Crises drive innovation

doi:10.1111/codi.15043

Dear Editor,

Crises often drive innovation. The COVID-19 pandemic has led to the necessary postponement of much planned surgical activity with the cancellation of outpatient, diagnostic and operative work. These measures have been designed to 'flatten the curve' and delay the spread of coronavirus whilst also freeing up capacity within hospitals for patients affected with the virus.

This inevitable postponement of routine activity will create challenges to healthcare systems when normal business resumes and in many healthcare settings, which are often already resource constrained. This will impose an additional burden on patients whose diagnoses and treatment will be delayed.

Therefore, what can the surgeon do differently to face these challenges? Remote consultation is not a panacea but has a number of advantages. There are essentially three modalities. The telephone is ubiquitous, cheap and resilient. Telephone consultations can be used for both new and returning patients and require no specialist information technology infrastructure or user training. Patients find it highly acceptable, and in some instances it is preferable to face to face consultations [1].

Video consultations have traditionally been performed using specialist video conferencing facilities, which are limited in number and often require patients to travel to a local healthcare facility to gain access to the equipment. Being able to see a live video image of the patient does add to the quality of the consultation by being able to see visual cues and body language. In addition, video consultations have been shown to reduce medication errors and improve diagnostic accuracy compared to the telephone [2]. Newer video consultation systems, such as Attend Anywhere (NHS NearMe), offer a more accessible and managed video consultation system. Consultations can be conducted on any digital device: phone, tablet or personal computer. It does not require patients to download an application and the system requires limited bandwidth to run. The potential savings of both travel time and cost are huge when comparing remote consultation to face to face [3].

The educational opportunities for students in healthcare on clinical placements will be greatly disrupted by infection control measures brought in as a result of the COVID-19 pandemic. The use of video consultation as a tool for education in healthcare has been established [4] but the potential opportunities offered by such technology are only now becoming evident. Healthy patient volunteers who are used in medical education by universities nationwide are being asked to stay at home to reduce their risk of exposure, yet this resource of ready trained assistance can still be tapped for both training and assessment using video consultation software.

All these communication tools should be used to conduct outpatient consultations and maintain some continuity of an adapted 'normal'. Patients can be triaged effectively and if urgent physical examination is required this can then be arranged. Education can be adapted to allow continued interaction with patients using remote consultation technologies.

Innovation has been a cornerstone of healthcare since its inception – perhaps the current crisis should be viewed as an opportunity not to be missed.

C. K. Gunner*, R. Oliphant† and A. J. M. Watson*

*Department of Surgery, Raigmore Hospital, Inverness, UK, and †West of Scotland Cancer Surveillance Unit, University of Glasgow, Glasgow, UK

E-mail: angus.watson@nhs.net

@watsoninverness

Received 13 March 2020; accepted 17 March 2020; Accepted Article Online 17 March 2020

References

- 1 Bunn F, Byrne G, Kendall S. The effects of telephone consultation and triage on healthcare use and patient satisfaction: a systematic review. *Br J Gen Pract* 2005; **55**: 956–61.
- 2 Rush KL, Howlett L, Munro A, Burton L. Videoconference compared to telephone in healthcare delivery: a systematic review. Int J Med Inform 2018; 118: 44–53.
- 3 Ruf B, Jenkinson P, Armour D, Fraser M, Watson AJM. Videoconference clinics improve efficiency of inflammatory bowel disease care in a remote and rural setting. *J Telemed Telecare* 2019; 1–7. https://doi.org/10.1177/1357633X 19849280.
- 4 Bramstedt KA, Prang M, Dave S, Shin PNH, Savy A, Fatica RA. Telemedicine as an ethics teaching tool for medical students within the nephrology curriculum. *Prog Transplant* 2014; 24: 294–7.