

## THE ADJACENT POSSIBLE IN PRIMARY CARE

### Highlights

Research on respiratory health this month will inform the care of people with pneumonia post-discharge, the ever-challenging timely diagnosis of lung cancer, and the use of antibiotics in COPD. No one wants to miss a cancer diagnosis, much less on the rare occasions when they occur in a child, and an editorial explores this challenging topic. There has been emerging concern about people with learning disabilities and the disproportionate impact of COVID, and Shemtob *et al* draw our

### The adjacent possible

A smartphone app that can diagnose pneumonia? Not long ago this would be the stuff of science fiction but in this issue we publish research on a diagnostic accuracy study that can analyse cough sounds. The study by Paul Porter and colleagues reports on how they recorded coughs with an iPhone 6, added in some key questions, and ran it through their algorithm. Your grip may tighten defensively on your stethoscope but pause and consider the diagnostic accuracy of chest auscultation first. Many doctors will fear the unintended consequences of technology and that it is denaturing the 'care' in health care. It would take little to irrecoverably damage general practice, which is, as Madeleine Bunting put it, a 'powerful but fragile construct'.<sup>1</sup>

Recording coughs and running them through a computer is innovative and nudges us into the realms of the 'adjacent possible'. This phrase was first coined by doctor and biologist Stuart Kauffman but covered in Steven Johnson's excellent book *Where Good Ideas Come From: The Seven Patterns of Innovation*, itself a must-read manual for change-seekers.<sup>2</sup> The idea of cough analysis by algorithm would have been barely conceivable in the 1980s but it needed the particular confluence of mobile recording technology and computing power to bring it within range. It's not yet incorporated into the complex system that is human society but it's close enough that we can grasp the possibilities.

Once innovations creep into the territory of the adjacent possible they are, arguably, inevitable. William F Ogburn and Dorothy Thomas wrote a fascinating essay in 1922 suggesting just that and cited scores of

attention back to our primary care systems.

Professor Trish Greenhalgh has been a beacon of evidence-informed commonsense in the pandemic: ferocious academic rigour in lockstep with a GP's pragmatic wisdom. Throughout the past year this approach to remote consultations has proved invaluable. Alongside Rebecca Rosen, she offers a provocative tilt at the future for remote consultations. Matt 'remote-by-default' Hancock would do well to heed them to appreciate the complexities and to understand when clinicians express reservations.

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inventions in history that have happened almost simultaneously.<sup>3</sup> There are many medical discoveries in this category: the theory of the infection of micro-organisms; the nature of cataracts; and the function of the pancreas were all revealed together. It is easy to be beguiled by technology and while there may be an inevitability to this progress we can remain judicious in how we use them.

We've always had 'technology' in various guises, and as Stefan Timmermans and Marc Berg put it: *'Medicine forms an archaeology of layer upon layer of technologies from the most mundane band-aids and pencils to sophisticated machines such as MRIs and artificial hearts ...'*<sup>4</sup>

Remote consultations are now with us and, like smartphone apps to listen to coughs, we will have to find ways to accommodate them into our practice.

The adjacent possible in primary care is awaiting us.

Euan Lawson,  
Editor, *BJGP*

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