

Enhancing Comparative Effectiveness Research Capabilities in the Practice Partner Research Network (PPRNet)

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Infrastructure Description

This project enhanced the infrastructure and capability of the Practice Partner Research Network (PPRNet), a successful national primary care practice-based research network, to conduct epidemiologic and comparative effectiveness research (CER). Research capability was enhanced by expanding the network and developing computer algorithms that allowed researchers to identify patients with any of 20 chronic medical conditions. This project helped fill gaps in current knowledge about the relationship between chronic illness and the delivery of recommended preventive services, and informs efforts to improve the delivery of these services to patients with multiple chronic illnesses.

Specific Aims

1. Expand the number of practices participating in the PPRNet to 250.
2. Enhance PPRNet's analytic ability to identify patients with a wide spectrum of chronic illness and, by extension, its ability to conduct CER on complex patients.

Pilot Study

This pilot compared the delivery of a broad range of preventive services recommended by the U.S. Preventive Services Task Force by PPRNet practices among patients with zero, one, or more than one of 20 chronic conditions.

Analyses of 667,379 active adult patients from 148 PPRNet primary care practices across the United States showed strong positive associations between the presence of chronic illnesses and receipt of clinical preventive services. In fact, the more chronic conditions a patient had, the higher the odds they would receive preventive services, particularly depression screening, but also for cholesterol, diabetes, colorectal cancer,

Infrastructure Goal

Expand Practice Partner Research Network's (PPRNet) infrastructure and research capability to enable participating practices to conduct research on complex patients.

Data Sources

Clinical data from PPRNet

Data Access

For data use arrangements, please contact Ruth G. Jenkins, PhD (jenkinsr@musc.edu) or Steven M. Ornstein, MD (ornstesm@musc.edu) at the Practice Partner Research Network (PPRNet), Medical University of South Carolina.

Strategies Addressed from the HHS Strategic Framework on Multiple Chronic Conditions

- 1.D. Implement and effectively use HIT
- 4.B. Understand the epidemiology of MCCs
- 4.C. Increase clinical research

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and bone density screening. These findings persisted even after adjustment for age and encounter frequency.

Concerns are often expressed that patient complexity impedes the delivery of preventive services because of competing clinical demands. This study's findings are in direct contrast to that theory, and suggest that some factors related to the nature of the care provided to these complex patients accounted for the increased attention to prevention.

Publications (as of September 2013)

Ornstein SM, Nietert PJ, Jenkins RG, Litvin CB: The prevalence of chronic diseases and multimorbidity in primary care practice: A PPRNet report. *J Am Board Fam Med*. In Press, 2013.

Ornstein S, Jenkins R, Litvin C, Wessell A, and Nietert P. Preventive services delivery in patients with chronic illnesses: Parallel opportunities rather than competing obligations. *Ann Fam Med*. 2013 July/August; 11(4):344-349. doi: 10.1370/afm.1502.

Posters and Presentations

Jenkins R, Ornstein S, Wessel A, Litvin C, Nietert P, Riley J. Enhancing strategies to identify complex patients on primary care EHR data. Poster session presented at: 39th Annual Meeting of the North American Primary Care Research Group; 2011 Nov; Alberta, Canada.