The Opioid Crisis in Tennessee

Andrew Cox and Logan Farr, under UT MPPA Faculty Guidance

April 2018
Baker Center Board (Active Members)

Dr. Michael Adams
President Emeritus, University of Georgia

Cynthia Baker
Former Vice President, Tribune Broadcasting

Patrick Butler
President and CEO, America’s Public Television Stations

Dr. Jimmy G. Cheek
Chancellor Emeritus, The University of Tennessee, Knoxville

AB Culvahouse Jr.
Attorney and Partner, O’Melveny & Myers, LLP

Dr. Beverly Davenport
Chancellor, University of Tennessee, Knoxville

David Golden
Senior Vice President, Eastman

Thomas Griscom
Former Executive Editor and Publisher, Chattanooga Times Free Press and Former Director of Communications, President Reagan

James Haslam II
Founder, Pilot Corporation and The University of Tennessee Board of Trustees

William Johnson
President and CEO, Tennessee Valley Authority

Dr. Theresa Lee
Dean, College of Arts and Sciences, University of Tennessee, Knoxville

Margaret Scobey
Former Ambassador to Syria and Egypt

Don C. Stansberry Jr.
Attorney (retired), Baker, Worthington, Crossley and Stansberry

The Honorable Don Sundquist
Former Governor of Tennessee

John Toltsma
Founder, Knowledge Launch

Dr. Thomas Zacharia
Director, Oak Ridge National Laboratory

Baker Center Board (Emeritus Members)

Sarah Keeton Campbell
Attorney, Special Assistant to the Solicitor General and the Attorney General

The Honorable Albert Gore Jr.
Former Vice President of The United States
Former United States Senator

Joseph E. Johnson
Former President, University of Tennessee

Fred Marcum
Former Senior Advisor to Senator Baker

Amb. George Cranwell Montgomery
Former Ambassador to the Sultanate of Oman

Regina Murray, Knoxville, TN

Lee Riedinger
Vice Chancellor, The University of Tennessee, Knoxville

Robert Waller
Former President and CEO, Mayo Clinic

Baker Center Staff

Matt Murray, PhD
Director

Katie Cahill, PhD
Associate Director

Charles Sims, PhD
Faculty Fellow

Krista Wiegand, PhD
Faculty Fellow

Jilleah Welch, PhD
Research Associate

Brandon Buffington
Business Manager

Elizabeth Woody
Events Manager

William Park, PhD
Director of Undergraduate Programs
Professor, Agricultural and Resource Economics

About the Baker Center
The Howard H. Baker Jr. Center for Public Policy is an education and research center that serves the University of Tennessee, Knoxville, and the public. The Baker Center is a nonpartisan institute devoted to education and public policy scholarship focused on energy and the environment, global security, and leadership and governance.

Howard H. Baker Jr. Center for Public Policy
1640 Cumberland Avenue
Knoxville, TN 37996-3340

Additional publications available at http://bakercenter.utk.edu/publications/

Disclaimer
Findings and opinions conveyed herein are those of the authors only and do not necessarily represent an official position of the Howard H. Baker Jr. Center for Public Policy or the University of Tennessee.
The Opioid Crisis in Tennessee

Issue at a Glance

• Nationally, more than 140 Americans die every day from an opioid overdose. Addiction to opioids has become so acute that it was declared it a national public health emergency in 2017. In Tennessee; more people die from opioid overdoses than perish in traffic accidents, homicides, or suicides. Opioid overdose deaths totaled 1,186 in 2016, up 14.7% from 2015. This translates into a mortality rate of 17.8 deaths per 100,000 people, up 13.4% since 2015.¹

• The number of opioid pain prescriptions totaled 7,636,112 in 2016, a decline of 12% from the 2012 peak of 8.5 million prescriptions but still larger than the total population of the entire state. Despite progress in reducing prescriptions, Tennessee’s 2016 rate of 107.5 prescriptions per 100 people was the third highest in the country after Alabama and Arkansas.²

• The health and economic consequences of opioid addiction are tragic, far-reaching and costly. Many addicts, for example, develop health complications such as endocarditis, an infection of the heart valve that requires expensive surgery but still results in early death. In 2016 1,057 infants were born to mothers addicted to opioids and suffered from neonatal abstinence syndrome (NAS); these infants required an average 24.1 days of hospitalization and continued health care that averaged $45,000 during the child’s first year of life.³ About 20% of NAS babies wind up in state custody.

• Opioid addiction impacts communities indirectly in several ways. These include higher rates of drug-related crimes, increases in the workload and training requirements for emergency responders, lower labor force productivity, and greater difficulty in attracting employers as fewer workers are able to pass employment drug screenings.⁴

The Policy Challenges

Opioids include prescription pain relievers such as hydrocodone, oxycodone, alprazolam, morphine, as well as illicit opioids such as heroin and opium. People who find it harder and more expensive to get prescribed drugs often move on to heroin and fentanyl. The potency of fentanyl and other synthetic opioids, such as carfentanil, vary considerably by batch and make these substances very hazardous. Overdose deaths continue to rise in part because of the use of these illicit opioids.⁵ Addicts also may obtain opioid substitutes such as Kratom that is available

in several states outside of Tennessee, e.g. Georgia, that have not outlawed the sale or use of this substance that is brewed into a tea, chewed, smoked, or ingested in capsules.6

State policies have helped to reduce the number of painkiller prescriptions, but opioid deaths continue to rise in part because an estimated 60% of opioid addicts obtain pills without a prescription; in fact, 40.8% obtained prescription opioids from friends or relatives.7 Consequently, the opioid crisis has expanded the scope of physicians’ concerns in pain management to include the patient’s social network.

Complicating the development of state policies to combat the opioid epidemic is the inaccuracy of official mortality statistics. The actual number of opioid-involved deaths may be as much as 24% higher than official estimates.8 Incomplete or inaccurate information reported on death certificates, county budget constraints that limit the number of autopsies, and inconsistencies in how medical examiners, hospitals, and law enforcement officials flag possible overdose deaths are the suspected causes.9 Better data and better research about the scope, consequences, and costs of opioid addiction may facilitate development of more precise policies.

Tennessee has adopted several best practices for limiting the supply of prescription opioids and for preventing, treating, and deterring opioid abuse.10 The 2012 Prescription Safety Act expanded the requirements for pharmacists to use and update the state’s prescription drug database and enabled sharing these data with law enforcement and officials in other states; it also elevated some types of doctor-shopping from a misdemeanor crime to a felony.11 Tennessee requires medical professionals to use tamper resistant paper for all written prescriptions, to check the Controlled Substance Monitoring Data base before prescribing a controlled substance, and to limit prescriptions for Schedule II and III drugs to 30 days. Pain management clinics are prohibited from dispensing controlled substances and the Safe Harbor Act of 2013 encouraged expanded treatment for pregnant women addicted to drug by enabling them to seek treatment without fear of losing custody because of drug dependency.12

New prescription guidelines established in 2014 specified daily opioid doses and protocols for drugs given to women of child-bearing age. The 2016 Prescription Safety Act

---

made permanent previously enacted changes and added requirements that targeted prescribers at all stages of opioid medication. That law specified practices for proper prescription drug disposal and use of the controlled substance monitoring database.\textsuperscript{13}

**Prevention**

Prevention policies seek to address the factors that underlie a substance use disorder (SUD). The incidence of SUDs can be reduced by educational efforts begun during adolescence if they emphasize healthy choices and increase awareness of the dangers associated with prescribed pain medications and other substances.\textsuperscript{14} Efforts to educate adolescents about the risks of drug abuse have proven to be effective; one study, for instance, suggested that for every $1 spent on school based prevention, $18 is saved in terms of education, healthcare, and lost productivity costs.\textsuperscript{15} The state's Building Strong Brains Initiative is a contemporary example of a program intended to help prevent and mitigate the impact of adverse childhood experiences that left un-addressed may lead to a higher risk of later substance abuse.\textsuperscript{16} State-funded drug free coalitions also stage campaigns in many counties to collect unused or expired medications and sponsor media campaigns to educate youth about the dangers of prescribed pain medications.\textsuperscript{17}

The prevention strategies recommended by the House Task Force on Opioid Abuse include developing new public education and awareness campaigns led by a prominent spokesperson that emphasize help resources, proper disposal of un-needed medications, the dangers of opioid use especially for pregnant women, and how to acquire and administer Naloxone. The task force advised limiting opioid pain prescriptions to 7 days at the lowest effective dosage, requiring patients to provide feedback to prescribers, and requiring prescribers to receive prior authorization from insurance carrier prior to a third consecutive opiate prescription.\textsuperscript{18}

**Treatment**

Medication Assisted Treatment (MAT) involves the combination of counseling and medication and is among the more effective approaches for treating opioid addiction. Methadone, buprenorphine, and naltrexone are approved by the Food and Drug Administration (FDA) for this purpose. These medications are intended to help reduce withdrawal symptoms as well as weaken the overall effects of opioids. Each drug however has its own risks. Methadone and buprenorphine, for example, can be addictive in their own right. The TN Department of Health

\textsuperscript{13}“Tennessee Overdose Prevention | Laws to Fight Opioid Abuse.”
\textsuperscript{15}“Substance Abuse Prevention Dollars and Cents: A Cost-Benefit Analysis,” n.d., 60.
associated 67 deaths with buprenorphine in 2016. Some argue that these treatments merely swap one addiction for another, but the National Institute on Drug Abuse (NIDA) reports that most people who get into and remain in these treatments stop using drugs, decrease their criminal activity, and improve their occupational, social, and psychological functioning.19

Evidence based MAT treatments can be cost effective. A recent study found, for example, that for every $1 spent on evidence based treatment, $12 is saved in reduced healthcare and costs associated with criminal justice.20 A challenge in Tennessee is that the distribution of MAT providers does not necessarily align geographically with need. There are twelve Opioid Treatment Clinics across the state, but only three are in East Tennessee where opioid abuse and death rates are particularly high.21

New treatment policies suggested by the House Task Force include allocating more state funds to provide opioid addicts greater access to substance abuse services, establishing a pilot Recovery School in each grand division of the state, distributing Naloxone in high risk areas to law enforcement personnel, and developing a collaborative pharmacy practice model to help expand the distribution of Naltrexone.22

Outlook

State policies have helped to reduce prescriptions for opioid pain medications, but future success in combating the opioid crisis will depend on continued refinements in prevention, treatment, and recovery programs that include a full range of medication-assisted treatments. The recommendations advanced by the House Task Force on Opioid abuse likely to be considered by the General Assembly in 2018 include a 5 day limit on emergency room prescriptions of any Schedule II controlled substance, a state Commission to review current programs and suggest needed policy changes, funding an additional 25 agents for the Tennessee Bureau of Investigation to combat the opioid epidemic, and prohibiting pain clinics from treating walk-ins without a referral from an independent health care provider.