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Shortages and Sustainability of the Anesthesia Workforce: What Does Cataract Surgery Have to Do With It?

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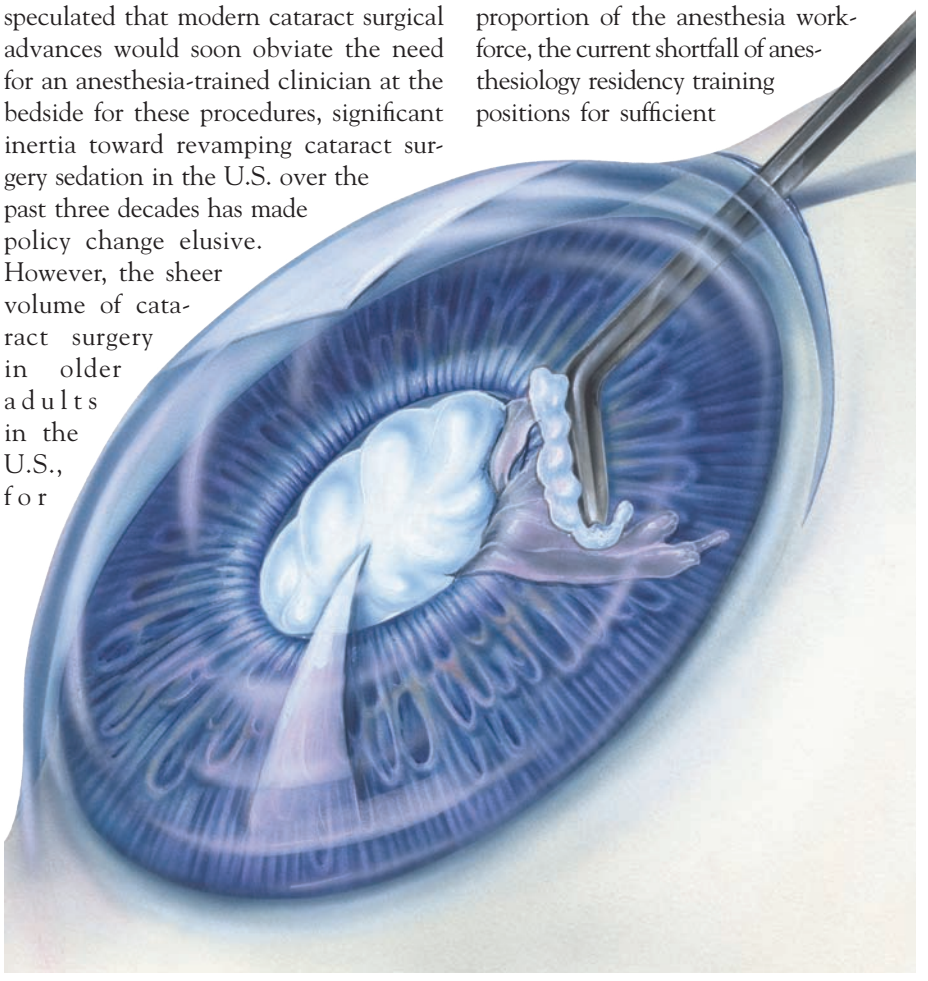
When I received my first FAER Research Fellowship Grant to study unnecessary routine preoperative testing in Medicare cataract surgery patients as a CA-2 resident in 2013, I could not have predicted that I would still be studying the delivery of cataract surgery care more than 10 years later (*N Engl J Med* 2015;372:1530-8). The decision to focus my research efforts on cataract surgery care stemmed from a combination of serendipity and pragmatism. Starting in medical school, I had been nurturing a burgeoning interest in improving health care value. Early in my residency training, cataract surgery came to the forefront as I brainstormed potential topics with my health services research mentor.

Cataract surgery is an effective, low-risk, well-tolerated, and frequently performed intervention to treat cataract disease. Over half of Americans will have cataracts by the age of 75 (asamonitor.pub/3A4NsyR). It is estimated that Medicare pays for 80% of the cataract surgeries performed in the United States (*Ophthalmic Epidemiol* 2012;19:257-64). By 2030, the number of U.S. patients with cataract disease is projected to increase by over 60% to 38.7 million (asamonitor.pub/3A4NsyR). Therefore, any change in cataract care has significant implications for the health care system in the U.S., and there is an urgent need to identify ways to enhance the value of cataract surgery while maintaining patient safety and surgical outcomes.

At first glance, the relationship between improving health care value, streamlining cataract care, and mitigating the impact of shortages in the anesthesia workforce is not immediately self-evident. Because cataract surgery originally started out as a high-risk, multi-hour procedure requiring general anesthesia, paralysis, and a weeklong inpatient admission for surgical recovery, anesthesia care was always viewed as an essential component of cataract surgery in the U.S. and, therefore, was always reimbursed by Medicare (asamonitor.pub/3UHUfbe; asamonitor.pub/40v3r4d). Although clinicians and policymakers from the late 1990s onward speculated that modern cataract surgical advances would soon obviate the need for an anesthesia-trained clinician at the bedside for these procedures, significant inertia toward revamping cataract surgery sedation in the U.S. over the past three decades has made policy change elusive. However, the sheer volume of cataract surgery in older adults in the U.S., for which 90% of Medicare beneficiaries still receive one-to-one anesthesia care, combined with current demographic trends in the U.S. population and anesthesia workforce, make the appropriate allocation of anesthesia-trained clinicians for cataract surgery an important consideration for our specialty (*JAMA Intern Med* 2022;182:1171-80).



There is already a shortage of practicing anesthesiologists in the U.S., which was made worse by the COVID-19 pandemic due to burnout and the mass exodus of many clinicians from clinical care (*J Clin Anesth* 2021;68:110084; *ASA Monitor* 2022;86:19-20). This trend is expected to continue in the coming decade. According to the American Association of Medical Colleges, as of December 2021, more than half of practicing anesthesiologists are over the age of 55 (asamonitor.pub/43RkEaX). The anticipated retirement of a large proportion of the anesthesia workforce, the current shortfall of anesthesiology residency training positions for sufficient replacement, and the increasing demand for surgical services that will accompany the graying of the population – where one in five Americans will be older than 65 by 2030 – will continue to put pressure on anesthesia staffing decisions for the foreseeable future (asamonitor.pub/3mFVsDj; asamonitor.pub/3mCGHkP; asamonitor.pub/3oaihPS). In this context, the current U.S. approach to cataract surgery sedation is very resource-intensive compared to that of other countries and a subset of U.S. institutions, which have increasingly opted for other forms of sedation and monitoring that do not routinely require the services of an anesthesia-trained professional (*Br J Ophthalmol* 2016;100:772-6; *Ophthalmology* 2016;123:723-8; asamonitor.pub/41gmz79).

Given the high utilization of cataract surgery in older adults and the rapid expansion in the number of older adults over the coming decade, during which the entire Baby Boom generation will become Medicare-eligible, any changes to cataract care must be done thoughtfully and with sufficient evidence to demonstrate that we are not sacrificing quality and safety on the altar of cost and efficiency. At the same time, ophthalmologists, anesthesiologists, nurse anesthetists, and patients, each of whom may individually benefit from maintaining the status quo, cannot continue to ignore the societal burden posed by the aggregate cost to Medicare of routine anesthesia care for cataract surgery – especially in the context of the projected shortage of anesthesia staff for other, more invasive surgical procedures that require our training and expertise.

How can we as a specialty make anesthesia care more sustainable? Not just from the environmental sense, but to ensure that anesthesiologists are available to staff the many surgical procedures that make the best use of our specialized knowledge and skillset, while simultaneously scaling back areas of low-value anesthesia care? I believe our specialty needs to generate compelling evidence regarding the value of anesthesia services when an outcome difference exists while conceding those procedures where our presence only drives up costs without conferring any benefit to patients. My NIH-funded K23 career development award allows me to take a deeper dive into the merits of anesthesia care for cataract surgery. I urge my anesthesia colleagues to evaluate health care delivery and anesthesia resource allocation through the lenses of efficiency, safety, quality, and cost so that we as a specialty can work together to advance evidence-informed, patient-centered health policy. ■

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