

TITLE: Telemedicine in the Covid-19 era: Does a mobile phone and a secure connection do the trick?

NHS, 2018 addressed in 2018 how to alleviate the pressures that are frequently experienced by NHS staff members cost by eliminating the number of patients being seen in clinics. By 2024, the NHS Long Term Plan aims to redesign thousands of GPs and hospitals throughout the UK to provide consultations. However, during the current Covid-19 situation that consultations, especially in primary care, need to be addressed. Yet

there is limited research that argues the relationship between telemedicine technology and telemedicine facility healthcare facilities that apply telemedicine technology space planning and design.

This research aimed to explore the relationship between telemedicine and facility planning and design. Currently, the discussions of telemedicine user experiences are oriented towards technology, there is limited research to discuss the potential influence of telemedicine planning and design in terms of user experiences. However, the hypothesis of this research is that facility planning and design plays a critical role in telemedicine. As a result, the evolving and emerging technologies will affect the way we plan and design at the same time.

Methodology:

We conducted literature review focused on Telemedicine development, Telemedicine scenarios, Telemedicine facility planning and design and Telemedicine related technology. We conducted 10 semi structured interviews employing phenomenology to understand the positions and experiences of healthcare planners and architects.

Results:

Results indicate that healthcare planners and professionals have not paid enough attention to telemedicine, either as a physical or virtual space. They think that telemedicine will be important and will affect their practice but they lack the understanding of a possible roadmap for them to be involved in the discussion.

Conclusions and Implications

Conclusions include recommendations in terms of telemedicine planning and design relation to the environment.

Keywords: Telehealth, built environment, infection control

Reference

1. HIMSS. 2019. Weighing Options: Perceptions of Adult Patients Accessing Telehealth in Primary Care [online]. Available from: <https://www.himss.org/resources/weighing-options-perceptions-adult-patients-accessing-telehealth-primary-care> [Accessed 2nd April 2020]
2. Debasish D., 2004. Activity analysis of telemedicine in the UK. *Grad Med Journal* 80(Anon) pp335-338
3. WHO. 2010. Telemedicine [online]. Available from: https://www.who.int/goe/publications/goe_telemedicine_2010 [Accessed 2nd April 2020]
4. NHS. 2018. Online version of the NHS Long Term Plan. [online]. Available from: <https://www.longtermplan.nhs.uk/online-version/overview-and-summary/> [Accessed 2nd April 2020]
5. Tracy, A, Lustig, R., 2012. THE ROLE OF TELEHEALTH IN AN EVOLVING HEALTH CARE ENVIRONMENT WORK SUMMARY. Washington, DC, The national Academies Press.
6. FACILITY GUIDELINES INSTITUTE. 2018. Edition 2018. [online]. Available from: <https://fgiguideines.org/guidelines/2018-guidelines/> [Accessed 2nd April 2020]
7. Janet Major. 2005. Telemedicine room design. *Journal of Telemedicine and Telecare*. 11(1), pp 10-14
8. Juri, Y., Evangelos T., 2014. Telemedicine, Telehealth, and Mobile Health Applications That Work: Opportunities and Barriers.

Implications for coronavirus disease 2019 (COVID-19). *Journal of Telemedicine and Telecare*. 0(0)pp 1–5

14. Vander Werf M. Ten critical steps for a successful telemedicine program. In: Dattif R, ed. *Establishing Telemedicine in Developing Countries From Inception to Implementation*. Washington, DC: IOS Press, pp860–869.
15. MCNEILL, K, M., MAJOR J, ROEHRIG H, et al. 2002. Practical Methods of Color Quality Assurance for Telemedicine Systems. 20(2), pp 111–116.
16. Squibb NJ. 1999. Video transmission for telemedicine. *J Telemed Telecare*. 5(Annon) 1–10
17. Collins, J., 1996. Audio design of a telemedicine conference room. *Telemed Today*. 4(Annon), pp 269–271
18. Collins, J., Lindstrom B., Quin M., Schiefelbein M., 1996. Lighting design and layout of a telemedicine conference room. *Telemed Today* (Annon), pp 26–8
19. Caffery, L., J, 2016. Telehealth interventions for reducing waiting lists and waiting times for specialist outpatient services: A scoping review. *J Telemed Telecare*. 22(Annon) 504–512.
20. Ekeland A., G., Bowes A., Flottorp, S 2010. Effectiveness of telemedicine: A systematic review of reviews. *Int J Meth Inform*. 79(11), 736771.