from-lockdown-12-steps-to-eliminate-digital-exclusion-summary/>. Accessed December 31, 2021.

20. National Health Service. Specialty guides for patient management during the coronavirus pandemic. Clinical guide for the management of remote consultations and remote

working in secondary care during the coronavirus pandemic. Royal College of Speech and Language Therapists; 2020. Available at: <https://www.rcslt.org/wp-content/uploads/2021/10/NHS-England-clinical-guide-for-the-management-of-remote-consultations-and-remote-working-in-secondary-care-during-the-coronavirus-pandemic.pdf>. Accessed December 31, 2021.

21. Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: a systematic review. *Am J Public Health* 2015;105:e60–76.

22. Hammersley V, Donaghy E, Parker R, et al. Comparing the content and quality of video,

telephone, and face-to-face consultations: a non-randomised, quasi-experimental, exploratory study in UK primary care. *Br J Gen Pract* 2019;69:e595–604.

23. National Health Service. London Networks good practice guidance to determine suitability of remote consultation. South East London CCG; 2020. Available at: https://selondonccg.nhs.uk/wp-content/uploads/2020/08/Paper-1b.-Remote-consultation-good-practice-guidance-Draft-v-1.0-for-CAG_.pptx. Accessed December 31, 2021.

24. Marks S, Mathie E, Smiddy J, Jones J, da Silva-Gane M. Reflections and experiences of a co-researcher involved in a renal research study. *Res Involv Engagem* 2018;4:36.