
PRACTICE PERFECT

BUSINESS OPERATIONS

Moneyball, Ophthalmology, and Statistics

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It's unbelievable how much you don't know about the game you've been playing all your life," said Mickey Mantle. This is the quote that opens the 2011 motion picture *Moneyball*, which stars Brad Pitt as Billy Beane, general manager of the Oakland Athletics. *Moneyball* is the story of his use of statistics to take a group of undervalued baseball players on a run of 20 straight wins, an American League record, in the 2002 season. I enjoy baseball, having watched and helped coach my two boys in Little League. Indeed, when traveling, I make it a point to catch a professional game in as many stadiums around the country as I can. And I liked the story in this movie so much that I recently watched it again. It was on the second viewing that the parallels to ophthalmology hit me over the head—like a bat!

The Story Behind *Moneyball*

The Oakland A's were coming off a good 2001 season but were faced with a challenge in 2002, as three of their star players were leaving for other teams that offered higher salaries; furthermore, the team's owner refused

to budge on the limited payroll he had approved for the team.

Given these constraints, Mr. Beane was forced to use an unconventional approach. He hired as assistant manager a Yale economics graduate who believed in the use of key statistics, particularly the percentage on-base average, to find undervalued players rather than the traditional approach of using subjective scouting reports. The theory, based on the work of Bill James and others, is known as sabermetrics,¹ which Mr. James defined as the "search for objective knowledge about baseball."

The record-setting season vindicated the manager's philosophy of the importance of the empirical analysis of baseball. In fact, the owner of the Boston Red Sox was so impressed by the A's performance in 2002 that he offered Mr. Beane the position of general manager to bring sabermetrics to his organization. Though Mr. Beane opted to stay with the A's, the Red Sox adopted the methodology anyway and went on to win



HOW DID BILLY BEANE

DO IT? "It would be malpractice not to do research," said Mr. Beane, whose team, the Oakland A's, enjoyed a record-breaking winning streak in 2002, thanks to its use of sabermetrics. And now Eye M.D.s have access to three tools that make it easier to use statistics for analyzing the performance of their practices.

the major league championship in 2004—their first since 1918!

Mr. Beane's type of statistical analysis is now widely used throughout professional baseball.

The Ophthalmology Connection

Much like the Oakland A's, Eye M.D.s are in an era of constrained resources. Since 2002—coincidentally the year of the A's record season—average Medicare reimbursement for physicians has not kept pace with inflation. In addition, insurance rates for patients through the new health care exchanges in many cases do not match Medicare rates or are associated with high deductibles. The increase in patients with vision plans

is also further eroding reimbursement levels. On top of that, there is a trend toward paying for the value or quality of services rather than volume.

This year, we can participate in three initiatives sponsored by the Academy that will enable us to begin addressing these challenges by statistically analyzing our practices.



Visit the AAOE at www.aao.org/joinaaoe.

Three Essential Tools

■ **AcadeMetrics: Ophthalmic Financial Benchmarking.** Compare your practice to similar practices on a number of metrics, including profit margin, staffing expenses, patient encounters, collections per MD/OD, and measures of collections efficiency.

Benchmarking provides perspective. It is critical that each practice pay keen attention to the critical financial indicators. However, it is not enough to know the practice's "numbers"; it is also important to know how they compare with a benchmark of similar organizations. Physicians are used to this concept, as that is how they practice medicine. Derek Preece—who works for BSM, the consulting firm that helped develop the new Academy/AAOE benchmarking survey—gives the following analogy, "If a patient is found to have a blood pressure of 180/110, his doctor compares that figure with the benchmark of 120/80 and knows that there is a problem. Without that comparison number—the benchmark for healthy blood pressure—the patient's reading wouldn't have much meaning."

This year's financial benchmarking survey has been completely redesigned with the help of a vendor that specializes in benchmarking. The new version makes it easy for each practice to input its data, which will be used to generate the practice's AcadeMetrics values, analogous to the statistics used in sabermetrics. After entering its own data, a practice will have access to the AcadeMetrics database, which it can use to see how it measures up against a group of similar practices. The more participation in the project, the more comparisons will be possible by groups, for example by practice type (academic, private practice), size, subspecialty, and locale.

■ **AcadeMetrics: Ophthalmic Salary Survey.** As practice budgets shrink, we—like Mr. Beane—must right-size staff compensation. Contribute data and find out how your practice compares. The more who participate, the more meaningful will be the data specific to your locale.

Three Winning Tools

ACADEMETRICS: FINANCIAL BENCHMARKING. Put your financial data to work.

Access. Available to Academy and AAOE members who submit data.

Cost. None.

Deadline. Submit your data by June 1.

For more information, visit www.aao.org/benchmarking.

ACADEMETRICS: OPHTHALMIC SALARY SURVEY. How does your practice compare?

Access. Available to Academy and AAOE members who submit data.

Cost. None.

Deadline. None.

For more information, visit www.aao.org/salarysurvey.

IRIS REGISTRY. Use this to report PQRS, to benchmark, and to do much more.

Access. U.S. Academy members.

Cost. The Academy is initially offering multiyear, fee-free access to those who sign agreements and meet the data submission requirements in 2014.

Deadlines. If you want to report PQRS measures via EHR, you must submit your signed agreement by June 1 and your EHR system must be mapped by Aug. 1.

For more information, including how to use the IRIS Registry to report PQRS without an EHR, visit www.aao.org/irisregistry and www.aao.org/pqrs.

■ **IRIS Registry.** The third venture involves the IRIS Registry, the nation's first clinical eye disease registry.

Validate your clinical performance. The statistical analysis of process and outcomes measures in ophthalmology will help us improve the care we provide. This is particularly important in an era of increasingly limited reimbursement that rewards value more than volume. Improving patient care can reduce costs, too. As W. Edwards Deming, a statistician and leader in the era of quality improvement in the last century, stated: "When people and organizations focus primarily on quality, quality tends to increase and costs fall over time. When people and organizations focus primarily on costs, costs tend to rise and quality declines over time."

Simplify reporting for PQRS and meaningful use. The program will initially focus on the clinical quality measures associated with the PQRS and EHR meaningful use programs. Over time, it will expand as it adds other measures, including outcomes across all subspecialties.

Registries in other specialties have proven popular, as seen with that of the Society of Thoracic Surgeons, which has the longest-running clinical registry, with a participation rate of 90

percent. And early interest in the IRIS Registry suggests a similar enthusiasm in ophthalmology for an easy-to-use clinical registry.

Don't Strike Out

Like the Oakland A's, we will find ourselves in need of winning strategies in an era of constrained resources. We no longer have the luxury of a subjective analysis of practice management or clinical quality.

This year is shaping up to be a challenging one for ophthalmologists. Make it the year you incorporate statistical analysis into your practice by participating in the financial benchmarking survey, the staff salary survey, and the IRIS Registry. And watch *Moneyball*. It's got something for everyone: baseball, Brad Pitt, and a great story, which I enjoyed just as much the second time. The valuable lessons imparted for our profession should make it eligible for CME credit. ■

1 The term sabermetrics is derived from the acronym SABR, Society for American Baseball Research.

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