In fall 2019, the Bureau of Justice Assistance’s Comprehensive Opioid Abuse Program (COAP), within the U.S. Department of Justice’s Office of Justice Programs, awarded eight Overdose Detection Mapping Application Program (ODMAP) Statewide Expansion and Response grants of up to $700,000. These grants are “designed to support the statewide adoption of ODMAP as well as support the development of highly coordinated public safety, behavioral health, and public health responses to the data.”

In March 2020, the Attorney General of Nevada, a state receiving one of the COAP grants, described ODMAP as “one of the most useful technologies at our disposal to evaluate overdose spikes and trends and to intervene when necessary.”

Existing statutes, regulations, or executive orders in at least five states direct the collection of certain overdose incident information via ODMAP.

Importantly, the Legislative Analysis and Public Policy Association (LAPPA) recently developed a model state law that proposes a framework for states to require the use of ODMAP.

ODMAP is a highly regarded program, but some do not know what ODMAP is or how it works. This factsheet provides an overview of ODMAP, explains the intersection between ODMAP and federal health information privacy law, and provides several examples of how localities already use this important resource.

**ODMAP BASICS**

The High Intensity Drug Trafficking Areas (HIDTA) is a federal program administered by the Office of National Drug Control Policy (ONDCP), Executive Office of the President, that provides resources to federal, state, local, and tribal agencies to coordinate activities addressing drug trafficking in more than 30 areas of the country. The Washington / Baltimore HIDTA (W/B HIDTA), serving Maryland, the District of Columbia, Virginia, and parts of West Virginia, developed ODMAP in the fall of 2016 and launched it as a pilot program in West Virginia and Maryland in January 2017.

ODMAP is a mapping application tied to a database containing overdose incident information. W/B HIDTA provides no cost access to ODMAP to federal, state, local, and tribal law enforcement, other licensed first responders, criminal justice personnel, emergency room and hospital personnel, and other public health entities serving the interests...
of public safety and public health. Entities choosing to use ODMAP must enter into a participation agreement with W/B HIDTA agreeing to adhere to ODMAP’s operating policies and procedures.

The primary purposes of ODMAP include: (1) to provide near real-time surveillance of known or suspected overdose incidents across the United States and its territories; and (2) to support public safety and public health efforts to collaborate and mobilize immediate responses to a sudden increase or spike in overdose incidents.

**HOW DOES ODMAP WORK?**

Using a mobile phone or computer interface with ODMAP, authorized users (see below for types of authorized users) from participating agencies report information about an incident involving a confirmed or suspected drug overdose. This area of ODMAP is called “Level 1.” ODMAP does not place constraints on the types of drug overdoses reported, meaning that it can be used to track confirmed or suspected overdoses caused by any drug, not just opioids. Overdose incident information reported to ODMAP is plotted on a national, electronic map. This area of ODMAP is called “Level 2.” Only authorized users who are granted Level 1 access to ODMAP can report information, and only authorized users granted Level 2 access to ODMAP can see the visualized information.

The majority of ODMAP Level 1 users are first responders, such as police, emergency medical service (EMS) providers, and fire department personnel who are often among the first people to arrive at an overdose scene. Level 1 users also include emergency departments and hospitals, although not the research units contained within some hospitals. Level 2 users are public health and public safety officials and policy analysts authorized by the participating agency. Each participating agency designates their own respective users with Level 1 and/or Level 2 access, subject to the constraint that ODMAP information is considered controlled unclassified information (CUI) that may only be released to authorized personnel. Accordingly, recipients of ODMAP information must have a need and right to know the information in the performance of their criminal justice and public health functions.

For each confirmed or suspected overdose incident, an authorized Level 1 user must report the following four pieces of information to ODMAP: (1) date and time of the incident; (2) location of the incident or first encounter; (3) whether the overdose was fatal or non-fatal; and (4) whether a first responder administered an overdose reversal drug to the victim, and if so, how much. Level 1 users may report certain additional categories of information, but it is not required. These other categories of information include: (1) age or gender of the victim; (2)

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9 Ibid. at 1.

10 Ibid. at 2.

11 Ibid. at 3.

12 Ibid at 5. CUI is “information that requires safeguarding or dissemination controls pursuant to and consistent with applicable law, regulations, and government-wide policies but is not classified.” National Archives, *About Controlled Unclassified Information*, [https://www.archives.gov/cui/about](https://www.archives.gov/cui/about) (last accessed February 26, 2020).
suspected drug involved; (3) additional drugs involved; (4) if the victim was one of multiple victims at the incident location; (5) if the victim was taken to the hospital; (6) if the incident involved a motor vehicle; and (7) case number. Location data is reported to ODMAP using either an address or GPS coordinates. If an address is entered, it is converted to GPS coordinates prior to data storage in the database.13

In addition to manual Level 1 data entry, participating agencies can implement an application programming interface (API). An API allows overdose incident information reported to an already-functioning database to be automatically uploaded to ODMAP.14 Using an API permits participating agencies to contribute Level 1 data without adding manual reporting processes to field workers.

In Level 2 of ODMAP, overdose incidents are plotted as colored data points on a nationwide electronic map. Each point is placed on the map based upon the approximate GPS coordinates associated with the location reported via Level 1. Level 2 users are limited in how far they can zoom into the map. If a data point is selected by the authorized user, the information associated with the point becomes visible. A Level 2 user can filter data points by many of the categories of reported information.

As of February 2020, W/B HIDTA reports that there are approximately 20,000 authorized users of ODMAP from 3,000 participating agencies across all 50 states, the District of Columbia, and Puerto Rico.15 Through September 2019, these users reported information about more than 175,000 actual or suspected overdose incidents.16

INTERACTION WITH FEDERAL HEALTH INFORMATION LAWS

Many ODMAP users initially question whether laws addressing protected health information apply to the application. At the federal level, the two health information laws that come into play are the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Confidentiality of Substance Use Disorder Patient Records (commonly referred to as 42 CFR Part 2). The short answer is that ODMAP use does not implicate 42 CFR Part 2 and is allowed under the HIPAA Privacy Rule.

The analysis for 42 CFR Part 2 is fairly simple, as 42 CFR Part 2 contains a set of federal regulations that address the confidentiality of patient records concerning alcohol and substance use disorder diagnosis, treatment, or referral for treatment. These regulations apply to all “federally-assisted programs” (as those terms are defined in the regulations) holding themselves out as providing such diagnosis, treatment, or referral to treatment. The information available in ODMAP to Level 2 users does not involve patient records about substance use disorder diagnosis, treatment, or referral to treatment; rather, the information pertains to the occurrence of a confirmed or suspected overdose. Accordingly, 42 CFR Part 2 is not implicated in the use of ODMAP as it currently operates.

Analyzing ODMAP in the context of the HIPAA Privacy Rule’s regulation of protected health information (PHI) is considerably more involved. The HIPAA Privacy Rule states that “[a] covered entity or business associate may not use or disclose protected health information, except as permitted or required by [the Privacy Rule].”17 LAPP recently published a document that analyzes HIPAA in the context of

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15 https://twitter.com/ODMAP1/status/1229765639042146304 (showing the number of participating agencies and users); http://www.odmap.org (containing a graphic showing at least one participating agency in each of these jurisdictions).
16 How it Works, supra note 14 (containing a slide showing the cumulative overdose incident submissions as of year-end 2017, 2018, and first 40 weeks of 2019).
17 45 CFR § 164.502(a).
ODMAP. A summary of the main conclusions of that document is provided here.

Three questions must be addressed in order to determine the implications. First, are any ODMAP Level 1 users HIPAA covered entities? Second, does any of the information reported by ODMAP Level 1 users, and accessible to ODMAP Level 2 users, constitute PHI? Third, if the answers to the first two questions are both yes, then is the disclosure of PHI by covered entity Level 1 users to Level 2 users allowable under the Privacy Rule?

HIPAA’s Privacy Rule applies only to “covered entities” and “business associates” of covered entities. Covered entities include health care providers, which are providers of medical or health services or other persons who furnish, bill, or are paid for health care in the normal course of business. This potentially includes many types of Level 1 users, such as emergency medical service providers, fire departments, and hospital emergency departments. Thus, the answer to the first question above is yes. Importantly, however, law enforcement officers are not covered entities. Thus, a law enforcement officer’s Level 1 report in ODMAP of information learned first-hand at the scene of an actual or suspected overdose does not implicate the Privacy Rule. It follows then, that the use of that law enforcement officer’s reported information by any Level 2 user also does not implicate the Privacy Rule.

The Privacy Rule lists 18 personal identifiers that must be removed in order to turn personally identifiable health information, which is subject to Privacy Rule restrictions for PHI, into de-identified health information, which is not subject to restrictions in most cases. Of these 18 identifiers, the overdose incident information collected via ODMAP involves only one—collecting more specific geographic information about the location of an overdose incident than just the state. The PHI question for ODMAP boils down to determining if the location of the overdose event can be used, in combination with date, time, and some investigative effort, to determine the identity of the victim (or limited group of persons that includes the victim) who suffered the actual or suspected overdose. In dense, urban areas, ODMAP’s use of approximate location to determine GPS coordinates, along with map zoom limitations, may provide a level of de-identification sufficient to substantially reduce the possibility of identification. However, in rural areas, structure and population density may be low enough that the mere existence of a data point on or near a street narrows the list of possible victims to a few homes or less (so long as the incident location indicates a direct correlation to the owner or resident at a specific location, which is not always the case). Actual identification, however, would require substantial effort beyond what is available on ODMAP. Thus, the answer to the second question above may be yes in some cases.

The HIPAA Privacy Rule does not bar all disclosures of PHI absent prior authorization by the individual. Among many authorized disclosures, the Privacy Rule specifies 12 activities for which use or disclosure of PHI by a covered entity without prior authorization by the individual may be acceptable. Four of these 12

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21 45 CFR §§ 164.512(a) – 164.512(l).
activities can apply to ODMAP uses. These provisions relate to disclosures: (1) required by law; (2) for certain public health authority activities; (3) to avert a serious threat to health or safety; and (4) for certain law enforcement purposes. The LAPPA research document referenced earlier reviews the reasons why the use of ODMAP by covered entities is covered by one or more of these four exceptions. The analysis is summarized in the flowchart below.

**USING ODMAP**

One of ODMAP’s main purposes is to support public safety and public health efforts to collaborate and mobilize immediate responses to a sudden increase or spike in overdose incidents. With approximately 3,000 participating agencies currently using ODMAP, there is no shortage of approaches to utilizing the information. Moreover, the ODMAP Statewide Expansion and Response grants should encourage additional development of novel program uses in the eight awarded jurisdictions: Connecticut, Georgia, Seminole County (Florida), Minnesota, Nevada, New Jersey, Ohio, and Rhode Island.

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22 ODMAP and Protected Health Information Under HIPAA: Guidance Document, supra note 18.
Here are some examples of innovative uses of ODMAP in various areas of the United States:

- W/B HIDTA developed a publicly available Overdose Spike Response Framework document for participating agencies that contains a compilation of recommendations for coordinated responses to overdose.  

- In Erie County, New York, ODMAP is used to facilitate communication between police and the local health department. The health department utilizes ODMAP to identify recent overdose incidents and then contacts the police to obtain identifying information from the police report filed in most cases. Once the overdose victim is identified, health officials and peer recovery specialists conduct outreach to the victim to discuss treatment and recovery options.

- In Shelby County, Tennessee, health officials use ODMAP for spike alert monitoring. Memphis Fire/EMS data is imported into the program via an API. Using this near real-time information, the public health department can issue a press release to the community within two hours of determining that an overdose spike is occurring.

- In Connecticut, hospital and emergency services personnel who treat a patient for an opioid overdose must report that information to the Connecticut Poison Control Center (CPCC). CPCC then reports that information to ODMAP. In 2019, as a result of access to near real-time overdose incident information, the Hartford Health and Human Services Department and the Hartford Police Department were able to deploy harm reduction measures (fentanyl test strips) when a fatal batch of fentanyl was identified. This helped to curtail the fatal overdoses happening at the time.

LAPPA’s Model Overdose Mapping and Response Act and accompanying document, ODMAP and Protected Health Information Under HIPAA: Guidance Document, are available at the links provided.