Analyze Your Data Using the Pareto Concept

This 80/20 rule can help improve productivity.

BY JON A. HULTMAN, DPM, MBA

Multiple plans of action are often put forward following office meetings or strategic planning retreats. These create a long list that needs to be reduced to a manageable size. The challenge lies in deciding which ones you first want to focus on. To understand the importance of "focus," Sun Tzu gives a good example in his essay entitled *The Art of War*. This essay was written in 500 B.C. "The enemy must not know where I intend to give battle. For if he does not know where I intend to give battle, he must prepare in a great many places. For if he prepares to the front, his rear will be weak, and if to the rear, his front will be fragile. If he prepares to the left, his right will be vulnerable and if to the right, there will be few on his left. And when he prepares everywhere, he will be weak everywhere."

Obviously, one does not want to be weak everywhere. You will need focus, and it is important to know where to focus your effort to achieve the greatest results. If you focus on 100% of your planning list, you will be "weak everywhere" and lose out on the type of leverage that a narrower focus can deliver. Fortunately, there is a way to decide where to focus your effort to achieve the biggest "bang for your buck."

When facing a "where to focus first" decision, it is helpful to be familiar with the "80:20 business rule"—a concept that was initially hypothesized by Vilfredo Pareto, an Italian economist born in 1906. Pareto described the distribution of wealth in his country as being unequal with 20% of the population holding 80% of the country's wealth. In the 1930s, Pareto's finding was applied to business by one of the early gurus, Joseph Juran, who focused on manufacturing quality. He determined that 20% of the defects in automobile manufacturing were the cause of 80% of the process problems in the industry. As has been verified by multiple researchers, this 80:20 relationship seems to be universal and holds true for most types of business decisions that we face.

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Examples of this 80:20 relationship that can be found in medical practices include the likelihood that: 1) 20% of your staff cause 80% of your HR problems, 2) 20% of your

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staff provide 80% of your production, 3) 80% of your revenue is generated during 20% of your office hours, 4) 20% of your patient visits account for 80% of your revenue, 5) 20% of your CPT codes generate 80% of your revenue, and 6) 20% of your expense categories generate 80% of your costs. A slight variation of this theme is detected when implementing a large project. When taking on large projects, the first 10% and last 10% of most jobs consume 80% of the project's total time. You are likely to be familiar with this phenomenon if you have ever been involved in either an office or a home remodeling project. This explains why many construction companies run out of money before the last 10% of a project is finished.

Obviously, if you plan to focus on finding ways to increase the productivity of your practice, you will first want to identify the 20% of patient visits, CPT codes, productive staff members, and key office hours that account for 80% of your revenue. This is important because in today's computerized medical practices, doctors face information overload. The amount of data generated by computers can be overwhelming, making it difficult to know just where to focus. Understanding the Pareto concept and knowing that 80% of the data with which you are bombarded is basically "trivial" should give you confidence to narrow your focus to this vital 20% of the data that will have the most significant impact on your practice.

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Perhaps the most practical application of the Pareto concept in a business is its use in re-engineering processes. The Toyota Company found that at any given time, when using traditional processes, 80% of its employees were "not working." Traditional processes were those defined as being arranged as a dependent series of tasks. This means that workflow in these processes was arranged in a sequential manner; one step needed to be completed before moving on to the next. Because of the sequential order of its processes, Toyota employees were often temporarily idled while waiting for tasks to be completed by employees engaged earlier in their same processes. Any idled employee held up the next person in the workflow—and so on, compounding the delay.

Toyota estimated that 30% of its employees' time was spent "waiting for something." In medical practices, this time spent "waiting for something" often comprises even more than 30% of an employee's time. This "down time" is twice as unproductive when two employees are idle while exchanging information with one another. In addition to this time spent waiting, 25% of the time, employees are performing tasks that add no actual value to the final outcome of a process, and another 25% of the time they are using inefficient methods.

Consider the billing process which extends from the first phone call, to check-in, to the treatment room, and then to the billing office—often with later, follow-up steps to address under-payments or non-payments. When the billing process becomes backed up and seemingly creates the "need" to hire additional employees, consider the reality that only 20% of any new employee's time is actually utilized in assisting the billing process. This is why staff size for billing is often much larger than necessary, especially in large groups with higher patient volumes and greater complexity and whose processes are distributed through multiple office locations.

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When striving to make your practice more efficient, both in terms of treatment and the business office, simply focusing on the 20% of activities that achieve 80% of your results will give you the greatest leverage. This often requires 1) examining your processes and eliminating tasks that add no value to the final outcome 2) cross-training staff, and 3) converting series processes to parallel ones so that cross-trained employees who are temporarily idled can assist in areas where any tasks may be backing up. Once you have addressed the vital 20% of areas, you can focus at your leisure on the other 80% of less essential activities. This type of focus is defined as *continuous quality improvement* and will aid your practice in staying efficient and more profitable as you grow. **PM**

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