Retinal PHYSICIAN

A Brave New World

The retina subspecialty is in the vanguard of changes to clinical practice and reimbursement

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Ophthalmologists specializing in the management of retinal diseases exist in a brave new world. In the Aldous Huxley novel of that title, the society of the future threatens individuality. One could argue that limitations placed on physicians by CMS, third-party payers, regulators and the legal system likewise restrict our ability to practice medicine as we see fit.

One of the limitations of our training is that it does not specifically prepare us to manage our practices as financial entities. Tradi tionally, we focus on patient care and offer services that we believe are of most benefit to patients. Over the past decade, that means our practices have acquired office-based diagnostic imaging technologies like OCT, purchased laser equipment to perform procedures in clinic settings, and allocated capital and human resources allowing us to provide medical therapies that we were not able to a decade ago.

However, we rarely understand fully the impact that these changes in treatment patterns have on the financial health of our practices. Retinal physicians increasingly need to get a better handle on how to manage their practices in a fiscally responsible manner. While not necessarily being our primary mission in life, maintaining a financially healthy practice is the best way that we can ensure continuity and access to patient care.

We recently submitted for publication a financial analysis of our office-based practice, examining revenues, expenses and profitability. In particular, we examined financial data from 2005 and compared them to 2007, after the widespread adoption of anti-VEGF treatment for wet AMD in our practices. The results were profound. While we added significant revenue to the practice in the form of more patient visits, more OCTs, and more drug injections, we had to increase our labor and other expenses disproportionately to manage the impact of these changes on physician workflow, operations, patient management, billing and collections. The net result was that, in 2007, we worked harder, increased our patient encounters, took on more expenses, and yet walked away with less money. And those activities potentially took time away from performing retinal surgeries, which turned out to be the most profitable activities that we perform.

The purpose of this article is to provide retinal physicians with:

- An understanding of how we evaluated revenues, expenses and profitability in our practice.
- Techniques that other practices may consider if they want to perform their own evaluations.
- Scenarios as to how changes in reimbursement in the future may affect the financial health of our practices, which will hopefully provide an impetus for more practices to employ tools to get a handle on their own financial situations.

UNDERSTANDING THE FINANCIAL HEALTH OF OUR PRACTICES

This article assumes that most readers have a basic understanding of how to read a financial statement and understand key terms, such as revenues, expenses and profits (or margins). For most community-based physicians, revenues are not the charges we establish for our services, but rather the net collections that we receive from government and commercial payers and patients themselves. Expenses include salaries, benefits, office space, equipment, supplies and other costs of running our businesses. Profits or margins are the differences between revenues and expenses.

While most of us know the overall "top" and "bottom" lines associated with our practices, we typically think of profitability across all of the patients, procedures and services with which we are engaged. While we may know the differences in reimbursement rates between different procedures, we rarely understand the profitability differences between services. And given the brave new world in which we operate, we believe that retinal physicians need to get a better handle on the financial implications at a more granular level.

For example, the advent of anti-VEGF treatment for wet AMD has radically changed the nature of our practice. These patients had limited treatment options in the past. Now, we may see these patients on a monthly basis, performing diagnostic procedures and injections on a frequent, longitudinal basis. As retinal physicians, our training focused more on surgical interventions rather than "medical management." Only more recently has medical management become a larger part of our practices, and many of our practices were not designed to address these shifts in patient care.

The net effect was that, from 2005 to 2007 in our practice, injection procedures increased the most (472%), followed by optical coherence tomography (414%). While we experienced significant revenue growth, expenses increased as well. So we wanted to dig deeper and understand how changes in patient volume and practice patterns really affected our bottom line.

ACTIVITY-BASED COSTING (ABC)

With the help of practice management and accounting experts, we employed a technique called activity-based costing (ABC) to evaluate our financial health. ABC is a cost calculation technique that helps organizations determine their actual costs associated with their services, based on the resources they consume. This type of accounting system has been used to calculate costs in various other healthcare outlets, including radiotherapy, laboratory testing and overall hospital management. By allocating expenses as they relate to the activity, ABC methodology paints a picture of both the revenue of an organization, as well as its expenses/profitability.

The importance of proper accounting and, more specifically, the ABC methodology can be illustrated by the airline industry. It is well known that the main reason for failure in the airline industry is the inability to assess the profitability of new flight routes. This would seem to be quite simple. However, to determine the profitability of a new flight route, "fixed" and "shared" expenses, such as luggage handling and check-in agents, must be separated from "new" and "specific" expenses, such as fuel costs and airport taxes. This can only be done accurately by the ABC methodology.

The key to ABC is that revenues and *expenses* are allocated specifically to activities that generate revenue to the business. For example, rent is not considered a global fixed expense, but rather it is allocated to how the space is being used and for what purpose. Examining rooms are matched with evaluation and management revenues, OCT exam rooms to OCT revenues, and so forth. Non-revenue generating expenses (labor and nonlabor) are reallocated based on the purpose of those expenses in supporting revenue-generating activities.

KEY FINDINGS AT OUR PRACTICE

Our analysis found that the most profitable service provided during the time analyzed was laser surgery, followed by nonlaser surgery; the least profitable service was intravitreal injections. Nonlaser vs laser surgical procedures were defined as procedures for which a laser is included in the AMA CPT code description. We also determined that office visits, OCT testing and non-OCT diagnostics (eg, fluorescein angiograms) were no longer profitable. The practice had undergone inadvertent change over the course of the two years, whereby traditional services were being replaced by newer technologies and medical processes that appeared to be revenue-positive activities for the practice.

Total practice collections increased 42% from 2005 to 2007. However, collections by practice area varied considerably.

The practice experienced considerable growth in collections in OCT (an increase of 414%) and injections (472% increase) as we treated more patients for wet AMD. The largest decline in collections came from surgery procedures and non-OCT diagnostics. This was due to the fact that the practice had predominantly shifted to providing medical care with anti-VEGF agents and partially due to a decrease in Medicare reimbursement.

Overall, the practice had a declining profit margin (-14%) from 2005 to 2007, indicating the move toward providing clinical care with increased numbers of anti-VEGF injections may not be optimal for the practice's financial health. While revenues increased significantly (driven by payment levels for anti-VEGF drugs), expenses increased significantly as well, which offset the potential "profit" associated with providing office-based injections.

While Medicare and other third-party payers typically pay for in-office administered drugs at the average selling price (ASP) plus a percentage (eg, 106% of ASP), our practice still had to incur costs related to patient scheduling, office space, product ordering, inventory management, billing and collections. We had to increase staffing and other resources in order to support these changes in patient care and collections. Thus, while it appears that anti-VEGF treatment might increase both gross revenues and profitability, one actually has to evaluate changes in costs/expenses as well to truly assess the impact on profitability associated with drug treatment. Even if we had administered a lower-cost drug alternative (eg, bevacizumab instead of ranibizumab), our expenses would still have increased — and at lower drug reimbursement levels.

It is imperative to note, however, that, regardless of revenue, expenses and profits, when the practice physicians deemed medical intervention or surgery necessary, it was provided appropriately. Patient care was not dictated by the cost or reimbursement associated with providing care.

We also collaborated with retinal physicians Timothy G. Murray, MD, of Bascom Palmer, and Paul Tornambe, MD, in private practice in Poway, CA, to evaluate the impact of changes in the clinical armamentarium on financial performance at their practices. We specifically wanted to work with them because their practices are different than ours — namely, a tertiary academic center and a twophysician private practice, respectively.

We found similar results. Both practices added expenses to address the demand for medical services. And the profitability of any individual procedure was highest for surgeries and laser procedures and lowest for office visits and imaging procedures.

HOW CHANGES IN REIMBURSEMENT MAY AFFECT OUR FINANCIAL OUTLOOK

Our brave new world is not only comprised of advances in technology, but also an increasing need for business acumen. Healthcare reform will also affect reimbursement rates from CMS and other payers for the services we provide.

Initial indications from CMS and the AAO suggest that reimbursement rates for the procedures performed by retinal physicians will be shifting in the coming years. For example, the AAO has announced that reimbursement for services involving physician time will go up, but that reimbursement for diagnostic services performed under physician supervision will likely decrease.

Time and again, we have seen that, as procedure volume increases, the AMA and CMS are more likely to scrutinize payment rates. This has resulted in lower payment rates for higher-volume procedures (eg, see cataract procedures, fluorescein angiography, OCT). **Figures 1** and **2** (OCT and injection, respectively) show trends in CMS volume of billed services and the national unadjusted Medicare Physician Fee Schedule (MPFS) amounts for OCT and intravitreal injection procedures. As you can see, OCT services increased from two million to over five million and injection services from less than 50,000 to about 800,000 from 2003 to 2007. In contrast (or response), CMS fee schedule payments have decreased 40% for OCT and 60% for intravitreal injections over this same time period.

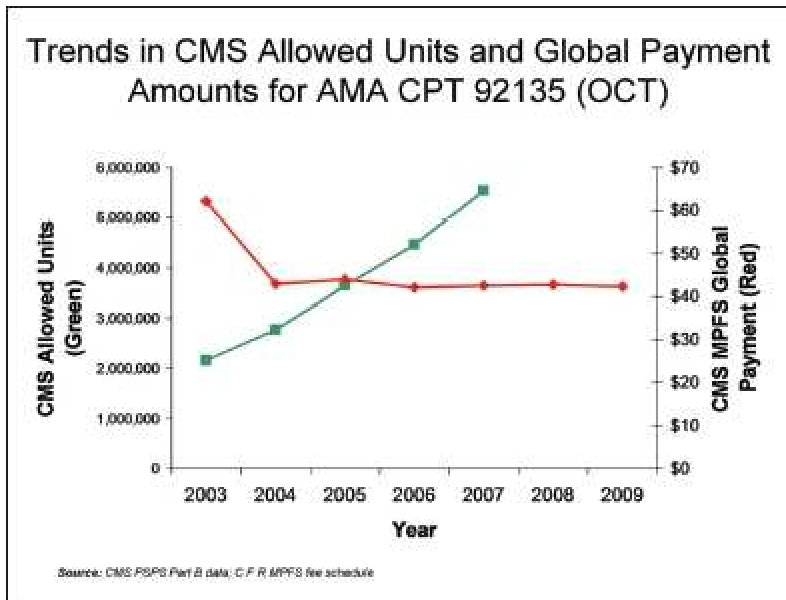

Figure 1. Trends in CMS volume of billed services and the national unadjusted Medicare Physician Fee Schedule amounts for OCT.

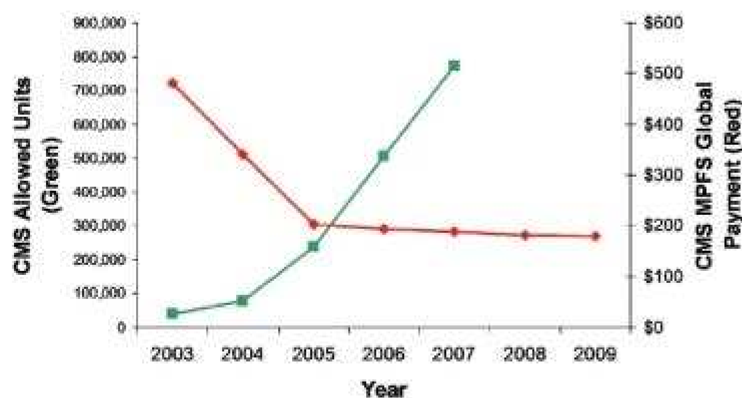

Figure 2. Trends in CMS volume of billed services and the national unadjusted Medicare Physician Fee Schedule amounts for intravitreal injections.

Furthermore, Medicare payment rates for imaging diagnostics, specifically OCT, may decrease again, as the AMA is set to establish separate CPT codes for optic nerve head and retina OCT procedures. While we do not know the precise changes that will be in effect by January 2011, the AAO has indicated that reimbursement for more labor-intensive services, such as office visits and surgeries, will be increasing at a rate higher than reimbursement levels for diagnostic services.

So when thinking about the future, it is not enough to simply think about the sustainable growth rate (SGR) and the MPFS conversion factor. Retinal physicians need to examine more closely current practice patterns, clinical trends and the reimbursement rates that affect their practices as new treatment modalities become available to the community.

HOW CHANGES IN CLINICAL PRACTICE AND MEDICAL INNOVATION MAY AFFECT OUR FINANCIAL OUTLOOK

Looking forward, 2011 will be a significant year during which the retina community will have to confront new data and make fresh treatment decisions in their AMD clinics. Three new phase 3 trials are about to reveal new data on the safety and efficacy of ranibizumab as compared to medical interventions such as bevacizumab and VEGF Trap-Eye (Regeneron), as well as a surgical modality commonly described as epimacular brachytherapy. None of these trials cross-compares the safety and efficacy of the new treatment modalities against each other. So the community will be left to make comparative interpretations based on the data presented to them as compared to ranibizumab. If the perceived safety and efficacy among the new modalities is comparable to the most commonly used FDA approved anti- VEGF agent (ranibizumab),

we will be left to make decisions based on the quality of life improvements, as well as the economics of the treatment options available to us in our arsenal.

Hence, more than ever it is very important for every retina specialist and clinic across the United States to understand their individual practice economics and to be able to implement measures that will enable them to sustain their financial health and give their patients access to the most cost-effective treatment modalities.

"WHAT IF.?" SCENARIOS

Since we had the benefit of completing an ABC analysis at our practice, we were able to conduct sensitivity analyses, also known as "what if?" scenarios. For example, we were able to model the financial implications if: (1) Reimbursement rates for intravitreal injection procedures decreased; (2) All reimbursement rates decreased across all services (for example, due to some doomsday scenario where there was no repeal of the cuts in the SGR); or (3) Wet AMD therapies became more durable and resulted in the need for fewer injections per year.

Tables 1 through **3** summarize the impact on practice profitability if each of the above scenarios were to happen. In **Tables 1** and **2**, we simply decreased the level of collections for each service based on a certain percentage and evaluated the impact on revenues and profits. In **Table 3**, we decreased the number of injection procedures and OCTs and adjusted revenues and profits. It is important to note that the only thing we changed in our financial analyses were these parameters. For example, we did not change staffing levels or other costs in response to these potential changes in reimbursement or treatment patterns.

Table 1. If Injection Reimbursement Declines (Decrease in collection for each injection procedure/CPT)

IF Injection Reimbursement Declines	THEN Injection Profits Decline	THEN Total Profit Decreases
-5%	-19%	-3%
-10%	-37%	-6%
-15%	-55%	-9%
-20%	-75%	-12%
-50%	-187%	-31%

Table 2. If ALL Reimbursement Declines (Decrease in collection for every procedure/CPT/HCPCS code)

IF All Reimbursement Declines	THEN Total Profit Decreases
-5%	-22%
-10%	-44%
-11.5%	-51%
-15%	-66%
-20%	-88%
-22.5%	-99%

Tables 1 through 3

Table 3. If Injection Durability Improves (Less frequent visits resulting in fewer injections and OCTs)

IF Injection Frequency Shifts from Monthly to	THEN Total Profit Decreases
Every 3 months	-80%
Every 6 months	-101%
Once per year	-111%

Changes in reimbursement levels would have a dramatic impact on the financial health of our practice. A 50% reduction in reimbursement for injection procedures would eliminate all profits from injection procedures. It would also reduce overall practice profitability by 31%. A reduction in all reimbursement levels across the board (akin to the –20% reduction due to lack of repeal of the SGR) would be even more difficult. A reduction of 22.5% across the board would just about eliminate all profits of the practice.

Changes in clinical practices can also have a profound effect. If wet AMD treatments were to shift from monthly injections to a longer interval (every quarter or once per year), the practice would see a considerable reduction in office visits, imaging procedures, injection procedures, and drug revenue. A significant reduction in the number of these services (and associated revenue/profit) would quickly eliminate all profits or result in financial loss to the practice. This is due to the significant costs (mostly labor, office space, equipment costs, etc.) that we have devoted to providing these services. Obviously, it would prompt a careful examination of how we might restructure to address these changes.

CONCLUSIONS

It is difficult, if not impossible, to understand how changes in reimbursement may affect the financial health of your practice if you do not have a handle of the current situation. Instead of examining revenues and profitability on a practice-wide level, we recommend an ABC approach, which allows practices to evaluate and compare financial implications at the procedural level. Armed with this information, practices will be in a better position to evaluate the financial implications of changes in technology, practice patterns and reimbursement levels in order to maintain a healthy financial practice that provides the best clinical care in the brave new world. **RP**

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