


Rebuttal: Do electronic medical records improve quality of care?

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YES Dr Greiver states that there is “little conclusive evidence that EMRs [electronic medical records] make a substantial difference in the quality of care provided to patients.”¹ This conclusion is based primarily on the neutral results of systematic reviews. Systematic reviews require numerous homogeneous, high-quality studies to demonstrate a causal effect. The research on smoking is a good example of why we cannot rely on high-level systematic reviews alone. Evidence of the health risks from smoking began to manifest in the 1970s; however, no systematic review precisely quantified the relationship between smoking and lung cancer until recently.² The research on EMRs is even more heterogeneous, with numerous outcome indicators for quality of care, wide variation in the quality of EMRs, and a large range in EMR skills of and use by clinicians. The resultant studies could be interpreted as having overall neutral results. However, we need to look deeper, and when we do we find early evidence of the positive effect that EMRs have had on quality of care. Improved quality of care outcomes have been demonstrated in a study that compares EMRs to paper charts,³ and in other studies that illustrate positive effects through the additional resources that EMRs bring to the point of care.⁴⁻⁶

I agree with Dr Greiver that it is the quality of the EMR and how we use it that improves the quality of care; we are at a tipping point. There is wide variation in the quality of EMRs, and minimal standards to ensure that each EMR on the market supports the Patient's Medical Home.⁷ Standards are especially important to ensure minimum reporting and analytical properties. We need to bring new skills and approaches to the team setting;

it is not only the family physician who needs to change. Electronic medical records require a new set of skills in data entry and data management to avoid the “garbage in, garbage out” scenario. But other systems, such as electronic health records, must also be adapted to communicate seamlessly with the EMR. Finally, we need unfettered access to our EMR data. Electronic medical records are tools that can improve quality of care if we adapt them and use them appropriately. 

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Competing interests

None declared

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La traduction en français de cet article se trouve à www.cfp.ca dans la table des matières du numéro d'octobre 2015 à la page e437.

These rebuttals are responses from the authors of the debates in the October issue (*Can Fam Physician* 2015;61:846-9 [Eng], 850-3 [Fr]).