The National Instant Criminal Background Check Improvement Act has serious implications for persons with mental illness with regard to the ability to purchase firearms. Federally prohibited persons include those who have been adjudicated as mentally defective, or have been committed to a mental institution, or are unlawful users of or are addicted to a controlled substance. The legislation was intended to expand the reporting practices of states by providing significant financial incentives and disincentives for releasing all relevant records, including those contained within mental health databases, to the National Instant Criminal Background Check System (NICS). As of April 2007, only 22 states were voluntarily submitting records from mental health databases to the NICS. The legislation was introduced following the Virginia Tech tragedy, when public opinion favored tightening control over access to firearms of persons with mental illness.

A recent trend in firearms legislation in the United States is to define categories of persons considered at high risk of violence to self and others and then to limit their ability to gain legal access to firearms.1–3 The desired, though often not fully realized, outcome of these laws is a substantial reduction in the rates of homicide and suicide by firearms. On the surface, having such a targeted approach appears to be a reasonable strategy in a nation in which approximately 33 percent of adults live in a residence that contains a firearm and in which a strong gun lobby opposes measures that would tighten general availability of firearms.4–7 However, selecting which groups present an increased risk can be based more on public perception of risk rather than on careful statistical analysis.1,3,8

Perception of Dangerousness and Firearms Legislation

Persons with mental illness and/or substance abuse are frequently perceived by the public to be dangerous.9–12 This has resulted in an increase in federal and state legislation restricting their ability to purchase, possess, register, obtain licensure, retain, and/or carry firearms.1–3 Norris et al.1 noted that there is ongoing discussion, and sometimes debate, in medicine, law, social sciences, and public safety regarding the uncertain relationship between violence and mental illness, and the literature highlights the complexity involved in assessing risk. Research suggests a relationship among mental illness, substance abuse, and violence. Persons with mental illness who have comorbid substance abuse pose the greater risk.1,13–24 Persons with mental illness are not the only targets of federal firearms restriction. The Federal Gun Control Act25 and its sequels prohibit possession by or transfer of any firearm to a person who has been adjudicated as “mentally defective or committed to a mental institution” or is an “unlawful user or addicted to any controlled substance.” However, other prohibited classes include those who are under indictment for or have been convicted of a crime punishable by imprisonment for more than 1 year; are
fugitives from justice, are unlawfully in the U.S. or were admitted under a nonimmigrant visa; are discharged under dishonorable conditions; have renounced citizenship; are subject to a court order restraining them for harassing, stalking, or threatening an intimate partner or child of an intimate partner or have been convicted in any court of a misdemeanor crime of domestic violence. Under Federal Gun Control Act, 18 U.S.C. 922 (b) and (x), federal firearms licensees are prohibited from transferring any long gun to a person who is less than 21 years of age. In addition, with few exceptions, it is unlawful to transfer a handgun to a juvenile.

The shooting of President Ronald Reagan and White House Press Secretary James Brady in 1981 resulted in a re-evaluation of the federal and state gun laws. Congress enacted legislation that amended the Gun Control Act to provide a system for blocking transfer to members of the prohibited classes. The Brady Handgun Violence Prevention Act (Brady Act) of 1993 included a requirement that federally licensed firearms dealers (FFL; federal firearms licensee) initiate background checks for handgun sales, and it established a five-day waiting period before handgun purchase. The permanent provisions of the Brady Bill established the National Instant Criminal Background Check System (NICS), which was to be operational by November 1998. With the NICS, an FFL could receive information immediately on whether transfer to a purchaser would violate Federal or State law.

There was an expectation that once the NICS was operational, there would be improvement in the rates of homicide and suicide by firearm. However, one of the shortcomings of the NICS was that information transmitted from states concerning prohibited persons was incomplete. The Supreme Court in Printz v. U.S. held that under the 10th amendment, the federal government may not mandate that state officials administer or enforce a federal regulatory program. Thus, state participation has remained voluntary.

A press release by the Federal Bureau of Investigation (FBI) dated April 9, 2007, noted that only 22 states voluntarily contribute mental health records to the NICS. The Federal system contained only 235,000 mental health records as of January 2006, although it was estimated that 2.7 million people had been involuntarily institutionalized.

The problems with incomplete data are not confined to information concerning mental health disqualifications. Representative Carolyn McCarthy (D-NY) reported on January 17, 2007, on the House floor that 25 states have automated less than 60 percent of their felony convictions into the NICS and in 13 states, domestic violence and restraining orders are not accessible through the NICS. Unfortunately, a series of high-profile cases involving persons with mental illness have focused attention on placing increased restrictions on persons with mental illness at the state and federal level while other gun legislation has not been passed.

In December 1993, Colin Ferguson shot 25 persons (among whom were Rep. McCarthy’s husband and son) aboard a train on the Long Island Railroad with a 9-mm automatic pistol he had purchased in California. In 1998, Russell Weston killed two police officers in the United States Capitol. He had been involuntarily committed in Montana with a diagnosis of paranoid schizophrenia. Montana did not report his commitment to the federal database. Therefore, an Illinois gun shop owner allowed him to purchase guns. In 1999, Lisa Duy walked into Doug’s Shoot’n Sports in Salt Lake City and bought a Smith & Wesson 9-mm semiautomatic pistol. Her exclusionary history of mental illness had not been forwarded to the NICS database. Two hours after purchasing the pistol, she killed a young mother and wounded the building manager at the studios of KSL, a local television station. Duy carried the diagnosis of paranoid schizophrenia and had delusions that the station was broadcasting information about her sex life. Utah changed its law in response to this incident and now transmits information to the NICS.

On March 12, 2002, Peter Troy killed a priest and a parishioner at Our Lady of Peace Church in Lynbrook, New York. Troy had a history of hospitalization at Bellevue Hospital in New York City and at Nassau University Medical Center on Long Island. His psychiatric history was not recorded in the NICS database. In 2002, The Lady of Peace Bill was introduced by Rep. McCarthy, who had become an antigun activist after her husband was killed and her son severely injured by Colin Ferguson. The bill would have offered financial incentives to states to automate records and create databases and withhold money if states did not comply. While other groups of prohibited persons would be affected, it was clear that the
bill was introduced at a time when public attention was focused on persons with mental illness. The bill did not pass the Senate. In December 2005, a Virginia judge found Seung-Hui Cho, the Virginia Tech gunman, to be mentally ill and a danger to himself. He was directed to undergo outpatient treatment. Because of the judge’s adjudication of dangerousness, Mr. Cho may have met the criteria for disqualification on a federal level. Records of the outpatient commitment were not placed into the Virginia Mental Health Database that forwards information to the NICS. As a result, Mr. Cho was able to purchase two handguns. There was an immediate response by Virginia Governor Timothy Kaine to the shootings that occurred on April 16, 2007, which left 32 people dead. He issued Executive Order 50 on April 30, 2007, directing all executive branch employees to consider involuntary outpatient treatment as involuntary admission to a mental health facility for the purposes of VA Code Ann.§37.2-1014. The order further directed law enforcement to enter records of involuntary outpatient care into the state database and to forward such records to federal law enforcement.35

There was also a federal response to the Virginia Tech tragedy. The new centerpiece of federal legislation affecting the purchase of firearms by persons with a history of mental illness, the National Instant Criminal Background Check System (NICS) Improvement Act, was introduced after the Virginia Tech tragedy; it contains many of the provisions of the original Lady of Peace Bill.34

There was insufficient support for other legislation that Rep. McCarthy and others introduced around this time, including the Assault Weapons Ban Reauthorization Act of 2007 and the Anti-Large Capacity Ammunition Feeding Device of 2007 (HR 1859), which would reinstate and strengthen the prohibition against possessing or transferring such devices, which had been illegal until the end of the assault gun ban in 2004. The fact that Cho had purchased a semiautomatic weapon was insufficient to generate the needed support for passage. Also proposed was a Gun Show Loophole Closing Act of 2007 (HR 96), which would require background checks of those purchasing firearms at shows.34

The NICS Improvement Act was passed by the House of Representatives on June 13, 2007, and then by the Senate on December 20, 2007, with the public support of the National Rifle Association (NRA). It was signed by the President on January 8, 2008.36 It will have significant impact on persons with mental illness, because the bill provides states with significant financial incentives to release all relevant records, including those contained in mental health databases, to the NICS. The grants will allow states to establish or upgrade information and identification technologies for firearms eligibility determinations and to improve the automation and transmittal to federal and state record repositories of criminal history dispositions, records relevant to determining whether a person has been convicted of a misdemeanor crime of domestic violence, court orders, and mental health adjudications or commitments.34

Concerns have been raised that this approach may contribute to the stigmatization of mental illness and result in reluctance by persons with mental illness to seek treatment.37 Simpson3 noted the lack of research to determine whether the legal disqualification criteria used by states or the federal government accurately identify persons who are at increased risk for firearms violence. One of the criteria has been a history of involuntary hospitalization based on the assumption that persons who do not accept treatment voluntarily are at a higher risk of engaging in violence with firearms because of lack of insight. Yet, there are no studies available that support this distinction.3

Outcomes of Firearms Legislation

In the context of the debate about the implications of firearms laws, it is helpful to review the evidence of changes in rates of suicide and homicide following the implementation of earlier firearms legislation, legislation that targets persons who have a history of mental illness, as well as other classes of prohibited persons and legislative initiatives that are aimed at reduction of firearms availability.

The expectation upon the passage of the Brady Act was that the provisions would decrease the incidence of homicide and suicide by firearms. Those with felony records would be prohibited from purchasing a handgun. The waiting period was designed to allow a cooling off period and help to prevent impulsive homicides and suicides.1,3,37

Ludwig and Cook38 undertook a study to measure the effect of the Brady Act. They performed an analysis of vital statistics regarding suicide and homicide rates obtained from the National Center for Health
Statistics for the period 1985 to 1997. At the time of the implementation of the Brady Act, 18 states and the District of Columbia had comparable legislation in place, while the other states had to institute these new procedures.

Ludwig and Cook\textsuperscript{38} took advantage of this situation to compare the change in the rates of suicide and homicide following implementation of the Brady Handgun Violence Prevention Act between the states that already had been using these measures and states that were required to apply the provisions of the Brady Act. They found that there was a reduction in firearms-associated suicide rates only among persons over the age of 55 in those states that had been induced to implement the provisions of the Brady Act. The effect was more pronounced in those states that had instituted changes in both the waiting period and the background check requirements compared with those states that had needed only to implement the background check requirement. The authors found no evidence that the Brady Act provisions resulted in overall suicide reduction or reduction of the homicide rates with the exception of the reduction seen in persons over the age of 55. Analysis was complicated because of the secondary market, which has been estimated to account for about 40 percent of firearms purchases. (The secondary market includes those gun transfers that are not made through federally licensed firearms dealers.) Before passage of the Brady Act, guns could be purchased in more lenient states and then transported across the border to states with more stringent laws. Ludwig and Cook noted that the federally required waiting period was eliminated in 1998 when checking through the NICS became operational.

Hahn \textit{et al.}\textsuperscript{39} performed a comprehensive review of studies evaluating the efficacy of various state and federal gun laws. They identified four studies concerning the effects of acquisition restrictions on violent outcome but determined that there was still insufficient evidence to come to a definitive conclusion about a reduction in firearms-associated suicide or homicide rate.

Hahn \textit{et al.}\textsuperscript{39} identified nine studies on the effect of banning certain categories of firearms. Among these was a study by Roth and Koper,\textsuperscript{40} who examined the effect of the Federal Violent Crime Control Act of 1994, which banned the sale of assault weapons and large capacity ammunition magazines. They compared states that had bans in place before the passage of the federal legislation with states that had no such ban. There was a relative decline in homicide rates in those states that did not have a ban in place before passage of the Act.\textsuperscript{40} However, Hahn \textit{et al.}\textsuperscript{39} in considering the inconsistent results across all nine studies, concluded that there was insufficient evidence to draw a definitive conclusion as to whether bans had been effective. They reviewed seven studies concerning the effects of instituting a waiting period for firearms purchases. However, again because of the small number of studies, limitations in design and execution, and inconsistent results, there was insufficient evidence to determine whether this strategy has been useful in reducing firearms-related violence.

There have been several studies assessing whether laws designed to restrict access to firearms by domestic violence offenders have had the desired effect on rates of intimate partner homicide.\textsuperscript{41} There are two components of the Federal Gun Control Act that address domestic abuse and firearms purchase and possession. The Violent Crime Control Act of 1994 made it a federal offense to possess or receive a firearm while subject to a restraining order protecting an intimate partner or child of an intimate partner.\textsuperscript{42} However, not all protective orders are considered exclusionary. Only those that are issued after a hearing in which the alleged abuser has an opportunity to participate qualify for federal firearms exclusion. The Lautenberg Amendment to the Gun Control Act, which passed in 1996, prohibited possession or receipt of a firearm by anyone who had ever been convicted of a qualifying misdemeanor crime of domestic violence.\textsuperscript{43} Some states have laws that allow for confiscation of firearms in domestic violence situations and may have further restrictions on possession such as applying the prohibition when there has been a temporary restraining order only. State laws can also expand the definition of an intimate partner.\textsuperscript{44}

Vigor and Mercy\textsuperscript{41} reported that laws restricting access to firearms by abusers under a restraining order in fact led to a modest reduction in intimate partner homicide (IPH), but could not account for the substantial reduction in the rate of IPH in United States during the study period. Between 1976 and 2005 there was an 83 percent reduction in the rate of IPH involving black male victims, a 61 percent reduction in white male victims, a 52 percent reduction in black female victims, and a 6 percent reduction in white female victims. Following passage of
such a law by a state, there is a reduction of the rate of female IPH by seven percent, or on average of 2.9 homicides per year. However, the overall reduction was attributed to those states that not only prohibited purchase of firearms but also had a database of persons under restraining orders. These states had three to four fewer IPHs per year and a decrease of nine percent in IPHs by firearms. However, they found no effect of the domestic violence misdemeanor or confiscation laws.

Webster et al. evaluated the association between youth-focused firearms laws and suicides among youths. Firearms are used in approximately half of all youth suicides. Many state and federal laws provide age-specific restrictions on the purchase, possession, or storage of firearms. Webster et al. used state data on suicide rates among U.S. youth aged 14 through 20 years, from 1976 to 2001. They estimated the association between state and federal youth-focused firearms laws that mandate a minimum age for the purchase or possession of handguns and state child access prevention (CAP) laws requiring safe storage of firearms on suicide rates among youth and youth-focused state and federal firearms laws and rates of firearm- and nonfirearm-associated and total suicides among U.S. youth aged 14 through 17 and 18 through 20 years. They found that minimum purchase-age and possession-age laws were not associated with statistically significant reductions in suicide rates among youth aged 14 through 20 years but state CAP laws were associated with an 8.3 percent decrease in suicide rates among 14- to 17-year-olds. The annual rate of suicide in this age group in states with CAP laws was 5.97 per 100,000 population rather than the projected 6.51. This association was statistically significant for firearm-associated suicides but not for nonfirearm-related suicides. CAP laws were also associated with a significant reduction in suicides among the older youth (18–20 years); however, the association was similar for firearm- and nonfirearm-associated suicides.

Not all studies have shown a link between the availability of household firearms and the rates of suicide. A recent comprehensive analysis highlighted the lack of evidence of a link between suicide and firearms ownership based on an international perspective. In contrast Miller et al. found that persons of all ages and both sexes were more likely to die by suicide when they lived in households containing firearms. In their study, a 1 percent difference in household firearms prevalence was associated with a 3.5 percent relative difference in the rate of firearm-related suicide and a difference of 1.4 percent in the rate of suicide overall. The study results indicated that nearly twice as many persons committed suicide in the 15 states with the highest percentage of household firearms ownership compared with the six states with the lowest level of firearms ownership. Miller and his colleagues used state-level, survey-based estimates of household firearms ownership from the Behavioral Risk Surveillance System and suicide mortality data for each state from the Centers for Disease Control and Prevention. Their findings were significant, even when they controlled for the state rates of poverty, urbanization, unemployment, mental illness, and drug and alcohol dependence.

This result suggests that there could be some potential, though unstudied, benefit in psychiatrists’ following the Practice Guideline for the Assessment and Treatment of Patients With Suicidal Behaviors. The guideline recommends that if the patient has access to a firearm, the psychiatrist should discuss and recommend to the patient or a significant other the importance of restricting access to, securing, or removing this or other weapons. However, in a recent survey of adult psychiatrists, about 45 percent reported that they had never thought seriously about discussing firearms safety with their patients and only one-fourth reported having a routine method of identifying patients who owned firearms.

Implications for Persons With Mental Illness

A series of high-profile cases involving persons with mental illness who have committed violent acts has captured the public attention and has resulted in calls to limit the access to firearms by such persons. The fact that diverse organizations such as the NRA and gun control groups worked together to pass the NICS Improvement Act highlights the effect of media attention on advancing public policy. This legislative approach has been adopted despite the lack of definitive answers to many questions concerning persons with mental illness. Do persons with mental disorders have an increased risk of violent behavior, and if so, under what circumstances and conditions? To what extent does effective treatment mitigate risk? Have firearms regulations accurately identified those persons with mental illness who pose the high-
est risk? Even if the persons with mental illness who are part of the prohibited class are truly at increased risk, can the legislation actually decrease the suicide and homicide rates, and at what cost? Will further stigmatization and fear of loss of firearms access prevent persons with mental illness from seeking treatment? Are other options such as more resources for treatment likely to be more effective than the strategy of restricting access?

There is evidence of a complicated relationship between mental illness and violence, and the attributed risk due to mental illness, though real, may be smaller than public perception suggests. The question remains how best to mitigate the risk. There are other options to be considered such as expanded mandatory treatment and outpatient commitment, more frequent contact of patients with clinicians, and use of access to money and housing as leverage to improve treatment compliance, especially in persons with a history of violence and aggressive acts. These approaches need further study.

The NICS Improvement Act was passed after the Virginia Tech tragedy, which linked in the public mind the connection between persons with mental illness and dangerousness. There are few data showing that limiting legal firearm access to persons with mental illness as defined by the Brady Act will in fact have an effect on suicide and homicide rates using firearms. The NICS Improvement Act has been viewed as an opportunity to increase the reporting of prohibited persons by state agencies. Given the considerable financial incentives, it is likely that states will comply and set up databases of persons with mental illness.

The Act will encourage more states to establish a mental health database that communicates with the NICS. However, there is little evidence that the disqualifying criteria accurately select those persons who pose a greater risk of engaging in firearms violence. For example, there is a distinction made between persons who have been voluntarily hospitalized versus those involuntarily hospitalized without any empirical support. As an unintended consequence of the Act, persons with mental illness may avoid entering into treatment or, if admitted to an impatient unit, may simply agree to voluntary hospitalization to retain their firearms access. There are threats to the confidentiality of psychiatric records, especially in states that have very broad definitions of mental illness that are disqualifying, which again may discourage clients from seeking treatment.

To date, there have been inconsistent results with respect to lowering suicide and homicide rates with past legislative efforts. The NICS Improvement Act has been marketed as a measure to close loopholes but it does not affect the availability of firearms through secondary sources and through illegal means. With about a third of households containing a firearm, persons with mental illness may be able to gain access through family members or friends. It does not address the availability of assault weapons and semiautomatic weapons.

It is notable that the NRA supported the NICS Improvement Act. The NRA endorsed the goal of the legislation to provide financial incentives to states to report those who were adjudicated by a court to be “mentally defective,” a danger to themselves or a danger to others. In a press release, the NRA lauded this legislation as representing progress for gun ownership rights, pointing to the introduction of safeguards.

There are certain provisions that will in fact allow persons with mental illness some recourse after being placed in a mental health database. The Act requires all federal agencies that impose mental health adjudications or commitments to provide a process for “relief from disabilities.” It prevents reporting of mental adjudications or commitments by federal agencies when those adjudications or commitments have been removed. The NICS Improvement Act requires removal of expired, incorrect, or otherwise irrelevant records, and it provides persons with mental illness an opportunity to appeal when there has been an inappropriate commitment or finding of incompetence by a federal agency. The error could be corrected either through the agency or in court. The Senate version requires that incorrect or outdated records be purged from the system within 30 days after the Attorney General learns of an error.

The NICS Improvement Act prevents the use of federal “adjudications” that consist only of medical diagnoses without findings that the persons involved are dangerous to themselves or others or are mentally incompetent or lack the capacity to manage their own affairs. The objective of this provision is to prevent the reliance on psychiatric diagnosis alone in making federal determinations concerning restriction. It is unclear what affect this would have on states that have very expansive definitions of prohib-
ited persons. The legislation would require agencies to provide “relief from disabilities” programs within 120 days, and it calls on federal agencies to provide notification to all people who are subjected to a mental health adjudication or commitment process about the consequences to their firearms ownership rights and the availability of future relief.

References
25. Federal Gun Control Act, 18 U.S.C. § 922(d) (1968), et seq
42. 18 U.S.C. § 922 (g)(8)
43. 18 U.S.C. § 922 (g)(9)