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Challenges Associated with the Use of Policy to Identify and Manage Risk for Suicide and Interpersonal Violence Among Veterans and Other Americans

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Abstract

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In this issue, Swanson et al. (2018) presents findings from a study of more than 3000 U.S. veterans to describe associations between proxy indicators of need for fiduciary services and risk for suicide or interpersonal violence. The main objectives of this study were to evaluate the potential impact of current policies restricting access to firearms among Veterans determined to be incapable of responsibly managing their own finances and assess underlying assumptions about the associations between decision making as it relates to financial matters and increased risk for self-harm or interpersonal violence. The authors reported statistically significant increases in risk for thoughts of suicide and interpersonal violence associated with three proxy indicators of need for fiduciary services. Findings from this study raise several important questions about strategies for reducing rates of suicide among Veterans and members of other high-risk groups.

There is a recognized need for additional efforts to reduce access to firearms and other lethal means among individuals at risk for suicide as evidence of the burden is clear (General 2012). In 2016, nearly 23,000 Americans died of suicide resulting from a firearm injury (CDC 2018). Overall, firearm-related injury accounted for more than 50% of all deaths from suicide among Americans. Available data suggests an even greater proportion of firearm-related suicides among Veterans. According to the Department of Veterans Affairs, firearm-

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related injury accounted for nearly 70% of all deaths from suicide among Veterans of U.S. military service (VA 2016).

Existing epidemiologic data and expert consensus on the importance of methods to restrict access to highly lethal means support policies such as those implemented by the Department of Veterans Affairs (VA) (General 2012). However, policies such as these could result in negative unintended consequences. It is fair to consider both the efficacy of the proposed solution and potential for unintended consequences associated with implementation of these strategies. It is also important to consider any assumptions underlying the proposed solution and the likelihood that the selected strategy will yield a favorable outcome that outweighs any negative consequences associated with implementation. In the case of VA's fiduciary policy, the assumption is clear. An inability to responsibly manage one's finances is taken to be an indicator of impaired decision making and therefore increased risk of self-harm or violence directed towards others. Viewed from this perspective, limiting access to fire-arms could be seen as a reasonable response to observed evidence of risk. However, it could be argued that justification of actions intended to reduce risk for suicide or other adverse outcomes are dependent on two conditions. First, that there is reasonable evidence supporting the assumed relationships between indicators of risk and the outcomes of concern. Second, that there is no evidence of an imbalance in the ratio of benefit and negative consequence associated with implementation of the proposed action.

Results presented by Swanson and colleagues seem to provide evidence of increased risk for suicide ideation and interpersonal violence associated, in varying degrees, with all three proxy indicators of need for fiduciary services. This would seem to satisfy the first of our conditions. However, it is also possible that there is insufficient evidence to support this conclusion. Any deficiency in evidence is not a product of results from the thoughtful research presented by Swanson and colleagues. Rather, it is more likely the result of challenges associated with the reliable assessment of suicide risk (Gaynes et al. 2004), dependency on a risk factor-driven system for predicting risk for suicide and other violent behaviors (McClatchey et al. 2017), and assumptions about the relationships between risk for violence (including self-harm) and violence involving a firearm. In the absence of reliable and valid indicators of suicide risk, clinicians, policy-makers and public health practitioners are dependent on the identification of factors associated with increased risk for suicide and other forms of violence. However, it is difficult to predict risk for suicide based on the presence of a single risk factor or even group of risk factors. The relationships between even seemingly robust indicators of suicide risk, such as psychiatric disorders (Conner et al. 2013, 2014) or suicide ideation (Stack 2014), and death from suicide are complex. This is not to suggest that there is no value associated with the assessment of risk factors to inform clinical or preventive services. For instance, major depression is widely recognized as a strong indicator of proximal risk for suicide and continued support for routine assessment is warranted (Conner et al. 2017). While associations between impaired decision making and risk for suicide have been found (Deisenhammer et al. 2018; Szanto et al. 2018) and preliminary evidence support the use of strategies to encourage healthy decision making for suicide prevention (Barnes et al. 2017), evidence supporting a link between financial management and imminent risk for suicide is lacking. Additional studies are needed to strengthen support for the proposed relationships between decision making, as

it relates to finances, and proximal risk for suicide or other forms of violence. Such studies will be needed to better understand the strength of the associations between financial mismanagement and suicide risk, circumstances that enhance or mitigate risk for suicide among members of this group, or the identification of more direct indicators of risk that may also be associated with financial management.

An untested assumption underlying VA's existing policy is risk for violence involving a firearm associated with determination of the need for fiduciary services. At first glance, the logic appears sound and results from the study conducted by Swanson and colleagues provide some evidence of increased risk for suicide ideation and interpersonal violence among members of this group. However, increased risk for suicide ideation and interpersonal violence does not necessarily equal risk for violence involving a firearm. Limiting access to lethal means is an evidence-based strategy for reducing rates of suicide (Gunnell et al. 2017; Pirkis et al. 2015); though there is reason to believe that some strategies for reducing rates of suicide by limiting access to firearms may not be equally effective in the U.S. (Mann and Michel 2016) The overwhelming proportion of suicides resulting from a firearm injury among Veterans also argues in support of the need to reduce access to lethal means, including access to firearms, among some members of this group. However, it is worth considering that not all Veterans, or members of other groups, are equally at risk for firearm violence in particular. While there are available tools to support assessment risk of firearm violence (Goldstick et al. 2017), there is no evidence that such assessments are conducted as a secondary step in the process of limiting access to firearms among persons with broader indications of risk. Gaps in knowledge about the characteristics of individuals at risk for suicide and other forms of violence who are also at increased risk of violence involving a firearm means that efforts to reduce rates of suicide and other violence do not routinely differentiate between risk for violence involving firearms and risk for violence by other means. In some cases, failure to consider a distinction between different forms of violence may be of little consequence. However, in the politically charged environment surrounding access to firearms it is worth considering the clinical and public health consequences that may result from imprecise implementation of preventive programs or support for blanket policies without complementary support for the systematic evaluation of the related programs and policies. At this point, there is insufficient information to allow for an informed assessment of the benefits and unintended consequences of VA's fiduciary policy. Additional research is needed to better understand the impact of these programs on the individuals they serve and the clinical and public health systems that support them.

The practice of limiting access to firearms among Veterans in need of fiduciary services and dependency on the assessment of individual factors to estimate risk for suicide and other forms of violence highlight challenges associated with our current systems for identifying and mitigating risk for adverse outcomes. Systems relying on the assessment of risk factors without consideration of the complex array of relationships between characteristics, circumstance, and place result in the identification of large populations of persons at risk and high potential for false negatives or poor alignment between the specific type of violence and the strategy selected to reduce the probability that these outcomes will be realized. This is a problem of both complexity and approach. Currently, prevention programs rely on the assessment of select characteristics to identify individuals at increased risk for adverse

outcomes. As noted in earlier sections, risk factors identified using this approach may not consider the complex relationships between other characteristics of the individual and the individual's place or differentially prioritize the selection of more proximal indicators of risk. There is another option. It is possible to identify populations with significantly increased risk for the outcome of interest as a starting point for the identification of modifiable characteristics among the individuals within these groups and as a foundation for the development of tailored intervention strategies informed by the probability of outcome type or likelihood of response to the proposed intervention. Approaches such as these, known generally as risk-stratified models of care, utilize advanced algorithms and population data to calculate predicted risk scores and stratify populations according to their relative level of risk. Once the higher risk groups are identified, preventive efforts can be targeted to the populations at greatest risk and tailored either to the characteristics of the individuals in the group or, optimally, the probability of response to available strategies. A preliminary effort of this type, known as Reach Vet, is currently being used by VA to identify and intervene on Veterans at high risk for suicide (VA 2017). VA's model for predicting risk for suicide was informed by the clinical and demographic characteristics of Veterans who used VA health services (Kessler et al. 2017; McCarthy et al. 2015) but stops short of considering differences within risk stratum or probability of response to available prevention programs.

Efforts to reduce rates of suicide and other forms of violence among Veterans and other Americans must find a way to reduce rates of deaths resulting from firearm injury. VA's policy to limit access to firearms among Veterans in need of fiduciary services is supported by evidence of increased risk of suicide ideation and interpersonal violence among Veterans of the conflicts of the Iraq and Afghanistan era with estimates fiduciary need. However, the reliability of fiduciary need as an indicator of proximal risk for violence, either self-directed or directed at others, and complexities associated with estimation of risk and likelihood of risk mitigation suggest the current approach is insufficient. Additional support is needed for continued assessment of outcomes among those receiving fiduciary services, evaluation of existing policies and continued development of advanced methods for estimating risk and modification of preventive programs.

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