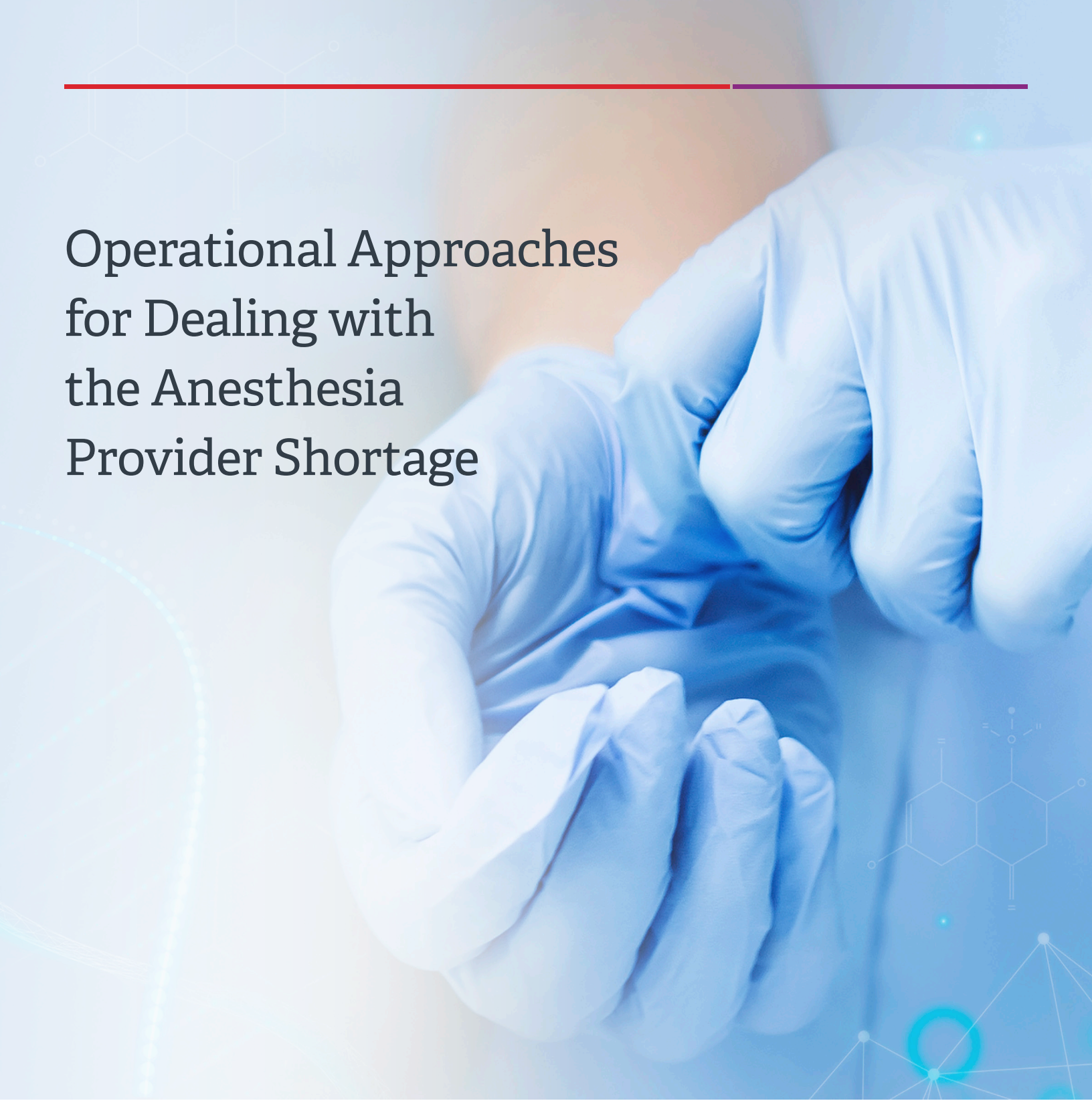
Operational Approaches for Dealing with the Anesthesia Provider Shortage



ECG MANAGEMENT CONSULTANTS

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With a nationwide shortage of anesthesia providers that is expected to worsen before it improves, hospitals are discovering that their vision of a fully staffed anesthesia department is really a mirage. Large stipends alone will rarely be sufficient to ensure all the anesthesia coverage a hospital desires. Hospitals will need to optimize their use of anesthesia providers, not simply to keep the stipends in check but also to avoid the curtailment of necessary services.

Across the country, hospitals and health systems are providing increasingly larger stipends for anesthesia coverage, and by all indications, this trend will continue for the foreseeable future. At the heart of this trend is a shortage of anesthesia providers resulting from:

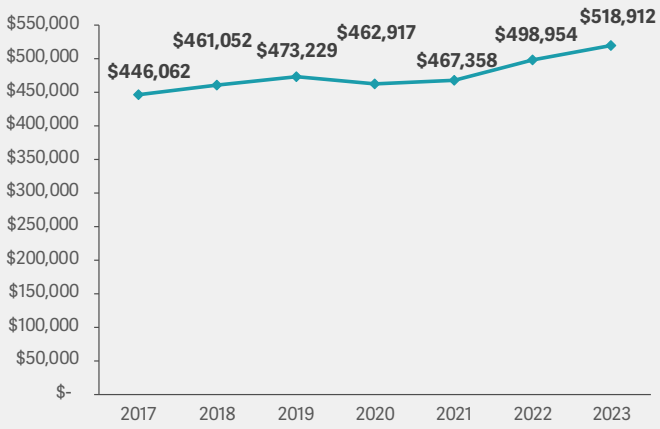
- A steady expansion in the number of the rooms requiring anesthesia coverage and their hours of operation.
- An insufficient number of anesthesiologists and CRNAs coming out of training programs.

These market forces have produced a bidding war for anesthesia providers as hospitals struggle to keep ORs and procedure rooms—their main profit centers—open and productive. While the bidding war has driven up salary levels for anesthesia providers, it does nothing to produce more of them, nor does it address critical OR productivity shortfalls. This means that for years to come, anesthesia providers will remain in short supply even as the stipends get larger.

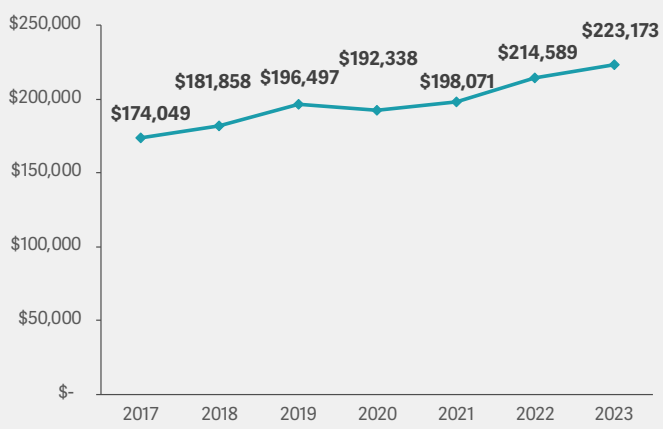
To manage this situation effectively, existing anesthesia providers must be utilized at optimal efficiency. This will require difficult decisions that many hospital leaders have traditionally been reluctant to make.

The shortage of anesthesiologists and CRNAs has caused compensation levels for these providers to increase steadily. Because revenues have remained essentially flat, there is a growing gap between these revenues and the cost of the providers. Hospitals are being asked to cover this gap via financial support arrangements.

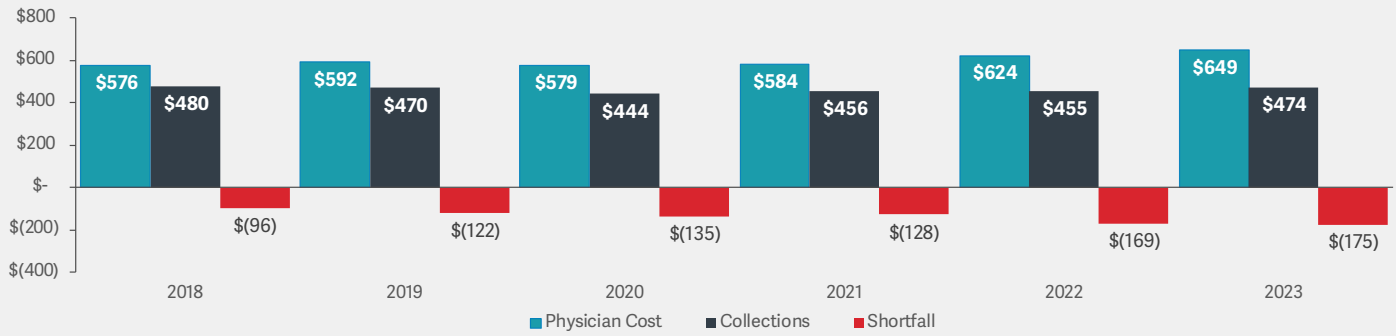
MEDIAN PHYSICIAN COMPENSATION[1]



MEDIAN NURSE ANESTHETIST COMPENSATION[1]



ANESTHESIOLOGIST COSTS VERSUS COLLECTIONS ($000s)



Note: 4% lag adjustment applied to 2022 data based on MGMA 2022–2023 data.

THE ANESTHESIA SHORTAGE AND RUNAWAY COSTS

In a typical free market, prices serve to balance the supply and demand of goods and services. If the demand for a particular resource increases, its price will trend upward, leading suppliers to find a way to produce more of it. At the same time, the higher price means buyers will find a way to consume less of it than they otherwise would. Thus, the production and consumption of the resource are brought back into balance.

Unfortunately, that's not how things play out in the market for anesthesia services.

Instead, we have a dynamic where the supply of anesthesiologists cannot effectively flex upward to meet the increased demand because it is artificially constrained by the number of GME-funded residency positions. By all indications, there are not enough residency positions to replace the number of retiring

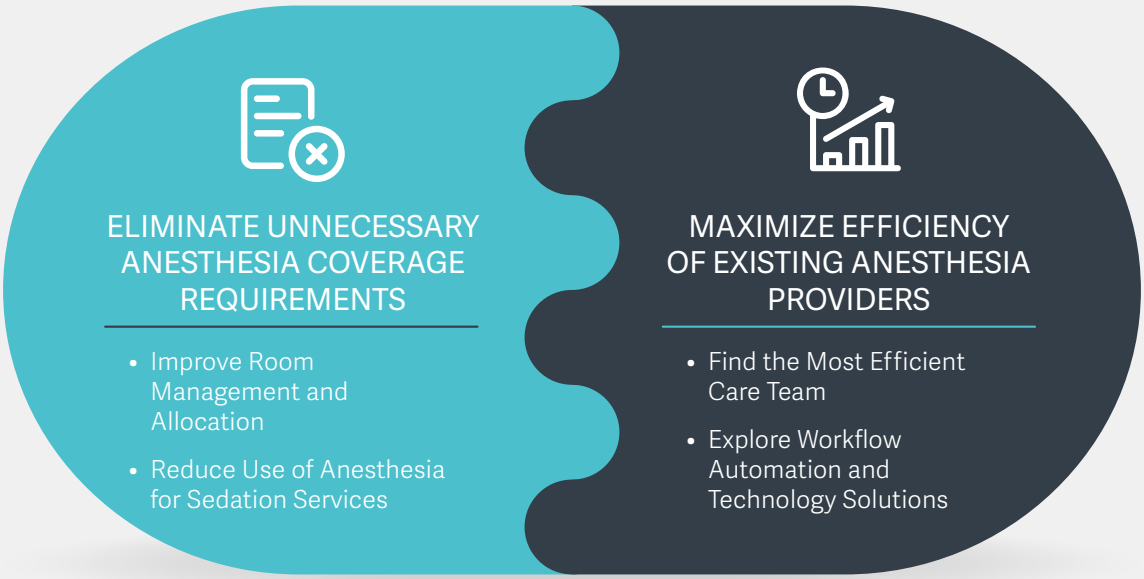
[1] Based on MGMA DataDive Compensation, 2018–2023 Data. Physician cost figures assume 25% for malpractice insurance, benefits, and group overhead.

anesthesiologists. In fact, ECG estimates that for every anesthesiologist retiring over the next 10 years, there will be only 0.80 anesthesiologists replacing them. In other words, over the next decade, we expect that the total number of practicing anesthesiologists in the US will shrink by roughly 5,000, or 12%.

CRNA and anesthesia assistant (AA) training programs are scaling up, but they're only part of the solution, as it will take years before any significant supply return is realized. As a result, anesthesia groups are asking for and often receiving larger hospital stipends in an effort to recruit and retain providers in an increasingly tight labor market, while hospitals are faced with no viable choices other than to pay. When they don't, we typically see the all-too-familiar anesthesia group "death spiral" in which the group's funding runs short, anesthesiologists leave for greener pastures, and the system ends up closing rooms and/or paying for large numbers of locums at exorbitant prices.

WHAT HOSPITALS CAN DO

Hospital leaders must acknowledge that anesthesia providers are a critically scarce resource and that the inability to find them in sufficient numbers—at virtually any price—is a constraint within which they must learn to operate. The goal is not simply to limit the size of the anesthesia stipend; the overarching objective is to ensure that the facility gets the maximum mileage out of this scarce resource so that it doesn't become a barrier to providing services. Below are some effective and proven strategies hospital leaders may pursue.



Improve Room Management and Allocation

The single most effective way to maximize the effectiveness of anesthesia providers is to improve perioperative efficiency. One key move hospital leaders can make is to become more diligent in managing the availability of rooms offered to proceduralists. Frequently, the number of rooms in use varies considerably from day to day, and there is often an excessive amount of downtime throughout the day. The typical justification for this excess capacity is to provide an accessible, welcoming

environment for referring physicians. While that is a legitimate business objective, it is becoming less feasible to maintain excess capacity and/or to allow inefficient processes to burden productivity, given that a single OR represents roughly $500,000 in annual staffing costs alone.[2]

Hospitals will need to develop more efficient scheduling practices to maximize the utilization of existing anesthesia providers. This means having difficult conversations on sensitive topics such as block time allocation and reassignment and flip room utilization. While these topics are nothing new, the context in which they are being discussed is shifting the narrative between hospital leadership and perioperative clinicians. We are no longer talking about just the high cost of excess room capacity; instead, we are also acknowledging the inability to provide excess capacity at all, as the anesthesia providers needed to cover those rooms simply do not exist.

Fortunately, these operational adjustments do not need to be a win-lose situation. Fostering collaboration among anesthesia providers, surgeons, nurses, and other healthcare professionals will help to produce a well-coordinated team that enhances efficiency and supplies streamlined anesthesia services. This will in turn reduce delays and improve overall efficiency in the OR, resulting in improved capacity planning and enhanced throughput.

Improved OR efficiency will enable hospitals to accommodate greater volumes with the same resources, as shown in the illustration below from an actual ECG client. Conversely, enhanced efficiency will allow hospitals to accommodate the same volumes with fewer OR resources. This not only results in cost savings but also allows the hospital to continue providing services when faced with the diminished availability of anesthesia providers.

Main OR	Current Metrics	Low 60% Utilization	High 80% Utilization
Total Available Minutes	1,800,000	1,800,000	1,800,000
Average Case Length (Min)	100	100	100
Total Used Minutes	720,000	1,100,000	1,400,000
Total Unused Minutes	1,080,000	700,000	400,000
Prime Time Utilization	39%	60%	80%
Average # Cases/OR/Day	2.4	3.6	4.7
Potential New Cases w/ Avg Case Duration		3,800	6,800
Incremental IP Cases		1,597	2,857
Incremental OP Cases		2,203	3,943
Total Annual Cases	8,265	12,065	15,065
Collections per Case	$2,322	$2,322	$2,322
Incremental Collections		$8,825,000	$15,792,000

[2] Estimated conservatively at $90,000 for one OR technician, $125,000 for one OR nurse, and $285,000 for one CRNA.

Reduce the Use of Anesthesia for Sedation Services

Recent years have seen a migration of sedation administration away from nurses and the rendering physician in favor of anesthesia providers. In many cases, this trend will need to be reversed so that anesthesia providers can focus on supplying the services only they can furnish.

While it makes sense for the anesthesia department to "own" sedation from the perspective of developing protocols and training other providers on proper sedation techniques,[3] its providers will typically be too scarce a resource to spend much of their time personally providing this service. Here again there will likely be pushback, requiring the hospital to be able to make a strong case for the imperative for change.

Find the Most Efficient Care Team

As mentioned earlier, CRNA and AA training programs are scaling up, both in terms of class size and total programs in existence. While this will increase the total number of anesthesia providers available, it will make anesthesiologists the minority among these providers, which will have implications on how hospitals staff their anesthesia departments.

In the immediate term, CRNA compensation is rising even faster than that of anesthesiologists, which has changed the math for the most efficient coverage models. Therefore, existing care team models may need to increase the average number of providers their anesthesiologists supervise, and CRNAs will increasingly function as independent providers participating in call panels. There is no single, perfect coverage model; it will always depend on room types, the facility's physical layout, the volumes and complexity of cases within each room, and the mix of providers on your team. But the old "just use more CRNAs" adage is not universally applicable.

These changes will require providers to stretch themselves and expand their skill sets: anesthesiologists will either need to oversee more CRNAs or step back into MD-only room models; CRNAs must function with less physician oversight; and PAs and NPs will be asked to handle an increasing array of tasks such as pre-anesthesia testing, patient education, medication review, and preoperative orders. There may be pushback from these providers, as well as from proceduralists who have grown accustomed to working more directly with anesthesiologists. This will require resolve and excellent communication from leadership regarding the need to distribute the workload and ensure basic anesthesia needs are met.

[3] Abdelmalak et al, "A Blueprint for Success: Implementation of the Center for Medicare and Medicaid Services Mandated Anesthesiology Oversight for Procedural Sedation in a Large Health System" in Ambulatory Anesthesiology, July 2022.

Explore Workflow Automation and Technology Solutions

Finally, hospitals should look for innovative ways to use technology as a means of enhancing provider productivity and optimizing resource availability. For example:

- Telemedicine for preoperative assessments and postoperative follow-ups
- Remote monitoring of patients to extend the reach of anesthesia providers and improve resource allocation
- Anesthesia information management systems and automation tools to streamline documentation, reduce administrative burdens, and enhance overall efficiency
- Predictive analytics to plan for the caseload at 24 and 72 hours
- Standardized anesthesia protocols related to disease-based testing matrix, pre-emptive analgesia, obstructive sleep apnea, postoperative nausea and vomiting, and fluid replacement

The cost per anesthesia provider will continue to rise as long as supply and demand remain misaligned, which is the foreseeable future.

THE NEED FOR CHANGE

The cost per anesthesia provider will continue to rise as long as supply and demand remain misaligned, which is the foreseeable future. This will place more pressure on organizations to adopt the tactics described above. In order to implement any of these approaches, hospitals will need to change workflows and procedures that are deeply entrenched. However, in a time of unprecedented financial pressures on hospitals, misallocating a resource as costly as anesthesia is simply unsustainable.

Moreover, given the scarcity of this resource, hospitals face the prospect of constantly chasing the elusive goal of a fully staffed anesthesia department without ever attaining it—and paying ever-increasing subsidies all the while. More fully integrating your anesthesia team into your perioperative leadership structure ensures these increasingly scarce resources are deployed efficiently, fully maximized, and highly engaged.

ABOUT ECG

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