A Call to Actions Wisely Chosen

To the Editor:

The "Call to Action" by Ranney et al[1] on firearms and public health is a stirring reminder of the influence of the social problems associated with the misuse of guns. The shootings last year in Aurora, CO, and Newtown, MA were deeply disturbing to all of us.

Existing American College of Emergency Physicians policy supports universal background checks, funding for research, and improved access to mental health services.

Research is vital. Public policy, like the practice of medicine, should be evidence based and conducted in such a way as to avoid the perception of antigun bias that was the basis on which the gun lobby successfully sought Congressional action to restrict funding.

Although noting that an estimated 40% of current gun sales do not go through the federal "instant check" system, the authors omit to mention of the fact that fewer than 1% of guns used in crime were purchased at gun shows.[2] Criminals will obtain firearms despite the most robust background check system. The most important contribution of a more comprehensive system will be denial of guns to the dangerously mentally ill, yet the authors are wary of mandatory reporting of these persons, fearing it would "run the risk of keeping psychiatric patients away from needed help." Such reporting could be part of a deliberate system that would ensure due process, including the right to appeal any adverse determination.

Although tragic mass shootings generate much news reporting and public interest, the proportion of US murders committed with all rifles was only 2.55% in 2011.[3] Thus, the authors' call for a ban on "assault rifles" and high-capacity magazines as "a growing and clear threat to public safety" is not supported by data. Such a ban, in effect for a decade, expired in 2004. The authors of a comprehensive study[4] said, "Should it be renewed, the ban's effects on gun violence are likely to be small at best and perhaps too small for reliable measurement."

The traditional focus of the pro-gun-control advocates has been on handguns, which are used in the commission of the majority of gun crimes. Handgun bans, however, have been struck down by the Supreme Court. There is some case law to suggest that a renewed ban on semiautomatic rifles might also be found to violate the Second Amendment. (See *US v Miller*, 1939, in which the Court's ruling suggests that the private ownership of firearms suitable for use by members of a militia is protected by the Second Amendment).

We should support increased funding for research while encouraging objectivity; improve the system of background checks to deny access to prohibited persons, especially the dangerously mentally ill; and promote gun safety, making ourselves sufficiently knowledgeable about it that we may effectively educate our patients (and, in the case of children, their parents).

We should also recognize the passion of gun rights advocates. They believe they have a constitutionally guaranteed right on their side, and legislators and judges have tended to agree with them. So we should choose wisely when deciding how to tackle this vexing social problem.

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In reply:

We thank Dr. Solomon for his comments and appreciate his agreement with the crux of our editorial.[1] We as a specialty need to use the public health model to decrease the frequency and lethality of gun injuries.

However, we wish to make a few clarifications.

First, gun shows represent only a small portion of the "private sales" excluded by current national background check laws. We know that 96% of criminals unable to purchase a gun from a licensed firearm dealer instead acquired their gun through a "private" transfer.[2]

That some criminals might circumvent certain background check requirements should *not* be an excuse for not passing such laws. After all, speeding tickets and driving-under-the-influence citations are issued every day, but we would not suggest that such laws are pointless. They are essential parts of an evidence-based, public health approach to decreasing rates of motor vehicle injuries. A robust background check system is the most important immediate step our nation can take in reducing firearm injuries. According to a recent study in the *New England Journal of Medicine,* 84% of gun owners and 74% of National Rifle Association members (versus 90% of non–gun owners) support a universal background-check system for all gun sales.[3]

We agree there should be more focus on treating the mentally ill, and we support laws restricting access to firearms for individuals deemed to be a danger to themselves or others. Mentally ill patients with a history of violence or threats of violence, or a history of alcohol or drug abuse, should be asked about firearm access and ownership: firearm ownership is an important risk factor for violence to self and others.[4,5] However, a psychiatric diagnosis is not in itself a risk factor for violence.

In regard to semiautomatic weapons and high-capacity magazines, it is true that the majority of suicides, homicides, and "accidental" (unintentional) shootings are not committed with these weapons. However, we exclude race cars from our highways. And we have long restricted our citizens from owning grenades or bazookas. Similarly, it is appropriate to limit the widespread access to these most-dangerous weapons.

Moreover, mass shootings are similar to terrorist attacks in that they undermine our nation's confidence in its own safety. The number killed or injured in such events has increased recently. Just as we work actively to decrease our country's risk of terrorist attack so also should we actively strive to decrease our communities' risk of mass killings.

Last, our editorial does not call for a ban on firearm ownership. We are advocating common sense policies—and well-done research—to decrease our patients' risk of firearm injuries.

It would be a shame to prevaricate on this issue. Since the Newtown tragedy, there have been countless suicides and homicides and a number of tragic deaths of young children because of guns. We are encouraged by the American College of Emergency Physicians' new Firearm Injury Prevention policy and look forward to working together as a specialty to decrease the number of firearm injuries seen in our emergency departments each day.

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Pragmatic Interpretation of the Study of Nontraumatic Subarachnoid Hemorrhage in the Setting of Negative Cranial Computed Tomography Results: External Validation of a Clinical and Imaging Prediction Rule

To the Editor:

We commend the efforts of Mark et al[1] to validate our clinical decision rules for subarachnoid hemorrhage. Nevertheless, important limitations temper direct comparisons with our work,[2,3] namely, (1) including patients with isolated cranial nerve palsies; (2) no rereads of reportedly normal computed tomography (CT) scan results; (3) studying only patients with normal CT results, precluding an estimate of CT sensitivity; and (4) the retrospective nature, which resulted in loss of information (eg, "onset during exertion" missing in 1 in 3 patients). Although their study cannot be used as a true validation study, their case-control methodology is useful when considering rare outcomes, such as CT-negative subarachnoid hemorrhage.

A headache patient with a third cranial nerve palsy should be considered to have an aneurysm until proven otherwise.[4] We explicitly excluded such patients because their symptoms are often due to the enlarging aneurysm, not hemorrhage.[4] As such, a CT result may be normal, yet angiography is still necessary. This scenario is most frequently associated with a posterior communicating artery aneurysm,[4] which accounted for 4 of the 11 so-called falsely negative early CT cases. Of the 7 remaining