### **REFLECTION**

## The Firearm Suicide Crisis: Physicians Can Make a Difference

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### **ABSTRACT**

Firearm suicide receives relatively little public attention in the United States, however, the United States is in the midst of a firearm suicide crisis. Most suicides are completed using a firearm. The age-adjusted firearm suicide rate increased 22.6% from 2005 to 2017, and globally the US firearm suicide rate is 8 times higher than the average firearm suicide rate of 22 other developed countries. The debate over how to solve the firearm suicide epidemic tends to focus on reducing the firearm supply or increasing access to behavioral health treatment. Ineffectual federal firearm control policies and inadequate behavioral health treatment access has heightened the need for primary care physicians to play a more meaningful role in firearm suicide prevention. We offer suggestions for how individual physicians and the collective medical community can take action to reduce mortality arising from firearm suicide and firearm deaths.

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### INTRODUCTION

Ithough mass shootings are an alarming manifestation of gun violence, many more Americans kill themselves with a firearm each year than are murdered with one.<sup>1,2</sup> Firearm suicide receives relatively little public attention; however, the United States is in the midst of a firearm suicide crisis. Suicide is the second leading cause of death among young teens and adolescents,<sup>3</sup> and it is the tenth leading cause of death overall in the United States.<sup>4</sup> Notably, most suicides are completed using a firearm, and the age-adjusted firearm suicide rate increased 22.6% from 2005 to 2017.<sup>5</sup> The US firearm suicide rate is 8 times higher than the average firearm suicide rate of 22 other high-income, developed countries, even though the total suicide rate for the United States is similar to that of other countries.<sup>6</sup>

No single feasible solution to the firearm suicide epidemic currently exists. In general, attention has focused on the broader impacts of prevention policies aimed at regulating the supply of guns through background checks, mandatory waiting periods before firearm issue, and restricting certain types of military-style weapons. Without question, the availability of firearms and keeping them in the home both serve as strong risk factors for completed suicide, particularly among adolescents.<sup>7</sup> However, political factors, especially at the federal level, typically encumber policy makers' ability to enact and implement firearm safety and control policy solutions to firearm suicide. For example, both the National Rifle Association and the Second Amendment to the US Constitution often insulate firearm safety issues from comprehensive policy change, yielding to periods of only incremental change.8 Further, many Americans value gun ownership and others hold on deeply to what they perceive are their Second Amendment rights. Thus, despite the magnitude of the current firearm suicide epidemic, windows of opportunity for policy intervention remain open for only short periods of time.

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Behavioral health treatment often emerges as a key alternative theme in discussions around firearm safety. Among adolescents, upwards of 90% of individuals who complete suicide have experienced signs of mental illness.7 Although the existence of mental illness is often unrecognized at the time of death for people who complete suicide, the existence of a mood disorder (such as depression) is a known risk factor for suicide.9 The widespread shortage of mental health professionals poses significant barriers to access for at-risk persons needing mental health treatment.<sup>10</sup> When taken in the context of firearm suicide, however, evidence shows that additional behavioral health treatment capacity has only a small protective effect.<sup>11</sup> Improving firearm safety and strengthening evidencebased regulations pertaining to the purchase of firearms may provide superior protective effects against suicide. Addressing firearm control through public policy at the federal level, however, has been nearly impossible. Given this impasse, the question arises: can physicians, and the collective medical community more generally, play a constructive role in helping to prevent firearm suicide? We believe the answer is yes and offer a course of action.

# REFLECTING AND PROPOSING A COURSE OF ACTION

If meaningful firearm safety and control policies continue to be elusive and if increasing the country's capacity to provide behavioral health services has at best a small effect on firearm suicide, 11 then physicians, and their representative associations, should be encouraged to play a greater role in the collective campaign to reduce firearm suicide. Despite legal opposition to physicians intervening in their patients' firearm-related affairs, a 2017 opinion issued by the US Court of Appeals for the Eleventh Circuit ruled that physicians can inquire about firearm-related risk factors and attempt to protect their patients from firearmrelated injury.<sup>12</sup> In turn, the American Medical Association (AMA) made recommendations opposing limits on physicians' ability to discuss firearm safety with patients and encouraging physicians to use firearmrelated educational materials.<sup>13</sup> Although there remains a dearth of evidence-based frameworks for translating these recommendations into clinical practice, there is evidence that trust fostered in primary care therapeutic relationships promotes patient and parent adherence to safety guidelines.<sup>14</sup> We propose the following actionable steps to better leverage the unique primary care practice environment to improve identification of and interventions for at-risk patients. In addition, we offer suggestions for how the larger medical community can initiate advocacy efforts directed at reducing firearm suicide and firearm deaths.

### How Can Physicians Reduce Firearm Suicide Risk?

The primary care practice environment already provides motivation for physicians to address firearm suicide through improved screening and prevention efforts. For example, the US Preventive Services Task Force (USPSTF) recommends screening all adults for depression and women of reproductive age for intimate partner violence, both known risk factors for suicide. 15 Billing codes also allow primary care physicians to earn compensation for depression and suicide screening, while new physician payment methods, such as the Merit-based Incentive Payment System (MIPS) and Alternative Payment Models (APM), provide further financial incentives to do so.16 Although firearm suicide is not exclusively driven by mental illness, a renewed focus on depression and suicide risk screening—especially among adolescents—may help clinicians uncover behavioral risk factors among the slight majority of people who complete suicide with unrecognized mental health conditions.9 Enhanced screening efforts are critical for preventing additional attempts at suicide and the successful completion of suicide by firearm, as firearms are 2.6 times more lethal than suffocation, the next deadliest method of suicide.17 While a non-fatal attempt at suicide can act as a red flag to help prevent a future attempt, firearm suicide has an alarming 80% to 90% fatality rate.<sup>18</sup>

To that end, many physicians do not routinely screen or counsel their patients about firearm safety.<sup>19</sup> Lack of time, inadequate training, lack of understanding regarding the availability of screening tools, and related factors present barriers for fulfilling this function. Even if additional screening happens, it is often difficult to navigate local mental health treatment systems or to identify appropriate community-based mental health resources. However, there are steps that can be taken. First, primary care practices can employ other members of the clinical team in the medical home or practice to screen patients about their access to firearms and their firearm storage practices. Second, clinicians can incorporate questions about firearm availability directly into existing screening tools, such as the Patient Health Questionnaire (PHQ-9) for depression. Third, primary care practices can enhance pre-visit planning services by using online portal-based questionnaires to more efficiently screen patients for firearm availability, firearm storage practices, and related risk factors without increasing office encounter times.<sup>20</sup> Professional organizations, such as the American Academy of Family Physicians (AAFP), the

American Academy of Pediatricians (AAP), or similar associations offering continuing medical education (CME) could also actively promote the incorporation of these actionable steps into primary care practice. While many patients may benefit from these process enhancements, a renewed effort at the individual practice level will be critical for patients with children and patients who screen positive for depression, domestic violence, or suicide risk.

# The Medical Community Advocating for Policy Change

The medical profession also wields considerable advocacy power, and there is a long history of physicians collectively influencing policy making and public health practice.<sup>21</sup> Key historic examples of improving the public's health include the physician community's role in advocating for stricter state-level drunk-driving legislation and for stricter tobacco advertising policies.<sup>22</sup> Because the AAFP, the AAP, and the AMA all formally denounce gun violence, 23-25 we believe the broader physician community can harness the momentum of the #ThisIsOurLane movement26 and can collectively influence the political discourse on firearms. Acting together, physicians can support the adoption of firearm safety and control policies at the state level that are shown to be effective for preventing firearm suicide, such as stricter background checks with mandatory waiting period requirements and child-access prevention laws. 27,28

Specific advocacy steps can be taken. First, the collective medical profession can help present the facts about firearm suicide; set aside discomfort with approaching sensitive political and mental health related issues at the community level; and mobilize grassroots outreach and voter support for the evidence-based policy interventions.<sup>29</sup> Second, the literature suggests medical associations like the AAFP and AAP can effectively communicate important public policy matters—such as the suicide-related consequences of firearm safety initiatives—to state legislatures and facilitate the adoption of policies across state lines.30 Third, primary care physician coalitions are equipped to help the greater public health community identify alternative funding sources for conducting meaningful research on firearm suicide because of their designated roles in delivering preventive care.

To date, the literature on how different firearm control policies affect suicide is limited.<sup>28</sup> The Dickey Amendment to the Omnibus Reconciliation Act of 1996 and subsequent policies have severely limited federal funding for gun violence research, impeding the public health community's ability to fully explore the relationship between firearms and suicide.<sup>31</sup> While

private foundations offer funding opportunities, seeking and securing funding can be challenging. Finally, the physician community can also advocate against proposed or pending "physician gag laws," where states attempt to regulate conversations between physicians and their patients and prevent physicians from inquiring about firearm ownership. Despite the 2017 ruling issued by the US Court of Appeals for the Eleventh Circuit, other physician gag laws exist or have been proposed in different jurisdictions, further demonstrating the need for ongoing physician advocacy.<sup>32</sup>

### Conclusion: Wide Public Support for Action

A call to action is imperative. The United States has so far failed to make meaningful and appropriate policy changes at the federal level to promote gun safety and limit gun availability to advance the goal of reducing firearm suicide and firearm deaths more generally. Recent national survey data indicate broad public support, among both gun owners and non-gun owners, for regulatory action to promote gun safety and restrict access to certain weapons.33 To be sure, no single solution exists. As in the past, however, the medical community now has an opportunity to meaningfully wield its professional authority, both collectively and as individual physicians, to improve screening efforts and to promote evidence-based firearm safety initiatives toward the end of reducing the suicide epidemic plaguing our families and communities.

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**Key words:** health policy; gun violence; health policy research; firearm suicide; physician practice

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