

The Cost of the Opioid Epidemic, In Context

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Research studies that place a price tag on the opioid epidemic complement news stories that reveal the human face of the crisis.¹ The direct costs to the healthcare, criminal justice, foster care, and educational systems are substantial, and yet they still represent only a part of the vast economic damage caused by the loss of tens of thousands of people in the prime of their lives every year. The articles in this supplement to the *American Journal of Managed Care*[®] contribute significantly to understanding the epidemic's impact on society, and they provide additional justification for major investments in solutions.

At the same time, economic analyses require context—specifically, the context of evidence about what works to help people with opioid use disorder. Context permits an understanding not only of economic costs, but also of where these costs are inevitable and where they are not.

For example, Zajac et al find enormous expenditures related to the opioid epidemic in the criminal justice system, including the cost of incarcerating many thousands of Pennsylvania residents.² The study is particularly striking in the context of a growing recognition that traditional law enforcement approaches to drugs may not be necessary and may even be counterproductive. A consensus committee of the National Research Council found in 2014 that “there is little evidence that enforcement efforts have been successful” in reducing the consumption of illicit drugs.³ States that make greater use of prison for drug crimes, according to the Pew Charitable Trusts, do not have less drug use or fewer overdose deaths.⁴ Arrest in and of itself often triggers withdrawal, which can be fatal without medical attention.⁵ There is very little use of medications for opioid use disorder in detention,⁶ and the loss of tolerance in detention is associated with very high rates of fatal overdose upon release.⁷ A criminal conviction may reduce access to jobs and housing, both often critical to an individual's recovery.⁸ Beyond simply documenting the costs of the opioid epidemic to the criminal justice system, the research by Zajac et al supports the pursuit of alternative approaches to incarceration that are associated with less expense and improved outcomes.⁹

Crowley et al identify the burden of opioid use disorder on the foster care system and make important recommendations for

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ongoing surveillance.¹⁰ However, also deserving of examination in this context are mitigation strategies that have been demonstrated to improve outcomes and reduce costs to the foster care system. The use of the opioid agonists methadone and buprenorphine for ongoing treatment has been associated with reductions in fatal overdoses of 50% or more,¹¹ more employment,¹² less criminal behavior,¹³ and decreased transmission of chronic infectious diseases such as HIV and hepatitis C.¹⁴ Some foster care systems discourage parents from receiving treatment with medications, or even use treatment as the basis of child removal.¹⁵ Yet fewer adverse outcomes for families and child welfare systems arise when parents receive this effective care.¹⁶ Tracking adoption of treatment with medications in child welfare programs can help drive understanding of smarter policy directions and their associated costs.

Leslie et al find major and rising health costs associated with addiction in the Medicaid program.¹⁷ The paper's most striking finding is the tiny increase in the expense of treatment for people with substance use disorder between 2006 and 2013. Rather, costs have increased as the result of medical illnesses associated with or neglected due to the disease of addiction. Placing the data in context helps clarify that these dual findings are no coincidence. For instance, effective treatment reduces endocarditis and HIV risk¹⁸ and is associated with lower healthcare costs.¹⁹ The study by Leslie et al lends support to Medicaid expansion, the integration of addiction treatment into mainstream healthcare, and rapid access to pharmacotherapy for opioid use disorder, especially for those at high risk for major complications.

Segel et al illustrate the enormous economic impact of the opioid epidemic on the labor market, including both lower income and

greater use of means-tested state and federal programs.²⁰ A critical piece of context for this study is what happens when workers are found to be misusing opioids: Are they fired, triggering the economic effects, or are they offered treatment, which may allow them to remain gainfully employed? Employer-based insurance has historically provided inadequate coverage for addiction treatment; the United States Surgeon General reported on a 2013 analysis which indicated that only 7% of privately insured individuals with substance use disorders received treatment from a specialty addiction provider.²¹ A better approach is for employers to offer coverage that provides parity with mental and medical illnesses and allows for the reimbursement of outpatient medical, pharmacologic, and counseling treatment services that may be minimally disruptive to employment obligations.

Morgan and Yang find substantial expenditures associated with increases in neonatal abstinence syndrome, which is the transient and treatable withdrawal period experienced by many newborns exposed in utero to opioids.²² Beyond the costs of hospitalization, major expenses that are associated with infants who have experienced neonatal abstinence syndrome include special education and services that address developmental delay. A key piece of context is the question of causality: What is responsible for these developmental impacts? It is not the transient withdrawal period itself. The authors note that that neonatal abstinence syndrome may either “be a marker for the neurobiological effects of opioid exposure” or reflects “the social impacts of...addiction and substance misuse more generally.” If the former, and the die is cast by the moment of birth, then women might be advised not to take opioid agonist treatments during pregnancy; if the latter, such treatment might be essential to avoid child harm both before and after pregnancy. Recently, the Substance Abuse and Mental Health Services Administration found that the medications “methadone and buprenorphine are not associated with birth defects and have minimal long-term developmental impact on infants.”²³ Their use during pregnancy is recommended by the American College of Obstetricians and Gynecologists²⁴ and the American Academy of Pediatrics.²⁵ Offering effective treatment, as well as providing other support and resources to stabilize the home environment, are likely to be critical steps to reducing these costs.

The economic costs documented in this supplement to the *American Journal of Managed Care*[®] reflect not only the scale of the epidemic but also the legacy of counterproductive policy. The articles provide more than an accounting of damages; they also quantify society’s failure to provide alternatives to incarceration, more comprehensive insurance coverage, greater access to effective treatment, and more resources and social support for affected families. Overcoming the stigma of addiction (as well as the stigma attached to certain types of treatment) is critical to improvement.

As states like Pennsylvania take steps forward, economic evaluation will remain a critical tool to measure and support progress. ■

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