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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 review 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 six 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. Additionally, 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

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training and technical assistance with local community support to ensure recommendations are actionable.

Keywords

overdose; case review; public health; public safety

Introduction

The United States (U.S.) remains in an unprecedented overdose epidemic. Since 1999 nearly one million people have died from an accidental drug overdose, with over 90 000 deaths in 2020 alone, and provisional data suggesting that the COVID-19 pandemic exacerbated overdose rates that were already increasing.[1] Though some people overdose intentionally, most overdoses, and in particular those driving national overdose rates, are from accidental poisoning. While the majority of overdoses in the U.S. 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 fifty to one-hundred 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] While 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 U.S.[8–11] In the 12-month period ending in September 2020, 47.4% of fatal overdoses in the U.S. reported to the Centers for Disease Control (CDC) involved illicit psychostimulants including cocaine, which increased to 51.4% in 2021.[7]

In the U.S., 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. Due to their expertise and access to information gleaned at the scene of an overdose and from post-mortem 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 is 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. 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), healthcare 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, 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. 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.[22]

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,[23] violent crime,[24,25] and overdose.[13,26] 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; 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.[27]

Research on the overdose fatality case review process and its outcomes remains limited, but some studies suggest 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.[27] 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 U.S.

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 Centers for Disease Control and Prevention (CDC) developed this guide in order to aid in standardizing the model nationally. This implementation guide outlines five 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 if 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 based on affirmation on a combination of four items: having all key OFR team positions filled (facilitator, coordinator, and data manager); eleven or more members on the team; five 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 prepration; 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 two 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 workgroups or subcommittees are formed to address recommendations. With resposnes to these items we measured adherence to each of the OFR practices outlined in the implementation guide; however, it is important to note 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 only included respondents that 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). Over half of 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 fourteen practices across the five modules to conduct tests of mean differences by OFR team

characteristics. This study was reviewed by Wayne State University IRB 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 1–4 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 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 (MOUD). Half (53.3%, *n*=16) of 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 1–2 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 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 repondents 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 seven to thirteen with a mean of 10.6 (*SD*=1.6). While no team had incorporated all fourteen practices measured, the overall distribution was toward more practices used, with 60% (*n*=18) of teams using between eleven and thirteen 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 two years used slightly more practices (more than two years: *M*=11.0, *SD*=1.1; less than two 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 paper. This study is the first to assess OFR team practices and measure alignment with the implementation guide by using survey response data from thirty 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; while most have a facilitator and 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 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 MOUD 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.[34–39] 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 they do not develop workgroups 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 versus in-person). While 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. While 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, multi-state 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. Although we did not ask survey participants if 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 a 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 that 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 above analysis included twelve (40%) persons who reported serving in an auxiliary (any role other than a coordinator or facilitator) rather than primary role on the team. Despite these limitations, the results provide one of the first obversations about how this emerging public health and safety collaboration is being implemented.

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References

1. Centers for Disease Control. Overdose Deaths Accelerating During COVID-19. CDC Newsroom. Published 2020. https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html
2. Cicero TJ, Ellis MS, Surratt HL, Kurtz SP. The changing face of heroin use in the United States: a retrospective analysis of the past 50 years. JAMA psychiatry. 2014;71(7):821–826. [PubMed: 24871348]
3. Grau LE, Dasgupta N, Harvey AP, et al. Illicit use of opioids: Is OxyContin® a "gateway drug"? The American Journal on Addictions. 2007;16(3):166–173. [PubMed: 17612819]
4. Rudd RA, Paulozzi LJ, Bauer MJ, et al. Increases in heroin overdose deaths—28 states, 2010 to 2012. MMWR Morbidity and mortality weekly report. 2014;63(39):849. [PubMed: 25275328]
5. Strickler GK, Zhang K, Halpin JM, Bohnert AS, Baldwin G, Kreiner PW. Effects of mandatory prescription drug monitoring program (PDMP) use laws on prescriber registration and use and on risky prescribing. Drug and Alcohol Dependence. Published online 2019.
6. Centers for Disease Control and Prevention. Injuries and Violence Are Leading Causes of Death. Published August 24, 2021. Accessed December 21, 2021. https://www.cdc.gov/injury/wisqars/animated-leading-causes.html
7. Ahmad F, Rossen L, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics. Published 2022. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm#dashboard
8. Rigg KK, Monnat SM, Chavez MN. Opioid-related mortality in rural America: Geographic heterogeneity and intervention strategies. International Journal of Drug Policy. 2018;57:119–129. doi:10.1016/j.drugpo.2018.04.011 [PubMed: 29754032]
9. Cano M, Huang Y. Overdose deaths involving psychostimulants with abuse potential, excluding cocaine: State-level differences and the role of opioids. Drug and Alcohol Dependence. 2021;218:108384. doi:10.1016/j.drugalcdep.2020.108384 [PubMed: 33158665]
10. Seth P, Scholl L, Rudd RA, Bacon S. Overdose deaths involving opioids, cocaine, and psychostimulants—United States, 2015–2016. Morbidity and Mortality Weekly Report. 2018;67(12):349. [PubMed: 29596405]
11. Mattson CL. Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019. MMWR Morb Mortal Wkly Rep. 2021;70. doi:10.15585/mmwr.mm7006a4
12. Williams KE, Freeman MD, Mirigian L. Drug Overdose Surveillance and Information Sharing via a Public Database: The Role of the Medical Examiner/Coroner. Acad Forensic Pathol. 2017;7(1):60–72. doi:10.23907/2017.007 [PubMed: 31239957]
13. Haas E, Truong C, Bartolomei-Hill L, Baier M, Bazron B, Rebbert-Franklin K. Local overdose fatality review team recommendations for overdose death prevention. Health promotion practice. Published online 2018:1524839918797617.
14. Robinson A, Christensen A, Bacon S. From the CDC: The Prevention for States program: preventing opioid overdose through evidence-based intervention and innovation. Journal of safety research. 2019;68:231–237. [PubMed: 30876516]
15. Pollack HA, Frohna JG. Infant Sleep Placement After the Back to Sleep Campaign. Pediatrics. 2002;109(4):608–614. doi:10.1542/peds.109.4.608 [PubMed: 11927704]

16. Buckley K, Chapin JL. Fetal and Infant Mortality Review: An Evolving Process. Maternal and Child Health Journal. 1999;3(3):4.
17. Malloy MH. Trends in Postneonatal Aspiration Deaths and Reclassification of Sudden Infant Death Syndrome: Impact of the “Back to Sleep” Program. PEDIATRICS. 2002;109(4):661–665. doi:10.1542/peds.109.4.661 [PubMed: 11927712]
18. Barbieri JS, Fuchs BD, Fishman N, et al. The Mortality Review Committee: A Novel and Scalable Approach to Reducing Inpatient Mortality. The Joint Commission Journal on Quality and Patient Safety. 2013;39(9):387–AP9. doi:10.1016/S1553-7250(13)39052-7 [PubMed: 24147350]
19. Kobewka DM, Walraven C van, Turnbull J, Worthington J, Calder L, Forster A. Quality gaps identified through mortality review. BMJ Qual Saf. 2017;26(2):141–149. doi:10.1136/bmjqs-2015-004735
20. Berg CJ. From Identification and Review to Action—Maternal Mortality Review in the United States. Seminars in Perinatology. 2012;36(1):7–13. doi:10.1053/j.semperi.2011.09.003 [PubMed: 22280859]
21. Kilpatrick SJ, Prentice P, Jones RL, Geller S. Reducing Maternal Deaths Through State Maternal Mortality Review. Journal of Women’s Health. 2012;21(9):905–909. doi:10.1089/jwh.2011.3398
22. Huebner BM, Lentz TS, Gibson M. Systematic Case Review Strategies: An Application for Jail Population Reduction. Justice Quarterly. 2020;37(7):1261–1276. doi:10.1080/07418825.2020.1819384
23. Azrael D, O’Brien M. Developing the Capacity to Understand and Prevent Homicide: An Evaluation of the Milwaukee Homicide Review Commission. :95.
24. Braga AA, Weisburd DL, Waring EJ, Mazerolle LG, Spelman W, Gajewski F. Problem-Oriented Policing in Violent Crime Places: A Randomized Controlled Experiment*. Criminology. 1999;37(3):541–580. doi:10.1111/j.1745-9125.1999.tb00496.x
25. BRAGA AA, KENNEDY DM, WARING EJ, PIEHL AM. Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston’s Operation Ceasefire. Journal of Research in Crime and Delinquency. 2001;38(3):195–225. doi:10.1177/0022427801038003001
26. Rebbert-Franklin K, Haas E, Singal P, et al. Development of Maryland Local Overdose Fatality Review Teams: A Localized, Interdisciplinary Approach to Combat the Growing Problem of Drug Overdose Deaths. Health Promotion Practice. 2016;17(4):596–600. doi:10.1177/1524839916632549 [PubMed: 27091609]
27. Larochelle MR, Bernstein R, Bernson D, et al. Touchpoints – Opportunities to predict and prevent opioid overdose: A cohort study. Drug and Alcohol Dependence. 2019;204:107537. doi:10.1016/j.drugalcdep.2019.06.039 [PubMed: 31521956]
28. Cherico-Hsii S, Bankoski A, Singal P, et al. Sharing Overdose Data Across State Agencies to Inform Public Health Strategies: A Case Study. Public Health Rep. 2016;131(2):258–263. doi:10.1177/003335491613100209 [PubMed: 26957660]
29. Greenfield B, Russell E, Youngdeer H, Walls M, Alexander C. Reducing Opioid Overdose Deaths in Minnesota: Insights from One Tribal Nation. National Drug Early Warning System (NDEWS) Minnesota HotSpot Study; 2019. https://com-phhp-epi-ndews.sites.medinfo.ufl.edu/wordpress/files/2020/07/MinnesotaHotSpotReport-December-2019-FINAL.pdf
30. Hackman HH, Koziol JA, McCormick M, McDonald JV, Green TC. Multidisciplinary Team Reviews of Drug Overdose Deaths and the Use of Minigrants to Advance Recommendations: A Statewide Pilot in Rhode Island. Journal of Public Health Management and Practice. 2020;26(3):236–242. doi:10.1097/PHH.0000000000001081 [PubMed: 31688739]
31. Hargrove SL, Bunn TL, Slavova S, et al. Establishment of a comprehensive drug overdose fatality surveillance system in Kentucky to inform drug overdose prevention policies, interventions and best practices. Inj Prev. 2018;24(1):60–67. doi:10.1136/injuryprev-2016-042308 [PubMed: 28739777]
32. Walker R A Review of Overdose Fatality and Drug Monitoring Initiatives in Delaware. Delaware Division of Public Health; 2020. http://djph.delamed.org/V3_I4/OP007.pdf
33. Association of State and Territorial Health Officials. More States Authorizing the Use of Overdose Fatality Review Teams. Published 2018. Accessed April 30,

2021. https://astho.org/StatePublicHealth/More-States-Authorizing-the-Use-of-Overdose-Fatality-Review-Teams/08-23-18/

34. Mahon LR, Hawthorne AN, Lee J, Blue H, Palombi L. Assessing pharmacy student experience with, knowledge of and attitudes towards harm reduction: illuminating barriers to pharmacist-led harm reduction. Harm Reduct J. 2018;15(1):57. doi:10.1186/s12954-018-0262-6 [PubMed: 30445958]
35. Ali S, McCormick K, Chavez S. LEARN Harm Reduction: A Collaborative Organizational Intervention in the US South. Journal of Social Service Research. 2021;47(4):590–603. doi:10.1080/01488376.2020.1860183
36. Estreet A, Archibald P, Tirmazi MT, Goodman S, Cudjoe T. Exploring social work student education: The effect of a harm reduction curriculum on student knowledge and attitudes regarding opioid use disorders. Substance Abuse. 2017;38(4):369–375. doi:10.1080/08897077.2017.1341447 [PubMed: 28605275]
37. Baker LS, Smith W, Gulley T, Tomann MM. Community Perceptions of Comprehensive Harm Reduction Programs and Stigma Towards People Who Inject Drugs in Rural Virginia. J Community Health. 2020;45(2):239–244. doi:10.1007/s10900-019-00732-8 [PubMed: 31502098]
38. Watson T, Hughes C. Pharmacists and Harm Reduction: A Review of Current Practices and Attitudes. Can Pharm J. 2012;145(3):124–127.e2. doi:10.3821/145.3.cpj124
39. Oldfield BJ, Tetrault JM, Wilkins KM, Edelman EJ, Capurso NA. Opioid overdose prevention education for medical students: Adopting harm reduction into mandatory clerkship curricula. Substance Abuse. 2020;41(1):29–34. doi:10.1080/08897077.2019.1621241 [PubMed: 31211657]

Implications for Policy and 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.

Table 1.

Overdose Fatality Review Team Characteristics (*N*=30)

OFR Team Characteristics	***N***	**%**
How long has the OFRT been reviewing overdose cases?		
Less than 6 months	7	23.3%
6 months to 1 year	5	16.7%
Between 1 and 2 years	9	30.0%
2 years or longer	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 or more	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%

Table 2.

Measuring Overdose Fatality Review Team Practices from the Implementation Guide[a] (*N*=30)

Module	Practice Item	Survey Item			Disagree		Not Sure		Agree		Practice Adherence	
		Does your OFR team have a member that fulfills the following roles?	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
Module 1: Recruit Your OFR Members	1	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 or more	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%								
		OUD 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%								

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 months	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%
		Less than 1 hr	1	3.3%								
		About 1 hr	4	13.3%								
		1–2 hrs	22	73.3%								
		2–3 hrs	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 workgroups or subcommittees to address recommendations.			14	46.7%	6	20.0%	10	33.3%	10	33.3%

[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 one 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***
Length of OFR Experience in Case Review		
Less than 2 Years	10.5	1.8
More than 2 Years	11.0	1.1
Technical Assistance Training		
Yes	10.7	1.5
No	10.6	1.7
Meeting Setting		
Mostly In-Person	10.6	2.1
Mostly Virtual/Virtual During Pandemic	10.6	1.6

[a]For “Count of Practices Utilized”, *M* and *SD* are given instead of *N and* %; n.s.= not significant