

**Potential Cost-Savings of a
Severe Mental Illness Exclusion
from the Death Penalty:
An Analysis of Tennessee Data**



americanbar.org/dueprocess

JUNE 2018

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June 2018

Guest Introduction by Peter A. Collins, Ph.D.

Although many researchers and policy makers had already asked about the financial impact of the death penalty, economic cost studies became more common after the turn of the 21st century.¹ Many of these studies came about because legislators, policy makers, and concerned citizens have asked “how much money is this costing taxpayers?” This question is indeed important, especially in light of the dynamics associated with, and the competition for, relatively scarce financial and in-kind resources, coupled with the significant decrease over the last 20 years in the use of the death penalty nationwide.²

State-level economic cost studies of the death penalty have ranged in both scope and rigor. In a recent cost study my colleagues and I conducted in Oklahoma for the Constitution Project’s Bipartisan Death Penalty Commission, we provide an analysis of 15 of the most recent and relevant cost studies completed since 2001. As with any research endeavor, there were positives and negatives associated with each study. One of the biggest issues affecting the bulk of the studies was a lack of case-level financial data. There are many reasons why data are limited. For example, many state and county prosecutors do not keep data based on their attorneys’ efforts on any particular case, which makes estimating and enumerating their work effort very difficult. Lack of data leads to an issue with scope, that is, the more rigorous cost studies are able to more reliably estimate effort in most, if not all, of the key generators of costs in a criminal trial. Several studies have risen to this higher level of rigor and provide valid estimates of average per-case costs.

I have led teams of researchers on three such empirical studies, first in Washington State (2015), the second in Oregon (2016), and the third in Oklahoma (2017).³ These studies, along with studies conducted in North Carolina (2009) and Maryland (2008), for example, offer reliable per-case, and in some cases, system-wide cost estimates.⁴ Importantly, *all* credible studies have found that seeking and imposing the death penalty is more expensive than in similar cases where it is not. The only differences in the results of these studies have been in discovering “how much” cost.

¹ See Peter A. Collins, Matthew J. Hickman & Robert C. Boruchowitz, *An Analysis of the Economic Costs of Capital Punishment in Oklahoma*, in THE REPORT OF THE OKLAHOMA DEATH PENALTY REVIEW COMMISSION 223 (2017), <http://okdeathpenaltyreview.org/the-report/> [hereinafter Collins, Hickman & Boruchowitz, *Oklahoma Analysis*].

² See *Death Penalty Trends*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/death-penalty-trends> (last visited Jun. 5, 2018).

³ PETER A. COLLINS ET AL., AN ANALYSIS OF THE ECONOMIC COSTS OF SEEKING THE DEATH PENALTY IN WASHINGTON STATE (Jan. 1, 2015), <https://bit.ly/2JxpJie>; ALIZA B. KAPLAN, PETER A. COLLINS & VENETIA L. MAYHEW, OREGON’S DEATH PENALTY: A COST ANALYSIS (Nov. 16, 2016), <https://bit.ly/2qTUK03>; Collins, Hickman & Boruchowitz, *Oklahoma Analysis*, *supra* note 1.

⁴ Philip J. Cook, *Potential Savings from Abolition of the Death Penalty in North Carolina*, 11 AM. L. & ECON. REV. 498 (2009), <https://unc.live/2LpWhrs>; John K. Roman, Aaron J. Chalfin & Carly R. Knight, *Reassessing the Cost of the Death Penalty Using Quasi-Experimental Methods: Evidence from Maryland*, 11 AM. L. & ECON. REV. 530 (2009); see also JOHN ROMAN ET AL., URBAN INST., THE COST OF THE DEATH PENALTY IN MARYLAND (2008), <https://urbn.is/2H2xkAV>.

The more comprehensive and rigorous the study, the better the cost estimates tend to be. However, taking on a case-level, methodologically rigorous, and comprehensive cost study is extremely labor intensive, time consuming, expensive, and in all, very difficult to accomplish. Thus, it is common, if not expected, for policy makers and researchers to survey the extant empirical literature and use existing findings to help guide their steps towards making a policy decision or prior to forming their own research activities, or both.⁵ To be clear, applying the findings from a previously conducted study, as is the case in the following, has its obvious limitations. These include issues with generalizability, validity, and reliability. As long as these and any other notable limitations are clearly identified, however, the adoption and application of outside measures can be helpful in providing some context to the issue at hand.

It is my opinion that the following analysis provides a good starting point or a rough estimate that may be used as part of the larger discussion regarding the treatment of people with serious mental illness in the justice system. I note, as the authors do, that the findings here do not reach the level of rigorous empirical evidence of the economic opportunity cost savings associated with limiting the death penalty in cases where the defendant has a serious mental illness. Therefore, the findings below should be interpreted with caution. Although opinions vary on the relative importance of economic cost studies, these findings offer another perspective along with the fundamental moral and ethical concerns that continue to drive much of the debate surrounding the application of the death penalty.

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⁵ See ERNEST GOSS ET AL, THE ECONOMIC IMPACT OF THE DEATH PENALTY ON THE STATE OF NEBRASKA: A TAXPAYER BURDEN? (Aug. 15, 2016), <https://bit.ly/2Jl29BV>.

Introduction⁶

Several state legislatures around the country are currently considering, have considered, or plan to consider legislation that would create a severe mental illness exclusion⁷ from the death penalty.⁸ While the details of these bills vary from state to state, they all share a common goal: prohibiting the application of the death penalty for persons with severe mental illness (“SMI”) that was present at the time of their crimes. In this context, severe mental illness is defined by most bills⁹ as “a severe mental disorder or disability that significantly impaired [a defendant’s] capacity (a) to appreciate the nature, consequences or wrongfulness of their conduct, (b) to exercise rational judgment in relation to conduct, or (c) to conform their conduct to the requirements of the law.”¹⁰ Some of the bills also include language requiring that “active psychotic symptoms” of the disorder be present at the time of the offense.¹¹ Alternatively, other bills limit the definition of severe mental illness to a list of diagnoses, which generally include schizophrenia, schizoaffective disorder, major depressive disorder, delusional disorder and, in some cases, Post-Traumatic Stress Disorder (PTSD) and traumatic brain injury (TBI).¹²

The American Bar Association primarily supports this exclusion for specific legal and public policy justifications as detailed below, although other advocates have advocated for an SMI exclusion because it would save money for states and municipalities that pay for criminal investigations, trials, experts, lawyers, appeals, and other expenses related to prosecuting serious crimes. Thus, the topic of relative costs has repeatedly come up in discussions with decisionmakers, including legislators, and several have asked for an estimate of what these relative cost estimates might be. However, to our knowledge, no other studies or analyses of the fiscal savings to a state government that could be achieved through the implementation of this reform have been conducted to date.

⁶ The statements and analysis contained in this report are the work of the American Bar Association Death Penalty Due Process Review Project, which is solely responsible for its content. The Board of Governors and House of Delegates of the American Bar Association have neither reviewed nor sanctioned its contents, with exception to its references to the 2006 ABA Mental Illness Resolution 122-A. Accordingly, the views expressed herein should not be construed as representing the policy of the ABA. In addition, this cost analysis is intended as background information. It is not intended to serve as legal advice in particular cases.

⁷ We use the term “exclusion” to refer to bills that would exclude, or exempt, individuals with severe mental illness from the death penalty. We have chosen to use this term for consistency throughout this report, although other entities, or other publications, use the term “exemption.” In this context, they are synonymous.

⁸ Rebecca Beitsch, *Should States Ban the Death Penalty for People with Severe Mental Illness?*, PBS NEWSHOUR (Apr. 17, 2017), <http://to.pbs.org/2pJOsSJ> (last visited Jun. 5, 2018) See also *Resources on Severe Mental Illness and the Death Penalty*, AM. BAR ASS’N, <https://bit.ly/2JgDsqq> (last visited December 13, 2017).

⁹ See *Resources on Severe Mental Illness and Death Penalty*, *supra* note 8 (listing relevant legislation under “Bills & other legal docs”).

¹⁰ AM. BAR ASS’N, RECOMMENDATION 122-A, at 1 ¶ 2 (Aug. 2006), <https://bit.ly/2M02H1C> [hereinafter ABA, RECOMMENDATION 122-A].

¹¹ For example, Tennessee Senate Bill 378 requires that the defendant exhibit “[s]ymptoms of psychosis shown by hallucinations, extremely disorganized thinking, or other significant disruptions of consciousness, memory, and perception that are not attributable solely to repeated criminal conduct or the acute effects of the intentional use of alcohol or other drugs.” S.B. 378, 110th Gen. Assemb., Reg. Sess. (Tenn. 2017).

¹² For bills that include PTSD or TBI in the list of diagnoses eligible for the exclusion, see, for example, S.B. 155, 120th Gen. Assemb., Reg. Sess. (Ind. 2017); H.B. 2170, 91st Gen. Assemb., Reg. Sess. (Ark. 2017).

This analysis aims to provide elements of a generalized answer to the question of potential costs or cost-savings based on case data and other information available from the state of Tennessee,¹³ but it serves only as an estimate. Because of data limitations, this does not offer conclusions about the specific savings that would be achieved through the exclusion in Tennessee or any other individual state that allows for death sentences. Such a definitive analysis could only be achieved through a more in-depth, empirical study. However, using the Tennessee-specific and comparative information that is available, we can provide a range that will help the public and decisionmakers get a broad sense of the cost savings that might result from implementing an SMI exclusion from the death penalty.

Existing death penalty cost studies (discussed in more detail below) demonstrate that cases in which the death penalty is sought are consistently more expensive overall than those in which the greatest sentence a defendant may receive is life without parole. A severe mental illness exclusion would most likely result in a modest, proportional reduction of new death sentences sought in the years following its implementation. Indeed, people with severe mental illness can still be – and are – sentenced to death around the country, and they face execution on a regular basis.¹⁴ This new legislation would make these individuals ineligible for the death penalty. Thus, a severe mental illness exclusion could result in cost savings for the states that implement this reform, as a subset of individuals who currently could face expensive capital prosecutions and decades of appeals would become ineligible and their trials and appeals would be significantly truncated, while still resulting in guilty verdicts.

With the methodology described below, we estimate that Tennessee’s implementation of a severe mental illness exclusion from the death penalty could save between \$1.4 million and \$1.9 million a year in 2017 dollars.

Rationale for the Severe Mental Illness Exclusion

While the American Bar Association (ABA) does not take a position on the death penalty *per se*, it called for an SMI exclusion in a 2006 Resolution:

“Defendants should not be executed or sentenced to death if, at the time of the offense, they had a severe mental disorder or disability that significantly impaired their capacity (a) to appreciate the nature, consequences or wrongfulness of their conduct, (b) to exercise rational judgment in relation to conduct, or (c) to conform their conduct to the requirements of the law. A disorder manifested primarily by

¹³ We chose Tennessee because of the public availability of detailed data on all first-degree murder cases since 1977 and the existence of an ongoing campaign to create a severe mental illness exclusion, with bills to such effect introduced in 2016 and 2017 by Tennessee legislators in both major parties.

¹⁴ For example, in March 2016, Texas executed Adam Ward, who the courts recognized was “diagnosed with bipolar disorder and placed on lithium as early as age four.” *Ward v. Stephens*, 777 F.3d 250, 253 (5th Cir. 2015). Andre Thomas, a man with a long history of paranoid schizophrenia, remains on Texas’s death row. Days after the crime and while unmedicated, Thomas removed his right eye in the throes of delusions. Years later, he also removed and ate his left eye. *Thomas v. Dir., Tex. Dep’t of Crim. Justice Corr. Insts. Div.*, No. 4:09-cv-644, 2016 WL 4988257, at *1-3 (E.D. Tex. Sept. 19, 2016). In 2013, the state of Florida executed John Ferguson, a man with schizophrenia who believed that he was the immortal Prince of God and that “he will be resurrected at some point after his execution ‘to sit at the right hand of God.’” *Ferguson v. Sec’y, Fla. Dep’t of Corr.*, 716 F.3d 1315, 1324 (11th Cir. 2013). While these are examples of individuals with severe mental illness who have been sentenced to death, we cannot say with certainty that they would have qualified for the proposed exclusion.

repeated criminal conduct or attributable solely to the acute effects of voluntary use of alcohol or other drugs does not, standing alone, constitute a mental disorder or disability for purposes of this provision.”¹⁵

In the Resolution’s accompanying report, the ABA notes that exempting people with severe mental illness from the death penalty would be a logical extension of the constitutional principles recognized by the Supreme Court in *Atkins v. Virginia*¹⁶ and in *Roper v. Simmons*.¹⁷ Indeed, when in *Atkins*, the Supreme Court barred the execution of individuals with intellectual disabilities, it noted that these individuals have “diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses and to understand the reactions of others.”¹⁸ These impairments make those with intellectual disability both less culpable than the average murderer and less likely to be deterred by the death penalty, making them undeserving of the ultimate punishment.¹⁹ Three years after *Atkins*, the Court ruled in *Roper* that the execution of juveniles under the age of 18 violated the Eighth Amendment. Indeed, because of their lack of maturity and underdeveloped sense of responsibility, their higher vulnerability or susceptibility to negative influences and outside pressures and because the “personality traits of juveniles are more transitory, less fixed,” the Court found that juveniles “cannot with reliability be classified among the worst offenders.”²⁰ Because people with severe mental illness have similarly diminished capacities when compared to the average murderer who does not have a disability, the reasoning of *Atkins* and *Roper* is also applicable and similar protections should be extended to exempt those with severe mental illness.

The ABA policy calling for a severe mental illness exclusion from the death penalty was adopted the same year by the American Psychological Association, American Psychiatric Association and the National Alliance on Mental Illness (NAMI).²¹ In 2011, Mental Health America adopted a similar policy, reflecting a broad consensus on the subject from relevant professional and advocacy organizations.²² Furthermore, there is strong public support for the exclusion. Indeed, a 2015 multi-state poll revealed that, when first asked, 66% of Americans oppose the death penalty for people with severe mental illnesses. After hearing further details about how a severe mental illness exclusion would work in practice, voter support rises to 72%.²³

¹⁵ ABA, RECOMMENDATION 122-A, *supra* note 9.

¹⁶ *Atkins v. Virginia*, 536 U.S. 304 (2002).

¹⁷ *Roper v. Simmons*, 543 U.S. 551 (2005).

¹⁸ *Atkins*, 536 U.S. at 305.

¹⁹ *Id.* at 318-21.

²⁰ *Roper*, 543 U.S. at 569-70.

²¹ Erika Packard, *Associations Concur on Mental Disability and Death Penalty Policy*, 38 MONITOR ON PSYCHOLOGY 14 (Jan. 2007), <https://bit.ly/2xLA8lx> (last visited Jan. 3, 2018).

²² *Position Statement 54: Death Penalty and People with Mental Illness*, MENTAL HEALTH AM. (Jun. 14, 2016), <https://bit.ly/2JdClq0>.

²³ DAVID BINDER RES., MULTI-STATE VOTER SURVEY: DEATH PENALTY AND MENTAL ILLNESS (2015) (survey conducted from Nov. 30 through Dec. 7, 2015) (results on file with authors).

For more information on the rationale for an SMI exclusion, we encourage you to read the ABA's 2006 Resolution and Report, and our December 2016 publication, *Severe Mental Illness and the Death Penalty*, that details the varied public policy and legal arguments that support an SMI exclusion.²⁴

Existing Death Penalty Cost Studies

There have been at least 27 studies conducted over the past twenty years in different jurisdictions about the cost of that jurisdiction's death penalty system, and they all found that a system with capital punishment is more expensive than a system without the death penalty.²⁵ The exact cost of a death penalty case varies from study to study due to differences in methodology and access to relevant data, but also because of differences in states' operation of their death penalty systems.

For example, a March 2017 study found that, on average, Oklahoma capital cases cost 3.2 times more than non-capital cases.²⁶ An August 2016 study of Nebraska's death penalty estimated that each death penalty prosecution cost Nebraska's taxpayers about \$1.5 million more than a life without parole prosecution.²⁷ Another study commissioned by the Nevada legislature and published in 2014 found that a capital case cost, on average, over \$500,000 more than a non-capital case.²⁸ While these are only a small selection of the existing cost studies related to the death penalty generally, all of their findings converge to show that a capital case costs more – and often a lot more – than a non-capital murder case.

Costs to the executing state can be incurred during the investigation, trial phase, sentencing phase, appeals, incarceration, and execution. Unfortunately, many of these disproportionate costs are still incurred even if the jury rejects the death penalty and sentences the person to life, or when an appeals court later overturns an improper or unconstitutional death sentence. In some cases where the original death sentence is overturned, there is the further additional cost of re-trials, even though most do not lead to executions. So, in a very significant number of cases, the eventual cost of life without parole is incurred on top of the very high costs of unsuccessfully seeking to secure and carry out a death sentence. Additionally, when an individual facing execution has a severe mental illness at the time of his or her execution, there may be additional – and sometimes fruitless – costs incurred to litigate whether the inmate is sane enough to be executed. If a court finds that the individual is not sufficiently aware of the reasons for his or her impending execution, all of the previously incurred costs of seeking a death sentence are wasted while the individual remains incarcerated. These are difficult permutations to accurately capture in a cost study, but are significant factors when examining the different stages of litigation and representation that require state funds to ensure the constitutionality of a potential execution.

While these cost studies provide incredibly valuable information on the cost of the death penalty generally – and have established that capital cases are more expensive than non-capital cases in every jurisdiction – they do not specifically isolate the potential unique costs associated with the complexity of

²⁴ AM. BAR ASS'N DEATH PENALTY DUE PROCESS REV. PROJECT, SEVERE MENTAL ILLNESS AND THE DEATH PENALTY (Dec. 2016), <https://bit.ly/2xyWUgl>.

²⁵ *Costs of the Death Penalty*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/costs-death-penalty> (last visited Jun. 5, 2018).

²⁶ Collins, Hickman & Boruchowitz, *Oklahoma Analysis*, *supra* note 1, at 260.

²⁷ See Goss, *supra* note 5, at 3, 28.

²⁸ NEV. LEGIS. AUDITOR, FISCAL COSTS OF THE DEATH PENALTY 10 (2014), <https://bit.ly/2Lou5oX>.

capital prosecutions of people with severe mental illness. They also do not evaluate the potential savings of a severe mental illness exclusion to the death penalty in the jurisdiction. While the moral, legal, and policy arguments are at the core of the ABA's support for this reform effort, the potential fiscal impact of the exclusion is an important element to consider for both advocates and lawmakers.

Methodology

Since each state utilizes slightly different procedures for the death penalty and pays the relevant actors differently, it would not be practical to conduct an analysis on all 31 death penalty states.²⁹ Therefore, it was necessary to focus on a single state. We then determined the key variables needed to conduct the cost-savings estimate and applied the methodology detailed below. However, while we chose Tennessee for this first analysis, the methodology and model could be replicated and applied to other states.

Choice of location: For this cost estimate, we focused on the state of Tennessee. Tennessee is currently the only state in which there is both an ongoing legislative effort to create a severe mental illness exclusion and detailed data available about all capital and non-capital first-degree murder cases since 1977.³⁰ Tennessee legislators introduced severe mental illness exclusion bills in 2011 and 2017. In 2017, two Republican legislators sponsored the Senate-side bill (SB 0378) while two Republicans and a Democrat sponsored the House-side bill (HB 0345).³¹ In addition, a detailed analysis of all first-degree murder cases in Tennessee since 1977 has already been compiled by Tennessee capital defenders, which makes our own analysis possible.³²

Percentage of individuals with severe mental illness on death row: After determining the geographic focus, we sought to determine how many people might be affected by the proposed legislative reform. The target population of the reform is the group of individuals with severe mental illness who are eligible to be sentenced to death in Tennessee. A comprehensive, empirically-rigorous

²⁹ *States With and Without the Death Penalty*, DEATH PENALTY INFO. CTR., <https://bit.ly/2pUzf1> (last visited Jun. 5, 2018).

³⁰ The data included a list of all capital and non-capital first-degree murder cases in the state since 1977, with a detailed analysis of the legal outcome of each case (death sentence, life without parole sentence, life sentence, term of years), as well as information about the county in which the case came from and information about the defendant (name, age, race, etc.) See Bradley A. MacLean & H.E. Miller, Jr., *Tennessee's Death Penalty Lottery*, 12 TENN. J.L. & POL'Y (forthcoming 2018) (manuscript at Appendix B, *Chart of Tennessee Capital Trials*) (on file with authors).

³¹ Both bills define severe mental illness as follows: "'severe mental illness' means a person has a documented history of: One or more of the following mental disorders as diagnosed using the current edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association: (A) Schizophrenia; (B) Schizoaffective disorder; (C) Bipolar disorder; (D) Major depressive disorder; or (E) Delusional disorder; and (2) Symptoms of psychosis shown by hallucinations, extremely disorganized thinking, or other significant disruptions of consciousness, memory, and perception that are not attributable solely to repeated criminal conduct or the acute effects of the intentional use of alcohol or other drugs. Notwithstanding any law to the contrary, no defendant with a severe mental illness at the time of committing the offense of murder in the first degree shall be sentenced to death when the conditions of the severe mental illness, while not meeting the standard to be found not guilty by reason of insanity as defined in § 39-11-501, significantly impaired the defendant's capacity to appreciate the nature, consequences, or wrongfulness of their conduct related to the offense or significantly impaired the defendant's capacity to exercise rational judgment in relation to the conduct of the offense." S.B. 378, 110th Gen. Assemb., Reg. Sess. (Tenn. 2017); H.B. 345, 110th Gen. Assemb., Reg. Sess. (Tenn. 2017).

³² MacLean & Miller, *supra* note 29 (manuscript at Appendix B, *Chart of Tennessee Capital Trials*).

study on this subject would distinguish the number of individuals with severe mental illness whom the State attempted to sentence to death from those who did get a death sentence. That would be relevant because if an exclusion deters prosecutors from seeking death, then there can be significant cost savings in avoiding a capital trial altogether. However, there is currently no database of all individuals with severe mental illness whom prosecutors attempted to sentence to death in Tennessee. This would require a case-by-case analysis of the thousands of Tennessee first-degree murder cases that ended with a life sentence (either before trial, at trial, or thereafter) since 1977 to identify each case in which the defendant had severe mental illness and the prosecution sought the death penalty. Such a research project could only be done as part of an in-depth cost analysis with a dedicated research team and significant time and resources. Until such a comprehensive examination can be done, we will use the number of individuals with severe mental illness who have been sentenced to death, which can give us a good, though less than entirely accurate, estimate of the potential fiscal impact of the proposed legislation.

The precise number of people who were sentenced to death in Tennessee and had severe mental illness at the time of their crime is not currently known. We thus had to use other data to estimate what that percentage of the overall death row population might be. We know that the prevalence of severe mental illness in the general population in the U.S. is 4%.³³ In Tennessee, the prevalence of severe mental illness is similar to the corresponding national annual average percentage, with 4.4% of adults aged 18 or older in 2014–2015 having had severe mental illness in the past year.³⁴ However, that proportion of defendants who received a death sentence is potentially much higher. Mental Health America currently estimates that 20% of individuals on death row have severe mental illness,³⁵ an estimate recently revised from their previous analysis that had found that 5 to 10% of individuals on death row have severe mental illness.³⁶

To verify whether that 20% figure was realistic for Tennessee’s death row, we conducted an analysis on a sample of Tennessee death penalty cases. To study all of Tennessee’s death penalty cases would have been beyond our current capacity. We instead chose to focus on a subset of death penalty cases, those out of Shelby County, which we could use to extrapolate to the entire Tennessee death penalty population. That sample included all 67 death penalty cases that were prosecuted in Shelby County between 1977 and 2017.³⁷ Shelby County was chosen because it is the Tennessee county that produces the most death sentences.³⁸ Out of the 192 individuals sentenced to death in Tennessee since 1977, 35% were sentenced in Shelby County.³⁹

³³ See *Mental Illness*, NAT’L INST. OF MENTAL HEALTH, <https://bit.ly/2s93EyS> (last visited Jun. 5, 2018) (fig. 3 and accompanying text).

³⁴ SUBSTANCE ABUSE & MENTAL HEALTH SERV. ADMIN., BEHAVIORAL HEALTH BAROMETER: TENNESSEE, VOLUME 4, at 8 (2017), <https://bit.ly/2xKcUMF>.

³⁵ *Position Statement 54*, *supra* note 21.

³⁶ Sarah Swig, *Mental Illness and the Death Penalty*, NAT’L. COAL. TO ABOLISH THE DEATH PENALTY (Sept. 29, 2014), <https://bit.ly/1xucVws> (last visited Jun. 5, 2018).

³⁷ MacLean & Miller, Jr., *supra* note 29 (manuscript at Appendix B, *Chart of Tennessee Capital Trials*).

³⁸ See, e.g., *Death Row Facts*, TENN. DEP’T OF CORR., <https://bit.ly/2M2Cwr9> (last visited Jun. 5, 2018) (noting that 27 of the 42 persons on death row as of June 5, 2018, were from Shelby County); MacLean & Miller, *supra* note 29 (manuscript at 35) (noting that Shelby County “has accounted for 52% of all new Tennessee death sentences since mid-2001”).

³⁹ See *id.* (manuscript at Appendix B, *Chart of Tennessee Capital Trials*).

We conducted an analysis of whether any of these Shelby County-sentenced defendants ever exhibited, per court records, symptoms of a severe mental illness at the time of the crime that might have allowed them to assert the applicability of the exclusion. Instances of severe mental illness were identified through analysis of defendants' medical history and professional diagnoses, which were gleaned through trial records and transcripts from appellate court hearings. For the purposes of this cost analysis, a defendant with severe mental illness must have a documented diagnosis and/or history of the following mental disorders: schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, or delusional disorder, as diagnosed using the current edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association. Defendants with other mental diagnoses, including post-traumatic stress disorder, mixed personality disorder, borderline personality disorder, and anti-social personality disorder, were not included. In all cases, these symptoms of psychosis were not attributable to repeated criminal conduct or the acute effects of the intentional use of alcohol or drugs. Therefore, although it cannot be guaranteed that these cases would all be covered under an SMI exclusion, our analysis suggests that their medical history and/or diagnoses coheres with the definition of "severe mental illness" proposed by the Tennessee bills.

Moreover, there is evidence in the records for many of these cases that suggests that the exclusion would likely have been meaningfully considered by the court. Indeed, that determination would be made, per the bill's requirements, by a judge based on a unique evaluation conducted by a mental health professional for the purposes of helping the judge determine whether the exclusion applies. Because there is currently no such requirement in the state, no such judicial determination or evaluation was conducted in those cases. However, the information available suggests that some of the defendants might have been able to raise the applicability of the exclusion.

Of the 67 cases studied – which represent all of the cases that ended in a death sentence in Shelby County – we found that 15% of the defendants had received a mental health diagnosis such that they might have been covered under the exclusion. This percentage, in addition to the one estimated by Mental Health America, allows us to arrive at a realistic range for the number of people with severe mental illness who are sentenced to death. The data tell us that it is reasonably likely that the number of individuals with severe mental illness within Tennessee's death penalty population is within the generally estimated range of 15 to 20%. To evaluate the overall fiscal impact of the severe mental illness exclusion, we now extrapolate the statistics found by Mental Health America and confirmed by our analysis of Shelby County to the entire Tennessee death row population.

Application of the percentages to Tennessee's death penalty population: To get a full sense of how many people might be affected by the severe mental illness exclusion in Tennessee if it were to be applied retroactively, we applied the percentages determined above to the entire Tennessee death penalty population. Per the study conducted by Tennessee capital defenders,⁴⁰ there have been 192 death sentences since 1977. We use 1977 as the starting point for our analysis because that was when Tennessee first passed its modern death penalty statute.⁴¹

⁴⁰ See *supra* notes 36-38 and accompanying text.

⁴¹ Tennessee's General Assembly voted to reinstate the death penalty in 1974 and 1976, but those two statutes were stricken down by the Tennessee Supreme Court. See AM. BAR ASS'N, EVALUATING FAIRNESS AND ACCURACY IN STATE DEATH PENALTY SYSTEMS: THE TENNESSEE DEATH PENALTY ASSESSMENT REPORT 8-19 (Mar. 2007),

Applying the percentages to the 192 death sentences allows us to arrive at estimate of the number of cases that, over 40 years, might have been affected if the severe mental illness exclusion had existed at the times of their trials.⁴² If we assume that 15% of Tennessee’s death penalty population had severe mental illness, 28 individuals would fall under the exclusion. If we instead use the estimate by Mental Health America, and assume that 20% of Tennessee’s death penalty population had severe mental illness, that would be 38 individuals. The table summarizes these findings:

Percentage of individuals on Tennessee's death row with severe mental illness (SMI)	Number of individuals with SMI on Tennessee’s death row in past 40 years
15%	28
20%	38

Cost of the death penalty: For our analysis, we needed a solid estimate of the costs of the death penalty. This meant getting an estimate of the cost of a capital case, and of the additional cost of a capital case compared to a non-capital first-degree murder case. We surveyed the existing case studies to find the most comprehensive one. We chose to use a study conducted in 2008 by the Urban Institute on the cost of the death penalty in Maryland (“Maryland study”),⁴³ which is considered by other experts to be “one of the more rigorous death penalty cost studies to date.”⁴⁴ The Maryland study found that a death penalty case costs, on average, about 3 million dollars, which is \$1,972,680 more than a non-death penalty case.⁴⁵

We conducted a review to verify that the Maryland and Tennessee death penalty systems were similar enough for us to use a cost study based on the now-abolished Maryland system. We found that the processing of a death penalty case from arrest to execution and through the appeals process followed similar steps in both states. In both states, a person sentenced to death has (or had, since Maryland no longer uses the death penalty) access to several levels of appeal. After the initial trial and direct appeal, capital defendants’ cases are or were reviewed by the state’s highest court, the Maryland Court of Appeals or Tennessee Supreme Court. In both states, capital defendants are or were then able to appeal their case through similar state post-conviction and federal *habeas* proceedings. The analysis did not reveal any major difference which would indicate that the Maryland death penalty system was significantly more expensive than the Tennessee death penalty system.

https://www.americanbar.org/content/dam/aba/migrated/moratorium/assessmentproject/tennessee/finalreport_authcheckdam.pdf.

⁴² It is important to note here that Tennessee’s SMI exclusion bill is strictly prospective and not retroactive. None of the current individuals on Tennessee’s death row would benefit from the exclusion. We simply use this number as it represents the historical trend of Tennessee’s application of the death penalty.

⁴³ ROMAN ET AL., *supra* note 4.

⁴⁴ Collins, Hickman & Boruchowitz, *Oklahoma Analysis*, *supra* note 1, at 231.

⁴⁵ The study was conducted in 2008, but we use a number adjusted into 2017 dollars.

Because the Maryland cost study is one of the most, if not the most, rigorous death penalty cost studies conducted to date, and because the Maryland and Tennessee death penalty systems are comparable, we decided to use the numbers obtained by the Maryland study for our own cost analysis.

Applying the cost findings to the percentage of individuals with SMI on death row in Tennessee:
 We then used a formula combining the elements described above to determine an estimate of how much money could be saved with a severe mental illness exclusion. We used the percentages of individuals with SMI on death row to calculate how many Tennessee capital defendants might have been able to benefit from the exclusion had it been available at the time they were prosecuted. These individuals would **not** benefit from the exclusion even if it were passed today, because Tennessee’s SMI exclusion bill is strictly prospective. However, using these numbers allows us to get a realistic estimate of how many individuals might be affected by the exclusion in the future by using historical trends.

For example, if 15% of all 192 Tennessee death-sentenced inmates had severe mental illness at the times of their crimes, 28 individuals might have benefited from the exclusion. Assuming that these

	Potential Savings
<i>Under assumption of 20% of individuals on death row with SMI</i>	
Estimated savings in TN over 40 years (in 2017 dollars)	75,750,912
Estimated savings in TN per year (in 2017 dollars)	1,893,773
<i>Under assumption of 15% of individuals on death row with SMI</i>	
Estimated savings in TN over 40 years (in 2017 dollars)	56,813,184.00
Estimated savings in TN per year (in 2017 dollars)	1,420,330

individuals would have been ineligible for the death penalty because of their severe mental illness, we then calculated how much money would have been saved by prosecuting them non-capitally. For example, if 28 individuals had not been eligible for a capital prosecution, and a capital case costs \$1.9 million more than a non-capital one, that would have meant a savings of \$54.8 million over 40 years (\$1.9 million multiplied by 29), or \$1.4 million per year on average (\$54.8 million divided by 40). We then applied this formula to the different percentages and cost estimates detailed below. The results are available in the table below:

Results

We estimate that a severe mental illness exclusion in Tennessee would save between \$1.4 million and \$1.9 million a year. According to our estimate, the state of Tennessee would have saved between \$57

and \$78 million dollars if this exclusion had been implemented in 1977, when the death penalty was reinstated in the state.

We believe that using the lower estimate of 15% of individuals on death row having severe mental illness is the most realistic, as the definition of severe mental illness in the Tennessee bill is very narrow. It is possible, however, that future savings might be higher. Indeed, capital cases are getting more and more complex and a capital case today costs more than a capital case in 1977. This analysis does not take into account the likelihood that capital cases will continue to become more expensive in the future and therefore might not reflect all of the potential savings that might be achieved through this exclusion. However, even when adopting this conservative estimate, it is clear that the reform would save taxpayer dollars.

Limits of the analysis

While this analysis is based on clearly defined assumptions, it provides what we believe is a realistic range of cost-savings that would be achieved if a severe mental illness exclusion were to be implemented in Tennessee. As noted above, however, it has by nature some limits.

First, we cannot determine the exact number of people who would benefit from the exclusion. Indeed, we cannot predict the number of future death sentences in Tennessee, the number of future defendants with severe mental illness who will be charged capitally and might raise the exclusion, and how courts will rule on their cases if they do raise the exclusion. Because of that, we rely on the estimates defined above. Notably, our extrapolation of the savings associated with the exclusion is based off the forty-year average rate of sentencing defendants to death row in Tennessee, which may or may not be an accurate estimation of the future rate of death sentencing.

Secondly, the cost studies we used do not look at the death penalty costs in Tennessee itself, but rather examine other states. No comprehensive study of capital punishment costs has been conducted in Tennessee. In 2004, a report of the Tennessee Comptroller of the Treasury found that death penalty trials in Tennessee were more expensive than non-death penalty trials: it found that “capital trials cost an average of \$46,791; life without the possibility of parole trials cost an average of \$31,494; and life with the possibility of parole trials cost an average of \$31,622.”⁴⁶ More generally, the Tennessee Comptroller report found that “death penalty cases cost more because: they are more complex; more agencies and people are involved in the adjudication of the cases, both the prosecution and defense spend more time in preparation, and the appellate process has more steps.”⁴⁷ However, that report provided almost no information as to appeals cost, which represents a significant part of the added cost of a capital case over a non-capital case. This is why we chose to use the comprehensive Maryland study, which includes at least part of the appellate costs of a capital trial. If a comprehensive study of the same kind and magnitude were conducted in Tennessee, we could review and refine our estimates. Third, and finally, our analysis does not quantify the deterrent effect that an SMI exemption would likely induce. That is, a categorical exemption for persons with severe mental illness could lead prosecutors to

⁴⁶ BRIAN DOSS, EMILY WILSON & SONYA PHILLIPS, TENN. COMPTROLLER OF THE TREASURY OFFICE OF RESEARCH, TENNESSEE’S DEATH PENALTY: COSTS AND CONSEQUENCES, at ii (2004),

http://www.tncourts.gov/sites/default/files/docs/comptroller_deathpenalty_report_2.pdf.

⁴⁷ *Id.* at 11.

seek the death penalty less often out of fear of losing the case. This implies our fiscal impact estimate is conservative and that cost savings in reality would be greater.

Conclusion

In conclusion, our analysis shows that, if a severe mental illness exclusion were to be implemented in Tennessee, it would lead to a saving of \$1.4 million to \$1.9 million a year. According to our estimate, the state of Tennessee would have saved between \$57 and \$78 million dollars if this exclusion had been implemented in 1977, when the death penalty was reinstated in the state. While there are limits to this analysis, and an in-depth, scholarly study would need to be conducted to confirm and refine the above findings, our analysis shows that Tennessee could obtain significant cost savings if the bills created a severe mental illness exclusion from the death penalty were to pass and become law.