

Digital Technology to Ease Pressures on the Health System

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Abstract

Increasing pressures on our health systems creates a requirement for creative approaches to ease the load for those working in them, especially given lessons learned in other areas of health, and considering opportunities provided by digital health strategies. This paper identifies an area in which screening is under consideration, with possibilities for saving funding by combining resources applied to two forms of screening. Processes and limitations are considered, along with possible further extensions of the concept.

Keywords: *Screening; Digital Health; Random Breath Testing; Prostate Cancer; Pilot Projects*

There are always pressures on our health systems [1] and it is incumbent on us all to find ways of easing the load on those who work in them. So this is also a time for creative thinking, and approaches that can perhaps address two problems simultaneously - reducing the pressures on health workers and finding new ways of addressing health problems that are also of concern to the wider community.

Further, while governments and health systems have devoted substantial resources to developing digital health strategies [2], the digital health concept could lend itself to further extensions.

Many males experience problems related to the prostate, particularly as they age. The literature shows that approximately half of males over the age of 50 will have some prostate enlargement [3].

There is debate about both possible benefits of screening for prostate cancer and whether this should entail digital rectal examination, which is a procedure commonly used to identify possible problems. It is important to note that Australian guidelines do not support routine screening on the basis that it is not clear whether the benefits outweigh the harms, so men should make their own decisions after weighing up the pros and cons, and discuss the options with their doctors [4].

Those who support mass screening might, however, wish to consider an approach that would simplify the process, ease pressures on the health professionals normally involved, and learn from experience of different forms of screening to prevent harms.

In Australia as elsewhere, Random Breath Testing (RBT) is now a well-accepted part of the community response to drink-driving [5]. While there was initial resistance [6], this has now all but disappeared, and drivers accept the minor inconvenience of a brief stop for roadside screening to identify those at risk of causing road crashes. Police administration and staff ensure that the process is smoothly and courteously conducted. There is clear evidence that, especially when conducted as part of a comprehensive approach, this contributes

to a reduction in alcohol-related road traffic accidents [7]. RBT has been temporarily suspended in some jurisdictions so as to ease current pressures on police services [8], but there is the opportunity to learn from experience with RBT, as well as to prepare for its reintroduction.

RBT already provides an infrastructure that could be used for other forms of screening. Staff, vehicles and administrative support are in place. Most police services have means of identifying locations where such screening can occur in ways that optimise numbers while minimising traffic disruption. Hygiene guidance is observed to provide maximum protection for both police officers and the drivers who are screened. Given current concerns, even when RBT is reintroduced, it may be appropriate to provide masks for police officers involved in the process.

It is therefore proposed that a pilot project be set in train to identify whether the RBT process can also be used for prostate screening. This would require some additional training for the police staff involved, and some additional hygiene precautions, but the basic approach would be similar. Following RBT, male drivers would be requested to step out of their vehicles, then escorted to a tent by the side of the road where specially trained police officers would administer digital rectal examination [9]. In the event of any concerns being identified, the drivers would be advised to pursue these with their general practitioners.

There may be limitations to this approach. Some drivers may feel uncomfortable about digital examination in a semi-public location, so the tents would have to be erected so as to ensure maximum privacy. There would need to be especial care to ensure a continuing supply of appropriate gloves, and means for their disposal - in recognition of their contribution to the program, drivers tested could perhaps be offered the gloves used as a memento of the occasion. Police officers can be expected to be physically fit, well-built and possibly with larger digits than the average physician, so would require training to ensure careful and caring administration of the test. There may also be the option of recruiting specialist staff who are of smaller build and less digitally enhanced than the current typical officer. Training modules could be developed at Police Academies. Given the sensitivity of the procedure, police staff may feel more comfortable rehearsing the procedure with senior officers as subjects, rather than members of the general public.

There may also be a need for additional resources in the event that some of those tested derive enjoyment from the experience and wish to be re-tested. Additionally, it may be necessary to develop special explanatory materials for visitors from developing countries such as New Zealand, who may have some difficulty in understanding standard English texts. In the current climate, there might also be some need to consider novel approaches to the digital rectal examination process itself. Such approaches already appear to have been piloted in the sporting arena [10]. Given the proximity required for medical and other staff involved, and again the need to protect scarce medical resources and the health of valued medical practitioners, further pilot projects might be developed to investigate the potential for Digital Self-Examination (DSE). This would clearly require a substantial focus on hygiene, including extensive use of gloves, complemented by a Wash the Finger (WTF) educational component. If considered practicable, this approach could be promoted through a television media campaign in which DSE is demonstrated by health, community and government leaders, further promoting the WTF message. If successful, the concept and educational approach might indeed then further be extended to other procedures such as colonoscopy. Trials of DIY colonoscopy could be considered, with the caveat that self-administered anaesthesia might pose obstacles, although these could be overcome by use of novel anaesthetic approaches such as podcasts of selected academics' lectures.

While details will clearly need to be worked through, these approaches may provide innovative means of ensuring optimal utilisation of governmental resources, benefiting from long experience of a successful screening program, reducing the workload of medical practitioners, and getting to the bottom of some major health system concerns. They would also complement the wish of governments to be working "hand in glove" with each other and the community [11]. A further benefit of the core proposal is that it would support road safety campaigns on driver fatigue, as there is little doubt that the process would serve to waken drivers who might otherwise be at

risk of falling asleep. It is important to reiterate that community prostate screening is not currently supported by health authorities and relevant guidelines. Nonetheless, those with an interest in screening may wish to add these approaches to the options under consideration, and possibly to establish pilot programs to verify their feasibility. This would undoubtedly add a new and interesting dimension to general perceptions of digital health strategies. It is, however, recognised that the proposals, while innovative, may turn out to have some unforeseen drawbacks.

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Conflicts of Interest

No financial interests or other conflicts.

Bibliography

1. Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW.
2. <https://www.digitalhealth.gov.au/> Accessed 10 April, 2020
3. <https://www.cancer.org.au/about-cancer/early-detection/early-detection-factsheets/prostate-cancer.html> Accessed 10 April, 2020.
4. <http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/prostate-cancer-screening> Accessed 10 April, 2020.
5. <https://legislation.nsw.gov.au/#/view/act/1999/20/historical2004-04-16/part2/div3> Accessed 10 April, 2020.
6. <https://www.walk.com.au/pedestriancouncil/page.asp?pageid=503> Accessed 10 April, 2020.
7. Ferris, J., Devaney, M., Sparkes-Carroll, M., Davis, G. (2015). A national examination of random breath testing and alcohol-related traffic crash rates (2000-2015). Canberra: Foundation for Alcohol Research and Education.
8. <https://www.whichcar.com.au/car-news/police-stop-random-breath-testing-coronavirus> Accessed 10 April, 2020.
9. <https://www.healthline.com/health/digital-rectal-exam#procedure> Accessed 10 April, 2020.
10. <https://www.irishtimes.com/news/rugby-player-quits-club-over-finger-jabbing-1.379299>.
11. <https://www.health.gov.au/news/deputy-chief-medical-officers-interview-on-abc-radio-darwin-about-novel-coronavirus> Accessed 10 April, 2020.

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