

Does one size fit all? What do you do if your patient panel is too big – or too small? The experts answer these questions and more.

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he number of patients a physician can effectively care for is not unlimited. Having a panel of manageable size promotes higher quality care by enabling physicians to see their patients in a timely manner without inevitably off-loading them to other providers, which can reduce satisfaction, increase costs, reduce revenues and adversely affect clinical care. Although a standard panel size for all family physicians does not exist, physicians can define their ideal panel size based on the following equation:

Panel size × visits per patient per year (demand) = visits per provider per day × number of days worked per year (supply).

For example, if a physician provides 20 visits per day, 220 days per year, and his or her patient population averages two visits per patient per year, the ideal panel size would be 2,200.

In a previous article ("Panel Size: How Many Patients Can One Doctor Manage?" *FPM*, April 2007), we offered an overview of how to calculate your current panel size, how to estimate your ideal panel size and how

to make adjustments. In this article, we answer physicians' frequently asked questions about panel size.

Number of patients per day

Q: What is the optimal number of patient visits a doctor can provide in one day?

A: The number of visits a physician can provide in a day is variable and influenced by several factors, particularly the visit length. Visit length can be optimized by having patients see their own doctor. When patients see their own doctor, the physician doesn't have to spend time establishing credibility, building rapport and gathering an entire history, since much of that work has already been done. As a result, the visit tends to be shorter, and the physician can increase the number of visits in a day.

Visit length can also be optimized by eliminating interruptions during patient visits. Interruptions can be eliminated by making sure before the visit that all equipment and information will be available when you need it. If all of the exam tools are accessible and in the same place, and if test results and other clinical data are in the chart, the time spent looking for these items is eliminated.

A standard panel size for all family physicians does not exist, but physicians can define their ideal panel size using a simple equation that shows supply and demand

In environments where physicians receive the same salary, their panel sizes should be equal.

in balance.

The best environments allow physicians to set their own panel size and reap the corresponding income. Some physicians may need a refresher on how to focus on the visit (see "Focusing on Today's Visit," *FPM*, June 2003). This can significantly improve the effectiveness of the visit and shorten the visit length.

Visits per day can also be increased through better and more focused teamwork supporting the clinician before, during and after the visit. In addition, visits can be increased if nonappointment work (e.g., telephone calls, refill requests and staff management) can be reduced for the clinician. This requires an extensive review of all the nonappointment processes that occur in the practice and a meticulous study of the tasks involved and who should be doing them.

Salaried environments

Q: How does a salaried-physician environment affect panel size?

A: A fixed-salary environment can be challenging. If each doctor has a fixed salary, then, to be equitable and fair, the panel size has to be fixed as well. However, because of differences in patient acuity, there may be various times of the year when one physician's panel will generate more demand and the physician will feel that his or her salary is unfair.

Practice style also plays a huge role in salaried environments. Doctors may claim that their personal style or their patients' style requires longer visits, which translate to fewer visits per day, which translate to a smaller panel. The risk is that the physician's personal style will begin to dictate the panel size, and then panel size becomes a subjective exercise based on preference, not based on equitable workload.

Some organizations that reimburse physicians with a fixed salary may adjust panel expec-

tations based on the number of exam rooms available, the number of support staff and the acuity of the panel. (See the original article for more advice about making adjustments.)

In our experience, the best environments do not rely on fixed salaries, and they allow physicians to choose their own panel size. This choice, of course, comes with two requirements: Providers have to see their own patients, and their patients cannot wait. Continuity and a no-wait culture are built into the system and are immutable. So, physicians in these environments who choose a large panel size and commit to seeing those patients as their needs arise can obtain higher reimbursement. Escalating reimbursement thresholds can be set for patient satisfaction and for selected clinical outcome measures to ensure they are not adversely affected. In such environments, physicians whose style is conducive to a small panel size are free to practice in that way but receive less reimbursement.

Dealing with too many patients

Q: What if a physician can't see all of his or her patients?

A: If a physician's panel is too large, there are serious consequences. Initially, the additional demand creates waiting time, which creates rework, redundancy, no-shows, a greater need for triage, etc. Eventually, the physician has to offload work to other providers within the practice, which increases the other providers' visit lengths because those providers and patients are not as familiar with one another. Offloaded work also has an adverse effect on individual provider and practice revenue. All these actions will reduce patient satisfaction and increase visit return rates. Ultimately, patients may seek care outside the practice.

Growing a panel

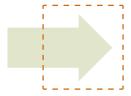
Q: How do you grow a small panel if you're new to a practice?

A: For the new physician, there are three obstacles to growing the panel: 1) the physician needs time to get used to the system; 2) all patients are new, so they require more time; 3) new patients generate more return visits than established patients.

We suggest that you fill every other appointment slot in the new physician's schedule for the first two to three weeks. The result is that each new patient gets an

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The most important lesson is that supply and demand must be balanced.

appointment that is twice as long as the standard. Then, gradually release the in-between slots so they can be booked with return patients.

At the same time, measure the ratio of return patients to new patients so that you can answer the following question: For every new patient, how many shorter return appointments will we need? Then, monitor the panel equation. It will not give you an accurate panel size number at the outset because of all the variables involved, but you should track it to better understand your system. Also monitor the wait time for an appointment with thresholds and make adjustments as needed (e.g., if the wait passes five days, you will release half of the in-between slots, and if it passes 10 days you will release all of the in-between slots). At six to nine months, you should have far less variation, a better view of the panel and a physician who is closer to having a full practice. The number and rate of new patients will be reduced, the return rate will stabilize and all slots will be available.

FPs vs. peds vs. IMs

Q: What's the right panel size for family physicians, pediatricians and internists? A: Ideal panel size is not dependent on specialty. For example, a new pediatrician with a practice primarily focused on newborn care can manage fewer patients than a veteran pediatrician with a panel consisting mostly of teenagers. What makes the difference is how the individual physician functions, given his or her patient population.

Assigning panels to specialists

Q: Can specialists have panels? A: Yes, specialists can have panels that define the limits of their workloads; however, we often use the term "caseload" to describe them. The term "panel" implies holding onto patients forever, whereas the term caseload implies a more temporary relationship. Caseload limits can be determined using exactly the same formula we use for panel size.

Service agreements between primary care physicians and other specialists can have a huge effect on visits per patient per year in specialty care because they help ensure appropriate, complete handoffs between physicians.²

The effect of no-shows

Q: How do no-shows affect panel size? A: Patients who do not show up for scheduled appointments affect the supply side of the equation (specifically, the provider visits per day). Since no-show visits are scheduled but do not materialize, they waste visit capacity. As a consequence, some groups will measure the no-show rate and adjust expected provider visits per day downward. The risk, of course, is that this method provides no incentive to eliminate the no-shows. If no-shows are high, practices should take steps to reduce them or schedule more visits than they have room for with the expectation that a certain percentage of patients will not show up.

A panel for midlevels

Q: What is the right panel size for midlevels? A: Every organization has to make a fundamental decision about the expected workload of midlevel providers. Some practices treat midlevel providers the same as physicians and expect them to carry the same panel size. Other practices expect fewer visits per day from midlevels, so the panel size expectation is also lower. For example, a full-time midlevel might be expected to carry half of a physiciansized panel. The best option will depend on your individual practice's circumstances.

Adjusting for OB care

Q: All of the physicians in our practice do obstetrics. How does this affect the panel size? **A:** The extensive time required for OB care will reduce the ideal panel size, so we recommend removing this work from the demandsupply equation. If the obstetrics work is separate from the primary care work (for example, each physician devotes one day a

When a physician's panel is too large, it can create chaos within a practice.

Panel size depends not on the physician's specialty but on how the physician functions and who the patients are.

No-shows reduce the number of visits a physician provides per day, which deflates the panel size unnecessarily.

week to OB call), then you can simply subtract that time from the supply side of the equation and subtract those patients from the demand side of the equation. If the obstetrics work interrupts the office practice, then you'll need to estimate the time spent and subtract it from regular office time.

Adjusting your panel each year

Q: How often should we calculate panel size?
A: Because of constant turnover in practices, panel size should be determined monthly. If a practice uses the fourcut method to determine panel size (see the original article) and tracks this information via a monthly panel report, then it can determine net panel gain or loss per month.

New patients

Q: How should a practice assign new patients?

A: New patients should be assigned to physicians whose panels are below the group's target or below the ideal panel number determined by the equation. This makes the assignment more objective. An easy way to do this is to create a "new patient" appointment type in your scheduling system, with only eligible providers having that appointment type. Alternatively, you can give your scheduler a list of eligible providers.

Popular vs. unpopular physicians

Q: In some practices, there are popular and unpopular physicians. Should we allow patient choice, or should we assign patients to panels so they will be relatively even? A: While patient choice is critical, it will result in some panels exceeding the ideal panel size. Once the limit is exceeded, it would be unwise to allow a patient to select an overpaneled physician.

Patient factors

Q: Can patient factors affect panel size?
A: Yes, age and gender can predict visit rates and, as a consequence, affect the demand side of the equation. Acuity can also affect visit length. In an environment where physicians are paid fixed salaries, these factors are critical in determining an equitable workload. At the same time, in environments where income is variable, acuity and other patient factors are less important, particularly when acuity represents increased workload and is reflected in higher relative value units per visit.

Accounting for patient turnover

Q: How can you appropriately estimate the panel size in a practice where most patients are transient or belong to Medicaid with a limited eligibility period? Would it be better to determine panel size based on unique patients seen in the last 12 months or the last 18 months?

A: In practices that have a high rate of patient turnover,

we would suggest measuring panel size based on the unique patients seen in the last 12 months. Using more than 12 months will overestimate the panel, and using less than 12 months will underestimate the panel.

The visits per patient per year may be lower than in practices with normal turnover, which would make the ideal panel size higher. On the other hand, practices with high patient turnover will also have to deal with more new patient visits, which require more time and effort. This reduces the number of visits per provider per day, which affects the demand side of the equation. To counter this, we would suggest that you mitigate the physician work associated with new patient visits as much as possible by delegating tasks to nurses or medical assistants, for example.

Academic environments

Q: In an academic environment, how should panel size be calculated for a supervising physician or a resident? A: The ideal panel size in any environment is based on the "demand equals supply" formula discussed earlier. The Accreditation Council for Graduate Medical Education's Residency Review Committee has established visit number requirements for both new and experienced residents. For example, family medicine residents are required to complete 1,650 visits over their three years, with 150 visits occurring the first year. This data can help you calculate the supply side of the equation. Then, using either historical data or an estimate of the average number of visits per patient per year, you can calculate the ideal panel size for residents. The same formula will help you determine panel size for supervising physicians as well, but you should recognize that the office time of supervising physicians is diluted by the amount of time they devote to other academic duties.

In certain academic environments, panel size can be calculated for a team of linked providers. In this situation, the team's supply is simply the sum of each individual supply.

The bottom line

The most important lesson regarding panel size is that supply and demand must be balanced. If a physician's actual panel is smaller than what the panel size equation suggests, he or she will cost the practice money. If the physician's actual panel is larger, it will cost the practice in other ways, such as decreased continuity, efficiency and patient satisfaction.

Send comments to fpmedit@aafp.org.

- 1. O'Hare CD, Corlett J. The outcomes of open-access scheduling. Fam Pract Manag. February 2004:35-38.
- 2. Murray M. Reducing waits and delays in the referral process. Fam Pract Manag. March 2002:39-42.