State-by-State Analyses of the Economic Cost of the Opioid Epidemic

- These reports adapt the methodology employed by a November 2017 report by the Council for Economic Advisers (CEA), which found that previous analyses of the economic cost of opioids significantly underestimate the total costs of the epidemic. The reports apply the CEA methodology on a state level to estimate total cost per year from both fatal and non-fatal costs, as well as a five-year estimate of the economic costs of opioid-related fatalities in each state.[1]

- The reports use data on the number of fatalities from opioid-related deaths from the Centers for Disease Control and Prevention (CDC) Multiple Causes of Death Database.[2] The reports make adjustments to the total number of fatalities based on academic research documenting the systemic undercounting of opioid-related deaths.[3]

- The reports determine the economic cost of fatalities by using the age-variable value of statistical life (VSL).[4] The reports adjust the costs to the dollar amounts for the relevant years (2012 to 2016).[5]

- The reports use data from the 2015-2016 National Survey on Drug Use and Health, conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), for state-level data on prescription pain reliever use disorder and heroin use.[6] To estimate data on heroin use disorder, the reports assume the same proportion of heroin use disorder among heroin users nationally (66%).[7]

- The reports rely on academic research to determine the economic cost of opioid use per user in a number of categories: (1) health care costs, (2) addiction treatment costs, (3) criminal justice costs, and (4) lost productivity costs.[8] These figures are updated to 2016 dollars.

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[1] Council of Economic Advisers, Executive Office of the President, *The Underestimated Cost of the Opioid Crisis* (Nov. 2017) (online at www.whitehouse.gov/sites/whitehouse.gov/files/images/The%20Underestimated%20Cost%20of%20the%20Opioid%20Crisis.pdf).

[2] Centers for Disease Control and Prevention, Multiple Causes of Death Database (online at wonder.cdc.gov/).

[3] Ruhm, C., "Geographic Variation in Opioid and Heroin Involved Drug Poisoning Fatality Rates." *American Journal of Preventative Medicine* (2017).

[4] Aldy, J. and Viscusi, W, "Adjusting the Value of a Statistical Live for Age and Cohort Effects." *Review of Economics and Statistics* (2008).

[5] Bureau of Labor Statistics, *CPI Inflation Calculator* (online at www.bls.gov/data/inflation_calculator.htm).

[6] Substance Abuse and Mental Health Services Administration, *National Survey of Drug Use and Health*. (2015–2016) (https://www.samhsa.gov/data/population-data-nsduh/reports?tab=38).

[7] Substance Abuse and Mental Health Services Administration, *Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey of Drug Use and Health.* (Sep. 2017) (https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf).

[8] Florence, C. et al, "The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 2013." *Medical Care* (2016).