Getting on with your computer is associated with job satisfaction in primary care: entrants to primary care should be assessed for their competency with electronic patient record systems

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ABSTRACT

Job satisfaction in primary care is associated with getting on with your computer. Many primary care professionals spend longer interacting with their computer than anything else in their day. However, the computer often makes demands rather than be an aid or supporter that has learned its user's preferences. The use of electronic patient record (EPR) systems is underrepresented in the assessment of entrants to primary care, and in definitions of the core competencies of a family physician/general practitioner. We call for this to be put right: for the use of the EPR to support direct patient care and clinical governance to be given greater prominence in training and assessment. In parallel, policy makers should ensure that the EPR system use is orientated to ensuring patients receive evidence-based care, and EPR system suppliers should explore how their systems might better support their clinician users, in particular learning their preferences.
primary care. In addition, perhaps more importantly, there should be competency-based assessment of their trainers, with provision of training and support for those who find they have a gap. Early work from Israel in the training and assessment area is encouraging.\textsuperscript{5} Not to test prospective primary care physicians on their use of computers in the consultation is akin to not testing their ability to ask open questions or use a stethoscope.

**JOB SATISFACTION MAY BE RELATED TO COMPUTER USE**

There are some suggestions in the management literature that job satisfaction may be associated with computer use; however, healthcare (as different from most other businesses) has adopted computers late. Unsurprisingly, in the telecommunications industry, back when IT was much less ubiquitous, computer use was associated with job satisfaction.\textsuperscript{6} In the 1980s and 1990s, technology use started to be incorporated into measures of job satisfaction, often measured with tools such as the Job Satisfaction Index.\textsuperscript{7} However, many of the scales from that time simply deal with the hours of use\textsuperscript{8} and would be outdated in modern clinical practice, where usability and the ability to incorporate the computer into complex consultations may be much more important.\textsuperscript{9}

**DESIGNING AND ASSESSING COMPETENCE IN THE USE OF TECHNOLOGY**

A major review suggested that technology, along with clinical reasoning, systems-based care and clinician–patient communication were the hardest areas within which to assess competence.\textsuperscript{10} This review commended the UK practice of trying to use video to directly observe GP trainees as part of their summative assessment. There may be some interrelationship between the fields identified in this review. It is possible for a primary care physician to simply refer everything to a specialist rather than carefully work out what might be in the best interests of their patient. Audits of computer data should provide insights into practitioners, approach to clinical reasoning and working as part of systems-based care. Whilst general practice, in particular, and primary care, in general, have been ahead of the field in generating competence-based assessments for clinician–patient interaction, the use of computers/EPR systems is not mentioned in the Europe definition of family medicine.\textsuperscript{11}

Notwithstanding that the consultation is now a triadic one, with patients accepting and encouraging EPR use,\textsuperscript{8} believe needs updating to reflect the central importance of the computerised medical record in patient care:

- The RCGP Workplace-Based Assessment (WPBA) should include ‘The Primary care administration and IM&T—appropriate use of primary care administration systems, effective record keeping and IT for the benefit of patient care’. However, many trainees, and practitioners, are not able to see the value of data for direct patient care, with coding for pay-for-performance targets and for management of prescribing costs appearing to be its primary drivers and beneficiaries. The wider quality agenda remains contested.\textsuperscript{13}
- In addition, although the RCGP Clinical Supervisor’s Report does include a section titled ‘Keeps good medical records’, there is no guidance or mention of what makes a good record or significantly the importance of accurate clinical coding.\textsuperscript{14}
- Whilst the RCGP Curriculum (2010) does include ‘Effective use of Medical Records’ as an area of competence, again there are no definitions of what this represents or how effective use of electronic records might be measured.
- Perhaps most importantly, the ‘Curriculum blueprint’ mapping the GP curriculum to MRCGP assessment requirements does not include any mention of computer use, clinical coding, or electronic medical records.\textsuperscript{15}
- Finally, the Consultation Observation Toolkit does not include taking a copy of the medical record made during that consultation, or highlighting what information is coded in the EPR during the consultation. Its exclusion might mean that a patient with a condition who is not coded might not be recalled, and there are criticisms of WPBA, but these are more about whether it encourages a ‘tick-box culture’ and is inflexible,\textsuperscript{16} rather than its lack of emphasis on competency with computerised medical record systems.

The RCGP is not alone, whilst the use of computers in primary care is fast becoming ubiquitous. In the developed world, neither the American College of Family Physicians nor the Royal Australian College of General Practice assesses computer use in their summative assessments.

**SUMMARY**

A primary care clinician may now communicate more with their computer than with anyone or anything else in their working day. They might start their day by reviewing laboratory results, which have been received electronically, browse and annotate incoming letter with any action that needs to be taken, prior to consulting with their patients. We know that coding diagnoses and making good records reduces the stress of the next professional to see that patient and in some conditions such as diabetes and chronic kidney disease are associated with good care and health outcomes.\textsuperscript{17,18} EPR
systems also improve prescribing accuracy and safety, and can be used as a tool for clinical governance.¹⁹

Not every issue with primary care computing can be solved by training practitioners how to use their EPR system more. Policy makers need to create an environment where any indicator based on routine data represents an evidence-based improvement in patient care. There need to be incentives to promote clinical audit, review care pathways, and measure how practitioners engage in systems-based care. EPR system manufacturers may want to give greater priority to making the EPR system the clinician’s friend: minimising the key strokes, they need to carry out repeated functions, learning their preferences and supporting the multi-tasking that goes on when phone or other interruptions disturb another activity.

The primary care informatics community should be working harder to develop a competency framework for all professionals entering primary care, and their trainers, to ensure we have consistent delivery of quality care, more satisfied patients, and possibly even happier doctors.

REFERENCES


9. Pearce CM, Kumarapeli P and de Lusignan S. Effects of exam room EHR use on doctor–patient communication: a systematic literature review—triadic and other key terms may have identified additional literature. Informatics in Primary Care 2013;21(1):40–2 (Commentary on Kazemi paper (Ref 15 § 21_1)).


