

In this issue

Digital disparities, complexity and patient safety: in this issue

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INTRODUCTION AND EDITOR'S CHOICE

In this issue, we publish articles about how digital health and the skills needed to use it may increase disparities. Unsurprisingly, if you change health services from a system where the phone or a visit in person is the only way to interact with it to one with a complex set of different online tools there will inevitably be disparities, particularly among those who find it most difficult to adapt. In research published in this issue, age, income and educational levels are important predictors of lower uptake. We also describe the complexity of healthcare; the importance of records that support holistic care; and of providing actionable informatics to improve patient safety. The Editor's choice article in this issue is the paper by Williams *et al.*,¹ on the use of a dashboard to improve prescribing safety.

MORE POINTERS TOWARDS DIGITAL DISPARITIES

We open this edition with an interesting paper about what predicts Internet use in older adults.² This is critically important for health systems as they move to implement digital health strategies. They need to understand the scale of this problem. A paper by Emani *et al.*, predicting who adopts a patient portal identified age and income as determinants of use. Additionally, the group of patients who expected benefits also used it more.³ This is also reinforced in other findings that online access to clinical records and other services that require Internet skills may increase disparities.⁴

COMPLEXITY

There are growing numbers of people with comorbidity, all of which have their own guidance; particularly for older people, we need to practice less disruptive medicine.⁵ A paper by Litchfield *et al.*,⁶ looks to steer us through the dilemma created by multiple potentially conflicting guidelines and sets out how we might address these conflicts. A further area of complexity is that of interoperability. Interoperability has long been a 'Holy grail' of informatics, and Oyeyemi and Scott⁷ draw out its complexity.

ENGEL'S BIOPSYCHOSOCIAL MODEL

Engel's biopsychosocial model of disease set out in 1977 challenged biomedicine.⁸ Engel stated biomedicine 'leaves no room within its framework for the social, psychological and behavioural dimensions of illness. A biopsychosocial model is proposed that provides a blueprint for research, a framework for teaching and a design for action in the real world of healthcare'. Computerised medical record (CMR)

systems are orientated towards the needs of biomedicine and Woodson⁹ describes how they struggle to meet the needs of behavioural health clinicians. It is possible that we need other tools to share information across teams and we publish a research letter from Sarkisian and Kagel¹⁰ explaining how they have used 'Slack' for collaborative medical work.

THE PATIENT AS THE UNIT OF IMPLEMENTATION

The patient rather than the organisation may be the best way of rolling out a new system. Gunja that provides a case study of an electronic prescribing system. The mantra was 'one patient one chart'!¹¹ If only we could also take that phrase more widely into 'one patient one computerised medical record'!

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MOBILE HEALTH TO SCREEN FOR CARDIOVASCULAR DISEASE

In a month when Public Health England has launched its online tool to predict your heart age,¹² we publish an article by Mannik *et al.*,¹³ about how community health workers in rural Kenya have used a mobile app to screen for cardiovascular disease and risk.

DASHBOARD TO IMPROVE QUALITY AND PATIENT SAFETY

Williams *et al.*¹ describe the development of a dashboard to improve patient safety, its focus is medication safety. The development of dashboards to improve quality is one I have an interest¹⁴ in and is the Editor's choice paper of this edition.