# Comparing Practices Used in Overdose Fatality Review Teams to Recommended Implementation Guidelines

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## ABSTRACT

**Objectives:** Overdose fatality review teams are a public health and public safety collaboration that reviews fatality cases using a multidisciplinary team to provide recommendations for overdose prevention. No research exists on the case review practices currently being used in these programs.

**Design:** We administered a cross-sectional survey measuring case review practices and perceptions to a convenience sample of overdose fatality review teams.

**Setting:** We administered the online survey to participants at a national virtual forum on overdose fatality review.

**Participants:** In this study, we examined 30 county-level overdose fatality review teams from 6 states who completed the survey.

**Main Outcome Measures:** We developed measures of case review practices from an overdose fatality review implementation guide. We provided descriptive statistics on the survey items used to measure these practices and examined how practice uptake varied by overdose fatality review team characteristics.

**Results:** Most overdose fatality review teams had adequate representation and membership, but none adhered to all of the practices measured from the implementation guide. The largest gap was in perceived effectiveness and implementation of case review recommendations. In addition, teams that had been reviewing cases for longer reported more adherence to recommended practices.

**Conclusions:** Overdose fatality case review is a collaboration between local public health and public safety agencies that holds great promise. However, these teams will require additional training and technical assistance with local community support to ensure that recommendations are actionable.

**KEY WORDS:** case review, overdose, public health, public safety

The United States remains in an unprecedented overdose epidemic. Since 1999, nearly 1 million people have died from an accidental drug overdose, with more than 90 000 deaths in 2020 alone, and provisional data suggesting that the COVID-19 pandemic exacerbated overdose rates that were already increasing.[1] Although some people overdose intentionally, most overdoses, and, in particular, those driving national overdose rates, are from accidental poisoning. Although the majority of overdoses in the United States involve opioids, the type of opioid has varied dramatically. Overdose deaths initially increased in the early 2000s because of the amplified availability of opioid pain analgesics[2,3]; however, as availability decreased in response to government and public pressure, many people who used opioids transitioned to illicit supplies such as heroin.[2,4,5] Soon followed illicitly produced fentanyl, a synthetic opioid 50 to 100 times more potent than morphine, replacing

or contaminating heroin supplies and resulting in drug overdose deaths surpassing automobile deaths as the leading cause of accidental death in many communities.[6] Although fentanyl and its analogs remain the driver of overdose deaths with 65.0% of all overdose deaths in the 12-month period ending in September 2021 involving synthetic opioids,[7] overdoses involving illicit psychostimulants, specifically methamphetamine and cocaine, are steadily increasing across the United States.[8-11] In the 12-month period ending in September 2020, 47.4% of fatal overdoses in the United States reported to the Centers for Disease Control and Prevention involved illicit psychostimulants including cocaine, which increased to 51.4% in 2021.[7]

In the United States, national overdose data lag by more than a year, and the rapidly changing and regionally based illicit drug supply markets drive the overdose epidemic. Thus, local overdose surveillance is crucial for prompt overdose prevention response. Because of their expertise and access to information gleaned at the scene of an overdose and from postmortem toxicology reports, medical examiners, coroners, and other death scene investigators play a critical role in these local surveillance efforts.[12] However, even when death scene investigators are strong local collaborators with sufficient data, local surveillance and evidence-based overdose prevention are often beyond death scene investigators' purview and expertise.

Overdose fatality review (OFR) teams have emerged as a program with the potential to utilize local overdose data to prevent deaths. The OFR teams are a public health and public safety collaboration aimed at reducing overdose deaths through a "death review" of decedent case files to determine how the death could have been prevented.[13] Most operate on a local (city or county) level, though some are regional or statewide initiatives, and generally include medical examiners/coroners, criminal-legal agencies (law enforcement, corrections, courts), health care and social service providers, treatment providers, public health department officials, and emergency responders.[14] Through multiple reviews of local overdose cases at regularly scheduled meetings, the OFR teams aim to identify gaps, deficits, and patterns of need within specific agencies and across systems; develop actionable, community-specific overdose prevention recommendations; and produce a potential framework for accountability. The OFR teams are modeled after similar case review practices that examine factors contributing to premature deaths in order to inform future prevention efforts. Case review models are a sound public health strategy; for example, fetal infant mortality reviews resulted in significant multi-

state changes in infant sleep positions,[15,16] resulting in reduced infant deaths.[17] As another example, hospital mortality review committees identify gaps in care among decedent cases and make efforts to reduce inpatient mortality accordingly.[18,19] A more recent and novel example is the use of case review techniques in reducing jail populations during the COVID-19 pandemic.[20]

Although case review models vary, they are generally considered a systems-level intervention with an action-oriented process aimed at improving policy and practice. The case review model has since been adopted to address social problems, including homicide,[21] violent crime,[22,23] and overdose.[13,24] And while teams that review overdoses are intended to cross systems, the laws differ by state regarding entities sanctioned to create and manage the review process and case information (Virginia SB 399; Arizona HB 2038; Maryland Health-Gen Code § 5-901; Delaware HB 211; Delaware Code Title 16, § 4799; Oklahoma HB 2798; and Rhode Island SB 2577 & HB 7697). However, one of the most anticipated benefits of the OFR process is the potential to bring together information from multiple local systems. Several states specify the type of records (public or private) that OFR teams are authorized to fully access and may include medical examiner reports and various types of other records including criminal/legal, hospital, medical, dental, school, vital, and mental health (treatment) records. Assessing the combined information from a variety of sources holds great potential for identifying overdose prevention touchpoints.[25]

Research on the overdose fatality case review process and its outcomes remains limited, but some studies suggest that the process can improve coordination between service providers, support health departments in overdose prevention strategic planning,[13] and allow for the identification of community-specific risk and protective factors.[25] However, all research to date has been site-specific with no attempt to look systematically at this emerging public health and public safety partnership model. Using survey data from a national group of OFR teams, we provide a description of the practices currently being employed by OFR teams in the United States.

## Data and Methods

To measure OFR practices, we used the "Overdose Fatality Review: A Practitioner's Guide to Implementation" as a guiding framework (https://www.cossapresources.org/Tools/OFR). Released in July 2020, funding from the Bureau of Justice Assistance (BJA) and the Centers for Disease Control

and Prevention developed this guide to aid in standardizing the model nationally. This implementation guide outlines 5 modules for practitioners to follow: (1) Recruit Your OFR Members, (2) Plan Your OFR Meeting, (3) Facilitate Your OFR, (4) Collect Your OFR Data, and (5) Build a Recommendation Plan. We developed survey items to capture the OFR team case review process and practices based on the content of these modules with some of the survey items as forced choice categories (yes or no) aiming to assess the presence or absence of team roles and practices while others were subjective, asking respondents whether they agreed or disagreed with statements about the OFR. Module 1, *Recruit Your OFR Members*, provides guidance for recruiting OFR members and developing a governing committee and adherence was determined on the basis of affirmation on a combination of 4 items: having all key OFR team positions filled (facilitator, coordinator, and data manager); 11 or more members on the team; 5 or more agencies/organizations represented within the team; and meeting updates provided to a governing committee. Module 2, *Plan Your OFR Meeting*, concerns planning for meetings, the presentation of case review materials, and the corresponding workload with adherence based on information preparation; meeting once per month or more; and meetings lasting 1–2 hours or more. Module 3, *Facilitate Your OFR*, focuses on the responsibilities of the facilitator role in case reviews with adherence based on whether confidentiality agreements are completed; detailed notes are taken at OFR meetings; and agreeing that overdose deaths are preventable (a key tenet of OFRs). In module 4, *Collect Your OFR Data*, the implementation guide provides recommendations for the data manager to securely collect and store case review data while module 5, *Build a Recommendation Plan,* focuses on how teams develop actionable recommendations that can be implemented in the community to prevent overdose. Adherence to module 4 was based on 2 items—whether case review materials are archived and recommendations are recorded in a database. Module 5 adherence was based on whether actionable recommendations result from OFR meetings and whether work groups or subcommittees are formed to address recommendations. With responses to these items, we measured adherence to each of the OFR practices outlined in the implementation guide; however, it is important to note that OFR teams did not necessarily review this guide, nor had they received training on this material prior to answering the survey.

Conference organizers shared the online survey about OFR team roles and practices with 253 registrants of the 2021 Virtual National Forum on Overdose Fatality Review in February 28, 2021, and yielded a 26.5% (N = 67) response rate from county-level OFR team members. Multiple team members from the same OFR team might have attended the conference; therefore, for the purpose of our analyses, we selected a single respondent per OFR team (prioritizing responses from coordinators, facilitators, and data managers, respectively) and included only those respondents who completed all items (we conducted listwise deletion of 13 respondents who started but did not complete the survey) bringing the sample to 58 respondents who represented 30 unique OFR teams. This included teams from Indiana (43.3%, n = 13), New Jersey (20.0%, n = 6), Wisconsin (16.7%, n = 5), Maryland, Ohio, and Pennsylvania (6.7%, n = 2 each). More than half of the survey respondents in the final sample had been involved with their OFR team for a year or longer (56.7%, n = 17) and 70% (n = 21) as founding members.

We conducted analyses using IBM SPSS Statistics (V.27); first, descriptive statistics assessed OFR team characteristics as well as the use of the practices within each module from the implementation guide. Then, we summed OFR team adherence to these 14 practices across the 5 modules to conduct tests of mean differences by OFR team characteristics. This study was reviewed by the Wayne State University Institutional Review Board and determined to have exempt status (HPR#2020170).

## Results

In Table 1, we present OFR team-level descriptive factors, showing that most teams represented had been reviewing cases for a year or longer at the time of the survey (1-2 years: 30.0%, n = 9; 2 years or longer: 30.0%, n = 9), typically 1 to 4 cases per meeting (1-2 cases: 43.3%, n = 13; 3-4 cases: 46.7%, n = 14), and mostly through virtual meetings (50.0%, n = 15). About half had received training or technical assistance for implementation (46.7%, n = 14) and three-quarters used identifiable information on decedents in case reviews (76.7%, n = 23).

Table 2 displays adherence items and participant responses as well as whether the response indicates adherence to the specific implementation guide practices. In relation to module 1, a majority of OFR teams reported having key OFR team roles filled (66.7%; n = 20) along with sufficient representation of team members (80%, n = 24) and supporting agencies (96.7%, n = 29). The mean number of agencies represented on an OFR team was 7.4 (SD = 2.1) and among these agencies, substance use treatment providers were most frequently represented, followed by law enforcement agencies, health and human

## TABLE 1
**Overdose Fatality Review Team Characteristics (N = 30)**

| OFR Team Characteristics | N | % |
|---|---|---|
| **How long has the OFR team been reviewing overdose cases?** | | |
| <6 mo | 7 | 23.3 |
| 6 mo to 1 y | 5 | 16.7 |
| Between 1 and 2 y | 9 | 30.0 |
| ≥2 y | 9 | 30.0 |
| **Did you receive any training or technical assistance to assist with implementation?** | | |
| Yes | 14 | 46.7 |
| No | 16 | 53.3 |
| **Approximately how many cases are typically reviewed per meeting?** | | |
| 1-2 | 13 | 43.3 |
| 3-4 | 14 | 46.7 |
| ≥5 | 3 | 10.0 |
| **Do the cases you review contain identifiable information on the overdose decedent?** | | |
| Yes | 23 | 76.7 |
| No | 7 | 23.3 |
| **How does your OFR team typically meet?** | | |
| Mostly in person | 5 | 16.7 |
| Mostly virtual | 15 | 50.0 |
| Mostly in person but virtual during pandemic | 10 | 33.3 |

Abbreviation: OFR, overdose fatality review.

services agencies, and medical examiners/coroner's offices. Harm reduction professionals were the least represented on OFR teams, followed by prescribers of medications for opioid use disorder. Half (53.3%, n = 16) of the respondents reported that meeting updates were provided to a governing committee, although over a quarter of respondents (26.7%, n = 8) were unsure if this occurred.

Concerning module 2, most teams (90.0%, n = 27) reported that they were advised on specific information to prepare before OFR meetings and met for 1 to 2 hours or more (83.3%, n = 25) at least once per month (73.3%, n = 22). Module 3 had mixed adherence as all teams indicated that confidentiality agreements are signed for case reviews (100.0%, n = 30) and most reported recorded meeting notes (90.0%, n = 27); however, only two-thirds (66.7%, n = 20) of respondents felt that all (30.0%, n = 9) or most overdose deaths (36.7%, n = 11) were preventable. For module 4, three-quarters of teams responded that case review materials were securely stored and recommendations were recorded and similarly, for module 5, the same number agreed that OFR meetings result in actionable recommendations.

Yet, when asked about subcommittees, only a quarter agreed that their OFR team followed this practice.

Table 3 shows that the count of practices utilized from the OFR implementation guide ranged from 7 to 13 with a mean of 10.6 (SD = 1.6). Although no team had incorporated all 14 practices measured, the overall distribution was toward more practices used, with 60% (n = 18) of teams using between 11 and 13 practices. Findings indicated there was no significant difference in the number of practices used by length of experience in reviewing cases, the receipt of training or technical assistance, or meeting setting utilized, although teams that had been reviewing cases for more than 2 years used slightly more practices (>2 years: $M = 11.0$, SD = 1.1; <2 years: $M = 10.5$, SD = 1.8).

## Discussion

To maximize the considerable investment in the development and maintenance of OFR teams, it is essential to gain understanding of how OFR teams currently operate, especially relative to practices recommended by OFR experts in the implementation guide referred to throughout this article. This study is the first to assess OFR team practices and measure alignment with the implementation guide by using survey response data from 30 OFR teams. Several important gaps exist between what is currently practiced and what is recommended.

Survey respondents report that their teams generally have sufficient members from a diverse group of agencies who meet for an adequate amount of time to conduct thorough reviews. However, some teams do not have all of the key roles in place to fulfill the tasks associated with overdose case reviews; although most have a facilitator and a coordinator, it is less common for teams to have a data manager role filled. The data manager is a key component to the OFR model in that this role tracks and presents trends in overdose data at OFR meetings and manages the storage and analysis of case review information and recommendations. However, given OFRs are largely volunteer-based and underfunded, it is not surprising that many teams do not report this role being filled. That said, in some communities these roles are indeed paid positions, whether full- or part-time.

This study also highlights a potential gap in overdose prevention knowledge among OFR members. The OFR practitioner guide sets forth as a key principle that overdose deaths are preventable through the implementation of evidence-based prevention strategies, community mobilization, and supportive friends and family. However, only 30% of respondents agreed with the statement that all overdose cases are preventable. The respondents' underestimation of the

## TABLE 2
### Measuring Overdose Fatality Review Team Practices From the Implementation Guide[a] (N = 30)

| Module | Practice Item | Survey Item | N | % | Disagree N | Disagree % | Not Sure N | Not Sure % | Agree N | Agree % | Practice Adherence N | Practice Adherence % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Module 1: Recruit your OFR members | 1 | Does your OFR team have a member that fulfills the following roles? | | | | | | | | | | |
| | | Facilitator | 29 | 96.7 | | | | | | | 20 | 66.7 |
| | | Coordinator | 25 | 83.3 | | | | | | | | |
| | | Data manager | 23 | 76.7 | | | | | | | | |
| | 2 | Approximately how many people participate in a typical OFR? | | | | | | | | | 24 | 80.0 |
| | | 5-10 | 6 | 20.0 | | | | | | | | |
| | | 11-15 | 13 | 43.3 | | | | | | | | |
| | | 16-20 | 4 | 13.3 | | | | | | | | |
| | | 21-25 | 5 | 16.7 | | | | | | | | |
| | | ≥26 | 2 | 6.7 | | | | | | | | |
| | 3 | Meeting updates are provided to a governing committee. | | | 6 | 20.0 | 8 | 26.7 | 16 | 53.3 | 16 | 53.3 |
| | 4 | Agencies or organizations that are typically represented in your OFR. | | | | | | | | | 29 | 96.7 |
| | | Local Health or Human Services | 25 | 83.3 | | | | | | | | |
| | | Law Enforcement (police or sheriff's office) | 26 | 86.7 | | | | | | | | |
| | | Medical Examiner/Coroner | 24 | 80.0 | | | | | | | | |
| | | Community Corrections (probation/parole) | 21 | 70.0 | | | | | | | | |
| | | Prosecutor's Office | 16 | 53.3 | | | | | | | | |
| | | Substance Use Disorder Treatment Provider | 27 | 90.0 | | | | | | | | |
| | | Opioid use disorder Medication Prescriber | 12 | 40.0 | | | | | | | | |
| | | Mental Health Treatment Provider | 23 | 76.7 | | | | | | | | |
| | | Emergency Department/Hospital | 19 | 63.3 | | | | | | | | |
| | | Child Protect Services | 21 | 70.0 | | | | | | | | |
| | | Harm Reduction | 7 | 23.3 | | | | | | | | |

*(continues)*

**TABLE 2**
**Measuring Overdose Fatality Review Team Practices From the Implementation Guide[a] (N = 30) (Continued)**

| Module | Practice Item | Survey Item | | Disagree | | Not Sure | | Agree | | Practice Adherence |
|---|---|---|---|---|---|---|---|---|---|---|
| Module 2: Plan your OFR meeting | 5 | Members are advised on specific information to prepare before a meeting. | | 3 | 10.0 | 0 | 0.0 | 27 | 90.0 | 27 | 90.0 |
| | 6 | With what regularity does your OFR team meet? | | | | | | | | 22 | 73.3 |
| | | About every 2-3 mo | 8 | 26.7 | | | | | | | |
| | | About once per month | 21 | 70.0 | | | | | | | |
| | | More than once per month | 1 | 3.3 | | | | | | | |
| | 7 | How long does the typical OFR meeting (where you review cases) last? | | | | | | | | 25 | 83.3 |
| | | <1 h | 1 | 3.3 | | | | | | | |
| | | About 1 h | 4 | 13.3 | | | | | | | |
| | | 1-2 h | 22 | 73.3 | | | | | | | |
| | | 2-3 h | 3 | 10.0 | | | | | | | |
| Module 3: Facilitate your OFR | 8 | To what extent do you feel overdose cases are preventable? | | | | | | | | 20 | 66.7 |
| | | All overdose cases are preventable | 9 | 30.0 | | | | | | | |
| | | Most overdose cases are preventable | 11 | 36.7 | | | | | | | |
| | | Some overdose cases are preventable | 10 | 33.3 | | | | | | | |
| | 9 | Confidentiality agreements are signed by attendees before participating in meetings. | | 0 | 0.0 | 0 | 0.0 | 30 | 100.0 | 30 | 100.0 |
| | 10 | Detailed notes are taken at meetings. | | 1 | 3.3 | 2 | 6.7 | 27 | 90.0 | 27 | 90.0 |
| Module 4: Collect your OFR data | 11 | Materials from cases reviewed are stored and archived. | | 1 | 3.3 | 6 | 20.0 | 23 | 76.7 | 23 | 76.7 |
| | 12 | Case recommendations are recorded in a database. | | 2 | 6.7 | 5 | 16.7 | 23 | 76.7 | 23 | 76.7 |
| Module 5: Build a recommendation plan | 13 | Actionable recommendations result from our meetings. | | 2 | 6.7 | 5 | 16.7 | 23 | 76.7 | 23 | 76.7 |
| | 14 | Our OFR develops work groups or subcommittees to address recommendations. | | 14 | 46.7 | 6 | 20.0 | 10 | 33.3 | 10 | 33.3 |

Abbreviation: OFR, overdose fatality review.

[a] Items 1 and 4 show categories that are not mutually exclusive. Item 1 depicts the percentage of OFR teams with each position filled and each team may have more than 1 position filled. Item 4 displays the percentage of OFR teams that have each agency/organization type represented and each team may have multiple organizations represented.

| TABLE 3 | | | |
|---|---|---|---|
| **Count of Practices Utilized by OFR Teams[a] (N = 30)** | | | |
| Count of Practices Utilized by OFR Teams | **N** | **%** | |
| Count of Practices Utilized | 10.6 | 1.6 | |
| 1 | 0 | 0.0 | |
| 2 | 0 | 0.0 | |
| 3 | 0 | 0.0 | |
| 4 | 0 | 0.0 | |
| 5 | 0 | 0.0 | |
| 6 | 0 | 0.0 | |
| 7 | 1 | 3.3 | |
| 8 | 3 | 10.0 | |
| 9 | 3 | 10.0 | |
| 10 | 5 | 16.7 | |
| 11 | 8 | 26.7 | |
| 12 | 7 | 23.3 | |
| 13 | 3 | 10.0 | |
| 14 | 0 | 0.0 | |
| **OFR Team Characteristic** | **M** | **SD** | **Test Statistic** |
| Length of OFR experience in case review | | | ns |
| <2 y | 10.5 | 1.8 | |
| >2 y | 11.0 | 1.1 | |
| Technical assistance training | | | ns |
| Yes | 10.7 | 1.5 | |
| No | 10.6 | 1.7 | |
| Meeting setting | | | ns |
| Mostly in-person | 10.6 | 2.1 | |
| Mostly virtual/virtual during pandemic | 10.6 | 1.6 | |

Abbreviations: ns, not significant; OFR, overdose fatality review.

[a]For "Count of Practices Utilized," M and SD are given instead of N and %.

capacity to prevent fatal overdose may speak to potential gaps in harm reduction training and/or lack of representation from harm reduction professionals on OFR teams, including medications for opioid use disorder providers. Community practitioners, stakeholders, and even medical providers often have limited information about the full range of interventions, programs, and evidence-based practices available to reduce overdose deaths.[26-31] Perhaps training on additional intervention options and/or greater representation of harm reduction professionals on OFR teams could result in teams feeling increased self-efficacy, with greater perceived capacity to make actionable recommendations to develop new or support existing harm reduction efforts.

This study also brings to light a potential gap among OFRs in translating case review meetings into actionable recommendations to prevent overdose. Nearly a quarter of teams disagree or are unsure whether their meetings result in actionable recommendations, and almost half report that they do not develop work groups or subcommittees to focus on implementation of specific recommendations. As discussed in the implementation guide, the role of subcommittees is to closely track the development of OFR recommendations and maintain momentum behind their implementation. Given the critical state of overdose and the potential for the OFR model to address local systems gaps in overdose prevention, it is imperative that the effort spent reviewing cases in OFR meetings results in measurable policy or practice change and improved community coordination.

Several factors were examined to explain the differences in the use of practices laid forth in the implementation guide: (1) length of time conducting case reviews, (2) receipt of technical assistance, and (3) the meeting setting (virtual vs in-person). Although no significant differences existed, OFR teams with a longer duration may have used slightly more practices due to having more opportunities to engage with OFR networks and experts to learn about model practices. Alternatively, perhaps it simply takes a longer amount of time to develop all of the key components of the OFR model, given it is a community-wide effort and largely volunteer-based. Either way, it is likely beneficial for newer OFR teams to engage in trainings and information sharing with more established OFRs to learn strategies for increasing practice adherence. However, further studies should examine barriers and facilitators to the uptake of the practices from the implementation guide.

It is important to note that the present study is exploratory and implementation-focused. Although there is a need to identify OFR practices that are most effective in preventing overdose, this study is most concerned with the measurement of practices according to an implementation guide, not effectiveness. Future OFR research should focus on the effectiveness of the model. Fetal Infant Mortality Review protocols developed in the 1980s in response to a spike in infant mortality were the foundation for the "Back to Sleep" campaigns, which resulted in significant, multistate changes in infant sleep positions and, ultimately, in reductions in infant deaths. The OFR process is based on fatality review teams, yet as a systems-level intervention with an action-oriented process aimed at improving policy and practice, program effectiveness in terms of long-term outcomes has yet to be evaluated.

A few limitations to this study are important to note and can guide future efforts to track OFR practices. First, OFRs have not received official training on the practices included in the implementation guide.

## Implications for Policy & Practice

- ■ To improve OFR adherence to recommended practices and consequently generate and implement actionable community overdose prevention recommendations:
  - ○ OFR teams should receive technical assistance, training, and/or commit to internal review of the OFR implementation guide. In particular, newer OFR teams should engage in information sharing and training with more established OFR teams to learn strategies for increasing practice adherence.
  - ○ OFR teams should engage in training on overdose prevention intervention options and/or increase representation of harm reduction professionals on OFR teams. Such efforts could elevate OFR teams' perceived capacity to make and implement actionable overdose prevention recommendations with new or existing harm reduction programs.
  - ○ OFR model fidelity tools must be established with input from fatality review experts and utilized in research and within OFR teams.
- ■ Further studies should examine:
  - ○ Barriers and facilitators to the uptake of the practices from the OFR implementation guide.
  - ○ Effectiveness of OFR teams and their particular practices in preventing overdose.

Although we did not ask survey participants whether they were aware of or had reviewed the guide at the time of the survey, it is possible that many had not. The first step to increasing the use of recommended practices is for OFRs to receive training or commit to internal review of the implementation guide. Second, the adherence measures conceived for this study should be reviewed, adjusted, and finalized by fatality review experts to create an OFR model fidelity tool before wide utilization in future research and practice. Third, survey respondents in this study are a convenience sample from OFR teams that vary greatly in maturity and did not necessarily represent OFRs broadly. Therefore, while conference attendees represented a variety of OFR team member positions and geographic locations, the survey results reported in this study are limited in generalizability. In particular, since respondents were also attendees at a national conference concerning OFRs, their OFR teams may be more invested in OFR implementation and consequently utilize more practices than what is typical. Finally, adherence tool survey respondents would ideally be those in OFR roles who have the most available knowledge about the way their community OFR functions; in theory, this person would serve in the OFR team's facilitator and/or coordinator role; however, the sample used in the aforementioned analysis included 12 (40%) persons who reported serving in an auxiliary (any role other than a coordinator or a facilitator) rather than primary role on the team. Despite these limitations, the results provide one of the first observations about how this emerging public health and safety collaboration is being implemented.

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