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INVITED COMMENTARY

Improving Population Health Through Team-Based Panel Management

A new concept is spreading rapidly across primary care practices: population management, also known as panel management. Panel management involves identifying and reaching out to patients—in the panel of a primary care practice or a primary care practitioner—who have unmet preventive and chronic condition care needs.[1]

Panel management can be viewed at 2 levels: as a fundamental culture change and as a set of operational details. The culture shift requires practitioners to think beyond the patients scheduled for this week's appointments and to assume responsibility for the health of all the patients in their panels, whether or not the patients seek care. The changes in the day-to-day function of the medical practice require a staff person to periodically review the clinical registry, to identify care gaps (deficiencies in preventive or chronic condition care), and to arrange for patients to address those care gaps. Examples of care gaps are a 55-year-old woman failing to have a mammogram for 4 years or a patient with diabetes who is overdue for a hemoglobin A_{1c} or low-density lipoprotein cholesterol laboratory test or for a foot or eye examination.

Panel management—which largely consists of routine functions not requiring clinical decisions—can be performed by unlicensed personnel using physician-written standing orders based on clinical practice guidelines. Removing the responsibility for panel management from busy and highly trained practitioners gives them more time to focus on patient-generated agenda items, more complex diagnostic and management problems, and the development of enduring relationships with patients. Panel management thus has 2 purposes: to improve preventive and chronic condition care for a population of patients and to redistribute work in the primary care practice so that practitioners have more time for complex functions that require their level of knowledge and skill.

Loo and colleagues[2] conducted a 3-arm study of the effects of panel management outreach and electronic medical record (EMR) reminders for 4 geriatric preventive-care quality measures: documentation of health care proxy, osteoporosis screening, and influenza and pneumococcal vaccination. This trial of 4660 patients took place in hospital-based academic practices. The authors found that EMR reminders alone and EMR reminders plus

panel management improved all 4 measures compared with the control group. They also found that EMR reminders plus panel management outreach, performed through telephone calls and letters by an off-site administrative assistant, compared with EMR reminders alone increased documentation of health care proxy (odds ratio, 2.34) and bone density screening (odds ratio, 1.80), but not vaccination rates.

Based on these findings, the authors suggest a 2-tiered approach using physician-directed EMR reminder tools for most preventive interventions and reserving panel management for interventions that require more time and effort. Indeed, completion of health proxy documentation and dual-energy x-ray absorptiometry scans requires more patient education and motivational interviewing to successfully engage patients in action and follow-up outside the primary care visit. These study findings demonstrate that a trained team member with dedicated time for outreach can significantly improve the delivery of time-intensive preventive care. Panel management outreach has been shown to improve other preventive and chronic condition care measures. For example, patients with diabetes who received letters from a panel manager reminding them to address care gaps had better process and outcome measures than patients whose physicians were responsible to close the care gaps.[3] Outreach separate from physician visits has also been shown to improve colorectal cancer screening.[4]

Panel management, as a team function, need not be limited to outreach, that is, contacting patients by mail or telephone. The other model of panel management—"in-reach"—addresses care gaps in preventive or chronic condition services while the patient is physically in the practice. The principle of in-reach is "every patient, every time"—whenever a patient shows up for any problem, a team member, often a medical assistant, with access to a list of the patient's care gaps arranges for the patient to close those gaps—to have blood drawn for overdue laboratory tests, to bring home fecal occult blood testing supplies, or to make a mammogram appointment.[5] To fully realize its potential, in-reach needs at least 3 things: an EMR to display a screen showing up-to-date care gaps for every patient in a practice's panel, medical assistants to be well trained in panel management, and physicians to write standing orders for the medical assistants. In-reach can be more challenging for practices to implement, for it requires a cultural and workflow transformation of the entire team so that routine preventive and chronic condition care is delivered with as little involvement of the practitioner as possible for most patients.

In 3 separate studies,[5-7] in-reach panel management facilitated by EMR reminders has been shown to improve quality measures. While Loo and colleagues[2] found that, compared with control patients, physician-directed EMR reminders improved pneumococcal vaccination rates among eligible patients with care gaps, the postintervention practice rates were 41.4% for the control patients and 47.1% for the EMR reminder plus panel management patients. It is possible that this rate could be improved by panel management in-reach at the time of patient visits.

Although outreach can be performed by a small number of designated panel managers, in-reach requires that all medical assistants be trained to provide panel management to the patients empanelled to the team in which they are working. This means that the primary care practice must initiate widespread training on basic preventive and chronic condition care and role redefinition. Moreover, personnel engaged in panel management need interpersonal skills in health coaching to explain procedures, engage patients in a culturally and linguistically concordant manner, and assist patients in navigating health care institutions.[8] Panel management may play a particularly effective role in decreasing health care disparities for low-literacy, lower socioeconomic-level, limited English–proficient, and underserved racial and ethnic groups.[9,10]

Under health care reform, demand for services is likely to increase as the uninsured gain coverage. Given the already strained supply of primary care practitioners, it will be critical to use panel managers and other team approaches to extend the reach of primary care practitioners.

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