

Capsule Commentary on Persell et al., Electronic Health Record-Based Patient Identification and Individualized Mailed Outreach for Primary Cardiovascular Disease Prevention: a Cluster Randomized Trial

Noah Ivers, MD CCFP

Women's College Hospital - University of Toronto, Toronto, Ontario, Canada.

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This trial by Persell et al.¹ tested an intervention that leveraged electronic health records to identify patients with risk factors for cardiovascular disease but not receiving statin treatment. The investigators provided a list of patients meeting these criteria to clinicians and mailed personalized letters to the patients on the list, offering advice regarding the benefit of statin treatment, controlling hypertension or quitting smoking. The result was not more contacts with primary care clinicians, but more *productive* contacts with respect to cardiovascular risk reduction. In particular, a greater proportion of intervention patients received statin prescriptions, with a nonsignificant trend towards greater hypertensive treatment. While there was no difference in low-density lipoprotein (LDL) levels at 9 months, a post-hoc analysis at 18 months showed benefit.

In addition to being post-hoc, interpretation of the findings at 18 months is hampered by the fact that the control group received feedback reports at 9 months. Thus, it is unclear if findings at 18 months are attributable to the patient letters alone or a function of the time necessary for the combined intervention to have an impact on measured cholesterol values. Previous studies have compared audit and feedback versus audit and feedback plus mailed patient educational reminders with mixed results.² To move the field forward, researchers should determine how to best develop and implement interventions by conducting multi-arm trials comparing different versions of quality improve-

ment strategies and by embedding qualitative methods within quality improvement trials.³

For clinicians and administrators, this study provides an example of how data can be used to automate routine tasks while supporting patients and clinicians to achieve evidence-informed decision-making. Unfortunately, electronic health records are not a panacea⁴ and many providers are unable to fully leverage data for quality improvement.⁵ Furthermore, this study aimed to improve primary prevention of cardiovascular disease; practices with limited quality improvement resources should focus on higher-risk populations.

Corresponding Author: Noah Ivers, MD CCFP; Women's College Hospital - University of Toronto, Toronto, Ontario, Canada (e-mail: noah.ivers@utoronto.ca).

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