SUPPLEMENT ARTICLE

Diabetes Management Within Evolving Health Care Delivery Models: The Osteopathic Perspective

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Although the passage of the Patient Protection and Affordable Care Act (ACA) in 2010 marked the genesis of the official government initiative to improve health care quality and reduce costs, stakeholders had already enacted a transformation in health care delivery decades before. The “medical home” concept was first introduced in 1967, and the origins of the modern patient-centered medical home (PCMH) are rooted in the chronic care model introduced before the new millennium. The PCMH model represents a framework of partnerships among clinicians, patients, and their families that puts patients’ needs above all else while striving to engage patients in their own care. The collaborative efforts of various clinicians are coordinated by a strategically centralized health care practitioner, most often a primary care physician. In the PCMH model, quality of care and patient safety are paramount considerations, with data captured and used for performance evaluation and provider accountability. All of the principles integral to the PCMH model align with those that served as the foundation for many of the components of the ACA, including the centerpiece of the ACA: accountable care organizations (ACOs).

The goal of ACOs is to deliver seamless, high-quality care for Medicare beneficiaries, as opposed to the fragmented care that often results from a fee-for-service payment system in which different clinicians receive different, disconnected payments. In the nascent system, groups of providers and suppliers of services (eg, physicians and hospitals) agree to work together to coordinate care for the Medicare patients they serve, incentivized by shared savings. The most common program available to ACOs is the Medicare Shared Savings Program, in which the government sets a national benchmark that represents the amount of health care dollars allocated per patient per year. Regardless of the ownership of an ACO—whether it is a hospital, health care system, or physicians group—a 50% portion of shared savings is delivered to stakeholders on the basis of performance according to 33 nationally recognized measures assessed by the Centers for Medicare & Medicaid Services. However, “Before an ACO can share in any savings created, it must demonstrate that it met the quality performance standards for that year.” As more health care systems adopt the ACO model, Medicaid and commercial insurers are developing strategies to work with them. As of mid-2014, approximately 4 million Medicare beneficiaries were under the care of an ACO, representing an estimated 14% of the US population. Furthermore, combined with the private sector, more than 428 provider groups had signed up to participate in an ACO as of mid-2014.

Just as the ACO model aligns well with the PCMH, both of these models of
care represent an intuitive fit with the tenets of osteopathic medicine. As such, the unique perspectives of osteopathic medicine are readily applicable to the patient engagement and comprehensive care delivered in each burgeoning model. Nowhere are these concerted efforts more necessary than in the management of patients with type 2 diabetes mellitus (T2DM). Overall, T2DM affects 29.1 million people in the United States, including 8.1 million who remain undiagnosed. In addition to the documented disease-related morbidity, the mortality associated with T2DM is substantial; perennially, it is 1 of the top 10 causes of death in the United States. With the disease reaching near-epidemic proportions, the application of the principles of osteopathic medicine—in conjunction with the coordinated and comprehensive care delivered in the PCMH and ACO models—to the prevention and management of T2DM may offer potential improvements in patient care. The osteopathic tenets applicable to the prevention and management of T2DM include the removal of noxious stimuli to help the body function optimally; the role of the musculoskeletal system in disease prevention and management; the dynamic interaction of body, mind, and spirit, all of which must be addressed to maintain health and limit disease; and intrinsic and extrinsic forces that can either promote or provoke a person’s overall health.

According to a number of well-recognized disease outcome measures, PCMH programs across the country have already demonstrated improvements in health care for patients with T2DM:

- Independence BlueCross BlueShield PCMH Practices reported a 9.5% to 12% reduction in emergency department use by patients with T2DM.  
- The Pennsylvania Chronic Care Initiative reported increased screening for nephropathy in patients with T2DM (82.7% vs 71.7%; $P<.001$).  
- The Colorado Medicaid Accountable Care Collaborative achieved a 9% reduction in hospital admissions among enrollees with T2DM.  
- The Missouri Health Homes reported improvement in T2DM control measures: 22% to 47% for low-density lipoprotein cholesterol (LDL-C) level, 27% to 59% for blood pressure, and 18% to 53% for hemoglobin A$_{1c}$ (HbA$_{1c}$).  
- The Oregon Coordinated Care Organizations reported a 5% improvement in the percentage of adult patients aged 18 to 75 years with T2DM who received an LDL-C screening.  
- The California Academy of Family Physicians and Community Medical Providers PCMH Initiative reported a 50% increase in the number of patients with T2DM with controlled blood sugar levels and a significant improvement in blood pressure and LDL-C control among patients with T2DM.  
- Horizon BlueCross BlueShield New Jersey Patient-Centered Programs reported a 14% higher rate of improved control of T2DM.  

Likewise, ACOs are primed to address T2DM management, with CMS evaluating quality of care according to the following measures:

- HbA$_{1c}$: Poor control
- All-or-nothing composite: high blood pressure control, LDL-C control, HbA$_{1c}$ control (<8%), daily aspirin or antiplatelet medication for concurrent ischemic vascular disease, and cessation of tobacco use, if applicable

The PCMH approach and ACOs hold tremendous promise in implementing the principles of osteopathic medicine as a result of incentivized coordination and collaboration among various caregivers. Focusing on comprehensive disease management interventions and capitalizing on positive patient-provider relationships further underscore the value of such emerging care models among osteopathic physicians. Furthermore, in the context of these recent changes, patients are increasingly aware of costs and have essentially evolved from patients to “health care consumers,” again highlighting the importance of quality care and meaningful patient engagement. As a result, osteopathic physicians should seek to acquire new competencies that integrate the principles of osteopathic medicine in the implementation of these models.

In addition to adapting the practice of medicine to accommodate the requirements of these new models, osteopathic physicians may also need to change their preconceptions of emerging technologies to ultimately...
References


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