

physicians. In the United States, the supervisory model is used most often. Applying the metaphor in Warner's editorial, we could say that in Canada older anesthesiologists are "in the driver's seat," whereas in the United States, they usually are "backseat drivers" – involved in the crucial parts of the anesthetic but otherwise leaving patient care to the individual actually "behind the wheel." This difference in practice could affect the applicability of the findings of Tessler *et al.* to anesthesia practice in the United States, where the age and skills of the anesthesiologist are only part of the equation – where the experience and knowledge of the older anesthesiologist might well be of more consequence than his/her decreased attention span, possible visual/hearing impairment, longer reaction and processing times, or other factors that could be related to the increased "crash rates" of older physicians cited in the study.

As noted both by Tessler *et al.* and by Warner, there is sufficient research on this topic to establish that physicians do not age like fine wines.^{3,4} However, especially in the absence of information as to what actions (or lack thereof) by the anesthesiologists involved lead to the lawsuits, this study is just the first step. As both Tessler *et al.* and Warner conclude, further research is essential – research based on the supervisory practice model that will help us determine just how and to what extent the observed correlation between anesthesiologist age and patient outcomes applies to practice in the United States.

Ian J. Gilmour, M.D., F.R.C.P.(C)., Charlotte, North Carolina. iegilmour@yahoo.com

References

1. Tessler MJ, Shrier I, Steele RJ: Association between anesthesiologist age and litigation. *ANESTHESIOLOGY*. 2012; 116:574-9
2. Warner MA: More than just taking the keys away *ANESTHESIOLOGY* 2012; 116:501-3
3. Day SC, Norcini JJ, Webster GD, Viner ED, Chirico AM: The effect of changes in medical knowledge on examination performance at the time of recertification. *Res Med Educ*. 1988; 27:139-44
4. Eva KW: The aging physician; Changes in cognitive processing and their impact on medical practice. *Acad Med* 2002; 77:S1-6

(Accepted for publication July 20, 2012.)

Take Away Some of the Keys

To the Editor:

The excellent article by Tessler *et al.*¹ and the accompanying editorial by Warner² offer an intriguing glimpse into one of many challenges confronting older anesthesiologists.³ However, this study paints in broad strokes the issue of medico-legal experience that might obscure important details. The risk of suboptimal clinical outcomes and resulting litigation

can be minimized if all clinicians, including older ones, limit their practice to exclude those procedures that they rarely perform. As demonstrated in a report on surgical mortality subsequent to various complex surgical procedures, older surgeons' age was not an independent predictor of surgical risk, provided that the surgeon maintained a high volume in those specific procedures.⁴ On the other hand, bad outcomes occurred most frequently among older surgeons who maintained low volumes in those same procedures.

The study by Tessler *et al.*¹ failed to identify this potential confounding variable among their study subjects. Although the authors' analysis did account for overall clinical volume, the small numbers precluded further stratification to identify which of those bad outcomes occurred when older anesthesiologists were working outside their "comfort zone" – regardless of whether or not these were intrinsically complex cases or straightforward cases in unfamiliar patient populations (*i.e.*, pediatrics, bariatrics, obstetrics, and so forth). The study of surgical mortality (previously cited) suggests that bad outcomes among older anesthesiologists could be minimized by stricter attention to case assignment. To extend Warner's analogy, maybe we should design ignition keys that restrict a senior citizen's access to a 4-cylinder pickup truck on a snowy winter evening as well as a 16-cylinder high-performance sports car on a sunny afternoon.

As suggested by the authors, these findings should inspire additional studies to examine what is a growing source of concern as our specialty continues to age.

Jonathan D. Katz, M.D., Yale University School of Medicine, New Haven, Connecticut. jonathan.katz@yale.edu

References

1. Tessler MJ, Shrier I, Steele RJ: Association between anesthesiologist age and litigation. *ANESTHESIOLOGY* 2012; 116:574-9
2. Warner MA: More than just taking the keys away *ANESTHESIOLOGY* 2012; 116:501-3
3. Katz JD: Issues of concern for the aging anesthesiologist. *Anesth Analg* 2001; 92:1487-92
4. Waljee JF, Greenfield LJ, Dimick JB, Birkmeyer JD: Surgeon age and operative mortality in the United States. *Ann Surg* 2006; 244:353-62

(Accepted for publication July 20, 2012.)

Maybe It Isn't Aging

To the Editor:

The report by Tessler *et al.*¹ and the accompanying editorial by Warner² cautiously examine the possibility that senior anesthesiologists, by virtue of age, pose a greater risk to patients. This natural concern is prompted by Tessler *et al.*'s finding that anesthesiologists older than 65 in the period between 1993 and 2002 incurred a greater risk of litigation than anesthesiologists younger than 51 yr.

Both the report and the editorial kindly avoided mentioning an explanation that did not rely upon the debilities of aging. If we assume that the 65-yr-old anesthesiologists entered training at age 25, they would have begun residency between 1953 and 1962, just before anesthesia programs began to attract the best and brightest, as they do today. Regarding recruitment into the specialty, in 1946 John Lundy noted,³ “There was a tendency for only those physicians who were incompetent in general practice or in other branches to limit themselves to the practice of anesthesia.”

Although they examine other factors, both Tessler *et al.* and Warner appear to assume that the prime factor differentiating their three groups was aging, and probably it was. But perhaps a confounding factor was that the older anesthesiologists were less competent to begin with. This might be revealed by repeating Tessler *et al.*'s study in 10 yr.

Edmond I Eger, II, M.D., University of California, San Francisco, San Francisco, California. egere@anesthesia.ucsf.edu

References

1. Tessler MJ, Shrier I, Steele RJ: Association between anesthesiologist age and litigation. *ANESTHESIOLOGY* 2012; 116:574-9
2. Warner MA: More than just taking the keys away *ANESTHESIOLOGY* 2012; 116:501-3
3. Lundy JS: Factors that influenced the development of anesthesiology. *Anesth Analg* 1946; 25:38-43

(Accepted for publication July 20, 2012.)

In Reply:

We thank Haddad, Gilmour, Katz, and Eger for their interest in our article.¹

We agree with Haddad that there is a growing body of literature looking at the quality of care delivered by older physicians.^{2,3} However, our study looked at the relative risk of litigation for three different ages of anesthesiologists and did not address the quality of care delivered by anesthesiologists who either did or did not take the Maintenance of Certification Exam. As a comment, we wish to highlight, despite Haddad's assurances the literature is “replete with studies” and “abundant data” regarding “declines in both knowledge and skill in the aging physician,” the most recent cited papers in all of the letters to the editor are from 2006,^{4,5} and Haddad and Gilmour quote the same two papers in support of their contentions.^{6,7} We think more work is essential.

Regarding Gilmour's comments, we studied the experiences of specialist anesthesiologists, as determined by each provincial billing authority, exclusively (see also the response to Eger). It is true that there is a 1-to-1 ratio between anesthesiologist and patient in Canada, unlike the practice south of the border. It remains to be determined whether the Canadian or American model leads to a higher relative risk of litigation as anesthesiologists age.

Katz raises a valid point. We had tried to explore, as best we could, confounding variables, such as the complexity level of the various interventions performed by the anesthesiologists studied. However, there were so few moderate or high complexity procedures performed by the oldest age group that we think older anesthesiologists are probably already systematically limiting their work to their “comfort zone.” Still, we agree that it remains possible some of these litigations could be because of the oldest group providing anesthesia for low complexity procedures in unfamiliar contexts or populations, and we hope our study stimulates more research in this area.

Eger raises an interesting point. It is possible that some of the older anesthesiologists in our database did not receive a similar quality of anesthesia training as is available today, and that the standards of the specialty have improved since the oldest group of anesthesiologists finished their residencies. We agree that factors affecting the quality of care provided by anesthesiologists need to be further investigated.

Michael J. Tessler, M.D.,* Ian Shrier, M.D., Ph.D., Russell J. Steele, Ph.D. *Jewish General Hospital, Montreal, Quebec, Canada. mtessler@ana.jgh.mcgill.ca

References

1. Tessler MJ, Shrier I, Steele RJ: Association between anesthesiologist age and litigation. *ANESTHESIOLOGY* 2012; 116:574-9
2. Southern WN, Bellin EY, Arnsten JH: Longer lengths of stay and higher risk of mortality among inpatients of physicians with more years in practice. *Am J Med* 2011; 124:868-74
3. Choudhry NK, Fletcher RH, Soumerai SB: Systematic review: The relationship between clinical experience and quality of health care. *Ann Intern Med* 2005; 142:260-73
4. Davis DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L: Accuracy of physician self-assessment compared with observed measures of competence: A systematic review. *JAMA* 2006; 296:1094-102
5. Waljee JF, Greenfield LJ, Dimick JB, Birkmeyer JD: Surgeon age and operative mortality in the United States. *Ann Surg* 2006; 244:353-62
6. Day SC, Norcini JJ, Webster GD, Viner ED, Chirico AM.: The effect of changes in medical knowledge on examination performance at the time of recertification. *Res Med Educ* 1988; 27:139-44
7. Eva KW: The aging physician: Changes in cognitive processing and their impact on medical practice. *Acad Med* 2002; 77:S1-6

(Accepted for publication July 20, 2012.)

In Reply:

I thank the letter writers for their interest in issues related to aging anesthesiologists (Tessler *et al.*¹ and Warner²) and for their thoughtful comments. Gilmour and Katz provide excellent examples that support the need for additional study of this important topic.

Haddad specifically noted that the American Board of Anesthesiologists (ABA) does not require its diplomates