Patient-Centered Medical Homes May Reduce Emergency Department Use: What Does This Tell Us?

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Policymakers are resolute in their focus on reducing emergency department (ED) use in the face of its persistent increase.1 Multiple types of interventions to reduce ED use have been tested, but a magic bullet that can safely and effectively divert individuals from EDs (and theoretically, into primary care) has proven elusive.

A recent study has cast some new light on this issue. In their article “Emergency Department and Inpatient Hospital Use by Medicare Beneficiaries in Patient-Centered Medical Homes,” Pines et al2 report that the growth rate of outpatient ED rates and outpatient ED payments among Medicare beneficiaries who seek care in practices with patient-centered medical home designation is lower compared with the rate for similar patients in non–patient-centered medical home practices. The beneficiaries assigned to practices with patient-centered medical home designation were healthier and had lower baseline rates of both ED use and payments, and propensity score matching was used to adjust for these differences.

The investigators’ findings represent an important contribution to the debate about how EDs can best fit into a delivery system that prioritizes efficiency and coordination of care across multiple settings. The patient-centered medical home model aims to reinvent primary care, making it “accessible, continuous, comprehensive, and coordinated and delivered in the context of family and community.”3 In other words, the patient-centered medical home model aims to deliver the right care in the right place at the right time. It follows that one measure of success for patient-centered medical homes would be ED visit reductions.

A prevailing school of thought among policymakers is that many ED visits represent failures. Patients end up in the ED because they have failed to seek care when or where they should. The outpatient ambulatory care system has failed to make itself available enough for those who need it. The hospital discharge process failed and, as a result, a patient returns to the ED after a recent admission. Community-based resources are insufficient to meet the needs of some patients, so they turn to the ED, lacking anywhere else to turn—another failure. If this is true, then the possibility that outpatient practices with patient-centered medical home designation can reduce growth in ED use is a positive finding. Research shows that patients increasingly turn to EDs to care for new acute health problems—problems historically cared for in primary care.4 Wouldn’t this care be better and more cheaply delivered in a non-ED ambulatory setting such as a patient-centered medical home?

The truth is, we don’t know. Health care delivery is rarely that simple, and studying health care use is complex. A strength of the investigation by Pines et al2 is that it tracked changes in outpatient ED visits—ED visits that resulted in discharge—and also those that led to hospital admission. The investigators found that patient-centered medical home designation had no effect on ED payments or visits resulting in hospital admission. They did find reduced growth in outpatient ED visits and payments. This is consistent with findings from other studies of the effect of patient-centered medical home designation on ED use.

What we don’t know from this study is whether the decline in outpatient ED use was accompanied by a change in the use of patient-centered medical home-based outpatient care, and, if it was, whether increases may have neutralized the relatively small savings that resulted from decreased growth in ED payments. ED visits do not occur in a vacuum, but are often preceded or followed by contact with other parts of the health care system. It might surprise people who don’t work in EDs that patients often come in seeking a second opinion about a recent diagnosis made by an outside provider, for a test or procedure their primary physician could not obtain promptly, or for reassurance. The dominant paradigm holds that consistent outpatient care can prevent ED use, especially ED use for ambulatory-care-sensitive conditions highlighted in...
the analysis by Pines et al. Few would dispute that a relationship with a primary care provider is important, especially for individuals who require ongoing chronic disease management. Yet it is not clear that primary care can or should serve as an ED substitute. In fact, it is well established that individuals who use EDs also use primary care, and often at rates comparable to that of patients who don’t use the ED.

One reason for this may be the limited capacity of the outpatient delivery system and constraints that are placed on outpatient providers themselves, such as 15-minute visit windows, limited office space, and lack of support staff. Recent work indicates that outpatient providers rely on EDs as a place to refer patients who require complex evaluations or other treatments that cannot be accomplished in a clinic. The ED can provide a setting where short-term critical interventions such as intravenous hydration and nebulizer treatments can be administered and advanced imaging can be administered.

In addition, patients can be rational actors in their choice about where to seek care. Someone with severe pain from a urinary tract infection, or who is having difficulty swallowing their secretions because of a severe pharyngitis, may be wise to seek care in the ED—especially at 2 in the morning when there are no alternatives. Multiple studies have shown that patients are savvy health care consumers. Some prefer to initiate care in the ED if they believe that their primary care provider will refer them there anyway, and others have stated that the ED is an efficient way to obtain tests and specialty access without having to miss work to attend multiple outpatient appointments.

This brings us to the next part of the policy argument for reducing ED use: health care costs. The type of outpatient ED use that may be affected by patient-centered medical home practices is not a main driver of health care expenditures compared with inpatient hospital admissions and skilled nursing care. EDs are becoming the major source of hospital admissions in the United States, and the admissions themselves are costly; however, reducing ED visits that lead to hospital admission may be difficult. Once a patient ends up in the ED and is sick enough to require inpatient care, any actions that could have been put in place to prevent the ED visit would have had to occur in the hours and days before.

Many argue that the ED is still unnecessarily expensive. The authors cite a study that suggests that for patients with similar conditions, ED care is more costly compared with care at retail clinics or in primary care offices. Yet even patients who end up with the same discharge diagnosis at the end of their evaluation may self-select to sites of care according to their severity of illness. As an example, a 55-year-old man with known heart disease and a smoking history and a 22-year-old otherwise healthy woman could both receive a diagnosis of upper respiratory tract infections at the end of a visit. Yet to arrive at this identical diagnosis, their evaluation and management during the visit would have differed.

It is also not clear that alternative sites of outpatient care can deliver the type of off-hours access and range of services that are available in EDs, especially at standard outpatient reimbursement rates. It is overly simple to equate the cost of an ED visit identified as “primary care treatable” according to a discharge diagnosis to the cost of a visit with the same diagnosis in another setting. To do so ignores the presenting symptoms of the patient, the management that was required to arrive at that diagnosis, the time of day that services were provided, and other factors. One upper respiratory tract infection is not necessarily interchangeable with another.

The analysis by Pines et al suggests that for Medicare beneficiaries, care delivered in a patient-centered medical home may reduce outpatient ED use and accompanying payments. Additional steps would be to the effects of examine patient-centered medical homes on other outcomes and to account for potential changes in costs of primary and other outpatient care delivery that might affect the investigators’ findings. And perhaps policymakers should consider that the provision of acute, “outpatient” type care in EDs may not be an anathema after all. Perhaps EDs are serving as a safety net not only for patients but also for outpatient providers.

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REFERENCES


