



Improving Population Health Management Strategies: Identifying Patients Who Are More Likely to Be Users of Avoidable Costly Care and Those More Likely to Develop a New Chronic Disease

Synopsis

After reviewing medical records for approximately 98,000 adults, researchers found that patients who did not feel competent to manage their own health or navigate the health care system were more likely to develop a chronic disease over a three-year period than “activated” patients with good self-management skills. Low patient-activation levels were also linked to significantly greater likelihood of hospitalization and emergency department (ED) use for “ambulatory care-sensitive” conditions—those that are avoidable if managed properly.

The Issue

The success of population health management depends, in part, on accurately identifying patients at high risk for poor health outcomes as well as preventable and costly health events. Risk-stratification approaches typically focus on clinical markers. This Commonwealth Fund-supported study explored whether considering a patient’s self-management skills and confidence—as predicted by the commercially available Patient Activation Measure (PAM)—might help health care delivery systems pinpoint additional high-risk patients who could benefit from supportive interventions. The Patient Activation Measure assigns patients a score of 0 to 100. Patient can be further grouped into four activation levels, with level 1 representing patients with the most limited self-management skills.

Key Findings

- At baseline, poorer patient self-management—as identified by lower patient activation scores—was associated with a higher prevalence of chronic conditions, including depression and high blood pressure, as well as more ED visits and hospital admissions related to these chronic conditions.

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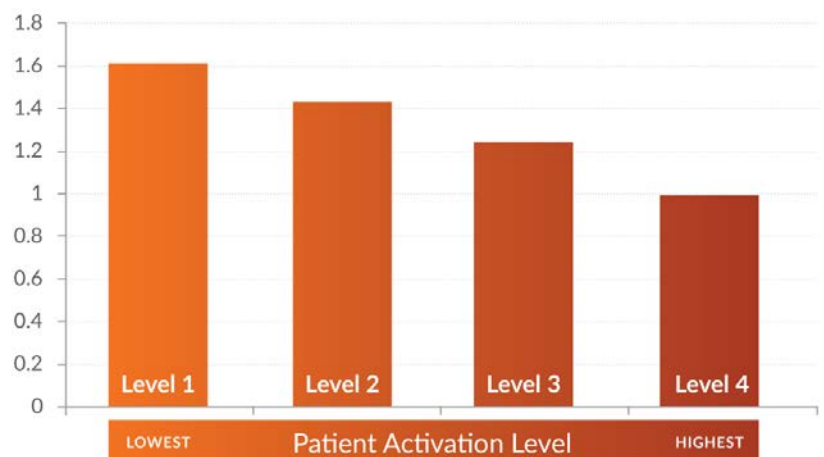
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Odds of Hospital Use for Ambulatory Care-Sensitive Conditions After One Year, by Patient Activation Level



SOURCE Adapted from J. H. Hibbard, J. Greene, R. Sacks et al., “Improving Population Health Management Strategies: Identifying Patients Who Are More Likely To Be Users of Avoidable Costly Care and Those More Likely to Develop a New Chronic Disease,” *Health Services Research*, published online Aug. 23, 2016.

- After controlling for baseline chronic conditions and demographic characteristics, patients at the lowest activation level at baseline were 25 percent more likely to develop a new chronic disease in the next calendar year compared to patients at the highest activation level. The same analysis two years after baseline showed a 31 percent difference between the lowest and highest activation groups. Three years after baseline, the difference was 21 percent. The authors say these findings indicate the enduring predictive value of the PAM score.
- Patients with the lowest activation score at baseline had a 62 percent greater likelihood of having an avoidable hospitalization compared to the most activated group one year later (again, after controlling for baseline demographics and chronic conditions). Two years later, the difference between the least and most activated groups was 40 percent, while three years later the difference was still 30 percent.

The Big Picture

A patient's activation score, or self-management skill level, helps predict future risk of developing a chronic disease and using expensive and avoidable medical services. Growing evidence suggests that it is possible to increase activation levels and helping patients become more skilled in managing their health and health care. By stratifying populations by patient activation scores, health care delivery systems can identify and help those patients with limited self-management skills in time

to prevent poor outcomes and unnecessary utilization. When working with patients with low activation levels, health care providers should recommend small steps to achieve behavioral changes, the authors say, since too much information or too many changes at once may be overwhelming to those patients.

"Understanding the patient's capability for self-management is a key part of understanding the risk of health declines and of avoidable utilization."

About the Study

This retrospective study focused on 98,142 patients at Minnesota's Fairview Health Services who had a Patient Activation Measure score recorded in the electronic health record in 2011 and visited a primary care clinic at least once in 2012, 2013, and 2014. The researchers evaluated the potential of the Patient Activation Measure in determining future chronic disease burden and ambulatory care-sensitive hospitalizations or ED visits.

The Bottom Line

A patient's activation level, or ability to self-manage health and health care, is linked to risk of developing a chronic disease and using expensive and avoidable health care services in the future. By stratifying populations by activation level, health care delivery systems might better identify and support patients with limited self-management skills, helping to improve outcomes and prevent unnecessary costs.

J. H. Hibbard, J. Greene, R. Sacks et al., "Improving Population Health Management Strategies: Identifying Patients Who Are More Likely to Be Users of Avoidable Costly Care and Those More Likely to Develop a New Chronic Disease," *Health Services Research*, published online Aug. 23, 2016.

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