Strengths and limitations of video-conference multidisciplinary management of breast disease during the COVID-19 pandemic

P. Cathcart, S. Smith and G. Clayton

Chelmsford Breast Unit, Broomfield Hospital, Court Road, Broomfield, Chelmsford CM1 7ET, UK (e-mail: paul.cathcart@gmail.com)

Dear Editor

The COVID-19 pandemic was listed as a pandemic by the WHO on 11 March 2020. National and international lockdowns restricting movement and gatherings have a role in reducing viral transmission rates; however, the virus persists in the communities. This pandemic is likely to be protracted, with second infection peaks already identified. It is therefore important that all measures are taken to prevent, control, and reduce transmission. Video-conferencing for multidisciplinary teams (MDTs) helps to reduce contact between healthcare professionals, some of whom attend multiple MDTs across several hospitals.

The MDT forms a vital part of patient management and is considered the standard, contributing to improved decision-making and outcomes. MDTs are of particular importance given the rapidly changing environment of cancer services and management protocols during the pandemic.

Our Trust has a robust MDT that, before the pandemic, was conducted in a large room with projectors displaying images and the Somerset Cancer Register system (https://www.somersetscr.nhs.uk). Following case discussion, a summary of MDT recommendations was entered into the registry and made visible to all participants before authorization. After announcement of the pandemic, the breast unit implemented a video-conferencing MDT using the secure platform StarLeaf (Cambridge, UK), maintaining the original MDT format with participants in offices or at home. After 4 months of video-conferencing, its impact on the MDT was assessed by a survey to all participants.

Eighteen participants responded, encompassing the whole spectrum of MDT professionals. The majority (14 participants) accessed the MDT from an office, half of whom (7 participants) used a private office. Four members accessed the meeting from home. All participants could access the meeting, although five members did not have microphone access. The majority of MDT participants were confident to comment during the StarLeaf meeting, with three members feeling more confident talking during the video-conference than in the traditional MDT. There were initial short-term technical difficulties initiating video-conferencing, but these were reduced as team members became accustomed to the format.

Audiovisual quality for MDT meetings is vitally important to patient safety. Miscommunication secondary to technological weakness cannot happen and, via this survey, it was confirmed that the majority of members rated the quality of the meeting with respect to the audio, video and group interaction as average or above (Fig. 1). All members could read the final MDT summary for each patient. Interestingly, most respondents considered video-conferencing more efficient than the original format, with

![Fig. 1 Satisfaction by multidisciplinary team participants with different parts of the video-conferencing system](image-url)
only three team members observing that StarLeaf did not alter meeting efficiency. This faster discussion was also noted, however, to impact on the more holistic discussions around the patient.

Members who work across various sites highlight a beneficial impact of video-conferencing to their working pattern, with a reduction in unnecessary travel, similar to findings in the USA\(^5\). With this variation in mind, 8 of the 18 respondents preferred to revert back to the original pre-pandemic MDT, whereas 12 preferred the video format.

This survey suggests that the format has been accepted and runs smoothly. It allows participants to work from home during the pandemic, and will facilitate future job plan modification for staff wishing to work off-site. There are technological limitations when trying to view the cancer registry, images and the conference call, as all screens cannot currently be viewed simultaneously. Other video-conferencing platforms are available that may resolve this issue; however, appropriate encryption is required when handling patient data. One recent survey\(^6\) showed Zoom to be the most favoured video-conferencing platform for MDTs; however, its encryption status is not currently supported by the authors’ Trust. Overall, video-conferencing MDTs provide a solution to social distancing during the pandemic whilst maintaining a high level of patient care.

Disclosures. The authors declare no conflict of interest.

References

1. World Health Organization. Coronavirus Updates. https://covid19.who.int (accessed 10 September 2020)
2. Flaxman S, Mishra S, Gandy A, Unwin HJT, Mellan TA, Coupland H et al. Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe. Nature 2020;584:257–261
3. Prades J, Remue E, van Hoof E, Borras JM. Is it worth reorganising cancer services on the basis of multidisciplinary teams (MDTs)? A systematic review of the objectives and organisation of MDTs and their impact on patient outcomes. Health Policy 2015;119:464–474
4. Søreide K, Hallet J, Matthews JB, Schnitzbauer AA, Line PD, Lai PBS et al. Immediate and long-term impact of the COVID-19 pandemic on delivery of surgical services. Br J Surg 2020; DOI:10.1002/bjs.11670 [Epub ahead of print]
5. Dharmarajan H, Anderson JL, Kim S, Sridharan S, Duvvuri U, Ferris RL et al. Transition to a virtual multidisciplinary tumor board during the COVID-19 pandemic: University of Pittsburgh experience. Head Neck 2020;42:1310–1316
6. Sidhra J, Chhabda S, Gaier C, Alwis A, Kumar N, Mankad K. Virtual multidisciplinary team meetings in the age of COVID-19: an effective and pragmatic alternative. Quant Imaging Med Surg 2020;10:1204–1207