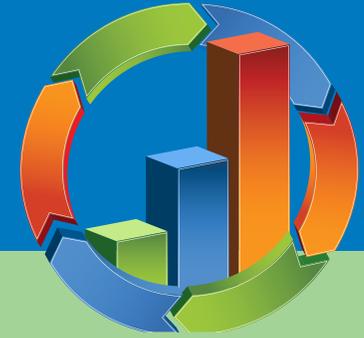




Surveillance Success Stories



OHIO

The Need for Data

In an effort to improve outcomes in its integrated care model, the Ohio Department of Mental Health and Addiction Services (OhioMHAS) began a mortality study in 2009 to determine the most prevalent causes of death for patients in the state's public mental health care system. The study combined death certificate data with both state hospital records and claims from Ohio's community mental health clinics. In 2013, researchers at Ohio State University (OSU) convened a research group that brought together OhioMHAS leaders with academic partners, state policy analysts, and community members to focus on suicide in Ohio. This group suggested building on the OhioMHAS study to create a surveillance project measuring suicide rates among public mental health patients.

Getting the Data

The Department of Vital Statistics, housed within the Ohio Department of Health (ODH), gave OhioMHAS permission to use and analyze the state's death certificates. The two agencies already had a good working relationship, which made this arrangement a straightforward process. OhioMHAS received the data free of charge, and allocated the time of one data analyst to examine the information.

Analyzing the Data

OhioMHAS matched Ohio death certificate data with claims records from its own clinics and hospitals for the years 2007–2011. This analysis identified 1,387 suicide decedents who had made a visit for public behavioral health services in the two years prior to death. With help from Case Western University, OhioMHAS created an algorithm containing several components—including social security number, first

and last names, and date of birth—to ensure the accurate matching of records. With the resulting data, they were able to compare demographic and clinical factors for those who did and did not receive services during the year before death.

What Ohio Learned

By crosswalking state death certificates with claims data from Ohio's public behavioral health system from 2007 to 2011, researchers learned that of the 1,387 suicide decedents who had received care from the OhioMHAS system:

- 64.5 percent were uninsured.
- Over 67 percent had made a public behavioral health contact in the year before death, and 29 percent had done so in the month before death.
- Many of those who visited a mental health practitioner in the month before death had seen a case manager.

Suicide decedents who had (1) a diagnosis of schizophrenia or another mood disorder or (2) multiple psychiatric diagnoses were more likely than



DATA RESOURCES

Locating and Understanding Data for Suicide Prevention (online course): <http://training.sprc.org/>

Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups (SAMHSA): <http://go.edc.org/Data1>

Improving Data Collection Across the Health Care System: <http://go.edc.org/Data2>

National Violent Death Reporting System: Stories from the Frontline of Violent Death Surveillance: <http://go.edc.org/Data3>

“We hope that by understanding the patterns of service use prior to suicide among those in our public behavioral health care system, we can develop targeted approaches to assist clinicians in identifying and treating at-risk patients.”

—Helen Anne Sweeney, Project Manager, Ohio Department of Mental Health and Addiction Services (OhioMHAS)

other suicide decedents to have used behavioral health services recently. Factors associated with a lower likelihood of receiving such services in the year before death included the following:

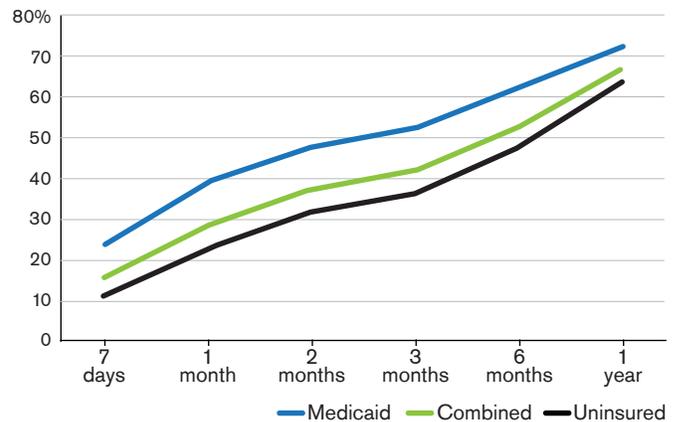
- Being uninsured
- Having a primary diagnosis of a substance abuse disorder
- Living in a rural area
- Using a firearm as the suicide method

What Comes Next

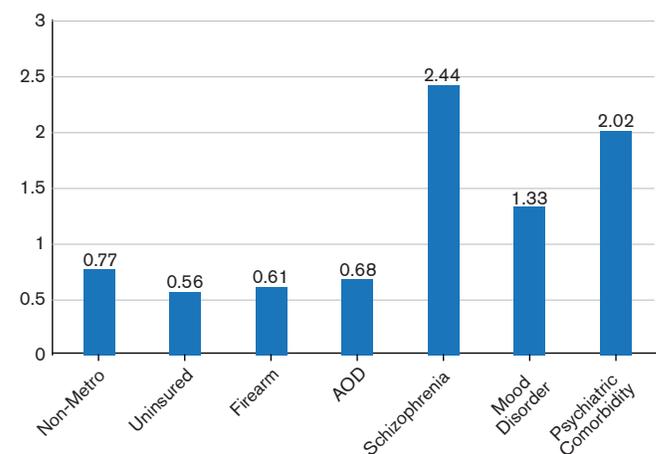
Impressed by the data collected and analyzed so far, the Ohio state legislature allocated \$2 million for a two-year period for OhioMHAS and its partners to (1) build on their findings with further analysis and (2) implement suicide prevention strategies that address specific areas of need. An inter-agency task force was formed, with representatives from OhioMHAS, ODH, the state Department of Medicaid, OSU, the Ohio Suicide Prevention Foundation (the former state Garrett Lee Smith Suicide Prevention grantee), and others to facilitate access to more data and to launch additional research projects. Areas of special interest include the following:

- Comparing the service use patterns of all the state’s Medicaid recipients who died by suicide and those of a matched control group of patients who did not die by suicide
- Studying the impact of the Affordable Care Act on service utilization and suicide rates
- Mapping suicide rates in Ohio to identify geographical areas and populations in highest need of suicide prevention services
- Introducing new treatment and outreach programs and tracking their effectiveness

Patterns of Behavioral Health Service Utilization in the Year Prior to Suicide Death by Insurance Status in Ohio, 2007–2011



Odds Ratios* of Characteristics Associated with Ohio Suicide Decedents’ Behavioral Health Service Use, 2007–2011



*Odds ratios depict how different factors (such as being uninsured or being diagnosed with a mood disorder) affect a given outcome (such as usage of behavioral health services). For instance, in the chart above, compared to other suicide decedents, those who had been diagnosed with schizophrenia were 2.44 times more likely to seek behavioral health services.

Data are from Ohio death certificate and Multi-Agency Community Service Information System (MACSIS) records, which were merged for the years 2007 through 2011 to identify suicide decedents (ICD-10 death codes X60-X84) who had made a public behavioral health service visit in the 2 years prior to death.

If you have questions or would like to learn more about how Ohio created its surveillance network, contact:

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