

Editorial

Healthcare innovation and market forces

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Health services in many developed countries are experiencing an urgent need for innovation in response to an ageing population and the growing prevalence of chronic and degenerative diseases.¹ Many urge reform of what are now perceived as inadequate and outdated services that have traditionally focused on a medical model predicated on access, continuity, integration and comprehensive care.^{2,3} Differentiation is the new mantra, and those committed to patient empowerment and professional role innovation are setting new trends.^{4,5} However, as we consider a fresh approach to health care we reflect on the experience of many researchers whose enthusiasm is tempered by frustration at the limited support for projects at the coal face.⁶ At present there are 7361 general practices in Australia and more than 4500 individual pharmacy outlets.^{7,8} Official data, now ten years old, also identified physiotherapists working from 4050 locations in primary care.⁹ In this country, remuneration for health services in the community is based on a fee for service, and many consequently argue that 'time is money'. A general practitioner (GP) made a typical comment in the *Weekend Australian* on 20-21 September 2008:

Lifestyle changes require difficult-to-acquire focus and persistence. I enjoy discussing with people the perils of smoking or how they might change the way they live to lose weight and avoid becoming diabetic. But then Medicare comes in and says 'thanks for all the good work, but don't bill for it, because we will audit you if you do'.¹⁰

The small and medium-sized businesses that comprise the primary healthcare industry cannot afford to invest clinic time doing work for which they are not remunerated, and this includes research. Without the engagement of end users, researchers will promote innovations with little or no value in practice and become disillusioned as they fail to gain traction or deliver the promised improvements in patient outcomes. We are

reminded of the leaky route from research to practice; Glasziou and Haynes posit that practitioners need to be aware of research, accept the implications for practice, target the appropriate group, and then alter practice because of ease of implementation.¹¹

As we reflect on these challenges three trends which have supervened since 2000 warrant particular attention. Firstly it is not just possible to find someone to make or code or do something for you quickly and cheaply; it is now easy, even in medicine.¹² In almost every business the production of physical goods and intellectual property is no longer based on geography but is based on talent and efficiency instead. Either what you are doing is repetitive, in which case you ought to outsource it, or it is homemade, insightful, and filled with initiative and judgement, in which case you can charge for it handsomely. Some might argue that everything primary healthcare practitioners do is inordinately insightful and steeped in good judgement. However, it is a sobering fact that much of what transpires in offices, consulting rooms and shop floors can be performed by a variety of people from different disciplines.¹³

Secondly there is an irreversible trend for direct patient-to-patient communication. A website now reports on the perceived skill and attitudes of doctors currently working in any of five developed countries. Let us not understate the size of this revolution. This is a no-holds barred site with the power to destroy reputations. Here doctors can be named, and in some cases shamed, by people who themselves enjoy anonymity.¹⁴ Thirdly, and this is a related phenomenon, we are witnessing the demise of 'experts'. Organisations and authorities who held the keys to this, that or the other simply do not have a current mandate. Even professionals now consult 'Google' when advising patients.¹⁵ The web has two particular features, firstly it can and does host information on almost any subject. Secondly, many of those who present material

on the web are not paid for what they do. They are passionate, not punching the clock. Information overload is a reality. The old way was characterised by limited access to people, provider-to-patient communication, long product cycles, focus groups and limitations based on manufacturing processes. The new way emphasises countless media outlets, consumer-to-consumer communication, fads, and a product line limited only by our imagination.¹⁶

In the competitive environment of funded health research and services, healthcare professionals are forced to make choices. Either compete in existing markets or create uncontested market space. Either engage the competition or make the competition irrelevant. Either exploit existing demand or create and capture new demand. Either align the team with a choice between differentiation or low cost, or do both. Four actions are possible. *Reduce* factors that should be reduced well below the current standard. *Raise* factors that should be raised well above the current standard. *Eliminate* factors that we take for granted and should be eliminated, and/or *create* factors that should be created that have never been offered. In the business world one needs to consider three categories of customer: current customer, those who choose not to be customers and those beyond the horizon who have never been a customer. One must then innovate to increase productivity and of course profitability. Innovations must be characterised by simplicity and convenience, reduce risk but remain appealing, and enhance the working environment.¹⁷

New models for health care are proposed.¹⁸ However, when the rubber hits the road they rely on the adoption of new roles, new technologies and new approaches to old problems. The impacts of innovations in primary health care could be attributed to many different factors. Therefore, in developing novel approaches we must initially focus on modelling and exploratory studies.¹⁹ It is incumbent on researchers to identify the various components of interventions and to enunciate the mechanisms by which they will influence meaningful outcomes, and to provide evidence that predicts how they relate to and interact with each other. They must describe the constant and variable components of a replicable intervention and propose a feasible protocol to robustly test the intervention with an existing 'gold standard'. Much of this work will not be publishable in 'high impact' journals or be supported by 'blue chip' funders.²⁰ Nonetheless, without this effort we will continue to fail to deliver on the promise of practical solutions at the coal face. Therein lies the challenge: how do we forge partnerships with the small and medium-sized businesses that comprise much of primary care in many parts of the world? We might also consider the imperatives in academia driven to produce ever more impactful outputs. The average academic will produce very few

'high impact' journal publications, few of which will be read by busy practitioners or be successful on more than a handful of substantial grant applications. Large volumes in relation to early and exploratory work add up to a substantial expertise and may be produced in a format that is more accessible, such as open access websites. New markets or stakeholders emerge. New relationships are forged that may be highly profitable. The three challenges are straightforward for the business of research as in the business of health care: find a market that hasn't been found yet; create something so remarkable that people in the market are compelled to find you; string together enough of those markets so you can make them into a business.¹⁷ Innovate or perish, neither the healthcare industry nor academia are immune to market forces, and both face an uncertain future.

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CONFLICTS OF INTEREST

None.

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