ADVANCES IN IBD

Current Developments in the Treatment of Inflammatory Bowel Disease

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Medical Homes for Patients With Inflammatory Bowel Disease

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G&H Why is there a need for a new model of care for patients with inflammatory bowel disease?

MR A new model of patient care for inflammatory bowel disease (IBD) is needed because care of this disease has become increasingly complicated and fragmented. Patients have IBD at the peak of their lives—the disease is usually diagnosed between the ages of 15 and 35 years—and although IBD is their primary disease, it has many impacts (ie, medically, physically, behaviorally, and potentially surgically). IBD is a complex disease. In the traditional care model, the gastroenterologist serves as a consultant and works with other providers in the health care system, including primary care doctors and surgeons, so patients have to go from one stop to another on a fragmented journey of care for this complex disease.

Another reason that a new care model is needed is the realization that the utilization and cost of these patients can be quite high, not only from disease management itself (because of medications, diagnostic testing, and surgery), but also because some of these patients are visiting the emergency room and being admitted to the hospital quite often, in what is referred to as unplanned care. Much of this expensive unplanned care may be avoidable, and, to date, the US health care system has struggled to adequately address this issue. From the payer's perspective, IBD has one of the highest disease costs per member per month.

G&H What is meant by a medical home (and specifically an IBD medical home)?

MR The primary care model of medical homes has emerged over the past decade in the era of health care reform and the Affordable Care Act. Until recently, there have not been any specialty medical homes. A specialty medical home, specifically a patient-centered medical home for IBD, involves the following: (1) a principal provider who is a gastroenterologist, (2) collaboration with a payer or insurance company around the cost of the patient, (3) a team of providers under the direction of the principal care provider who, in addition to providing IBD care, manages the whole patient (eg, behavioral health, social well-being, pain management, surgery), and (4) incorporation of information technology (eg, remote monitoring and telemedicine to keep the patient at home or in school without having to make multiple trips to the doctor).

It should also be noted that a medical home is not actually a physical home; a medical home is more of a virtual concept. It is whole-person care through the concept of a home environment in which everything the patient needs is in one place.

G&H Are there different models of medical homes for IBD patients?

MR Starting in July 2015, my colleagues at the University of Pittsburgh Medical Center (UPMC) and I designed a population-based IBD medical home, in which the gastroenterologist serves as the principal provider of the patient and provides whole-patient care using a single insurance company. We realized that one of the biggest unmet needs for IBD patients was the behavioral health

of the patient. As such, a psychiatrist codirects the IBD medical home with me. Recently, an IBD pediatrician and team were added to expand the model to whole-life care, from birth to death.

Around the same time as the start of the UPMC medical home, Dr Lawrence Kosinski (from Illinois Gastroenterology) designed a novel approach to IBD care with the development of Project Sonar. This unique system incorporates a population health management tool for IBD across multiple states with one insurance company. Essentially, this model "pings" IBD patients through a remote monitoring platform in a virtual medical home. One difference between this model and the UPMC IBD medical home is that the latter uses telemedicine and in-person visits across a single state (Pennsylvania).

To the best of my knowledge, these are currently the only IBD medical homes. There are also other novel models of IBD care that are emerging across the country. For example, the IBD center at the University of California Los Angeles has developed value-based health care for IBD patients. Such centers look at how to improve the cost of patient care by addressing utilization, appropriate implementation of medicines, and improvements in quality.

G&H How does a medical home for IBD differ from an IBD medical center?

MR The traditional IBD medical center is usually referred to as a center of excellence and is part of a large academic center. That model is built around a health care provider, for example the gastroenterologist, and relies on referrals of IBD patients to the provider via primary care physicians or other doctors. The physician is rated or paid based on relative value units (ie, the number of office visits and procedures) in a fee-for-service equation. This traditional IBD model is mainly supported by the institution or hospital, whereby downstream revenue from IBD care by surgeons, pathologists, radiologists, and so on goes to the hospital, which then gives money to the center to hire additional staff and provide program development.

The medical-home model differs in that the center of the health care universe is not the health care provider, but the patient. This model tries to figure out how to provide care that is patient-centered. The gastroenterologist does not become the referral specialist; the gastroenterologist essentially becomes the principal care provider. The collaboration is not so much with the hospital or institution, but more with the insurance company or payer, which is referring patients in a population-based way to the medical home in addition to the primary care physician and other doctors.

G&H Are there enrollment criteria for IBD medical homes, or are all IBD patients eligible to join?

MR Our medical home enrolls patients between 18 and 55 years of age, as well as children, who have either Crohn's disease or ulcerative colitis that is the primary reason for seeing a physician. This description covers the majority of patients with IBD but excludes IBD patients whose health care requirement is not primarily their Crohn's disease or ulcerative colitis (eg, a patient with IBD whose primary health care driver is his or her double lung transplant and need for dialysis). These are the enrollment criteria at UPMC; the criteria for other IBD models of care are likely different.

G&H Thus far, what are the advantages of using a medical home for IBD?

MR One of the advantages, at least from patient feedback and satisfaction scores, is that this approach covers all of the patient's needs. When patients come for their initial visit, they meet a nurse practitioner, who provides much of the education regarding preventive health vaccination; a gastroenterologist, who performs the overall care of the patient and makes sure that everything is coordinated; and a dietitian, who focuses on healthy lifestyle and nutritional care. Many patients also have stress or behavioral health needs and will meet the behavioral health team and a social worker to examine how stress can play a role in their disease. The social worker also links the patient to visiting nurses and social workers who make house calls to patients who may need additional assistance. In essence, the providers take care of the patient in person, but at the first visit begin to tie the patient's care back to his or her home and community.

Another advantage is outside-of-office care, such as (1) remote monitoring, including the use of phone applications to monitor symptoms and follow patients remotely; (2) a telemedicine portal, which involves interacting with patients via live video to touch base; and (3) nurses and social workers who make house calls to make sure that the needs of the patient are met (eg, administering intravenous medicine or fluids, checking up on the patient, performing social care work).

G&H Thus far, what limitations or challenges are associated with the use of a medical home for IBD patients?

MR In my opinion, the biggest challenge is that a medical home is a completely different model than what most specialists are used to; it is certainly a novel concept for myself. Gastroenterologists are usually trained to take care

of a single disease or organ system without being trained to be a whole-person provider, which is what happens in medical homes. Thus, one of the challenges is breaking the traditional mold, and, probably for this reason, many specialists may feel that this new approach is not an appealing way to practice because it is different from what they expect as specialty-trained physicians. For example, it has taken me time to become used to telling a patient that our team will take care of something rather than my previous approach of telling the patient to ask his or her primary care provider to take care of the issue. This is not to say that the patient no longer has a primary care provider; many patients still have a family doctor or primary care provider close to their home. The difference now is that the principal care provider (the gastroenterologist) is addressing the majority of the patient's needs, and this provider is working with the primary care provider in a medical neighborhood.

The other main challenge for specialists involves interacting with the payer and the insurance company in a shared, population-based approach. This is not a disadvantage; it is just a challenge to learn, as is trying to define alternative payment models. This care approach differs from fee-for-service payment. My colleagues and I are working on this issue right now with our payer, trying to determine whether we should use a shared risk and savings approach or different global payment/capitation plans.

G&H Has there been any research thus far on the effects of medical homes on patient outcomes?

MR There has been some research, but it has only been presented at meetings in abstract form to date; no research on our medical home has yet been published as a manuscript. In brief, the abstracts have shown an improvement in quality-of-life measures through the Short-Form Inflammatory Bowel Disease Questionnaire, as well as a decrease in hospitalization and emergency room visits by nearly 50% in the first year of the medical home, which was higher than expected.

G&H Do you think that medical homes for IBD will become more common in the future?

MR I do, although whether this model of care will still be called a medical home or by a different name remains to be seen. The reason that I think this or a similar model will likely be here to stay is that the cost of health care, especially for IBD, is rising. If gastroenterologists do not work with insurance companies to solve this problem, we will be cut out of the equation and find ourselves on the outside looking in. Therefore, I think that a new specialty care model, whether it is a medical home or not, will be important in the future for chronic disease management. IBD is one of the first diseases to use specialty medical homes for a new model of care, but there are many other medical homes being developed by specialists who manage the majority of a patient's health care.

G&H What is needed for more widespread adoption of this type of care model?

MR Ultimately, what is needed is a way for gastroenterologists and specialists to be trained that differs from the traditional approach in order to implement more quality metrics and value propositions. In addition, as specialists, we need to obtain a better understanding of the payer-provider mix and work with insurance companies to look at how whole-person care can be best provided, and not just focus on the disease. Finally, and most importantly, we need to develop a team-based concept of how to take care of the patient in a facile and effective way, and then how to scale that to a large population (potentially several thousands).

Dr Regueiro has been a consultant and on advisory boards for AbbVie, Janssen, UCB, Takeda, Pfizer, Miraca, Amgen, and Celgene.

Suggested Reading

Kosinski LR, Brill J, Regueiro M. Making a medical home for IBD patients. *Curr Gastroenterol Rep*. 2017;19(5):20.

Regueiro MD. Decreased emergency room utilization and hospitalizations and improved quality of life in the first year of an inflammatory bowel disease (IBD) patient-centered medical home (PCMH). Presented at: American College of Gastroenterology meeting; October 14-19, 2016; Las Vegas, Nevada. Abstract 69.

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