The Future of Glaucoma Practice

The influence of health care reform and technology on the next 10 years.

BY CYNTHIA MATTOX, MD

"Trying to predict the future is like trying to drive down a country road at night with no lights while looking out the back window."
—Peter F. Drucker

Although I do not have a clear vision of what the next decade holds, clues can be found in the recently passed (and now again contested) health care legislation and today's economic climate.

THE BUSINESS OF GLAUCOMA CARE

We all know that Medicare spending is growing far faster than the economy, a situation that is unsustainable for the long term. Spending and utilization controls have not reduced costs when applied to the aggregate of the health care system. Individual providers, certain overspending geographical areas, and hospital/physician organization systems will therefore be targeted. The tools will be profiling and value-based modifiers applied to individuals, reduced fee schedules for outlying regions, and "global payments" or capitation systems applied to Accountable Care Organizations (ACOs). All of these are in the works for Medicare payment structures that will begin in 2015. Many are already in place from private insurers across the country.

In my opinion, it is mandatory to have a physician partner and administrator who will monitor and understand the impending rules and requirements from all insurers. Each of us should encourage our state's ophthalmological society to keep all members informed and speak with one voice to fight unfair programs.

Individually, we can also prepare for change. For profiling on quality and cost, I recommend participating in quality reporting programs. The somewhat revamped Physician Quality Reporting System (previously Physician Quality Reporting Initiative) program will now have public reporting in 2012 of individual physicians, based on their 2011 participation. Most likely, the Physician Quality Reporting System will be used to generate the value-based modifier differential in Medicare reimbursement that will be applied in the future, and glaucoma care may be targeted in the first wave of affected services, due to the large variation in costs. Also, we should expect more quality improvement programs from private insurers, which are now required to spend 85 cents of every premium dollar on actual health care. They are allowed to classify the cost of quality and profiling programs as "health care," not administrative costs.

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New Glaucoma ICD9 diagnosis codes that stratify severity for open-angle suspects and the most common types of glaucoma are likely to be approved for use in October 2011. These are add-ons to the original ICD9 codes for the type of glaucoma, so additional effort will be involved in reporting these codes. On the upside, it is to be hoped that cost efficiency analysis applied to our practices will reflect risk adjustment for more severe cases.

We need not limit ourselves to joining a single ACO. Ultimately, we will likely be part of several such organizations, as they proliferate. In past capitation schemes, organized ophthalmology has been able to negotiate "carve-out" provisions for surgical ophthalmology services, and this may be an appropriate strategy in the future. It is worth our while to educate primary care physicians in the ACOs about glaucoma and diabetes and to offer to help them meet their Healthcare Effectiveness Data and Information Set measures. This effort will show our value to the ACO and help us to share in quality-based payments going forward.

THE CLINICAL SIDE OF GLAUCOMA PRACTICE

Clinical care will likely change in the next 7 to 10 years, as we develop better algorithms for the timing and type

of glaucoma intervention for various types of patients as well as early- versus advanced-stage disease. Comparative effectiveness research offers the hope of elucidating the best intervention at certain stages of disease. The cost of glaucoma care varies widely, making it a likely target for comparative effectiveness research. The Registry in Glaucoma Outcomes Research (RIGOR) study of primary open-angle glaucoma awarded to the AAO Hoskins Center for Quality Care and sponsored by the Agency for Healthcare Research and Quality has already begun, and it may guide care in the future. There will be plenty of funding for future studies. After the initial $1.1 trillion from the American Recovery and Reinvestment Act, a tax on Medicare and private insurers that begins in 2013 will annually provide an estimated $500 million in funding for comparative effectiveness research by 2015. The Patient Centered Outcomes Research Institute will direct the research and will contract with the National Institutes of Health, the Agency for Healthcare Research and Quality, and private sector organizations to conduct the studies.

Drug costs may be reigned in a bit as more generics become accepted and if Medicare gets more authority to negotiate drug costs for Part D. Still, as the cost of medications rises, patients may become more interested in pursuing surgical treatment for their glaucoma. I believe that the next generation of patients is already showing increasing confidence in technology for their care. Of course, we can all also hope for some type of disruptive technology to completely change treatment for our patients. Ten years is a long time!

THE EVOLUTION OF PRACTICE MODELS AND TECHNOLOGY

The ophthalmic practice of 2021 will need to be lean, adaptable, and flexible to incorporate cutting-edge technology that will speed throughput, diagnosis, and the use of treatment modalities. For example, I expect that visual field testing will be able to detect stimulus response directly from the visual cortex. Actual ganglion cell viability will be assessed by new forms of retinal imaging. We will have better algorithms to detect and predict progression and visual disability. Computer programs will analyze the constellation of tests to make an initial assessment and speed our evaluations. Practices will be larger with several surgical glaucoma subspecialists on the team. Comprehensive ophthalmologists and well-trained optometrists will supervise patients' medical and postoperative care. Many surgical consultations will occur through telemedicine setups, where testing is reviewed, the patient is examined, and a patient's interview occurs from a remote office location. The demands of an aging population will outstrip the supply of surgeons.

Compared to our current practice models in which we often observe patients for years or have intense relationships throughout their surgical recovery, this model may seem less intimate and less satisfying. Out of necessity, the next generation of physicians and patients will be more comfortable with technology and fewer personal doctor-patient relationships. Practices and glaucoma specialists will evolve.

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BY BLYTHE MONHEIT, MD

We stand on the verge of a new era of medicine, one that is to be closely scrutinized and regulated by government. We as ophthalmologists and specifically glaucoma specialists will face challenges and changes as never before.

We rely heavily on functional and structural testing to assess disease stability or progression. In our current payer system, conflicts exist between what we need to manage disease and what the health care system will authorize (for example, limits on the number of functional and structural tests that are allowed). This kind of conflict may become more frequent with the proposed changes to the health care system.

While some aspects of the reform are uniformly positive (Patient Protection and Affordable Care Act), other changes are of concern. Many utilize the concept that cost savings in health care directly benefit the physician. The glaucoma population is particularly at risk in this scenario. Good care requires multiple high-level tests throughout the year to determine disease stability, often multiple medications to control the disease, and not infrequently surgical intervention. This may not align well with the proposed models.

Along with our professional societies, we should strive to educate policy makers that the cost of vision loss due to undetected glaucomatous progression will burden the country with providing higher-level and more frequent health care services. Patients with low vision are more costly (46.7% increase in Medicare claims) than those with no vision loss. Mean and total health care

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costs increase from disease onset with no vision loss ($8,157) to blindness ($18,670).[1] Health care savings are the highest if vision loss is prevented.

In the current climate, innovations that will most affect our field include new technology to aid in accurately detecting progression and improved surgical techniques to attain IOPs that stop progression. Surgical options have increased, but the current devices and techniques do not yet offer a consistent IOP outcome in the low teens and are often more costly than the older alternatives.

When surgical innovations are able to attain long-term IOP control at a level that ensures disease stabilization, they will decrease the burden of medication costs on the patient and health care system. This will be the most important development in the field of glaucoma: the right surgical technique could change this from a primarily medically treated disease to a surgically treated one. Industry, clinicians, and research scientists actively pursue the development of the surgical technique that will change the landscape of our field.

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1. Bramley T, Peeples P, Walt JG, et al. impact of vision loss on costs and outcomes in Medicare beneficiaries with glaucoma. *Arch Ophthalmol.* 2008;126(6):849-856.

BY RONALD L. FELLMAN, MD

The next decade will be one of evolution as health care reform takes shape and the medical community adapts.

HOW WILL HEALTH CARE REFORM AFFECT GLAUCOMA PATIENTS?

The new health care legislation will have positive as well as negatives effects. Welcome changes will include the potential for more affordable medications, more widespread insurance coverage, better vertical integration, coverage despite preexisting illness, and no loss of insurance due to job changes. In addition, the preventive push for screening and education of the new reform package is a blessing for patients who have or are at risk of developing a "silent" disease such as glaucoma—a sneak thief of sight, especially in its early stages. The community outreach programs will be heavily involved in screening, and organizations like the American Glaucoma Society must be active on a national level in directing this difficult task.

A big negative will likely be the Centers for Medicare & Medicaid Services panel that rules by fiat and will ultimately dictate what will be paid for and what will not. We physicians will lose autonomy, entrepreneurial opportunities will fade, and cookbook medicine will predominate. Through the Accountable Care Organizations (ACOs), hospitals will have the most clout and will continue to dominate our work habits. As ACOs gobble up our practices, we will be forced to keep down costs and show accountability, and society will decide if it likes the model or not. Like most systems, it will slowly evolve.

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Whatever health care reform package prevails, we must concentrate on affordability, accountability, and accessibility. To do so, we will need one more A: adaptability. In the past 3 years, my colleagues and I have integrated electronic medical records, electronic practice management, the Physician Quality Reporting Initiative, and compliance programs. In addition, we increased our research productivity, added a satellite office, built a new main office and ambulatory surgery center with all updated equipment, and hired new well-trained doctors. We also hired outside consultants to rethink our whole practice management style. All of these changes significantly increased our efficiency. In terms of clinical practice, efficiency means performing in the best possible manner while wasting the least amount of time and effort by having and using requisite knowledge and skill. It also means producing a positive effect that is satisfactory to both physicians and patients.

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An essential is to use a commodity with maximum efficiency, and that commodity is one's medical practice. We now focus on the practice's identity, not individuals', because it is the practice that must be marketable to the new health care system. This will help us take on the government-mandated paradigm shift in medical care, which will ultimately be a change from volume based to value based, witnessed and facilitated by ACOs. Volume will become a secondary factor, a spillover from value-based care.

INNOVATIONS IN CLINICAL CARE

Pharmaceutical therapy will evolve along the lines of new implantable drug delivery systems that will last the patient several months and will be easy to replace. New compliance algorithms will take shape to boost patients' awareness of and success in dealing with their disease. A better understanding of the genetics of glaucoma will lead to gene therapy targeted against this difficult, relentless disease.

In diagnostics, we glaucoma surgeons will have the cardiologist's equivalent of their arteriogram (ie, a map of the patient's outflow system or "canalogram"). Patients with a repairable outflow system will undergo canal-based procedures. Those whose trabecular-canalicular system is beyond repair will be treated with a uveoscleral or external filtration procedure. Surgery will be tailored to the health of the remaining outflow system, not just to the diagnosis. In addition to a new emphasis on canal and uveoscleral surgery, newer means of less expensive filtration surgery will become available on a more global scale to relieve elevated IOP worldwide.

CONCLUSION

If we pay attention to the four As and our health care system evolves into a program that emphasizes outcomes and prevention, we will be able to efficiently take care of the major increase in the number of glaucoma patients. A better understanding of the etiology of glaucoma will facilitate the development of new procedures that will be simpler and less expensive to administer. As we tailor therapy to the specific defect in the outflow system, outcomes will vastly improve, and costs will decrease. It will be a great time to be a physician taking care of glaucoma patients, because we will have the means and the will to create an upbeat environment for our patients, and they will be better equipped to take care of themselves. ❑

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