

In this issue

In this issue: Everything you wanted to know about electronic health exchange, diversity and ethnicity

Simon de Lusignan

Professor of Primary Care & Clinical Informatics
Editor – Journal of Innovation in Health Informatics

INTRODUCTION

In this issues of the Journal of Innovation in Health Informatics we have two major papers on Health Information Exchange.^{1,2} The first paper listed in Medline that used Health Information Exchange in its title is from 1957 – setting out the value of sharing and exchanging data about health hazards in the workplace.³ The term was used much more in its current sense ten to fifteen years ago.⁴ These well illustrated papers are part of the innovation within this journal – we are trying an experiment in producing two major papers based on a Doctoral thesis. Your feedback about these would be greatly appreciated.

ELECTRONIC HEALTH RECORDS (EHR) GOOD AT SOME THINGS BUT NOT OTHERS

When electronic health records (EHR) were introduced into primary care the UK the first feature to be used was electronic prescribing, especially for repeat prescriptions. Although consultations in which a prescription was issued took longer, the time spent on prescribing was consistent.^{5,6} An interesting study by Sandoval et al., suggest that the EHR may have a positive effect on simple tasks (such as prescribing) but a negative effect on more complex tasks that require a lot of information processing.⁷ This certainly equates with your Editor's experience of using the EHR, in very complex consultations I sometimes realise I have written nothing – whilst the EHR is much more readily integrated into simpler, more mechanistic ones.

By way of contrast electronic prescribing has been much more complex to implement in secondary care – where the doctor may be constantly mobile – particularly in the ward setting. Cresswell et al., make five key recommendations for secondary care e-prescribing.⁸ In a further article Cresswell et al., learn from clinical innovators how bottom-up push to meet clinical need is the first requirement for innovation – but that there is also a need to be willing to experiment and take risk. Risk-taking does not come naturally to many clinical professionals, making this an interesting read.⁹

DIVERSITY AND ETHNICITY IN EHR

A systematic review, published in this issue, suggests there may be a lack of research across the diverse population that make up older adults. This review is a call to arms to carry out more reviews that include data about diversity – so

they might better inform and might help us understand why there is a lower level of uptake in this group.¹⁰ Finally, Tippu et al., have extended previous work on ethnicity recording in primary care records;¹¹ this time taking a much more

ontological approach (as described in the pages of this journal),¹² designed to maximise case-finding from electronic records.¹³ We hope this ontology will provide a resource that will be widely used.

REFERENCES

1. Akhlaq A, Sheikh A, Pagliari C. Defining health information exchange: scoping review of published definitions. *J Innov Health Inform.* 2016;23(4):684–764. <http://dx.doi.org/10.14236/jhi.v23i4.838>
2. Akhlaq A, Sheikh A, Pagliari C. Health information exchange as a complex and adaptive construct: scoping review. *J Innov Health Inform.* 2016;23(4):633–83. <http://dx.doi.org/10.14236/jhi.v23i4.889>.
3. Byers DH. Occupational Health Information Exchange. *Public Health Rep.* 72(12):1077–8.
4. Marquard J, Brennan PF, Grindrod D, Zayas-Cabán T. Health information exchange networks: understanding stakeholder views. *AMIA Annu Symp Proc.* 2005:1044.
5. Kumarapeli P, de Lusignan S. Using the computer in the clinical consultation; setting the stage, reviewing, recording, and taking actions: multi-channel video study. *J Am Med Inform Assoc.* 2013 Jun;20(e1):e67–75. doi: 10.1136/amiajnl-2012-001081.
6. Refsum C, Kumarapeli P, Gunaratne A, Dodds R, Hasan A, de Lusignan S. Measuring the impact of different brands of computer systems on the clinical consultation: a pilot study. *Inform Prim Care.* 2008;16(2):119–27.
7. Sandoval MB, Val Palumbo M, Hart V. Electronic health record's effects on the outpatient office visit and clinical education. *J Innov Health Inform.* 2016;23(4):765–71. <http://dx.doi.org/10.14236/jhi.v23i4.151>.
8. Cresswell KM, Slee A, Sheikh A. Five key recommendations for the implementation of hospital electronic prescribing and medicines administration systems in Scotland. *J Innov Health Inform.* 2016;23(4):783–88. <http://dx.doi.org/10.14236/jhi.v23i4.904>.
9. Cresswell KM, Cunningham-Burley S, Sheikh A. Creating a climate that catalyses healthcare innovation in the United Kingdom – learning lessons from international innovators. *J Innov Health Inform.* 2016;23(4):772–82. <http://dx.doi.org/10.14236/jhi.v23i4.882>.
10. Kneale L, Demiris G. Lack of diversity in personal health record evaluations with older adult participants: a systematic review of literature. *J Innov Health Inform.* 2017;23(4):789–98. <http://dx.doi.org/10.14236/jhi.v23i4.881>.
11. Kumarapeli P, Stepaniuk R, de Lusignan S, Williams R, Rowlands G. Ethnicity recording in general practice computer systems. *J Public Health (Oxf).* 2006;28(3):283–7.
12. de Lusignan S. In this issue: Ontologies a key concept in informatics and key for open definitions of cases, exposures, and outcome measures. *J Innov Health Inform.* 2015 Jul 10;22(2):170. doi: 10.14236/jhi.v22i2.170.
13. Tippu Z, Correa A, Liyanage H, Van Vlymen J, Burleigh D, McGovern A, Jones S, de Lusignan S. Ethnicity recording in primary care computerised medical record systems: an ontological approach. *J Innov Health Inform.* 2017;23(4):799–806. <http://dx.doi.org/10.14236/jhi.v23i4.920>.