Fragmentation of health care delivery is widespread in the US health care system and has been associated with a variety of unfavorable outcomes in common ambulatory conditions.1 Using the Veterans Health Administration (VHA) data set, Cohen-Mekelburg et al2 applied an established method to quantify care continuity to examine the association between care fragmentation and outcomes in patients with inflammatory bowel disease (IBD), a set of less prevalent but still common chronic conditions that affect approximately 1 percent of the US population.2,3 In the study by Cohen-Mekelburg et al,2 patients with at least 4 visits with either a primary care physician (PCP), a gastroenterologist, or a surgeon within the first year since an index IBD visit were included, and their Bice-Boxerman continuity of care index score (range: 0 to 1, where 0 indicated total lack of continuity and 1 indicated total continuity) was calculated.

A low level of care continuity (Bice-Boxerman index of ≤0.25) among visits with PCPs, gastroenterologists, and surgeons in the first year after coding of an IBD diagnosis was associated with worse outcomes in the next 2 years. These outcomes included a higher likelihood of flare, as defined by requiring a course of corticosteroids (adjusted hazard ratio [aHR], 1.11; 95% CI, 1.01-1.22), hospitalization (aHR, 1.25; 95% CI, 1.06-1.47), and surgical procedure (aHR, 1.72; 95% CI, 1.43-2.07).

In using the VHA data set, Cohen-Mekelburg et al2 were able to take advantage of an administrative database of one of the only closed health care systems in the US, but the study still has substantial limitations that are worth highlighting. More than half of the patients with a coded IBD diagnosis were excluded from the analysis because they did not have at least 4 visits with a PCP, gastroenterologist, or surgeon within the first year of analysis, and 4116 patients (20.5%) saw no gastroenterologist during the study period, suggesting that IBD care for this subgroup of patients may have been obtained outside of the VHA system. In addition, as expected with administrative data, limited information was available regarding IBD phenotype and severity. However, data on the use of more advanced therapies were reported, with only 24% of patients using an immunomodulator or biologic at baseline. This finding might be interpreted as a reflection of overall low disease severity, but it may actually represent several other factors: the study period (2002 to 2014) during which the only widely used biologic were anti–tumor necrosis factor agents (the first of which, infliximab, was approved by the US Food and Drug Administration 4 years before the study period); availability of IBD specialists within the VHA system; and a relatively older and more comorbid patient population than is typical for IBD.

That lower level of care continuity was associated with worse outcomes in IBD was not surprising because this finding mirrors the literature in other chronic diseases. However, these results nonetheless inform our understanding of how we might leverage interventions for improving care continuity to improve outcomes in patients with IBD. We must consider what care continuity represents. Is it a marker of patient characteristics, of the structure of care delivery, or of some interaction of the first 2? Cohen-Mekelburg et al2 found that a lower level of continuity of care was associated with both disease-specific characteristics (immunomodulator or biologic use, diagnosis of Crohn disease, or indeterminate colitis) and patient-level characteristics that were potentially independent of the disease (ie, younger age, non-White race/ethnicity, female sex, and fewer comorbidities). Some of the same authors previously reported that fragmentation in IBD hospitalizations (readmissions to a second hospital) was associated with patient-level factors, such
as younger age, public insurance or lack of insurance, mood disorder, and substance abuse, suggesting that patient characteristics beyond the IBD severity were associated with care fragmentation. There is likely an interaction between structural barriers and patient characteristics—not just disease severity and between socioeconomic factors and comorbidities—that leads to a higher degree of care fragmentation in certain patient populations.

With this information in mind, it may seem surprising that Cohen-Mekelburg et al² found that the association between low levels of care continuity and worse outcomes strengthened when they limited their analysis to visits with gastroenterologists or that the association no longer held when they analyzed only PCP visits. This result was likely because most decisions regarding IBD management are made by a gastroenterologist, in contrast to many other chronic conditions that are primarily managed by PCPs. This observation has driven the concept of a specialty medical home for IBD, housed within the domain of gastroenterologists rather than PCPs.

In one such IBD specialty medical home at the University of Pittsburgh, the gastroenterologist rather than the PCP takes responsibility for care coordination and uses a team-based care approach that includes a nurse coordinator, an advanced practice practitioner, a dietitian, a social worker, and a psychiatrist. After initiation of this care model, enrolled patients experienced decreases in emergency department visits and hospitalizations as well as improvements in disease activity and quality-of-life scores. The sustainability of such a model relies on aligning the interests of clinicians and payers. However, because most patients with commercial insurance receive care in systems without such an alignment in place, funding to support specialty medical homes is often lacking. After all, little to no reimbursement is available for many of the services a multidisciplinary team provides, especially in a specialty context. The VHA is a notable exception to this, however. It has invested heavily in patient-aligned care teams for primary care, and therefore a specialty medical home for IBD specialty care may be feasible at VHA.

Coordinated team-based care, rather than care continuity defined by physician, may be the key to improving the outcomes of patients struggling to engage care. Because of practical considerations, a patient with a high level of care needs (for example, a patient with severe disease manifestations, frequent flares, and psychiatric comorbidities who needs both frequent regularly scheduled visits and access to disease-specific urgent care) may not be able to see the same clinician on each visit. If this patient, however, has access to a clinician who is a member of a well-coordinated, well-trained care team, the outcomes may be better than for a patient who is restricted to seeing the same clinician each time but must do so less frequently or after an extended wait; this latter situation may be more likely in a traditional model in which the patient sees only a single physician for every visit.

This study by Cohen-Mekelburg et al² has shown that, by 1 measure, a lower level of care continuity is associated with worse outcomes in IBD. These outcomes cannot be improved with a more robust treatment armamentarium alone. We need to identify the particular aspects of care delivery that are associated with favorable outcomes and to ascertain whether novel models of care, such as gastroenterologist-led multidisciplinary care, offer promise to improve the care delivered and the outcomes realized for patients with IBD.

ARTICLE INFORMATION
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