Look Beyond Your Practice's Bottom Line

Two tools – **gap analysis** and **root cause analysis** – can work together to tell you where and why you might be lagging financially.

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It has been a struggle the past few years for most family physicians to balance revenue and expenses while maintaining quality. How is your practice doing? Do you know if your costs are too high or your productivity is too low compared to others? Is your overhead too high? Do you collect poorly? What differences between your practice and others may explain these performance gaps? What can you do to reverse these contributors to losses? We hope this article will help you answer questions like these.

Physicians are not trained in accounting or financial management. However, we are skilled in gathering pertinent clinical data, using diagnostic tools, applying "normal" standards or benchmarks, and exploring potential explanations in the evaluation and management of patients. These same principles can be applied to your practice's financial management. Diligence in monitoring your revenue and expenses, proficiency in applying financial tools and in selecting comparable financial and operational benchmarks, and systematic investigation of possible causes of poor performance will help you get the information you need to act. ➤

TIMOTHY COOK

Gap analysis helps you see where your practice performance does not measure up to benchmarks.

This article describes two financial tools – *gap analysis* and *root cause analysis* – to help you better understand your practice's performance and to highlight some financial and operational benchmarks that are necessary to complete these analyses. We will first discuss these tools, then illustrate their utility by showing what they revealed when applied to our practice, an academic, single-specialty family medicine group.

Family physicians' skill at collecting patient data and making diagnoses also can be applied to their practices' financial health.

To get a complete sense of your practice's financial weak points, the authors suggest using both gap analysis and root cause analysis.

Gap analysis standardizes your practice's financial performance to show you how it compares to others regionally and nationally.

What the tools do

Gap analysis is an accounting management tool that identifies key causes of financial loss, highlighting the relative contribution of each factor.[1] It standardizes your practice performance to widely used financial and operational measures and evaluates them against comparable benchmarks. The difference between your measure and the benchmark is the "gap" that gives the tool its name.

Gap analysis might show you, for instance, that your overhead percentage is too high in comparison to a benchmark figure. It can also lead you to analyze the factors that make up your overhead percentage by comparing components of your expenses with expense benchmarks and components of your revenue with revenue benchmarks to help identify specific parts of your practice that may be out of line. But gap analysis does not tell you *why* your practice performs below comparable benchmarks; root cause analysis helps with that.

Step one: Monitor your performance

The first step in evaluating your practice's financial health is keeping track of practice revenue, expenses and productivity. If your practice does not have a budget, you should consider preparing one (see "Think about a budget" on page 37 for help).

Once you are tracking financial data, you can zero in on the performance measures that you want to monitor. These are typically ratios such as relative value units (RVU) per visit or staff members per full-time equivalent (FTE) physician.

In deciding which performance measures to monitor, you need to consider what data you have access to and how accurate and reliable it is. You will naturally want to select measures that facilitate identification of potential targets for improvement, such as poor collection, low physician productivity or high overhead. And finally, you will need to select measures for which appropriate benchmark figures are available. For examples of performance measures that match commonly available benchmarks, see "Key financial and operational measures," page 35.

We recommend measuring costs as a percentage of net medical revenue (NMR) because this ratio measures efficiency directly. Other frequently used efficiency ratio denominators include work RVUs, encounters or FTE physicians. Productivity measures should ideally be tracked per FTE physician or, if you employ midlevel providers, per FTE provider. Practices with high managed care penetration, where capitation revenue accounts for a significant percent of NMR, should benchmark fee-for-service collection rate and gross collection rate separately.

Step two: Select benchmarks

Once you've identified pertinent financial and operational measures to help gauge your practice's performance, the next step is selecting external benchmarks derived from comparable practices. If available, local benchmarks are best,

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since they will account for geographic variations in practice standards, wages, rent, reimbursement rates and managed care penetration. We have identified four organizations that collect financial and productivity data on family physician groups (see "Sources of benchmarks" on page 36). Some have samples large enough to provide regional data. Understanding how each organization compiles and presents its data will help you choose the most appropriate benchmarks.

You might want to select more than one set of benchmarks for your comparative analysis. For example, the 2005 Medical Group Management Association (MGMA) Physician Compensation and Production Survey contains data on ambulatory encounters by group type, by hospital ownership, by geographic section, by years in specialty and by gender.

Moreover, you might identify multiple measures from one or more benchmark data sets to

KEY FINANCIAL AND OPERATIONAL MEASURES

Financial measures
• Total gross charges per FTE physician, encounter or work RVU
• Net medical revenue per FTE physician, encounter or work RVU
• Fee-for-service NMR per FTE physician, encounter or work RVU
• Capitated NMR per FTE physician, encounter or work RVU
• Net capitated co-payments and non-covered services payments per FTE physician, encounter or work RVU
• Total physician expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total staff expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total non-payroll expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total allocated expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total fixed expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total variable expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Total operating expenses per FTE physician, encounter or work RVU, or as a percentage of NMR
• Net medical income per FTE physician, encounter or work RVU
• Total compensation per FTE staff
• Number of capitated contracts
• Relative distribution of payer mix
• Average capitated payment per member per month (PMPM)
• Bad debt as a percentage of charges
• Total adjustments and write-offs as a percentage of charges or per physician FTE
• Rent per square foot
Operational measures
• Annual encounters per FTE physician
• Annual work RVUs per FTE physician (inpatient, outpatient and procedural RVUs)
• Work RVUs per encounter
• Patient-care hours per FTE physician
• Encounters per patient-care hour
• Patient panel per FTE physician
• New patients per time period
• Staff per FTE physician
• Percentage of charges entered more than seven, 14 or 21 days after encounter
• Aged accounts receivable > 90 or 120 days (total amount and percentage of total) per FTE physician
• Gross accounts receivable days by payer
• Number of days of gross FFS charges in accounts receivable
• Procedures per FTE physician per time period
• Relative distribution of evaluation and management codes by physician
• Square feet per FTE physician

Abbreviations: FTE = full-time equivalent RVU = relative value unit NMR = net medical revenue FFS = fee for service

evaluate the performance of one particular aspect of your practice. For example, annual RVUs, encounters, patient-care hours and gross charges per physician FTE all measure your overall productivity, but each reflects a unique aspect of your practice. Performance variability among these measures reveals different underlying causes; thus target interventions would differ.

Once the data set is selected (for example, we chose family physicians doing obstetrics, practicing in medium-sized, single-specialty groups in the West), you need to pull out the corresponding financial and operational benchmark measures. You should use the most current measures, update these annually and remember that these benchmark measures simply represent aggregate barometers for performance. You'll need to consider practice variations when applying benchmarks, irrespective of data source. Finally, benchmarks are often reported in quartiles. Choosing the appropriate cutoff threshold will depend largely on your performance standard and expectations. We suggest the median value as a reasonable level for initial comparison.

Root cause analysis helps identify the major causes of performance problems by breaking them down into components that can be benchmarked in turn.

Monitor performance measures that help identify targets for improvement and for which benchmarks are available.

Once you've selected your performance measures, you'll need to track down external benchmarks from comparable practices; the four sources listed at the right are a good starting point.

Step three: Identify performance gaps

Benchmarking will inevitably uncover gaps where your practice is performing below

SOURCES OF BENCHMARKS

National Association of Healthcare Consultants (NAHC)	
(202) 452-8282 www.healthcon.org	• "Medical and Dental Income and Expense Averages" report produced annually • Single-specialty report: $99 for members, $249 for nonmembers • Full report: $495 for members, $795 for nonmembers • Database includes more than 550 family physicians • Report includes information on charges, receipts, accounts receivable, contractual disallowance and many expense categories by region • More representative of smaller group practices than of larger ones, and more representative of these practices than other surveys are
Medical Group Management Association (MGMA)	
(877) ASK-MGMA www.mgma.com	• Offers a number of surveys, including *Cost Survey*, *Physician Compensation and Production Survey*, and *Academic Practice Compensation and Production for Faculty and Management* • Report prices: $250-$300 for members, $300-$350 for affiliate members, $450-$500 for nonmembers • Databases represent more than 1,000 organizations, 35,000 physicians and nonphysicians, and multiple specialties with data presented in a number of categories • Limitations: low survey response rate, and sample reflects large multispecialty practices and varies significantly by region (e.g., few California FP practices)
University HealthSystem Consortium (UHC)	
(630) 954-1700 www.uhc.edu	• Represents 90 academic health centers • Operational Data Base represents more than 70 UHC institutions • Includes primarily operational metrics with few financial indicators • Does not report net medical revenue or standardize productivity per physician • Pricing: members only, based on institutional rate
Medical Economics magazine	
(973) 944-7777 www.memag.com	• "Continuing Survey" reports annually on limited aggregate practice expense categories and charge coding patterns • Limitations: no description of data source: sample size, geographic, specialty and group size distribution

Practice variations must be considered when applying benchmarks, irrespective of data source.

benchmark levels. For instance, we found that our nonprovider expenses were running at 96 percent of NMR, while the MGMA benchmark was 76 percent. By contrast, our provider expenses were virtually at the benchmark level. This told us where to look for problems we were having with overall expenses.

While comparing with benchmarks is useful in pointing out problem areas, it may provide only limited information about the key causes of the problems. This is where root cause analysis comes in. It helps you identify the major causes of performance problems.

Step four: Root cause analysis

Root cause analysis as formulated by the Health Care Advisory Board is an iterative process that enables you to break down each problem found in the initial gap analysis into components that can be benchmarked in turn.[1] For instance, if net income per FTE physician is low, presumably NMR per FTE is low or practice expenses per FTE are high or both. And if NMR per FTE is low, presumably NMR per visit is low or the number of visits per year per FTE is low or both, and so on. Each measure may have multiple contributory factors; thus a root cause analysis can produce a tree diagram. While all practices share certain branches, the number of branches and smaller nodal points of your tree will reflect your practice environment, priorities and data availability. (To see an idealized version of a root cause tree diagram, access the online version of this article at http://www.aafp.org/fpm/20051100/33look.html.) We can best explain root cause analysis by example.

Case illustration

The University of California San Francisco, Lakeshore Family Medicine Center is community based and has six FTE family physicians, one FTE family nurse practitioner and 22 FTE support staff. Eleven physicians make up the physician FTEs. They include six family physicians who deliver babies, three who do not and two fellows. The faculty are in practice two to seven sessions per week. Eighty percent of the 23,000 average annual encounters are handled by the six family physicians who deliver babies. The clinic site has about 9,300 square feet of space with 19 exam rooms, two procedure rooms, nine physician offices, a conference room, a staff lounge and a medium-sized waiting area. Fifty-eight percent of the patients are insured by capitated plans (including commercial, Medicare and Medicaid), 10 percent by fee-for-service (FFS) Medicare, and 30 percent by preferred provider plans; less than 2 percent are self-pay or FFS Medicaid. The space is leased and staff employees are paid by the UCSF Medical Center, which charges the department for these costs. Billing and collection are done internally.

Part of our clinic's root cause analysis is illustrated on page 38, showing selected measures from our faculty practice. Although we have an academic practice, this same analytical approach can be applied to any practice.

Our total practice expenses were 17 percent higher than the MGMA benchmark, with nonprovider expenses accounting for the entire variance. The 52 percent variance in higher staffing expenses suggests that we may be overstaffed compared with MGMA prac-

- Benchmarking will likely point out problem areas where your practice is underperforming.
- A root cause analysis can be depicted with a tree diagram, as multiple contributing factors are identified for each performance measure being examined.
- The number of branches on your tree diagram will reflect your practice environment, priorities and data availability.

THINK ABOUT A BUDGET

Although it's not needed to complete a gap analysis, a budget is a fundamental financial management tool that you might want to attend to before tackling the tools in this article. Two useful *Family Practice Management* articles on the subject are "Three Steps to an Effective Practice Budget" (January 2004) for preparing a budget and financial statement, and "Determining the True Value of a Family Practice Residency Program" (June 2000) for samples of expense accounts to track and for a downloadable financial statement model.

Focus your root cause analysis on performance gaps that have the potential to be changed.

For example, the authors were able to renegotiate their lease after a root cause analysis revealed they were paying higher rent than comparable practices.

tices. However, a closer examination reveals that although we do have slightly higher FTE staff per FTE physician (3.68 versus benchmark of 3.55), the majority of our higher staffing expenses are the direct results of an academic, institutional, staffing cost structure. Drilling down further than this diagram shows also revealed that staff overtime cost contributed significantly to the higher staffing expenses, which led us to implement a number of management interventions to control staff overtime.

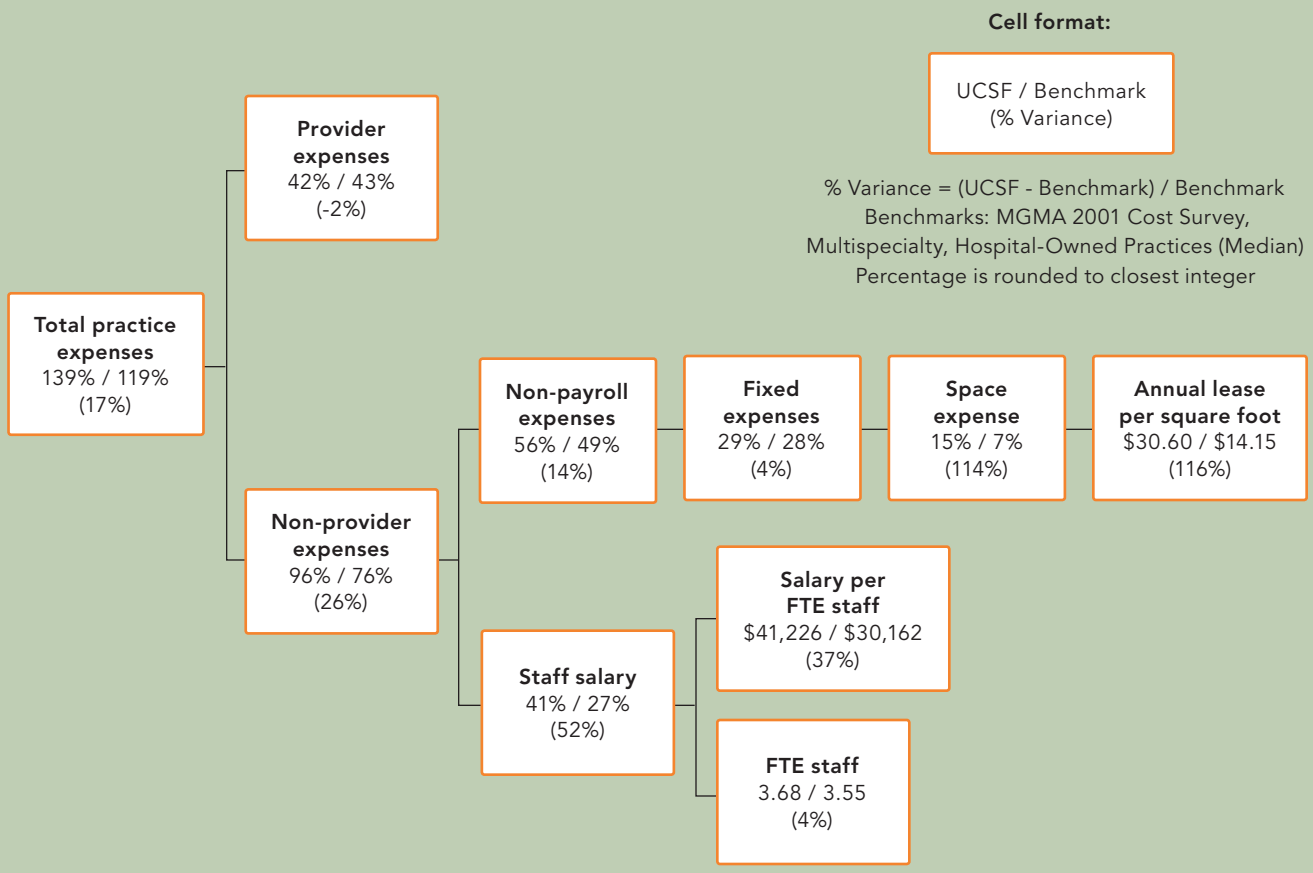
One might also conclude that because our fixed expenses are comparable with the benchmark, there is no need to look further. However, when we went ahead and broke down all of our fixed expenses, we found that our rent per square foot was more than double that of comparable practices in other markets as well as compared with the local market. This information directly facilitated an aggressive renegotiation of our lease.

To maximize the effectiveness of the tool, focus your root cause analysis on performance gaps that are amenable to change and that have a high perceived return on investment. For example, a common financial gap is NMR per encounter. A drill-down examination may uncover any of a number of root causes, including low gross charges per visit due to an old below-market fee schedule, low NMR per adjusted gross charges due to poorly managed accounts receivable, late claims submission, or suboptimal collection of co-payments at the point of service. But consider all potential causes in your analysis, including ancillary service charges per visit, charge entry lag days, collection rate by payer, adjustments and write-offs, denial patterns, and coding patterns. You won't know what problems are there until you look. FPM

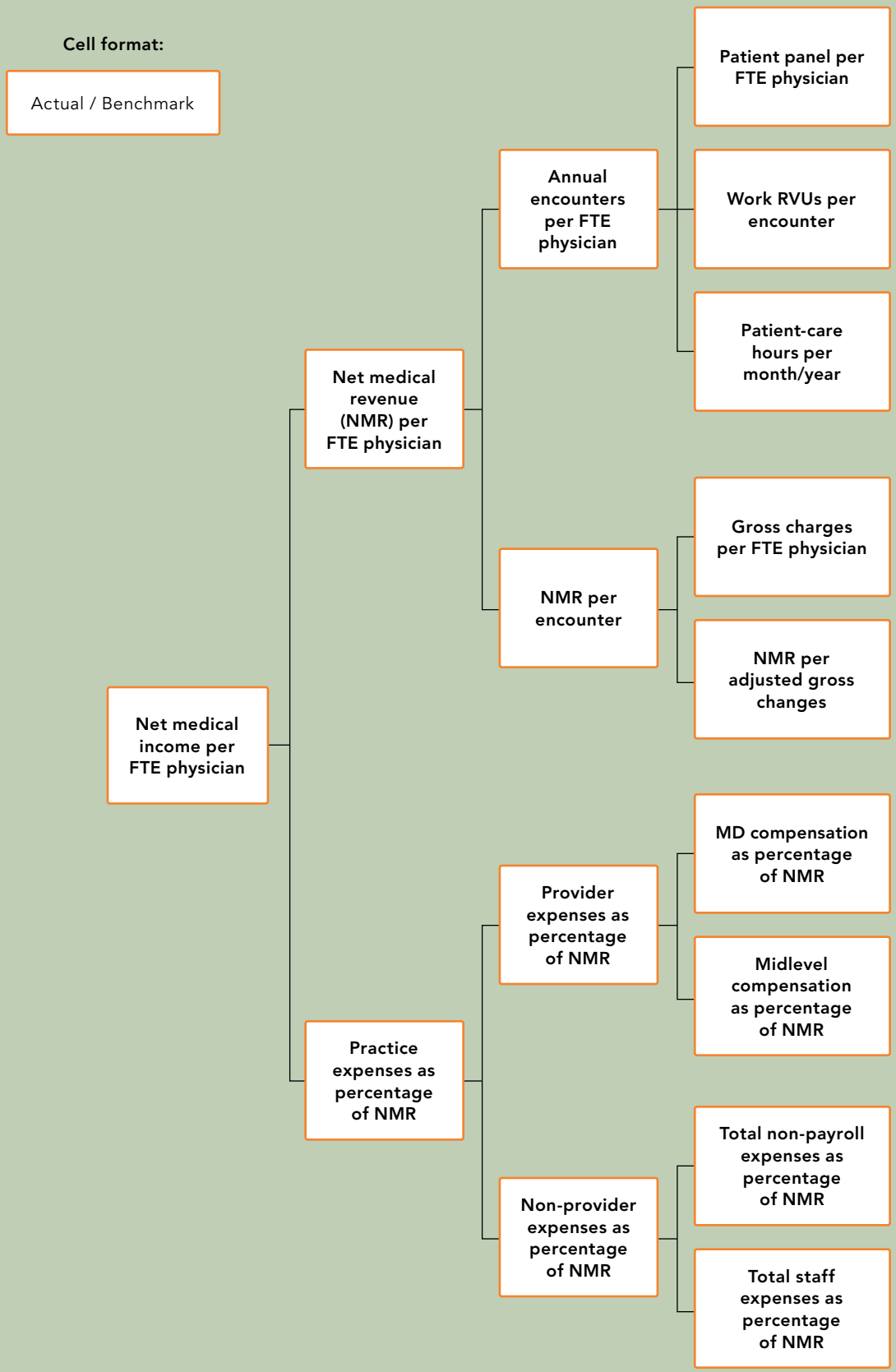
Send comments to **fpmedit@aafp.org.**

1. Practice Performance Gap Analysis Workbook: Identifying Root Causes of Owned Practice Losses. Washington, DC: The Advisory Board Company; Sept. 12, 2000.

LAKESHORE FAMILY MEDICINE CENTER TREE DIAGRAM



IDEALIZED ROOT CAUSE TREE DIAGRAM



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