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Leveraging Rapid Response Activities to Build Public Health Capacity: Development of the Opioid Rapid Response Team Model

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Abstract

As part of the federal response to the opioid crisis, the Opioid Rapid Response Team project (2018–2019) was created to provide rapid short-term assistance to requesting US jurisdictions responding to an acute opioid-related event. The project used an approach that maximized overall value by leveraging existing federal resources and harnessing opportunities to meet project-specific objectives while also enhancing general response capacity at the federal, state, and local levels. This tandem capacity building for both opioid rapid response and general response focused on systems and operations, workforce readiness, technical assistance, and partnerships. In this article, we demonstrate the ancillary value that issue-specific response activities can contribute to broader public health response capacity.

Keywords

Rapid response; Opioid; Public health preparedness/response; Jurisdictional issues

Introduction

In recent years, the US Department of Health and Human Services (HHS) has focused and reinforced efforts in response to the opioid crisis.[1] In 2018, HHS leaders overseeing the strategic coordination of the federal government-wide opioid portfolio recommended

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the creation of a specialized federal rapid response service: the Opioid Rapid Response Team (ORRT). The ORRT model was developed to meet acute public health response needs (eg, epidemiology, health communications, logistics) for opioid-related emergencies across the United States. The intent was to provide rapid assistance to supplement a requesting jurisdiction's (eg, state health department) response to an acute opioid-related event such as a spike in overdoses or a law enforcement action resulting in the closure of a clinic where patients are prescribed opioids. The objective of the ORRT focused on deploying federal experts to provide rapid, short-term assistance to jurisdictions for opioid-related public health emergencies. Its design and implementation also brought long-term value to public health response capacity more broadly.

This article focuses on the conception and initial implementation of the ORRT project (2018–2019). It has since evolved into the Opioid Rapid Response Program,[2] which currently serves all 50 states and the District of Columbia and continues to foster important relationships across federal, state, and local agencies.

Forming the ORRT Implementation Unit

The Centers for Disease Control and Prevention (CDC) initiated and primarily staffed the ORRT and collaborated early on with the US Public Health Service (USPHS) Commissioned Corps Headquarters, whose personnel have provided public health expertise and some clinical functions not typically administered by CDC. Other parts of HHS with expertise in opioids were also engaged, such as the Substance Abuse and Mental Health Services Administration and HHS regional health administrators. Considering how the ORRT can be applied to support patients who face interruptions in prescribed opioid therapy due to clinic closures, HHS also introduced a working relationship between the HHS Office of the Inspector General, the Department of Justice, and the Drug Enforcement Administration.

An ORRT implementation unit was formed to convene federal experts from these agencies who discussed the complex landscape of the opioid crisis and the role of the ORRT. This laid the groundwork for the cross-sector collaboration required for the efficient execution of ORRT objectives.

While the ORRT was designed to serve acute needs, its role was integrated within the long-term national response to the opioid crisis and overall public health response capacity. Recognizing these dual areas for strengthening capacity, the ORRT implementation unit leveraged resources to achieve project-specific objectives while also supporting foundational aspects to strengthen overall national public health response capacity. The design of the ORRT enabled it to use a systems approach to address an issue-specific need, while also strengthening longer-term response capacity among federal, state, and local agencies in systems and operations, workforce readiness, technical assistance, and partnerships.

Implementing the ORRT

Systems and Operations

Creating the operational infrastructure for a new public health support service can be resource- and time-intensive. To address this challenge, the ORRT leveraged existing CDC and USPHS Commissioned Corps emergency response systems to build its operational components. Building on existing systems fostered coordination with other federal response activities, prevented redundant data and personnel management, and derived additional value from existing federal agency services at minimal financial cost. Areas that benefited from systems integration included deployment logistics and procedures, responder tracking, and roster application management. Implementing the ORRT within the currently available systems also served as a use case that helped inform future enhancements to agency response capabilities.

By leveraging existing deployment systems, the ORRT also reduced staffing inefficiencies and informed agency-wide improvements to organizing CDC staff for emergency response. The ORRT integrated its personnel with existing CDC and USPHS Commissioned Corps Headquarters response rosters and served as a use case for the future development of an all-hazards rostering system. Furthermore, the ORRT roster was designed with the flexibility to staff other CDC responses supporting state and local jurisdictions. For example, the pilot roster contributed to emergency staffing for the CDC lung injury response related to use of e-cigarette (vaping) products.

Workforce Readiness

The capacity offered by ORRT was intended to augment (and not supplant) state or local public health response capacity related to facilitating care continuity and overdose risk mitigation. The ORRT membership covered a range of public health functions (eg, epidemiology, health communication, policy, logistics, evaluation) to allow for flexibility and customization to the particular public health needs of a local response. Within 6 months of launch, the ORRT recruited over 250 CDC staff with rapid response experience. By April 2019, the pilot roster was comprised of 160 of these responders, with auxiliary staffing from other CDC response units (eg, Epidemic Intelligence Service, Global Rapid Response Team) and USPHS Commissioned Corps response teams. Within the pilot roster, responders were organized by public health discipline and assigned to monthly on-call teams to provide continuity of coverage across all disciplines.

Training is a fundamental element of scaling public health workforce capacity in the midst of a crisis. Likewise, a critical step in preparing responders on the ORRT roster for deployment was supplementing their knowledge of the current opioid crisis. The ORRT roster included individuals with robust public health response experience in their designated roles (eg, epidemiology, health communication) who then received detailed training on opioid-specific issues. An on-demand, virtual training plan was curated to fill potential knowledge gaps and deliver the latest scientific evidence. It covered a range of topics to improve baseline knowledge of the opioid crisis including overdose data and trends, policy and communication strategies, and clinical issues related to prescribing

opioids and treatment for opioid use disorder. While the training plan provided a solid base of knowledge, responders also received mission-specific briefings prior to any given deployment with information about the requesting jurisdiction, their request, and the impacted population.

Expanded Access to Training

The training plan was developed for the ORRT but was designed so that other federal, state, and local public health practitioners might benefit from it as well. Within months of its launch, over 500 USPHS Commissioned Corps officers from a range of other federal agencies (eg, Indian Health Service, Department of Homeland Security, Federal Bureau of Prisons, National Park Service) had also completed the training plan. The training supplemented the officers' knowledge with information for an ORRT deployment that could also be applied to any other emergency response with interruptions in usual sources of care where opioid-related risks may arise (eg, hurricanes). Furthermore, the training plan is hosted online on the CDC TRAIN platform,[3] where it is available to staff from any federal, state, or local health agency. Several modules in the training plan offer free continuing education credits for health professionals.

Technical and Adaptive Assistance

Technical assistance and preparedness are critical elements of timely response to acute opioid-related crises. The ORRT model could staff teams with a range of different emergency response roles and be customized to the needs of the requesting jurisdiction.

The ORRT sought opportunities to expand the reach of its expertise beyond the singular model of field team deployments. It also served as a hub to provide remote consultative services to state and local partners on response preparedness for clinic closures or overdose spikes. A jurisdiction may not need a team on the ground, but it can still benefit from assistance to strengthen their response capacity. Early examples of remote support included assistance with provider education tools, interagency coordination, communication and messaging, preparedness plans, and generating data elements for response tracking. These support functions were complementary to broader opioid-related technical assistance provided by other CDC units for epidemiology, surveillance, and overdose prevention.

CDC also worked with the Association of State and Territorial Health Officials to organize a series of tabletop exercises for state response to clinic closures or overdose spikes. These activities facilitated connections between state emergency response infrastructure and work conducted by state injury prevention or behavioral health divisions.

Public Health and Law Enforcement Partnerships

Following the closure of a clinic where opioids are prescribed, the ORRT was designed to provide surge support for public health services, such as surveillance, health communications, and linking patients to care. When a law enforcement action is conducted against a healthcare provider, the clinic may close suddenly, potentially leaving patients on opioid therapy without access to care. Public health and law enforcement officials alike are concerned about this potential impact on patients.

HHS introduced a novel partnership between the HHS Office of the Inspector General, the Drug Enforcement Administration, and the ORRT to coordinate public health services following federal law enforcement actions on healthcare providers. The partnership was embraced in earnest and exceeded expectations. It built mutual trust among federal, state, and local points of contact that opened direct channels for sharing information with public health authorities and facilitated advanced coordination. A network of these trusted contacts allowed for the first-ever pre-positioning of local public health services during an opioid-related clinic closure by federal authorities.

An early example of this direct coordination between federal, state, and local health officials was the Appalachian Regional Prescription Opioid Strike Force,[4] which prosecuted medical professionals and others involved in illegal opioid prescription and distribution. In spring 2019, the strike force used the trusted contact network as a mechanism to align information and coordinate actions among federal, state, and local health authorities, which led to the arrests of over 50 healthcare professionals.[5] On the day of the arrests, the trusted contacts network rapidly delivered essential information to local health authorities that enabled robust and immediate response efforts, such as mobilizing overdose prevention specialists, preparing 24 hours a day/7 days a week hotline support, and notifying local medical providers.[6] The trusted contacts network model supports law enforcement actions by providing supplementary public health services in an effort to mitigate risks to patients, and supports local health response by providing the advanced notification required to prepare and deploy health services. The ORRT project built upon these crucial partnership successes to advance the trusted contacts network model beyond the Appalachian Regional Prescription Opioid region. (Table)

Lessons Learned

The opioid crisis is multifaceted and opioid-related harms intersect with many areas of public health work in the United States, such as infectious disease, disaster response, and maternal and infant health.[7–9] The creation of ORRT highlights the type of collaboration necessary across traditional silos to address the crisis.

Public health responses to new or different emergencies do not necessarily require new infrastructure and can often rely on common fundamental operational components. Leveraging existing resources and systems provides opportunities for any response, regardless of subject matter, to both derive value from and contribute value to the existing public health response infrastructure. With an issue as extensive and complex as the opioid crisis, the development of the ORRT provided a window of opportunity. It enabled CDC to quickly build a mechanism for rapid assistance, while also contributing to the long-term federal, state, and local response to this crisis. The linchpin of operationalizing these opportunities for the ORRT project was partnerships. From convening federal stakeholders at the outset of the project to developing a network of trusted contacts, partnerships played a critical role.

A review of the ORRT model suggests that issue-specific response activities can provide value beyond their immediate objectives and can contribute to strengthening public health response capacity more broadly. Specifically:

- Systems-based approaches can maximize the impact and adaptability of public health activities on both current and future public health emergencies. Public health response resources are often dedicated to a specific emergency event. The ORRT project demonstrated opportunities to maximize the value of response-specific efforts by both leveraging existing resources and investing in enterprise response capacity.
- Operations coordination and workforce management were areas where expertise and resources could be effectively leveraged and strengthened across response efforts.
- The content and format of technical assistance was designed to be scalable and customizable to individual requestor needs. This enhanced the usefulness and responsiveness of services amidst a complex crisis.
- Effective cross-sector partnerships are compelled by mutual needs but anchored in trust. Early and frequent engagement with cross-sector partners bolstered trust and increased the extent of collaboration.

The impacts of the ORRT model continue to bolster foundational systems, workforce readiness, technical assistance, and partnerships of a sustained response. The ORRT project has since evolved into the Opioid Rapid Response Program, which supports all 50 states and the District of Columbia and continues to facilitate timely communication, care coordination, risk reduction, and other overdose prevention interventions across federal, state, and local agencies.

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Table.

Deliverables of the Opioid Rapid Response Team Project

Capacity Area	Opioid Rapid Response Needs	General Response Capacity
Systems and operations	On-call federal roster for opioid-related emergencies	Deployment logistics built upon existing CDC and CCHQ protocols
		Coordination of rosters across CDC and CCHQ Use case to develop an all-hazards rostering system for CDC
Workforce readiness	ORRT training plan for rostered responders	ORRT training plan available to all CDC, CCHQ, and state and local jurisdiction staff
		Provides continuing education credits
Technical assistance	ORRT team deployment for spike in overdose or clinic closure	Technical assistance on opioid-related topics for other emergency responses
	Special consultations on opioid-related topics	
Partnerships	Federal-level cross-agency coordination for overdose spikes and clinic closures	Network of trusted contacts across public health and law enforcement at the federal and local levels

Abbreviations: CCHQ, US Public Health Service Commissioned Corps Headquarters; CDC, US Centers for Disease Control and Prevention; ORRT, Opioid Rapid Response Team.

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