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MEDICAL SURGE and the Role of HEALTH CLINICS

ASPR
ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE

TRACIE
HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

CONTENTS

EXECUTIVE SUMMARY

Overview

Health clinics* play a pivotal role in providing outpatient primary care and preventive health services to the most vulnerable populations in the U.S.[1] Regardless of their diverse designations, characteristics, and funding sources, health clinics share the same goal: to deliver affordable, accessible, and high quality primary healthcare to medically underserved patients regardless of their ability to pay.[1-4] Nearly 1,400 Federally Qualified Health Centers (federally funded and "look-alikes" that meet all criteria but do not receive Federal funding),[2] 4,100 Rural Health Clinics,[3] and over 1,200 Free and Charitable Clinics[4] provide community directed primary healthcare across the country. Because of their extensive geographic coverage, strong community ties, and potential to reach medically underserved areas, health clinics play a key stakeholder role in emergency and disaster preparedness and response.

> Nearly 1,400 Federally Qualified Health Centers, 4,100 Rural Health Clinics, and over 1,200 Free and Charitable Clinics provide community directed primary healthcare across the country.

To ensure that healthcare providers are equipped and prepared to effectively respond to emergency situations, the Centers for Medicare and Medicaid Services (CMS) issued the Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule (the CMS Final Rule) in November 2016.[5] Federally Qualified Health Centers and Rural Health Clinics are among the 17 provider and supplier types subject to this Rule. This exploratory study was conducted to learn more about the scope and level of implementation of emergency management activities among health clinics, including activities that some clinics may have initiated in response to the CMS Final Rule.

Methods

The U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response (ASPR) Technical Resources, Assistance Center, and Information Exchange (TRACIE) conducted 175 online surveys with health clinic leaders from 38 states to collect their perceptions about the role of health clinics in supporting the health and medical response to disasters or emergencies.† Among these health clinic leaders, 25 participated in one-on-one in-depth telephone interviews and provided additional detail on their survey responses. The survey and follow-up interviews sought to assess: (1) Health Clinic Role in Emergency Response; (2) Health Clinic Infrastructure and Scope of Emergency Response; (3) Emergency Preparedness: Procedures and Collaborations; and (4) Health Clinic Characteristics. Findings from this study will be used to increase awareness of health clinics' potential emergency management capabilities and to address some of their identified technical assistance needs.

**ASPR TRACIE uses the term "health clinics" in this document to apply to Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), and Free and Charitable Clinics. FQHCs include three subcategories: 1) health centers (Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, Public Housing Primary Care Centers), 2) Health Center Program look-alikes, and 3) outpatient health program facilities operated by Tribes and Tribal Organizations. Only 2.3% of survey respondents represented RHCs or Free and Charitable Clinics; no interview participants represented these two types of clinics. As a result, the findings may not accurately represent health clinics that are not FQHCs. Additionally, other types of health clinics – such as school-based, public health, family planning, retail, and health system or other private ambulatory clinics – were not included in this study.*

† Interviews were conducted in accordance with the Paperwork Reduction Act under Office of Management and Budget Control Number 0990-0391, approved May 25, 2018. ICF's IRB reviewed and approved the protocol used for this study. Approved, June 6, 2018.

Key Findings

Based on the survey and interview data, ASPR TRACIE identified the following key findings:

- Health clinics have a role in addressing healthcare needs during emergencies and disasters; however, survey and interview participants perceive that health clinics have the capacity to respond to infectious disease outbreaks and a more limited response capacity for a no-notice incident.
- The level of capacity for emergency response significantly differs among health clinics. Some report having a more limited response capacity, particularly those located in rural areas (communities that frequently lack alternative healthcare settings), those that are solo practices, and those that have less established partnerships and collaborations with local agencies and other healthcare providers.
- Respondents shared that the role of health clinics in emergency preparedness and response has not been clearly defined at the local, state, or federal level.
- Health clinics may encounter important challenges to effective involvement in an emergency response, including: lack of adequately trained staff; inadequate facilities and equipment; challenges associated with obtaining and storing supplies; limited transportation capabilities; lack of time to dedicate to emergency preparedness activities; and lack of resources (e.g., funding, availability of staff, equipment) to increase their readiness level, response capacity, and resilience.

While there are significant differences in the resources, services, and readiness levels among the health clinics associated with this study, the survey data and insights shared by the interview participants suggest that opportunities exist to improve health clinic readiness and the communities in which they operate. ASPR TRACIE recommends that this could be accomplished by:

- Clearly defining the role of health clinics in emergency response at different levels including local, state, and federal.
- Increasing awareness of the significant role health clinics could play in coordinated emergency response.
- Promoting active involvement of health clinics in local healthcare coalitions and engagement with other members.
- Leveraging the expertise of health clinics in reaching and providing care to the most vulnerable groups in their communities, including people experiencing homelessness, seasonal agricultural workers, and those without medical insurance.
- Developing training strategies and technical assistance to increase emergency management knowledge and capacity among health clinics.
- Developing and promoting mechanisms to exchange experiences, lessons learned, and mentoring from health clinics with more experience in emergency management.
- Providing additional emergency management resources and support to health clinics and local coalitions.
- Supporting health clinics in developing robust business continuity/continuity of operations plans to increase their ability to support their communities during an emergency, including relocating/reconstituting clinic services if the physical facility is inaccessible or inoperative.

The present study did not intend to provide conclusive statements on emergency management that are generalizable to all health clinics. As an exploratory study, this research aimed to learn more about the role of health clinics in emergency response and to inform future efforts from ASPR TRACIE. These findings and recommendations are a first step toward greater emergency management awareness and engagement, particularly among FQHCs (the vast majority of our sample).

BACKGROUND

Different types of community-based primary care sites provide healthcare to underserved communities.[7] The most widely known type of health clinics are Federally Qualified Health Centers (FQHCs). Most FQHCs receive grant funds through the Health Center Program.[6,7] FQHC "look-alikes" are outpatient clinics that meet all requirements to receive Health Center Program funds but do not actually receive a grant.[6,7] Other types of community-based primary care providers for underserved communities are Rural Health Clinics (RHCs) and Free and Charitable Clinics. RHCs are outpatient facilities that may be for profit and located in rural areas designated as a Health Professional Shortage Area (HPSA) or medically underserved area (MUA).[3] These clinics use nurse practitioners and physician assistants to provide the majority of care.[3] Free and Charitable Clinics are safety-net healthcare organizations that provide a range of medical, dental, pharmacy, vision, and/or behavioral health services to individuals who are uninsured, underinsured, and/or have limited or no access to health care.[4]

Nearly 1,400 Health Resources and Services Administration (HRSA)-funded health centers with more than 11,000 sites deliver affordable health care to more than 27 million patients in every U.S. state, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the Pacific Basin. These clinics serve one in three residents living in poverty, one in five living in rural areas, one in nine children, and more than 355,000 veterans.[8] As community-based organizations integrating primary medical, oral health, mental health, substance use disorder, vision care, and patient support services such as medical transportation and education, health centers are well-positioned to meet healthcare needs in their communities. The majority of these centers care for patients regardless of their ability to pay and are federally funded (e.g., by Medicaid or Medicare).[8] Thus, these clinics must also comply with health and safety standards to qualify for Medicare reimbursement as well as to the Health Center Program requirements overseen by HRSA.[6,8]

RHCs and Free and Charitable Clinics also have a strong presence in communities across the U.S., with 4,100 rural and over 1,200 outpatient clinics nationwide.[3,4] RHCs were established to address the inadequate supply of physicians serving Medicare beneficiaries in underserved rural areas.[10] RHCs are eligible to participate in the Medicare program and are paid an all-inclusive rate (AIR) for medically-necessary primary health services and qualified preventive health services provided mainly by non-physician practitioners.[10] Free and Charitable Clinics receive funding from individual donors, foundations, and grants and use volunteers (i.e., healthcare professionals that offer their services free of charge) in addition to staff to provide healthcare to vulnerable individuals regardless of the patient's ability to pay.[9]

Until recently there were limited emergency management requirements outside of accreditation standards for health clinics (and other healthcare settings) to be equipped and prepared to effectively respond to emergency situations.[5] In response to this challenge, the Centers for Medicare and Medicaid Services (CMS) issued the Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule in November 2016, in which FQHCs and RHCs were among the 17 named provider and supplier types, and thus[5,11] are required to establish emergency management programs to ensure compliance with the CMS Final Rule.[11]

The extensive geographic coverage, strong community ties, and potential to reach medically underserved areas suggest that health clinics may play essential roles in ensuring a coordinated response to an emergency impacting the communities they serve. However, there is limited information on the scope and level of implementation of emergency management activities among health clinics, including those that may have recently been initiated in response to the CMS Final Rule.

> The CMS Final Rule intends to strengthen and coordinate emergency response and to provide a comprehensive and consistent regulatory framework to enhance emergency preparedness among healthcare providers.[11]

ASPR TRACIE conducted this study to better understand the capacity and role of health clinics in supporting the health and medical response to disasters or emergencies beyond the established CMS Final Rule requirements. Particularly, this study aimed to provide critical insight into the role(s), barriers, and capacity of this type of healthcare setting in emergency response. The study also sought to provide information to health clinic leaders and other emergency management stakeholders with the potential to improve future emergency response in local communities. Additionally, the study identifies specific needs of health clinics that ASPR TRACIE and other stakeholders may be able to address through future technical assistance efforts. Findings from this study will be used to increase awareness of health clinics' potential emergency management capabilities and to address some of their identified technical assistance needs.

METHODOLOGY

ASPR TRACIE conducted online surveys and one-on-one in-depth telephone interviews with leaders of health clinics to better understand the clinics' capacity, preparedness for, and impediments to disaster response.

Research Questions

The following research questions were addressed in this study:

1. What is the role of health clinics in different scenarios of emergency response?
2. What is the level of capability and infrastructure for emergency response among health clinics?
3. What are the characteristics of the emergency preparedness activities and procedures that are being implemented at health clinics?
4. What factors can facilitate health clinics' involvement/engagement in emergency response and preparedness?

Recruitment

For the online survey, a convenience sample of individuals serving in leadership positions at health clinics was identified through existing relationships with the National Association of Community Health Centers (NACHC) and HRSA. For the purpose of this study health clinics included Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), and Free and Charitable Clinics. FQHCs include three subcategories: 1) health centers (Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, Public Housing Primary Care Centers), 2) Health Center Program look-alikes, and 3) outpatient health program facilities operated by Tribes and Tribal Organizations. Recruitment messages sought to reach leaders from all the different types of health clinics mentioned above. The messages were posted in HRSA's *Primary Health Care Digest* and NACHC's *Washington Update* newsletter and social media channels and sent through emails with a link to the online survey between June 6 and June 26, 2018. In addition, a number of state and regional primary care associations (PCAs)[†] disseminated the national recruitment messages among their members within the same timeframe. Eligible participants were individuals serving in leadership positions at different types of health clinics including FQHCs, RHCs, and Free and Charitable Clinics. Leadership positions included but were not limited to facilities managers, clinical managers, clinicians, and/or emergency preparedness leads; participants could select multiple roles and had the option to describe other roles not listed.

Interview participants were self-selected and included only online survey participants who indicated willingness to participate in a follow-up interview. The first 25 survey participants who indicated willingness to participate in the interview were enrolled in the interview component and received follow-up email messages scheduling a telephone interview.

Participants did not receive an incentive for completion of the survey or interview.

Data Collection

ASPR TRACIE administered an online survey estimated to take a maximum of 15 minutes for respondents to complete. The survey assessed 4 main components: (1) Health Clinic Role in Emergency Response, (2) Health Clinic Infrastructure and Scope of Emergency Response, (3) Emergency Preparedness: Procedures and Collaborations, and (4) Health Clinic Characteristics. The majority of the survey questions provided two emergency scenarios to encourage respondents to consider emergency management and assess how responses might differ: one with sudden onset and immediate impact (no-notice incidents), and a slow moving, potentially contagious scenario (infectious disease outbreaks). Experts on healthcare emergency preparedness and response reviewed and provided extensive feedback for the refinement of the survey instrument. The survey instrument is included as Appendix A.

In-depth interviews were conducted with a sub-sample of survey participants who indicated they were interested in participating and provided their contact information. The 30-minute interviews were conducted to expand upon health clinic leadership's perspectives on the role of their clinic in supporting the health and medical response to disasters or emergencies. The interview included questions to prompt respondents to elaborate more on their responses to the online survey (e.g., respondents were asked to elaborate on barriers and challenges they reported in a particular emergency response scenario). The interview guide included the same sections that were included in the online survey, in addition to questions about legal and financial practices related to emergency management (e.g., reimbursement and implementation of the CMS Final Rule). The interview guide is included as Appendix B.

[†] Primary care associations (PCAs) are state or regional nonprofit organizations that provide training and technical assistance (TTA) to safety-net providers. This TTA is based on statewide and regional needs to help health clinics improve programmatic, clinical, and financial performance and operations. The capacity and capabilities of PCAs in emergency management varies across the country to be responsive to the needs of their member health centers. Some PCAs have very robust emergency management programs that include training and education, active response roles, and working directly with emergency responders whereas other PCAs offer connections to other local or state emergency management resources.

Analysis

ASPR TRACIE used a mixed-methods analysis approach that included a quantitative analysis of survey data and a qualitative analysis of interviews. Descriptive analyses, using frequencies and percentages, were conducted to summarize survey responses. Interview recordings and notes were reviewed to identify key insights and themes (repeated response patterns) that depicted participant perceptions. As appropriate, illustrative quotes are included throughout the report.

FINDINGS

Of the 363 individuals who consented to taking the survey, close to half (n=175, 48%) of the responses were valid. Responses were determined valid if participants responded to the majority of the survey items, including the last questions, as most survey items were not required. Percentages presented are based on the final total sample unless otherwise indicated. Most survey items allowed for multiple responses, thus the percentages provided in the section below do not equal 100%.

Of the 175 survey respondents, 49% (n=86) were willing to participate in a follow-up interview. Of those, ASPR TRACIE chose the first 25 respondents who expressed interest and provided contact information to participate in the interview.

The survey assessed variables under four primary categories:

1. Health Clinic's Role in Emergency Response;
2. Health Clinic's Infrastructure and Scope of Emergency Response;
3. Emergency Preparedness: Procedures and Collaborations; and
4. Health Clinic

Participant Characteristics

Survey Participants

Table 1 provides a summary of each respondent's role(s) at their health clinic. The majority of survey respondents reported being an emergency preparedness lead (51%, n=89), and/or having an "other" (42%, n=73) role at their health clinic. Roles reported as "other" included: chief administrative officer, chief executive officer, chief operating officer, chief quality officer, compliance specialist, facilities director, grant coordinator/manager, office manager, operations director or officer, IT director, and safety specialist. Respondents less frequently indicated they had role(s) as clinical manager (15%, n=26), facilities manager (14%, n=24), and/or clinician (5%, n=8).

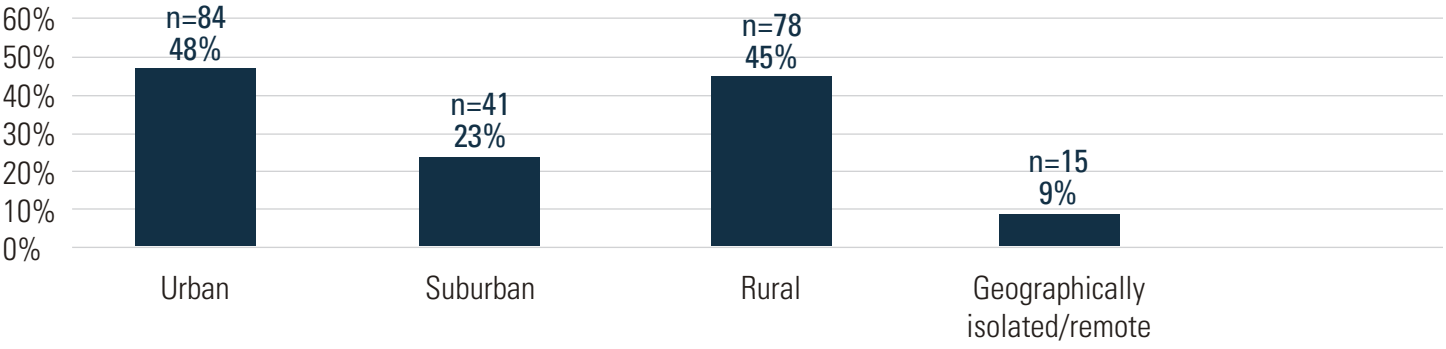
Table 1. Respondent's Role(s) at Health Clinic (n=175)

Role	n	%
Emergency Preparedness Lead	89	51%
Clinical Manager	26	15%
Facilities Manager	24	14%
Clinician	8	5%
Other	73	42%

Note: Respondents were asked to select all roles that apply. Total responses exceed 100% due to some respondents serving more than one role.

Respondents' description of their health clinic's geographic setting(s) varied (Figure 1). The majority of respondents stated their health clinic was in an urban (48%, n=84) and/or in a rural (45%, n=78) geographic setting. Respondents less often reported being in suburban (23%, n=41) and/or geographically isolated/remote (9%, n=15) areas.

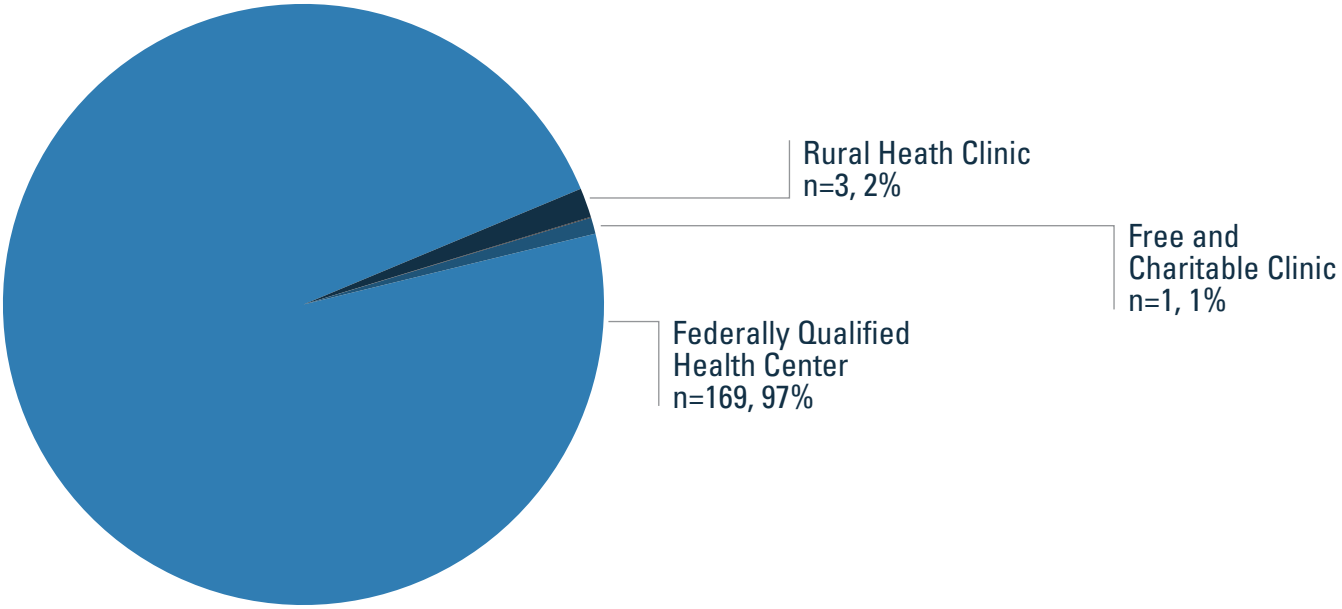
Figure 1. Geographic Setting(s) of Health Clinic (n=175)



Note: Respondents were asked to select all locations that apply. Total responses exceed 100% due to some respondents representing multiple sites.

The vast majority of respondents described the health clinic where they worked as an FQHC (97%, n=169) (Figure 2). Three respondents stated they worked at a RHC (2%), and one worked at a Free and Charitable Clinic (1%).

Figure 2. Type of Health Clinic (n=175)



Among the FQHCs (n=169), respondents most often described their facilities as Community Health Centers (93%, n=158) (Table 2). Others also described them as Health Care for the Homeless Health Centers (19%, n=32), Migrant Health Centers (11%, n=19), Health Center Program Look-Alikes (3%, n=5), Public Housing Primary Care Centers (2%, n=3), and/or Outpatient Health Program Facilities operated by a Tribe or Tribal organization (2%, n=3).

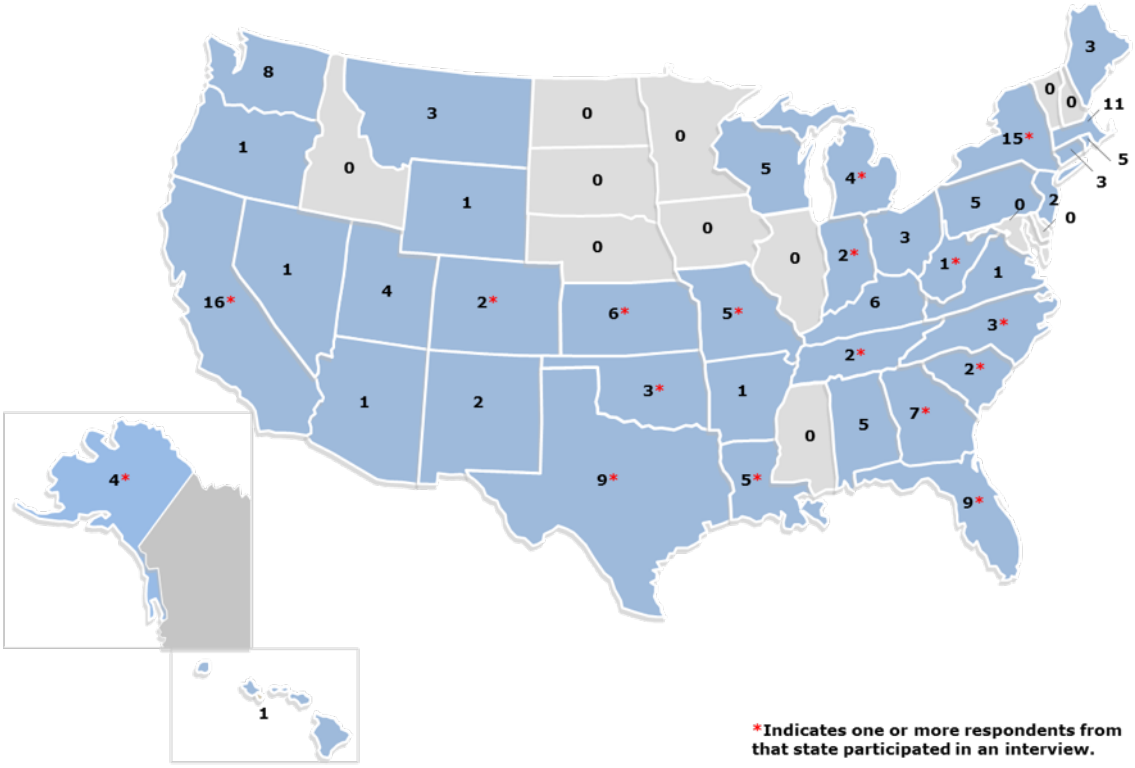
Table 2. Type(s) of Federally Qualified Health Centers (n=169)

	n	%
Federally Qualified Health Centers		
Community Health Centers	158	93%
Health Care for the Homeless Health Centers	32	19%
Migrant Health Centers	19	11%
Public Housing Primary Care Centers	3	2%
Health Center Program Look-Alikes	5	3%
Outpatient Health Programs Facilities operated by a Tribe or Tribal Organization	3	2%

Note: Respondents were asked to select all types that apply. Total responses exceed 100% due to some respondents representing multiple sites and/or FQHCs that are dually-funded to serve special populations.

Respondents reported being from 38 different states, suggesting a broad representation of U.S. regions. All 10 HHS Regions were represented in the sample (Figure 3). Respondents from 17 different states also participated in a follow-up interview as indicated in Figure 3.

Figure 3. Map of Responding Health Clinic's Location (n=175)



Interview Participants

A sub-sample of survey respondents (n=25) participated in a follow-up interview. Interviewees represented 17 states as shown in Figure 3. All interview participants described the health clinic where they worked as a FQHC or Community Health Center. The majority of interviewees indicated being an emergency preparedness lead (72%, n=18). All interviewees reported having multiple roles including facilities manager (24%, n=6), clinical manager (24%, n=6), and/or other roles (40%, n=10). Most interviewees described the location of their health clinic as rural (60%, n=15), followed by urban (44%, n=11), and/or suburban (12%, n=3).

Note: Total responses exceed 100% due to some respondents representing multiple sites and/or FQHCs that are dually-funded to serve special populations. Respondents were also asked to report all the roles they had within their health clinic.

Analysis of Main Findings by Research Question

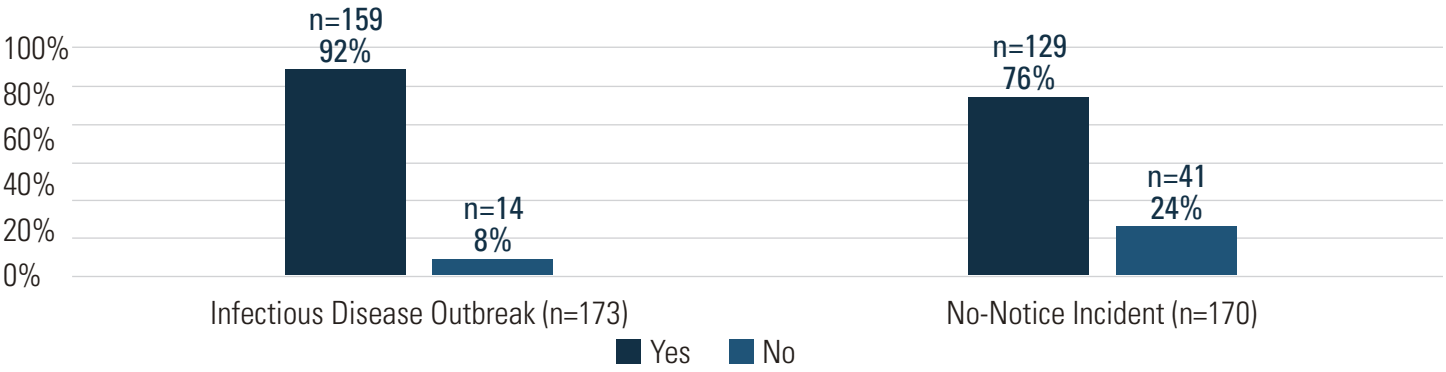
The following section is organized by research question. Findings from the survey items corresponding to each research question are presented first, followed by additional insights learned from the interviews (when applicable). Given that response was optional to most questions, and most questions were designed for the respondent to select all answer choices that applied, the denominators for each question may differ and percentages may not equal 100%. A clarifying note and corresponding denominator (i.e., number of respondents for each survey item) are added to the graphs as applicable.

RESEARCH QUESTION 1: What is the role of health clinics in different scenarios of emergency response?

Perception of Health Clinic's Role in Different Emergency Scenarios

The majority of survey respondents reported their health clinic would have a role in addressing healthcare needs caused by an infectious disease outbreak (92%, n=159) and/or a no-notice/sudden onset incident (76%, n=129) (Figure 4). Respondents reported not having a role in addressing healthcare needs caused by a no-notice/sudden onset incident (24%, n=41) more frequently than not having a role in addressing an infectious disease outbreak (8%, n=14).

Figure 4. Perception of Whether or not Health Clinics Have a Role in Emergency Response to Infectious Disease Outbreak and No-Notice Incident



Respondents were asked to review a list of healthcare services that are typically needed during and in the aftermath of emergencies; some of these are not typically required services and may be outside the normal scope of practice of health clinics. Respondents' perceived ability to provide specific services during standard practice, an infectious disease outbreak, and/or a sudden onset/no-notice incident varied by scenario (Table 3). The services most frequently reported as standard practice at respondent's health clinic were: expertise in treating certain patient populations (e.g., children, older adults, people experiencing homelessness) (97%, n=169); patient/community education/risk communication (88%, n=154); behavioral health support/treatment for patients (86%, n=150); and prophylaxis/vaccination available – on site (86%, n=150).

During an infectious disease outbreak, respondents most frequently reported their health clinic being able to provide: follow-up care during the recovery phase of the emergency (58%, n=102), expertise in treating certain patient populations (e.g., children, older adults, and people experiencing homelessness) (55%, n=97), and additional surge capacity for patient treatment (55%, n=97).

During a sudden onset/no-notice incident, respondents most frequently reported their health clinic being able to provide: follow-up care during the recovery phase of the emergency (53%, n=93), a temporary medical station or triage site (50%, n=88), and additional surge capacity for patient treatment (49%, n=86).

The most frequently reported services not provided by respondent's health clinic included: prophylaxis/vaccination available – off site (55%, n=97), having trained and geographically accessible personnel to support a medical shelter (54%, n=94), and having trained and geographically accessible personnel to support an alternate care site (43%, n=75).

Table 3. Health Clinic's Ability to Provide Specific Services in Different Scenarios Including: Standard Practice, Infectious Disease Outbreak, and No-Notice Incident (n=175)

	Standard Practice Health Clinic	Infectious Disease Outbreak	No-Notice Incident	Do Not Provide this Service
Expertise in treating certain patient populations	169 (97%)	97 (55%)	82 (47%)	5 (3%)
Patient/community education/risk communication	154 (88%)	91 (52%)	71 (41%)	12 (7%)
Behavioral health support/treatment for patients	150 (86%)	79 (45%)	79 (45%)	16 (9%)
Prophylaxis/vaccination available – on site	150 (86%)	89 (51%)	67 (38%)	16 (9%)
Patient triage	140 (80%)	94 (54%)	81 (46%)	11 (6%)
Follow-up care during the recovery phase of the emergency	132 (75%)	102 (58%)	93 (53%)	13 (7%)
Behavioral health support/treatment for staff	123 (70%)	79 (45%)	81 (46%)	31 (18%)
Public health surveillance/monitoring	101 (58%)	74 (42%)	51 (29%)	55 (31%)
Support for responder treatment/monitoring	93 (53%)	81 (46%)	72 (41%)	47 (27%)
Temporary safe haven from external threat	85 (49%)	58 (33%)	71 (41%)	54 (31%)
Additional surge capacity for patient treatment	79 (45%)	97 (55%)	86 (49%)	39 (22%)
Location to establish a temporary medical station or triage site	68 (39%)	85 (49%)	88 (50%)	50 (29%)
Trained and geographically accessible personnel to support an alternate care site	57 (33%)	65 (37%)	68 (39%)	75 (43%)
Prophylaxis/vaccination available – off site	54 (31%)	48 (27%)	39 (22%)	97 (55%)
Trained and geographically accessible personnel to support a medical shelter	40 (23%)	51 (29%)	61 (35%)	94 (54%)

Note: Respondents were asked to select all services that apply. Total responses exceed 100% due to respondents reporting all the services provided at their health clinics.

Consistent with survey responses, the perception of the role of health clinics in providing specific services during an emergency response varied among the leaders interviewed. The most frequently reported roles included patient triage, referral to specialized care, supporting medical surge response (particularly providing basic care to the "walking wounded"), and becoming points of dispensing (PODs) for their communities. The majority of the leaders interviewed indicated feeling

more capable of playing a role during infectious disease outbreaks versus other scenarios. Some interviewees highlighted the key role their health clinics have in maintaining primary care services during emergency scenarios, particularly for patients with chronic conditions. A few of the clinics' leaders—mainly those from larger clinics, those belonging to larger healthcare organizations, or those having multiple locations—perceive their clinic as being able to effectively participate in coordinated emergency response. These quotes emphasize those findings:

- Our role is primarily triage, treatment, and referral and working in partnership with the local health department. *~Chief Executive Officer, Rural, FQHC Community Health Center (CHC)*
- As the source of primary care for people in the community, they are going to be coming to us regardless, so we have to be ready. Besides, we provide integrated behavioral healthcare, so we are going to be a huge provider of mental health care during any kind of disaster. Depending on the nature of the event we may be coordinating with other health providers. *~Clinical Manager and Emergency Preparedness Lead, Rural/Suburban, FQHC, CHC, Migrant Health Center*
- If there was a flu epidemic or some other infectious disease outbreak we would treat our own patients and walk-ins. We are not really set up to handle any mass casualty; we are not set up to do burn care, suturing, or treat orthopedic fractures. We are not capable of participating in a mass casualty event—we are not trained for that. *~Emergency Preparedness Lead, Rural, FQHC, CHC*
- We have a negative pressure room, so we have the ability to isolate people with tuberculosis or those kinds of illnesses. Because we are such a large provider, we have a building with a generator, so if the power went down, we would be able to set up a medical triage and if a medical shelter was set up, we would take the lead on that [while working with the county Public Health Department] and provide staff, supplies, equipment and that kind of stuff. *~Clinical Manager, Geographically isolated/remote, FQHC, CHC, Health Care for the Homeless Health Centers*

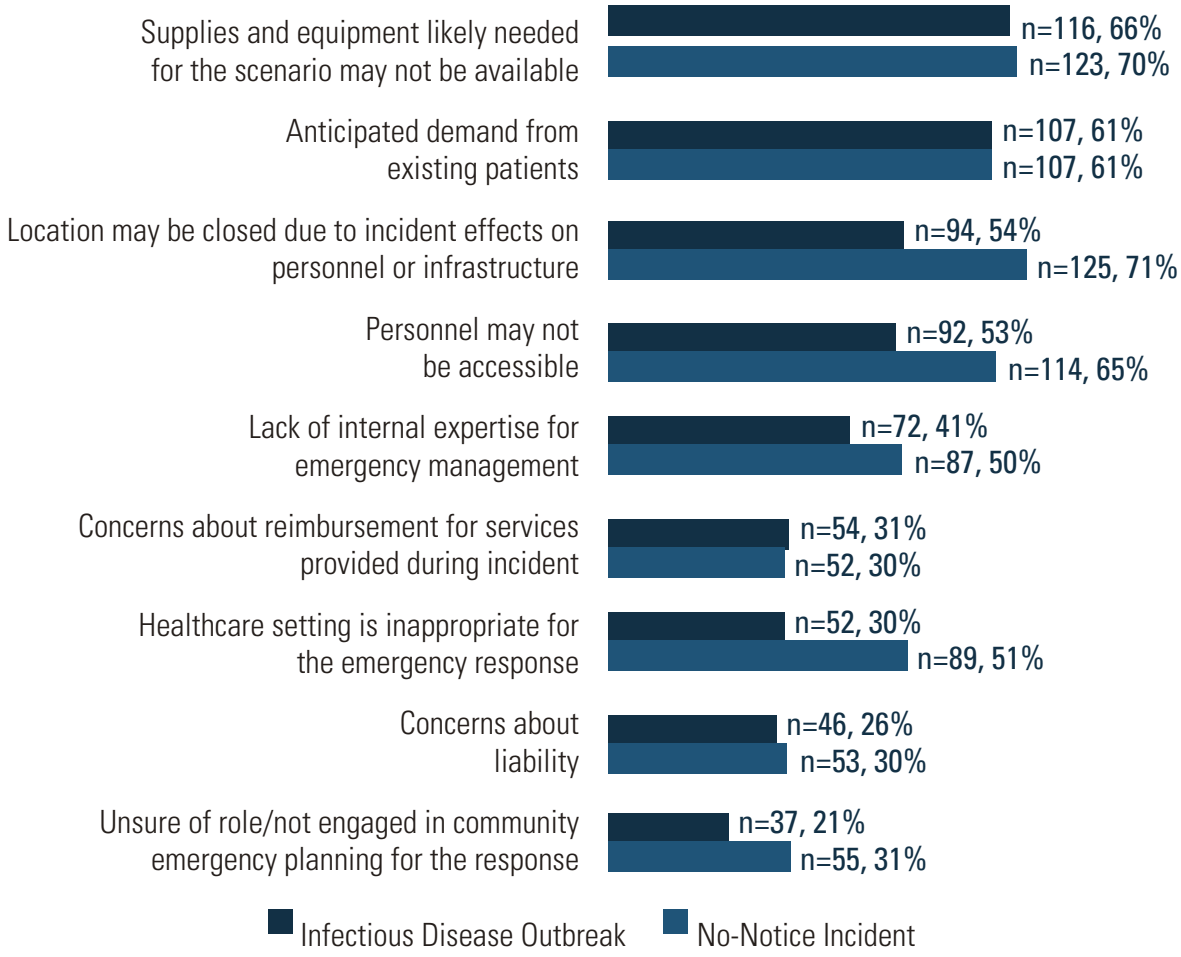
> People in our area who get affected by natural disasters would look at Health Centers for what they need, because the vast majority are diabetic, hypertensive, overweight; you know, they depend on us to get not only good quality health care but affordable healthcare. We do healthcare every day, during disasters all you do is just do a lot more of it.
>
> *~Facilities Manager and Emergency Preparedness Lead, Urban/Suburban, FQHC, CHC, Health Care for the Homeless Health Centers*

Barriers and Challenges for Health Clinic Involvement in Emergency Response

Survey respondents reported various factors that might pose a challenge to their health clinic's involvement in an infectious disease outbreak and/or no-notice incident (Figure 5). The most frequently cited obstacle or challenge to involvement in an infectious disease outbreak was that supplies and equipment likely needed for the scenario may not be available (66%, n=116), followed by the inability to keep up with anticipated demand from existing patients (61%, n=107). The most frequently cited obstacle or challenge to involvement in a no-notice/sudden onset incident was that the location may be closed due to incident effects on personnel or infrastructure (71%, n=125), and that supplies and equipment likely needed for the scenario may not be available (70%, n=123).

Fewer survey participants (21%, n=37) reported they were unsure of role/not engaged in community emergency planning for the response for an infectious disease outbreak. Concerns about reimbursement for services rendered during an emergency was the least frequently reported challenge for a no-notice incident (30%, n=52).

Figure 5. Factors that Pose an Obstacle or Challenge to Health Clinic Involvement in Response to an Infectious Disease Outbreak and No-Notice Incident (n=175)



Note: Respondents were asked to select all challenges/obstacles that apply. Total responses exceed 100% due to respondents reporting more than one barrier.

In general, health clinic leaders interviewed reported having similar barriers that could limit the scope and capacity of their practices to respond to emergency scenarios. The most common barriers reported included lack of trained staff, inadequate facilities and equipment, challenges to obtain and store supplies, and difficult access to and from the health clinic due to location and limited transportation options. These quotes summarize perceived barriers shared by interviewees:

» Our clinic has been in existence since 2014 and we have not been involved in any of the regional disaster situations. Our local fire department is an all-volunteer fire department; they are not current in [Cardiopulmonary Resuscitation] CPR or disaster response. We don't have e any capability to do decontamination within a 10-mile radius, so there are a lot of opportunities to increase our capabilities. We don't have any staged resources (supplies) within our radius of responsibility, and we do not have trained staff. *~Chief Executive Officer, Rural, FQHC, CHC*

> We do not have the capacity to address a serious influx of any kind based on current funding and current staffing.
>
> *~HR Dir-Compliance Safety and Security, Urban, FQHC, CHC*

» We are operating out of a building built in 1982; we do not have extra capacity to handle the number of patients in the area that would come to us as an overflow site. We do not have the space to store a large amount of supplies. *~Clinical Manager and Emergency Preparedness Lead, Geographically isolated/remote, FQHC, CHC*

» My biggest concern should there be an emergency is that all of our providers but one don't live in the county, so calling them in would be very difficult. It takes most of them 40 minutes to one hour to get here. Being rural is kind of our big problem. *~Quality and Risk Manager and Emergency Preparedness Lead, Rural, FQHC, CHC*

> I don't know what kind of demands are expected or would be laid on us, because until now—and I've been here for 5 years—I haven't had a conversation like this with anybody.
>
> ~ HR Dir-Compliance Safety and Security, Urban, FQHC, CHC

Another challenge consistently reported by interviewees was lack of time to effectively participate in emergency management activities. The majority of the interviewees reported having multiple roles and responsibilities at their health clinic and sometimes found it difficult to prioritize emergency preparedness and planning.

» I have a lot of other duties, I case manage patients, and I also have to be here for my patients. So it is a challenge to find the time and energy to focus [on emergency planning]. If it wasn't so important to me it would be hard to do. *~Health Home Director, CCM Case Manager, Chronic Pain Case Manager and Emergency Preparedness Lead, Rural, FQHC, CHC*

» It is a small part of my job. We are small; we don't have a dedicated person doing disaster planning; it probably represents only about 5% of my effort now. *~Director of Quality and Risk Management and Emergency Preparedness Lead, Rural, FQHC, CHC*

Interviewees also reported uncertainty about the specific role their health clinics would play in emergency response, particularly in a coordinated emergency response with other local providers and agencies.

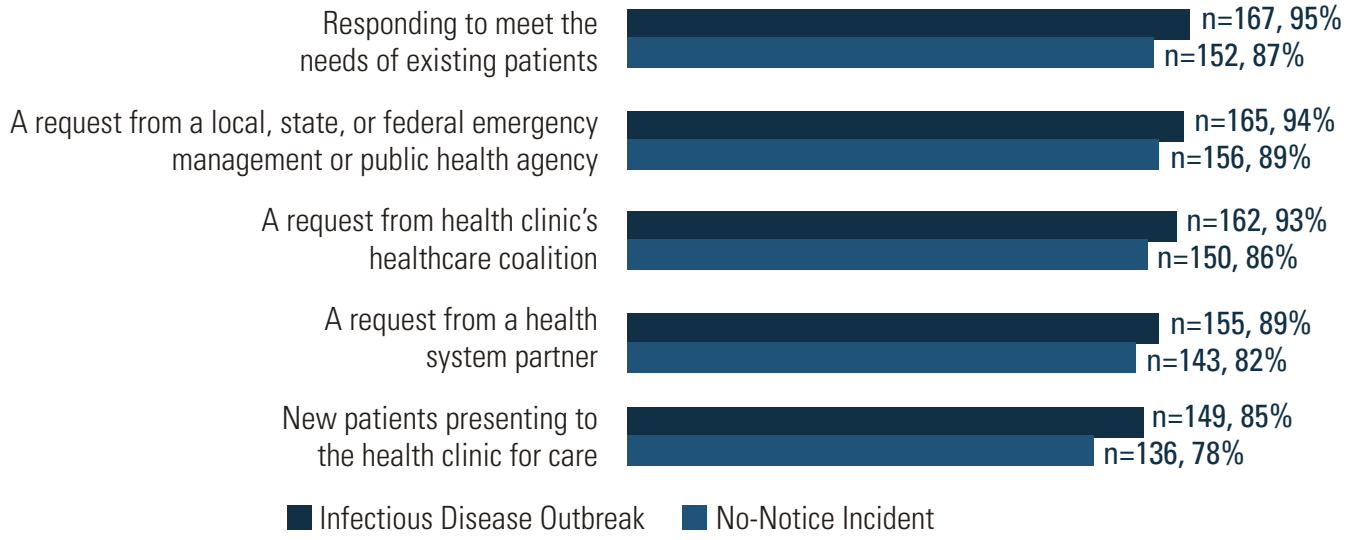
» We are willing to provide some of our staff for volunteering in the case of an emergency situation, but I don't know if we have a specific designated role. I guess we don't know where we would be needed the most. *~Emergency Preparedness Lead, Urban FQHC, CHC*

» The disaster preparedness and response system is really focused around the intersection of public health and hospital systems. Planners are not used to thinking in terms of this broader outpatient role and the way that outpatient facilities, primary care practice and ambulatory care can have a role to play. I agree that hospitals are going to be the primary source of care for the community during the first few hours, even first couple of days, but we are much better equipped to do the ambulatory phase, and the long term recovery. *~Emergency Preparedness Lead, Suburban/Rural, FQHC, CHC, Migrant Health Center*

Factors Associated with Level of Health Clinic Involvement in Emergency Response

Survey participants reported various factors that would initiate their health clinic's involvement in a response to an infectious disease outbreak and/or no-notice incident (Figure 6). Respondents most commonly reported that meeting the needs of existing patients (95%, n=167) was a factor for initiating a response to an infectious disease outbreak. Having a request from a local, state, or federal emergency management or public health agency was the most commonly reported factor for initiating a response to a no-notice/sudden onset incident (89%, n=156).

Figure 6. Factors that Would Initiate Health Clinic Involvement in Emergency Response (n=175)



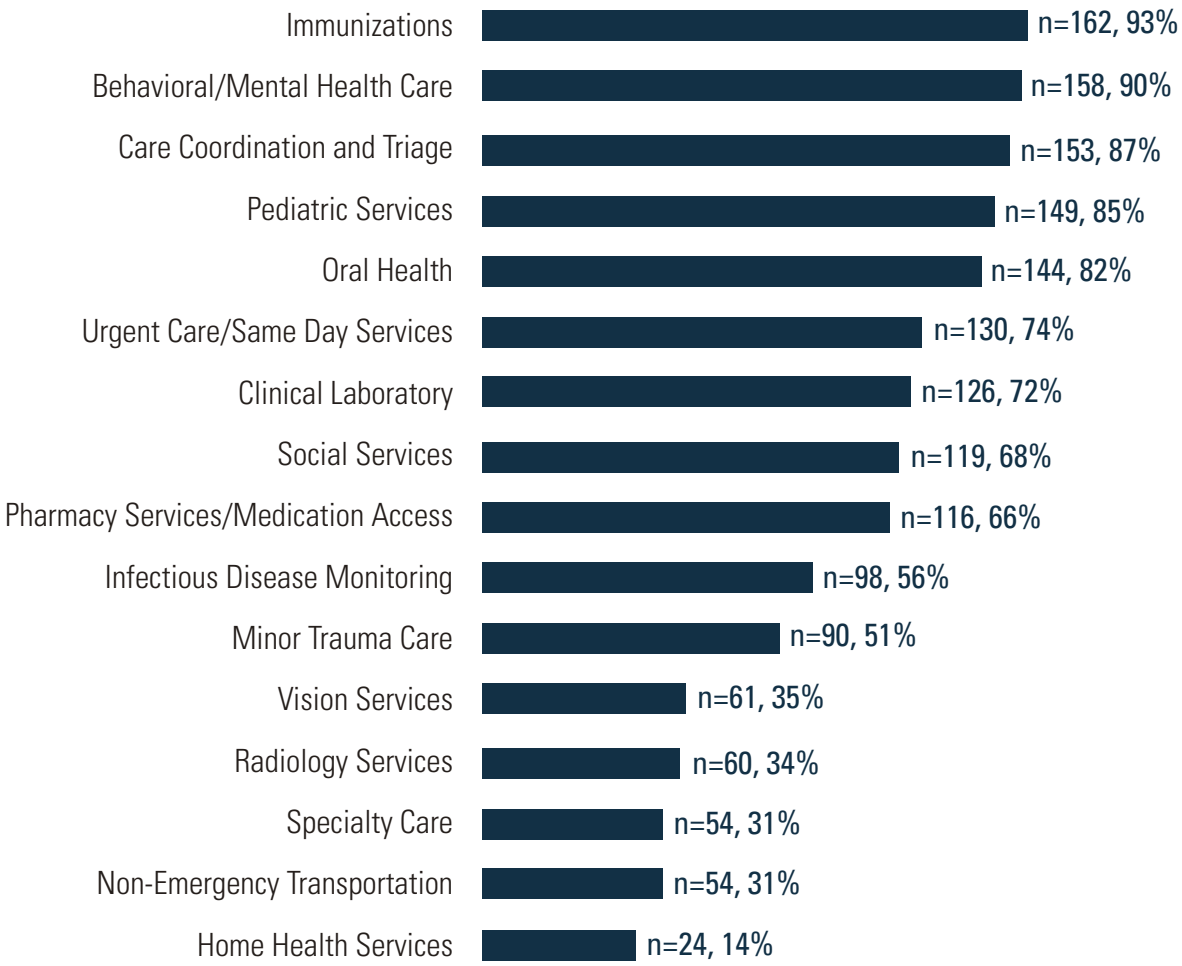
Note: Respondents were asked to select all factors that apply. Total responses exceed 100% due to respondents reporting more than one factor.

RESEARCH QUESTION 2: What is the level of capability and infrastructure for emergency response among health clinics?

Infrastructure and Scope of Services during Normal Operations

Survey respondents reported on the services provided at their health clinics during normal operations (Figure 7). Services reported most frequently by respondents included immunizations (93%, n=162), behavioral/mental health care (90%, n=158), and care coordination and triage (87%, n=153). The services provided least frequently were home health services (14%, n=24), non-emergency transportation (31%, n=54), and specialty care (31%, n=54).

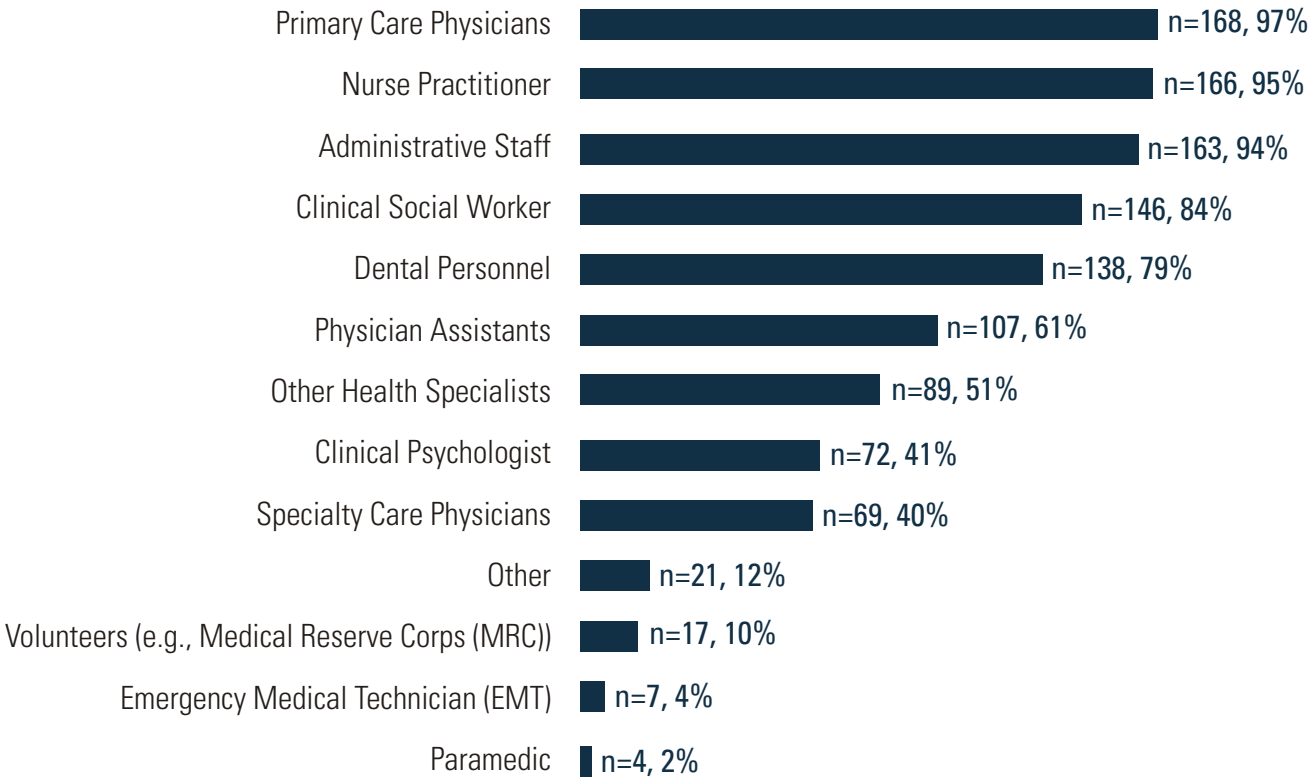
Figure 7. Services Provided by Health Clinics (n=175)



Note: Respondents were asked to select all services that apply. Total responses exceed 100% due to respondents reporting more than one service.

Survey participants were also asked about the type of staff at their health clinic during normal operations (Figure 8). Respondents consistently indicated their facilities had primary care physicians (97%, n=168), nurse practitioners (95%, n=166), and administrative staff (94%, n=163) working during business hours. Few respondents indicated having paramedics (2%, n=4), emergency medical technicians (EMTs) (4%, n=7), or volunteers (10%, n=17) at their health clinic during normal operations. It is important to highlight that paramedics and EMTs are not typical nor required staff for most health clinics. Similarly, volunteers may not be typical staff for most health clinics, with the exception of Free and Charitable Clinics. Additional staff reported as "other" included: behavioral health staff, caseworkers, community health workers, facilities/security, health educators, IT personnel, medical assistants, nurses, nutritionists, optometrists, and pharmacists.

Figure 8. Type of Staff at Health Clinic during Normal Operations (n=174)

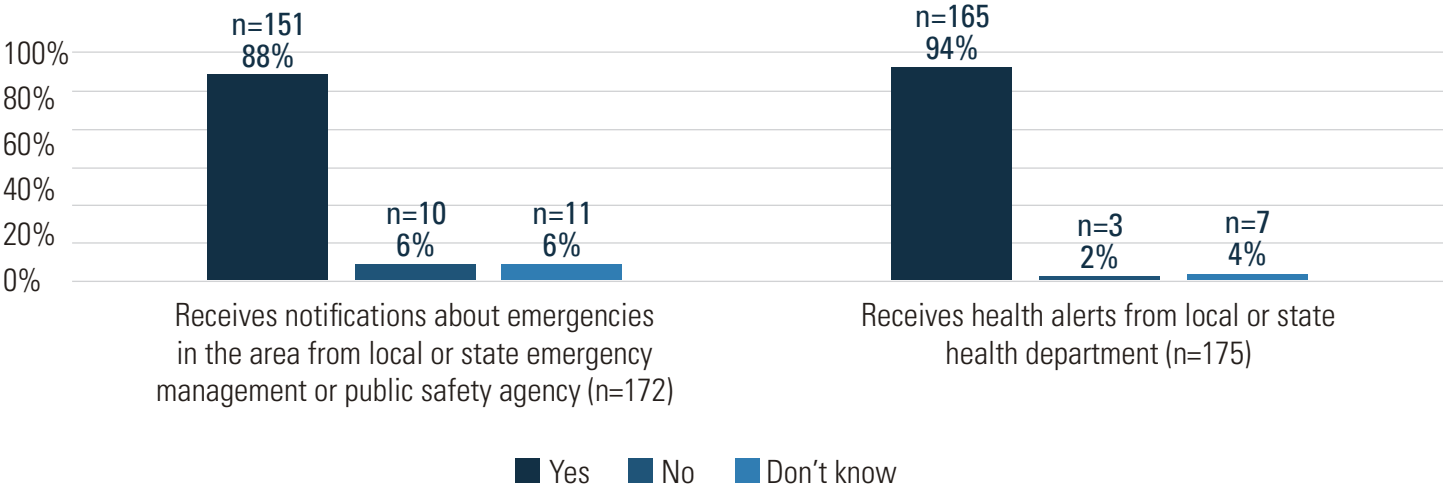


Note: Respondents were asked to select all types of staff that apply. Total responses exceed 100% due to respondents reporting more than one type of staff.

Communication and Collaboration with Emergency Response

When asked about their health clinic's communication with emergency response agencies, the majority of survey participants reported receiving notifications about emergencies in their area from local or state emergency management or public safety agencies (88%, n=151), and/or receiving health alerts from their local or state health department (94%, n=165) (Figure 9). Few respondents reporting not receiving or not knowing if they received these notifications.

Figure 9. Health Clinics' Communication with Emergency Response Agencies



In general, interview participants indicated their health clinic(s) maintained communication with other healthcare providers in their community. Interviewees particularly reported having open communication with the local health departments and local hospitals during both normal operations and emergency response. Some interviewees reported receiving information and emergency-related notifications from state-level agencies. Some leaders indicated having challenges establishing communication regarding emergency response and preparedness with local agencies.

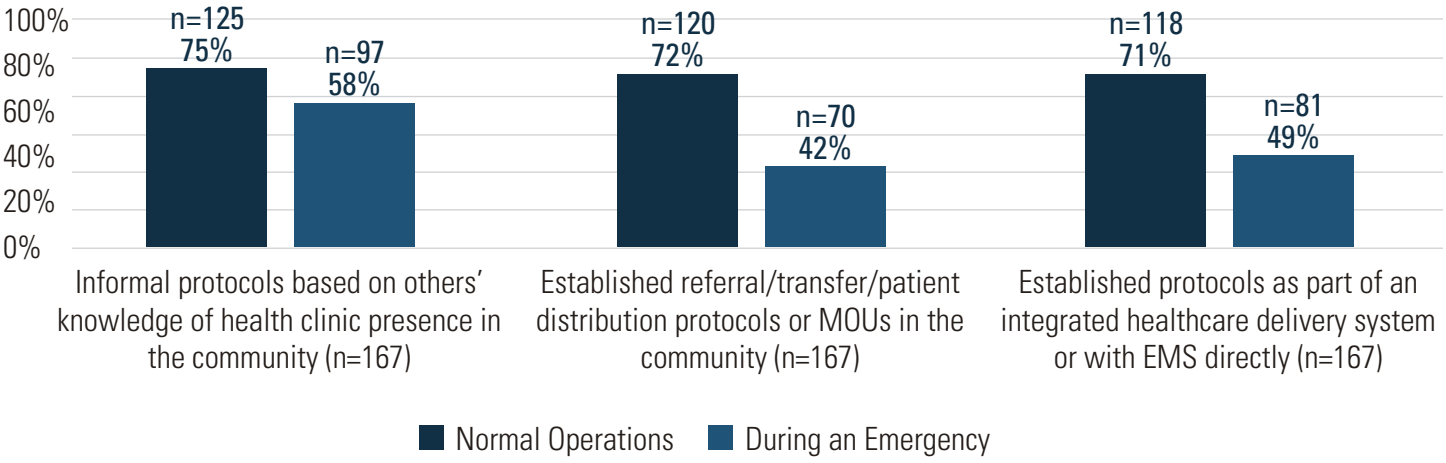
- We work closely with the local health department. If we need to, we can go straight to the state health department. We get newsletters and our local health department sends us any information that comes down from the state. We forward that on to our clinical staff. You know like if flu is increasing, or Hepatitis C. *~Quality and Risk Manager and Emergency Preparedness Lead, Urban, FQHC, CHC*
- I'm not sure how we would connect with the local agencies, I don't know what that process is. We have not participated in community activities. *~Emergency Preparedness Lead, Urban FQHC, CHC*

> Our State's Association for Health Centers has been great on getting me the tools that I need to meet the CMS rule.
>
> *~Emergency Preparedness Lead and Compliance Officer, Urban FQHC, CHC*

The majority of survey respondents had established and/or informal protocols with others in their community or health system to accept referrals of patients with minor illness or injury during normal operations or during an emergency (Figure 10). During normal operations, 75% (n=125) reported having informal protocols regarding referrals of patients based on others' knowledge of their health clinic's presence in the community. During normal operations, 72% (n=120) had established referral/transfer/patient distribution protocols or memoranda of understanding (MOUs) in the community, whereas only 42% (n=70) had established agreements during an emergency. More than half of the survey respondents (71%, n=118) had established protocols as part of an integrated healthcare delivery system (i.e., a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population) or with emergency medical services (EMS) directly during normal operations. Respondents reported having these protocols less frequently during an emergency (49%, n=81).

> We have never put anything specifically in writing, even though we've talked about it. We have made some fairly good progress in the county plans. The local EMA (Emergency Management Agency) director has to list the resources of who to call in an emergency, and for me that is about as close as we could ever get. Elected officials are not real keen on committing resources or making agreements. You know that is I guess small town politics. But probably like in any rural area in the country, when it happens, everybody comes out and helps.
>
> *~Quality and Risk Manager and Emergency Preparedness Lead, Rural, FQHC, CHC*

Figure 10. Referral Protocols in Health Clinics



Note: Respondents were asked to select all types of referral protocols that apply. Total responses exceed 100% due to respondents reporting more than one type.

Consistent with survey responses, the majority of health clinic leaders interviewed reported having established referral agreements for normal operations, particularly with EMS and nearby hospitals. Some interviewees indicated that emergency response was not explicitly included in existing referral agreements, but they believed such agreements would also be effective for emergency scenarios. A few interviewees reported not having any type of agreement with local agencies or healthcare providers for emergency response.

» We have agreements with other FQHC in areas close by to share staff and send patients. We also have agreements in place with two acute care hospitals that are 45 minutes away. They will accept [our patients]. These are standing MOUs—it happens on a daily basis, not only during disasters. *~HR/Compliance Officer and Emergency Preparedness Lead, Rural, Geographically isolated/remote, FQHC, CHC*

» We do have agreements with a sister organization. We have direct protocols with them if by any chance we are out of capacity and there are patients that need urgent care. We also have agreements with two hospitals for admissions and communication protocols. They do not specifically outline emergency response but they could be applied. We have never accepted patients from them, but theoretically we could. *~Emergency Preparedness Lead, Urban, FQHC, CHC*

Infrastructure for Emergency Response

Health clinics' infrastructure and scope of services for emergency response varied (Table 4). The majority of respondents reported being able to extend their operating hours during an emergency (89%, n=155); modify their existing space to accommodate additional patients (62%, n=108); have designated disaster supplies on site and/or contingency plans to allow the rapid order/delivery of supplies (57%, n=99); and provide information/resources to their patients to encourage their preparedness (51%, n=89). The majority of respondents reported not having contingency plans to provide emergency transport to designated hospitals or clinics in their area (53%, n=90).

Table 4. Health Clinics' Infrastructure for Emergency Response

	Yes n (%)	No n (%)	I don't know n (%)	N/A n (%)
Able to extend their operating hours during an emergency (n=175)	155 (89%)	6 (3%)	13 (7%)	1 (1%)
Able to modify their existing space to accommodate additional patients (n=173)	108 (62%)	39 (23%)	26 (15%)	0 (0%)
Has designated disaster supplies on site and/ or contingency plans to allow the rapid order/ delivery of supplies if there is a need for support beyond current service capacity (n=174)	99 (57%)	60 (34%)	13 (7%)	2 (1%)
Provides information/resources to their patients to encourage their preparedness (n=174)	89 (51%)	73 (42%)	12 (7%)	0 (0%)
Has the ability to supplement their normal staffing levels to accommodate a surge (n=174)	74 (43%)	73 (42%)	26 (15%)	1 (1%)
Has contingency plans to provide emergency transport to designated hospital or clinics in their area (n=170)	58 (34%)	90 (53%)	16 (9%)	6 (4%)

Note: Total percent by row calculated based on the total number of respondents for each question indicated in each row.

Health clinic leaders interviewed often indicated that the extent to which they could expand their existing infrastructure and services during emergencies would depend on the scenario and the level of impact to their facilities and staff.

» It would depend on the scale of the emergency. The biggest thing is staff. First is how much people can give before they get burned out and keeping them away from their families; and the second is the realistic part about pay. In [Hurricane] Irma, we extended the full scope of services to weekend hours. We could have done it for another week but that also depends on the impact you are making. *~Clinical Manager, Clinician, Emergency Preparedness Lead, Suburban, Rural, FQHC, CHC, Migrant Health Center*

» It would really depend on how many of my staff were impacted: in a flooding I would have some staff who live on the other side of the riverbed who would not be able to come to work; or if there was an infectious disease outbreak and I had a lot of the staff sick. But if none of those things were factors we could probably sustain it [emergency response] for a couple weeks. *~Clinical Manager, Geographically isolated/remote, FQHC, CHC, Health Care for the Homeless Health Centers*

Previous Participation and Experience in Emergency Response

The majority of survey respondents reported their health clinic had participated in an emergency response in their community (64%, n=112) and/or their operations had been affected by an emergency in their community (48%, n=83) (Table 5). More than half of the respondents (56%, n=84) reported making changes to their policies, procedures, or protocols based on their experience with an emergency.

Table 5. Health Clinics' Experience with Emergency Response

	Yes n (%)	No n (%)	I don't know n (%)	N/A n (%)
Participated in an emergency response in their community (n=174)	112 (64%)	55 (32%)	7 (4%)	0 (0%)
Operations at health clinic has been affected by an emergency in their community (n=174)	83 (48%)	85 (49%)	4 (2%)	2 (1%)
Made changes to their policies, procedures, or protocols based on their experience with an emergency (n=150)	84 (56%)	22 (15%)	6 (4%)	38 (25%)

Note: Total percent by row calculated based on the total number of respondents for each question indicated in each row.

Interviewees provided additional insights about the experience of their health clinics in community emergency response. Several reported participating in real-life local emergency responses, such as a flu outbreak, snow storms, wildfires, and hurricanes. In terms of impact to the clinics' operations, interviewees reported having had power outages, communication issues, and the need to temporarily close facilities. The most commonly reported change to policies after actual emergencies was the improvement of communications and partnerships.

» Five days after [Hurricane Irma] we took one of our mobile units out with some volunteers and provided basic medical services. We had been trying to coordinate with the health department, but they were preoccupied running the special needs shelters. They were completely tied-up, short-staffed, and they had to relocate people. The coordination across the county in terms of healthcare was not good. We found out about the health department's situation through a posting on the news or an email, not direct communication from them. We reached out to them to let them know we were open and we were able to help. During our after-action meeting with the health department, they gave us the contact information from the Emergency Support Function (ESF) desk within the Emergency Operation Center, and we exchanged personal cell phone numbers so in case something happened again we could coordinate the response better. *~Clinical Manager, Clinician, Emergency Preparedness Lead, Suburban, Rural, FQHC, CHC, Migrant Health Center*

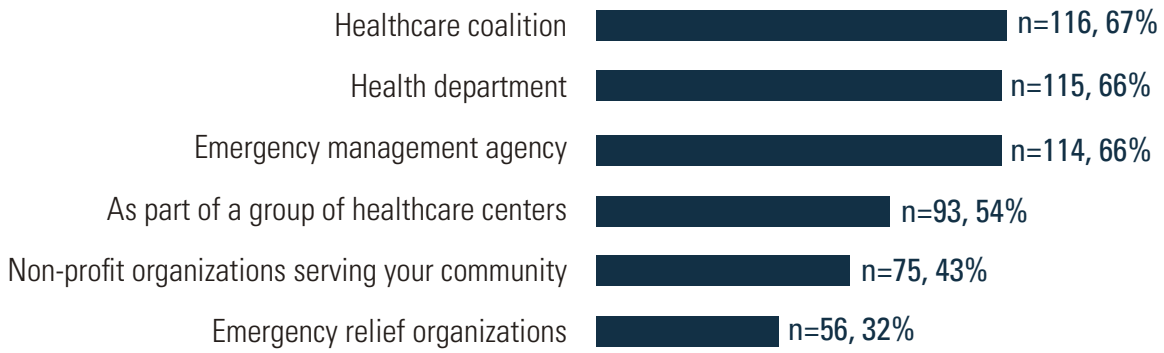
» For Hurricane Matthew our county evacuated so we closed. After the storm passed, our electricity was out, and we don't have emergency generator. We could not reopen. Although our staff was back, our communications were still down. [The outage] affected our electronic health records because we rely on the internet. I called up the cable and telephone companies and they said, "Well you are not a priority." That's when I discovered the priority system that we can have for Health Centers Government Emergency Telecommunications Service (GETS). I signed up for that. I also did research and found out about the Telecommunication Service Priority System run by the Department of Homeland Security. I spent the past year—because it is a long process— getting qualified for that, but now we have priority restoration, they have to put us ahead of the line to restore our communications. I applied for HRSA hurricane money so I'm hoping to get a generator. Those were things that I kind of discovered on my own, there has not been anything as far as an offering or training or knowledge or anything passed down to us. *~Emergency Preparedness Lead, Urban, Rural, FQHC, CHC*

RESEARCH QUESTION 3: What are the characteristics of the emergency preparedness activities and procedures that are being implemented at the health clinic?

Coordinated Emergency Response and Local Coalitions

The majority of survey respondents reported participating in coordinated emergency preparedness activities with various partners (Figure 11). Respondents often reported partnering with healthcare coalitions (67%, n=116), health departments (66%, n=115), emergency management agencies (66%, n=114), and participating as part of a group of healthcare centers (54%, n=93). Fewer respondents reported partnering with non-profit organizations (43%, n=75) and emergency relief organizations (32%, n=56) in their community.

Figure 11. Health Clinic Participation in Coordinated Emergency Preparedness Activities with Various Potential Partners (n=173)



Note: Respondents were asked to select all partners that apply. Total responses exceed 100% due to respondents reporting more than one.

The majority of the leaders interviewed indicated belonging to their local healthcare coalition; however, they reported various levels of involvement in coordinated preparedness activities. In some cases, leaders reported their coalition involvement was very active. Other interviewees reported their involvement was limited to attending monthly meetings and did not feel as though they had been engaged in coordinated emergency preparedness activities. A few leaders interviewed reported their health clinics had not been engaged/invited to participate in their local coalition activities.

> I don't think we have considered ourselves a major player in emergency response. It is kind of a culture thing, and it is also a permission thing: are we allowed to do that? Should we be doing that? At least in our coalition, it seems that it is the hospital who takes the lead. It's never been the thought that if say there is a major explosion, the thought is ok, the emergency room will handle it, or the fire department, or the first respondents. It is not, ok if the emergency rooms are flooded, who could take care of the walking wounded? Who else in the community can serve these people? I see gaps in our coordinated emergency response, but I'm still not sure if we should take the lead and say "hey yeah, we can do something like that."
>
> *~ Emergency Preparedness Lead, Urban, Rural, FQHC, CHC*

» Our public health department and EMS have an established disaster healthcare partnership throughout the county and it includes the local hospital and other major ambulatory practices besides us. We get together monthly, and we practice the drills together, so there are protocols, there are policies for setting up an ICS [Incident Command System] in any kind of disaster. The coalition is pretty strong. *~Clinical Manager, Geographically isolated/remote, FQHC, CHC, Health Care for the Homeless Health Centers*

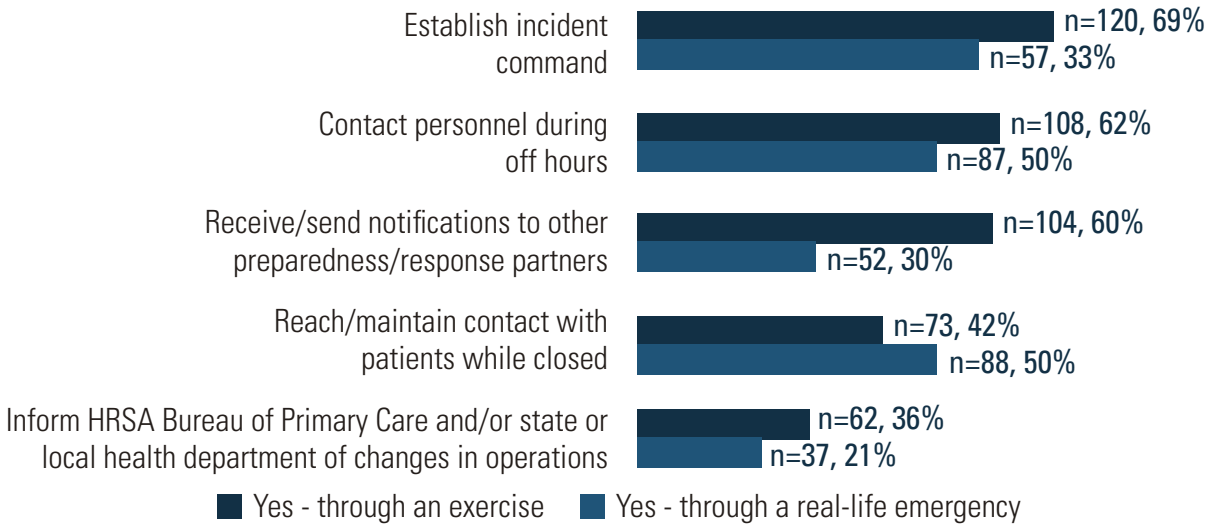
» We are required by CMS to be active in our emergency coalition, but those are mainly geared towards hospitals. I understand why, but that is kind of throwing apples and oranges together. These are very educational meetings but I'm sitting there thinking how is a clinic 75 miles away from the hospital going to help you in an emergency? So it almost needs to be a separate coalition that is clinic-based, health department-based, or public health- based. We need to work together obviously but we just have a different set of skills that we could offer than a hospital does. In these meetings we are like, "Well, Medicare requires us to get together," so we do, but there is not really useful interaction. *~Emergency Preparedness Lead, Health Home Director, CCM and Chronic Pain Case Manager, Rural, FQHC, CHC*

> Being part of the coalition and being active means that you are part of the solution to an emergency and a part of helping continue healthcare in your area. It is a critical part of being a Health Center to be involved with your coalition.
>
> ~ Facilities Manager, Emergency Preparedness Lead, Urban, Suburban, FQHC, CHC, Health Care for the Homeless Health Centers

Communication and Collaboration for Emergency Response

Survey participants reported testing their ability to implement communication and collaboration through emergency preparedness exercises and/or through a real-life emergency (Figure 12). Through an exercise, respondents most frequently reported testing their ability to establish incident command (69%, n=120) and contact personnel during off hours (62%, n=108). Through a real-life emergency, respondents most frequently reported testing their ability to reach/maintain contact with patients while closed (50%, n=88) and contact personnel during off hours (50%, n=87).

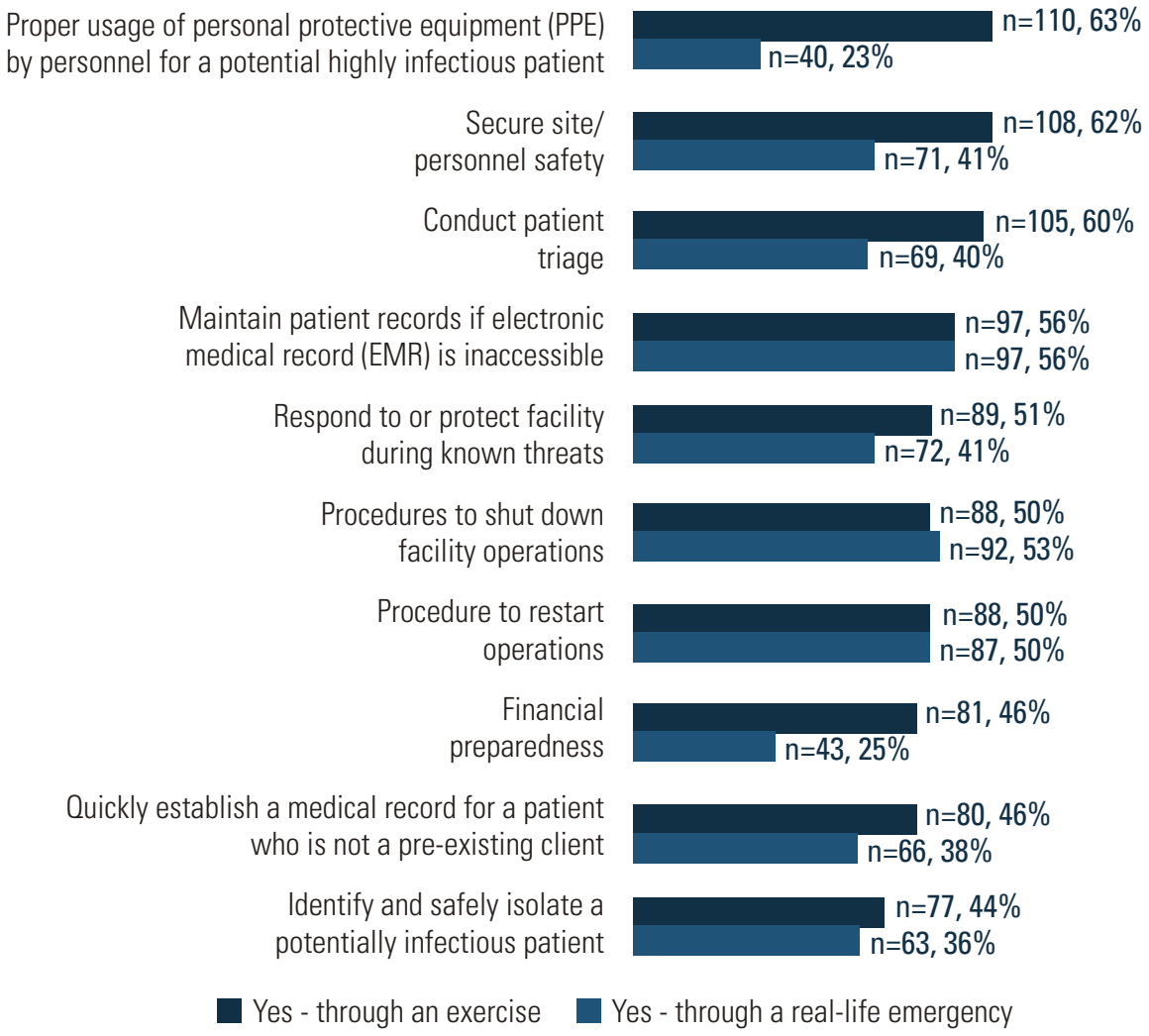
Figure 12. Health Clinic Tested Ability to Implement Communication and Collaboration (n=174)



Note: Respondents were asked to select all types of tested scenarios that apply. Total responses exceed 100% due to respondents reporting more than one type.

Survey participants also reported testing their ability to implement different emergency response procedures and protocols through emergency preparedness exercises and/or through a real-life emergency (Figure 13). Through an exercise, respondents most frequently reported testing their proper usage of personal protective equipment (PPE) by personnel for a potential highly infectious patient (e.g., novel influenza or Ebola) (63%, n=110) and secure site/personnel safety (62%, n=108). Through a real-life emergency, respondents most frequently reported testing their ability to maintain patient records (i.e., paper based) if their electronic medical record (EMR) is inaccessible (56%, n=97) and procedures to shut down facility operations (53%, n=92).

Figure 13. Health Clinic Tested Ability to Implement Emergency Response Procedure and Protocols (n=174)



Note: Respondents were asked to select all types of tested procedures and protocols that apply. Total responses exceed 100% due to respondents reporting more than one type.

When asked about the emergency scenarios their health clinic had tested or experienced, interviewees reported differing levels of involvement. According to the leaders interviewed, some clinics regularly test different potential scenarios based on their needs assessment, and some seem to limit their drills to the required exercises. Interviewees indicated having tested a variety of no-notice/sudden onset scenarios at their clinics including active shooter, bomb threat, fire, tornado, flooding, snow storm, and earthquake. They also reported having conducted pandemic response drills and community POD drills. Some leaders reported having conducted tabletop exercises and some also indicated that their clinics had participated in county-wide, state-wide, and/or local drills in addition to having conducted internal drills at their clinics. Many reported

the scenarios they tested were prompted by incidents that occurred in surrounding areas (e.g., active shooter). Interviewees also emphasized they had tested their emergency preparedness through real-life emergencies.

- We do have exercises where an irrational patient presents and is very disruptive to the admissions and clinical process and we are tested every year with 2-4 major snow storms that can shut us down for a day and sometimes more. We have improved how we communicate with our providers, our staff, and our patients. *~HR Dir-Compliance Off-Safety Off-Security, FQHC, CHC, Health Care for the Homeless Health Centers*
- Until you experience a real-life situation, it is like you don't know what you don't know. In a drill or a tabletop exercise, sometimes you don't ask the right questions or you're not drilling on the right things. So it is not until you have a real situation that you are like "Wow, I never thought that we would need two new huge containers to store our vaccines so we can transport them." It is one thing to participate in the exercises that are required, and it is another thing to do it right. I wonder if we are drilling over the right things. We are doing them, but I don't know if we are doing them right or we should be doing something differently. *~Emergency Preparedness Lead, Urban, Rural, FQHC, CHC*

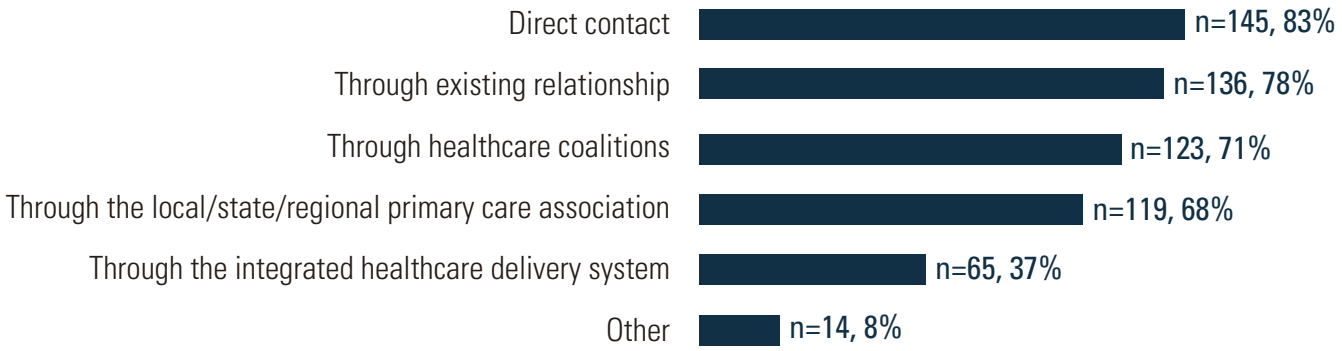
RESEARCH QUESTION 4: What factors can facilitate health clinic's involvement/engagement in emergency response and preparedness?

Partnerships for Emergency Preparedness and Response

For ongoing preparedness activities, survey respondents reported they were or could be engaged with potential partners in their community in several ways (Figure 14). Respondents most frequently reported engagement through direct contact (83%, n=145), followed by existing relationships (78%, n=136), healthcare coalitions (71%, n=123), and local/state/regional PCAs (68%, n=119). The least frequently reported engagement strategy was through integrated healthcare delivery system (37%, n=65). Additional ways to engage with potential partners reported as "other" included: local emergency management, local preparedness group/coalition, regional health clinic association, and other public agencies (e.g., police department, fire department).

> We do our fire drills, tornado drills, emergency communication drills, and prairie fire drills. We do drills on loss of power—we have a nice new generator that would keep us operational for 5 days. We drill on the process of going back to the use of paper to get patients in and out of our clinic. We have drills on floods. Most of the drills are based on our hazard vulnerability assessment; our findings set the schedule for our annual drills and trainings. Of course we practice if we had an influx of patients and we drill on how to separate the sick from the well when we had bad flu seasons. We are currently gearing up for a community POD drill.
>
> *~Facilities Manager, Emergency Preparedness Lead, Chief Quality Officer, Rural, FQHC, CHC*

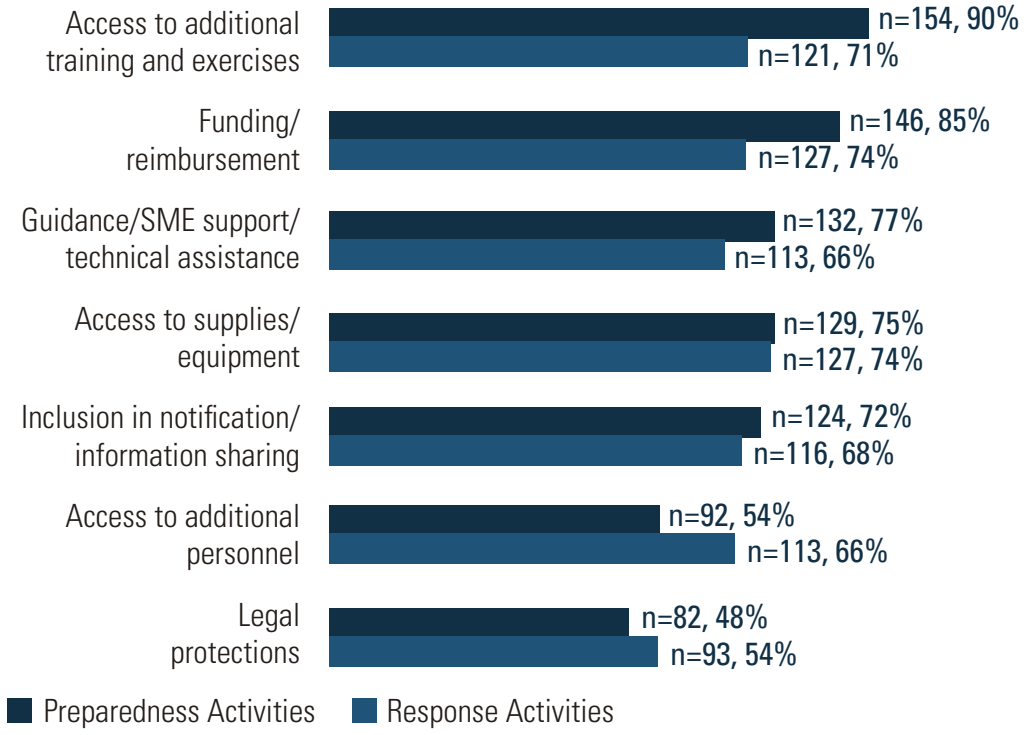
Figure 14. How Potential Community Partners Can/Do Engage Health Clinics in Ongoing Preparedness Activities (n=174)



Note: Respondents were asked to select all ways that apply. Total responses exceed 100% due to respondents reporting more than one way by which they could be engaged in preparedness activities.

Survey respondents reported several factors that they believed would make it easier for their health clinic to participate in emergency management activities (Figure 15). The most frequently reported factors that would assist health clinics in participating in preparedness activities included access to additional training and exercises (90%, n=154), funding/reimbursement (85%, n=146), and guidance/SME support/technical assistance (77%, n=132). The most frequently reported factors that would assist health clinics in participating in response activities included funding/reimbursement (74%, n=127), access to supplies/equipment (74%, n=127), and access to additional training and exercises (71%, n=121).

Figure 15. Factors that Would Facilitate Participation in Preparedness and Response Activities (n=171)



Note: Respondents were asked to select all factors that apply. Total responses exceed 100% due to respondents reporting more than one factor.

Interviewees were asked to expand on the factors that would facilitate their participation in preparedness and response activities. Some of the insights they provided included:

- We are interested in doing more emergency response, but if we are going to be asked to do more, there should be funding to support these activities. We are busy every day, we work hard every day, and then what the government is asking or expecting is that we prepare ourselves for additional work for something that may or may not happen. So if you think of your personal life, you do things that need to be done, must be done but a lot of times you put off things that could be done and that is due to lack of time or money. *~HR Dir-Compliance Off-Safety Off-Security, Urban, FQHC, CHC, Health Care for the Homeless Health Centers*
- Training is important for everyone. FQHCs should get state-level training in disaster response. I'd like to see training such as the Certified Emergency Manager available to every FQHC. *~Facilities Manager Emergency Preparedness Lead, Urban, Suburban, FQHC, CHC*
- We need administrative buy-in. I'm told to do what is required but they don't find it as urgent or important as I do. For example, I got a lot of resistance about our workplace violence and active shooter trainings. They didn't think it was necessary until I showed them the OSHA [Occupational Safety and Health Administration] regulations and said "You know you can get sued for this if something were to happen." Because they don't believe anything is going to happen, so they don't see the need for the trainings. But when it became evident that it is required, then I can do it as long as it does not take a lot of staff time or cost. I have to really work hard to get approval for those kinds of things. *~Emergency Preparedness Lead, Health Home Director, CCM, and Chronic Pain Case Manager, Rural, FQHC, CHC*
- I'd like to figure a way to get more of our staff to be more involved at the local level. Strictly I think, what stops that part of it is that our practice managers do not see themselves as "emergency preparedness experts." They do not see themselves on an "equal" when sitting down to talking to an EMA [Emergency Management Agency] director who has acronyms and lingo that they live by. I don't know how to provide training that gives them that level of confidence. *~Emergency Preparedness Lead, Rural, FQHC, CHC*
- If we could just get more solid partnerships. I think it is easier for us in a rural area because we know we can only depend on ourselves. It is harder in urban areas. Partnerships that are being pushed now are the key to everything. We know it is not a matter of "if," it is "when" something occurs that the partnerships are going to be everything. We often say, "We just need a good disaster every once in a while" and my coalition does not say that in a negative sense, it is just that we forget, we have very short memory and we don't plan. *~Emergency Preparedness Lead, HR/Compliance Officer, Rural, Geographically isolated/remote, FQHC, CHC*

> The coalition is a great start. I'd like to see more joint exercises, like open POD exercises in conjunction with the health department. Not just the operations of the POD but seeing how the health department and our organization would work together in an event. Hopefully we can involve other outside agencies. The sheriff's office, EMS, and so on. But the coordination—particularly with the hospital and other healthcare providing agencies in the county—that is what I'd like to see.
>
> *~Clinical Manager, Clinician, Emergency Preparedness Lead, Suburban, Rural, FQHC, CHC, Migrant Health Centers*

Challenges Associated with Meeting CMS Emergency Preparedness Requirements

Interview participants were also asked to discuss their health clinic's experience in meeting the new CMS requirements for emergency preparedness. Some of the interviewees' insights are shared below:

- The biggest thing for us is trying to pull the resources to do the exercises. We are working with the state and directly with CMS to know what type of exercises and trainings will be considered meeting the requirements. What kind of exercises can we do so we meet the requirement and not be a burden to law enforcement? *~Facilities Manager, Emergency Preparedness Lead, Rural, FQHC, CHC*
- We have not had any challenges and that is really kudos to our public health EMS because they brought us all into compliance and kept us abreast of any changes and new requirements. They have done the same with all the partners in the disaster healthcare partnership. They help them write their plans and help them do their mock audits to make sure they are up to speed. *~Clinical Manager, Geographically isolated/remote, FQHC, CHC*
- The challenge is conducting the full-scale exercises. Before we would conduct our required fire drills, but we wouldn't conduct those complex exercises that take a lot of time, and now they are required to do. That is an organizational change for us. So this first year we are taking baby steps and that hopefully sets us up for more robust exercises in the future. *~Emergency Preparedness Lead, Safety Specialist, Urban, Suburban, FQHC, CHC*
- I'd say it would be good to have more information about how we are supposed to report what they require. There is no formal reporting process or anything like that. We document everything, but we were not sure about what to do with that—do we just wait until they audit us? It was a weird situation because we did not know what to do with the information we had. *~Facilities Manager, Emergency Preparedness Lead, Rural, Geographically isolated/remote, FQHC, CHC*

> The requirements for an FQHC are pretty well spelled out. We have treated it like an open book test. We've been working on it since it kicked off. For us I feel that it just kind of formalized what we were doing anyway. We just have to document it much more now. It did require a little bit of changing of the way we do things. I went to multiple trainings and I feel pretty comfortable with our FQHC requirements.
>
> *~Emergency Preparedness Lead, HR/ Compliance Officer, Rural, Geographically isolated/ remote, FQHC, CHC*

- I have to be honest, I would not mind going through a training just to feel more comfortable with the CMS requirements. *~Facilities Manager, Emergency Preparedness Lead, Rural, Geographically isolated/remote, FQHC, CHC*

RECOMMENDATIONS

Survey and interview participants provided valuable insights about the role, barriers, and capacity of health clinics in emergency management. Based on the results of this study, ASPR TRACIE recommends the following steps that can improve the readiness of health clinics:

- **Define the Role Health Clinics Can Play in Community Disaster Response.** In general, the findings of this study indicate a need for health clinics to define their potential roles in community emergency response based on the scope of their practice and their capabilities. Emergency management and healthcare partners in the local healthcare coalition—including PCAs and other organizations representing health clinics—can work with clinics to identify materials and resources that can be tailored to clearly describe the healthcare services that are needed during emergencies, establishing a range of options based on existing capacity. Materials can include lists of all the stakeholders, including health clinics, that could be involved in emergency response; decision trees that health clinics and other healthcare providers, public health, or other community partners can use to identify who to reach out to depending on the need; pre-identification of essential elements of information that will be shared among community partners during emergencies; and clearly defined community level emergency management processes or protocols.

- **Increase Awareness of the Significant Role Health Clinics Can Play in Coordinated Emergency Response and Recovery.** The perception of the role of health clinics in emergency response and recovery varied among survey and interview participants. The significance of their role appeared to be influenced by their perceived capacity to respond to emergency scenarios, their level of involvement in the local healthcare coalition, and the level of "trust" they perceived from other community stakeholders such as local emergency management agencies, public health, and other healthcare providers. Additionally, health clinics play a significant role in long-term recovery efforts – sometimes months or years following an incident – but these services are often viewed as ongoing primary care and not "tracked" as part of the recovery. Existing or new local emergency management training materials (such as newsletters or fact sheets and online resources) should incorporate awareness messages about the services health clinics can provide and the patients they serve. When possible, messages should be tailored to the needs and infrastructure of each community, taking into account the marked differences in existing capacity and resources for emergency response at different types of health clinics and the communities they serve.

To maximize effectiveness, healthcare coalitions should promote active participation and empowerment of each of their members, including inviting them to participate in educational opportunities like training, drills, and exercises.

As indicated by interviewees, it is also important to highlight the significant role health clinics can play in alleviating hospital surge by caring for patients with less severe illness and injury during emergencies, through preventive care practices that keep people healthy and decrease unnecessary hospital visits among those with chronic conditions, and by providing long-term care during the recovery phase.

- **Promote the Implementation of Hazard Vulnerability Analyses by Health Clinics.** Health clinics, like other entities with emergency management programs, must conduct facility and community risk assessments and impact analyses. These assessments can help define and establish clinics' response roles based on realistic expectations and known facility and community threats and needs.
- **Increase Leadership Investment in Continuity of Operations Planning (COOP) to Lay a Foundation for Coordinated Community Preparedness.** COOP may be a new concept for some health clinic leaders, but it may provide the necessary framework for some to establish new procedures for staff resilience and business continuity. As a system, COOP supports organizational efficiency, and because it is mandated for all health settings in the CMS Final Rule, it can support coordinated planning across organizations in the community.
- **Promote Active Involvement of Health Clinics in Healthcare Coalitions.** Most health clinics participate in meetings hosted by local healthcare coalitions, but the level of further involvement in community emergency management activities varied. Coalitions should develop emergency plans that are inclusive of health clinics. Appendix C includes links to ASPR TRACIE-developed healthcare coalition preparedness, response, and recovery plan templates, among other resources. Coalitions can also aid in realistically defining the role that healthcare providers (including health clinics) and other community partners can play in coordinated emergency response and can help members be aware of and understand each other's capabilities and limitations.
- **Develop Training Strategies and Technical Assistance to Increase Knowledge and Capacity in Emergency Management among Health Clinics.** Survey results suggest that access to training opportunities is a significant driver of health clinic participation in emergency preparedness and response activities. Findings also suggest a need to develop and implement training and technical assistance tailored for health clinics with differing levels of knowledge and capacity. This should include facility-based and community-wide emergency response drills and exercises and testing the ability to establish incident and unified command. Different training and technical assistance strategies should be developed to reach: (1) health clinic leadership (including governing boards, as appropriate) to increase the level of support they provide to emergency management staff; (2) health clinic staff who are responsible for writing and implementing the emergency operations plans; and (3) local healthcare coalitions for which a "train-the-trainer" approach can be considered. Resources in Appendix C may serve as a starting point; additional resources may be available through state and regional PCAs, healthcare coalitions, and other community partners.
- **Develop and Promote Mechanisms to Exchange Experiences and Lessons Learned and Promote Mentoring from Health Clinics More Experienced in Emergency Management.** Surveyed health clinic leaders emphasized the need to learn from their peers' experiences, particularly from those that have been impacted by real-life emergencies and/or have participated in a coordinated emergency response. To fill this need, existing communication channels should incorporate strategies (such as mentoring programs or webinars) to facilitate health clinic emergency staff interactions and exchange of health clinic lessons learned. Health clinics should also seek out opportunities to engage with each other directly or through PCAs and other local, state, regional, and national stakeholder organizations, including through the use of learning networks and other collaborative approaches.
- **Provide Resources Appropriate to Health Clinics on All Aspects of Emergency Management.** Appendix C includes resources that health clinics may find useful in improving their emergency healthcare readiness. Local, state, regional, and national stakeholder organizations may disseminate and promote the use of such resources through social media posts or regular newsletters. Local agencies and coalitions can develop and disseminate a comprehensive contact list of national, state, and local organizations and resources that can be used by health clinics for various emergency scenarios. State and local agencies and healthcare coalitions can also develop and disseminate "playbooks" and operational templates to help health clinics and others frame their plans/protocols/policies with the right factors, characteristics, and consistency. Development of resources should particularly consider the needs of health clinics that

may need to play an oversized role during an emergency due to factors such as a limited number of other healthcare providers in their geographic area. As part of their planning, health clinics should identify electronic resources that would also be available in printed or other offline formats to ensure availability during electrical and cellular network outages.

» **Increase Awareness and Knowledge among FQHCs and RHCs about the CMS Final Rule Requirements and How to Implement Them.** While the study found widespread awareness of the recently-implemented CMS Final Rule among survey respondents and interviewees, the level of knowledge about how to implement specific aspects of the Rule varied among health clinics. Because FQHCs and RHCs fall under just one of the 17 provider and supplier types covered by the Rule, training and education resources targeting the specific needs and requirements of health clinics rather than all covered entities are particularly helpful. Appendix C includes some such resources.

» **Provide Resources and Support to Health Clinics and Healthcare Coalitions for Emergency Management Activities.** The majority of interviewed participants indicated that health clinics in general do not have staff that can fully dedicate the time that emergency management requires. Some clinics also lack sufficient funding to carry out effective drills, conduct training, purchase equipment, and acquire supplies that may be needed in emergencies. Community emergency management partners should consider the potential contributions of health clinics during an emergency when weighing decisions about the level of support, resources, and funding available to better enable their involvement in emergency management activities. Efforts should also focus on ensuring health clinics know how to access and be included in initiatives to prioritize the supply and infrastructure needs of critical response partners. Health clinics should increase their awareness of disaster relief organizations in their communities and explore potential partnerships.

LIMITATIONS

The findings of this study are subject to several limitations. First, despite the efforts to reach representatives from a diverse sample of health clinics, the majority of respondents were from FQHCs, leaving other types of health clinics underrepresented. Second, the sample was self-selected and no incentive was provided for survey completion or interview participation. This may explain in part the low response rate of 48% (175 out of 363 respondents who clicked on the link). It is possible that lack of time, lack of motivation, or lack of interest in the topic affected this response rate. Third, some of the respondents represented health clinics with multiple sites, and they may not necessarily be fully aware of the emergency management activities and issues from each location. For all the limitations outlined above, this study is not generalizable to all health clinics and it is not possible to make conclusive statements about the role of health clinics in emergency management. Nonetheless, these findings provide useful information to better understand the role of health clinics in emergency management and the challenges they face as important players in coordinated emergency response.

CONCLUSION

This study illustrates how health clinics serve a variety of patients in a multitude of geographic and other demographic settings. Because of their extensive geographic coverage, strong community ties, and potential to reach medically-underserved areas, health clinics can play a key stakeholder role in disaster healthcare. With the right resources and recommendations listed in this report, partnerships between health clinics and other health and emergency management providers could bolster community resilience before, during, and after an emergency.

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APPENDIX A: ASPR TRACIE HEALTH CLINIC SURVEY

ASPR TRACIE Health Clinic Survey

Consent

The US Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) Technical Resources, Assistance Center, and Information Exchange (TRACIE) is conducting research on the role of Health Centers in supporting the health and medical response to disasters or emergencies.

ASPR TRACIE recognizes your Health Center complies with Centers for Medicare & Medicaid Services (CMS) Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule. The purpose of this survey is to better understand Health Centers' capacity, preparedness, and impediments in disaster response beyond those requirements.

Your participation in this survey is completely voluntary. You may choose not to participate or to end the survey at any time. We will keep your responses confidential, and unless you wish to participate in a follow-up phone interview, we will not ask for any personal information such as your name or email address.

If you have any questions about the survey, please contact: askasprtracie@hhs.gov.

Please indicate whether or not you consent to participate in this survey:

» Consent [proceed to question 1]

» Do not consent [ineligible]

Participant Role

1. What is your role/position at your Health Center?

	Select All that Apply
Facilities Manager	☐
Clinical Manager	☐
Clinician	☐
Emergency Preparedness Lead	☐
Other (please describe)	☐

Health Center's Role in Emergency Response

Scenarios

For the next set of questions please consider the two different scenarios presented below:

An infectious disease outbreak *is affecting your entire geographic region.* Over an extended period of time, the number of infections will gradually increase, reach a peak, and begin to decrease. There will be high demands on the overall healthcare system, which will deal with patients infected with the disease and the worried well, on top of the normal range of healthcare services. There may be high demand and low availability of healthcare personnel, supplies, and other resources at varying points in time during the outbreak.

A sudden onset or no notice incident *occurs in your community and possibly causes a patient surge or mass casualties.* An incident such as a natural disaster or plant explosion suddenly results in large numbers of injuries with little or no warning. The healthcare system will absorb an immediate influx of patients with injuries of varying severity on top of its existing load of patients with chronic and acute illnesses and injuries. There may be infrastructure damage, security requirements, or communications breakdowns that challenge your response to the incident for an unpredictable amount of time due to electrical outages, telecommunications and IT system failure, supply chain disruptions, and reduced staffing.

Please select one answer for each scenario.

2. Based on your existing emergency plan and/or community partnerships, would your Health Center have a role in addressing healthcare needs caused by either of these scenarios?

	Yes	No
Infectious Disease Outbreak	☐	☐
Sudden Onset Incident	☐	☐

For the next set of questions please consider the two scenarios presented above and your standard practice of care.

3. Please indicate if your Health Center is able to provide the following services during standard practice, an Infectious Disease Outbreak, and/or a Sudden Onset/No Notice Incident. If your Health Center does not provide this service, please select "do not provide this service". Select all that apply.

	Standard Practice at your Health Center	Infectious Disease Outbreak	Sudden Onset Incident	Do not provide this service
Expertise in treating certain patient populations (e.g., children, older adults, homeless)	☐	☐	☐	☐
Additional surge capacity for patient treatment (i.e, ability to manage a sudden influx of patients including additional staff, space, equipment, medications, etc.)	☐	☐	☐	☐

	Standard Practice at your Health Center	Infectious Disease Outbreak	Sudden Onset Incident	Do not provide this service
Public health surveillance/monitoring	☐	☐	☐	☐
Patient triage	☐	☐	☐	☐
Patient/community education/risk communication	☐	☐	☐	☐
Prophylaxis/vaccination available – on site	☐	☐	☐	☐
Prophylaxis/vaccination available – off site	☐	☐	☐	☐
Behavioral health support/treatment for patients (i.e., availability of staff with expertise in behavioral health management)	☐	☐	☐	☐
Behavioral health support/treatment for staff (e.g., providers, first responders)	☐	☐	☐	☐
Support for responder treatment/monitoring	☐	☐	☐	☐
Follow-up care during the recovery phase of the emergency	☐	☐	☐	☐
Other (please describe)				

4. Which of the following might pose an obstacle or challenge to your Health Center's involvement in the response?

	Infectious Disease Outbreak	Sudden Onset Incident
Anticipated demand from existing patients	☐	☐
Lack of internal expertise for emergency management	☐	☐
Supplies and equipment likely needed for the scenario may not be available	☐	☐
Personnel may not be accessible	☐	☐

	Infectious Disease Outbreak	Sudden Onset Incident
Location may be closed due to incident effects on personnel or infrastructure	☐	☐
Concerns about reimbursement for services provided during incident	☐	☐
Concerns about liability	☐	☐
Healthcare setting is inappropriate for the emergency response	☐	☐
Unsure of role/not engaged in community emergency planning for the response	☐	☐
Other (please describe)		

5. What would initiate your Health Center's involvement in the response?

	Infectious Disease Outbreak	Sudden Onset Incident
Responding to meet the needs of your existing patients	☐	☐
New patients presenting to the health center for care	☐	☐
A request from a health system partner	☐	☐
A request from your healthcare coalition	☐	☐
A request from a local, state, or federal emergency management or public health agency	☐	☐
Other (please describe)		

Health Center's Infrastructure and Scope of Emergency Response

Please select one answer for each of the following questions.

6. Does your Health Center receive notifications about emergencies in your area from your local or state emergency management or public safety agency?

	Select One
Yes	☐
No	☐
I do not know	☐

7. Does your Health Center receive health alerts from your local or state health department?

	Select One
Yes	☐
No	☐
I do not know	☐

8. Would it be possible to modify the existing space at your Health Center to accommodate additional patients?

	Select One
Yes	☐
No	☐
I do not know	☐

9. Does your Health Center have the ability to supplement your normal staffing levels to accommodate a surge?

	Select One
Yes	☐
No	☐
I do not know	☐

10. Would your Health Center be able to extend your operating hours during an emergency?

	Select One
Yes	☐
No	☐
I do not know	☐

11. Does your Health Center have designated disaster supplies on site and/or contingency plans to allow the rapid order/delivery of supplies (medical and hospitality-related) if there is a need for support beyond current service provision capacity?

	Select One
Yes	☐
No	☐
I do not know	☐

12. Does your Health Center provide information/resources to patients to encourage their preparedness?

	Select One
Yes	☐
No	☐
I do not know	☐

13. Has your Health Center participated in an emergency response in your community?

	Select One
Yes	☐
No	☐
I do not know	☐

14. Have the operations at your Health Center been affected by an emergency in your community?

	Select One
Yes	☐
No	☐
I do not know	☐

15. If yes to 13 or 14 – Has your Health Center made any changes to your policies, procedures, or protocols based on the experience?

	Select One
Yes	☐
No	☐
I do not know	☐

16. Does your Health Center have contingency plans to provide emergency transport to designated hospital or clinics in your area?

	Select One
Yes	☐
No	☐
I do not know	☐

For the next set of questions please select the option that applies for normal operations and operations during an emergency at your Health Center.

17. Does your Health Center have any of the following in place to accept referrals of patients with minor illness or injury?

	Normal Operations	During an Emergency
Established protocols as part of an integrated healthcare delivery system (i.e., a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population) or with EMS directly	☐	☐
Informal protocols based on others' knowledge of your presence in the community	☐	☐
Established referral/transfer/patient distribution protocols or MOUs in the community	☐	☐

Emergency Preparedness: Procedures and Collaborations

Please select one answer for each of the following items.

18. Does your Health Center participate in coordinated emergency preparedness activities with any of the following?

	Yes	No
As part of a group of health care centers	☐	☐
Healthcare coalition	☐	☐
Health department	☐	☐
Emergency management agency	☐	☐
Non-profit organizations serving your community	☐	☐
Emergency relief organizations	☐	☐
Other (describe)		

19. Has your Health Center tested the ability to implement the following either through an exercise or real-life incident?

	Yes - through an exercise	Yes - through a real-life emergency
Contact personnel during off hours	☐	☐
Receive/send notifications to other preparedness/ response partners	☐	☐
Identify and safely isolate a potentially infectious patient	☐	☐
Proper usage of personal protective equipment (PPE) by personnel for a potential highly infectious patient (e.g., Novel Influenza or Ebola)	☐	☐
Quickly establish a medical record for a patient who is not a pre-existing client	☐	☐
Maintain patient records (i.e., paper based) if electronic medical record (EMR) is inaccessible	☐	☐
Procedures to shut down facility operations	☐	☐
Procedure to restart operations	☐	☐
Conduct patient triage	☐	☐
Financial preparedness (e.g., maintaining cash reserves, planning for business interruptions and losses, insurance policies)	☐	☐
Establish incident command	☐	☐
Secure site/personnel safety	☐	☐
Respond to or protect facility during known threats (e.g., earthquake, hurricane)	☐	☐
Inform HRSA Bureau of Primary Care and/or state or local Health Department of changes in operations, such as operating a temporary site	☐	☐
Reach/maintain contact with patients while closed	☐	☐

Please select all the options that apply for each of the following questions.

20. How do/can potential partners in your community engage your Health Center in ongoing preparedness activities?

	Select All that Apply
Direct contact	☐
Through the local/state/regional primary care association	☐
Through the integrated healthcare delivery system	☐
Through healthcare coalitions	☐
Through existing relationships	☐
Other (please describe)	☐

Please select all that apply for each type of emergency-related of activity.

21. What would make it easier for your Health Center to participate in preparedness and response activities?

	Preparedness Activities	Response Activities
Funding/reimbursement	☐	☐
Guidance/SME support/technical assistance	☐	☐
Access to supplies/equipment	☐	☐
Access to additional personnel	☐	☐
Access to additional training and exercises	☐	☐
Legal protections	☐	☐
Inclusion in notification/information sharing	☐	☐
Other (please describe)		

Health Center Characteristics

22. In what state is your Health Center located?

23. How would you describe the geographic setting of your Health Center?

	Select All that Apply
Urban	☐
Suburban	☐
Rural	☐
Geographically isolated/remote	☐

24. Which best describes the type of Health Center where you work?

	Select One
Federally Qualified Health Center	☐
Rural Health Clinic	☐
Free and Charitable Clinic	☐
Planned Parenthood Clinic	☐

25. (IF Above = Federally Qualified Health Center) Which best describes the type(s) of Federally Qualified Health Center where you work?

	Select All that Apply
Community Health Centers	☐
Migrant Health Center	☐
Health Care for the Homeless Health Centers	☐
Public Housing Primary Care Centers	☐
Health Center Program Look-Alikes	☐
Outpatient Health Programs Facilities Operated by a tribe or tribal organization under the Indian Self-Determination Act or by an urban Indian organization under the Indian Health Care Improvement Act	☐

26. Is your Health Center part of an Integrated Delivery System?

	Select One
Yes	☐
No	☐
I do not know	☐

27. Please indicate the type(s) of practice that best describe your Health Center's setting.

	Select All that Apply
Your Health Center is the only practice on site	☐
There are other specialty practices on site	☐
Your Health Center is integrated within a hospital	☐

28. Please select all the services that are provided at your Health Center.

	Select All that Apply
Care Coordination and Triage	☐
Infectious Disease Monitoring	☐
Behavioral/Mental Health Care	☐
Oral Health	☐
Vision Services	☐
Urgent Care/Same Day Services	☐
Clinical Laboratory	☐
Social Services	☐
Radiology Services	☐
Home Health Services	☐
Specialty Care	☐
Immunizations	☐
Pharmacy Services/Medication Access	☐
Minor Trauma care (e.g., lacerations, minor orthopedic injuries)	☐
Pediatric Services	☐
Non-emergency Transportation	☐

29. Please select the type of staff at your Health Center during normal operations.

	Select All that Apply
Primary Care Physicians	☐
Physician Assistants	☐
Specialty Care Physicians	☐
Nurse Practitioner	☐
Dental Personnel	☐
Paramedic	☐
Emergency Medical Technician (EMT)	☐
Clinical Psychologist	☐
Clinical Social Worker	☐
Other Health Specialties	☐
Administrative Staff	☐
Volunteers (e.g., Medical Reserve Corps (MRC))	☐
Other (please specify)	

30. Is there anything else that you would like to share about the role of Health Centers in an emergency?

31. Would you be willing to participate in a follow-up discussion, scheduled at your convenience, to elaborate on some of your survey responses?

	Select One
Yes	☐
No	☐
If yes, please provide your first name and email address:	

Your email address will be stored in a password protected file on a private network that is only available to the ICF research team. Your email address will only be used to contact you for a follow-up interview. Your email address will not be shared with anyone, including ASPR.

End of Survey

Thank you for taking the time to complete this survey. Visit ASPR TRACIE at https://asprtracie.hhs.gov/ for resources to improve your healthcare emergency readiness.

APPENDIX B: ASPR TRACIE HEALTH CLINIC INTERVIEW DISCUSSION GUIDE

ASPR TRACIE Health Clinic Interview Discussion Guide

Discussion of Purpose and Review of Informed Consent

Thank you for agreeing to speak with me today. My name is [insert name]. I'm conducting this interview on behalf of the Office of the Assistant Secretary for Preparedness and Response (ASPR) Technical Resources, Assistance Center, and Information Exchange (TRACIE), which I may refer to as ASPR TRACIE. I work for ICF, a contractor supporting ASPR's TRACIE project.

Purpose and Procedures

ASPR TRACIE is conducting this project to improve understanding of the role of Health Centers in supporting the health and medical response to disasters or emergencies. You are among several Health Center leaders we will be interviewing to learn your perception about the role of Health Centers in supporting the community surge response to health and medical needs during disasters or emergencies. During our discussion, we will review your responses to the online survey. I'll ask you some questions to expand upon what you shared, so we can get a fuller understanding of your perspectives on the role of Health Centers in supporting the health and medical response to disasters or emergencies. Our discussion should take 30 minutes.

Voluntary Participation

Your participation in this discussion is completely voluntary. You do not have to answer any question that you do not want to answer. You may choose not to participate or to leave the discussion at any time. We will record the discussion and my colleague [first name] is on the line to take notes. Please speak clearly to ensure proper recording.

Privacy

The digital recording and notes of the interview will be stored in a password-protected folder. The recording will be destroyed when the project is over. Only members of the project team will have access to the notes and recordings, and they will not be allowed to share them with anyone else. Your name and Health Center name will not be used in any documents written on the basis of this project. Data will be presented in aggregate so responses will not be attributed to individual participants or the centers with which they are affiliated. A final report will be posted on the ASPR TRACIE website. The research may also be submitted for publication in a peer-reviewed journal. If you have any questions about this project, you can reach out to askasprtracie@hhs.gov.

Do you agree to participate in the interview?

Preliminary Discussion

Do you have any questions for me before we begin?

I'd like to start by better understanding the type of Health Center you are affiliated with and your role.

1. How would you describe the Health Center where you work?
    a. How would you describe the practice setting?

2. What is your role at your Health Center?

    a. How involved are you in emergency preparedness for your Health Center? *(prompt for roles and responsibilities related to emergency preparedness)*

    b. How involved are you in emergency responses for your Health Center? *(prompt for roles and responsibilities related to emergency responses)*

Health Center's Role in Emergency Response

3. You indicated your Health Center [does/does not] have a role in addressing healthcare needs caused by an infectious disease outbreak and/or a sudden onset or no notice incident. What do you think the role of your Health Center would be in those scenarios?

4. If participant indicated their Health Center would contribute differently depending on the different scenarios ask for explanation.

5. You indicated [factor] might pose an obstacle or challenge to your Health Center's involvement in an emergency response. Can you explain why that might be a barrier for your Health Center's involvement?

    a. Are there other obstacles that might prevent your center from assisting in an emergency situation?

    b. If participant indicated they would face different obstacles depending on the scenarios ask for explanation?

3. If participant indicated that factors that would initiate their involvement in the response differed based on the scenarios ask for explanation.

Health Center's Infrastructure and Scope of Emergency Response

7. Has a disaster or major disease outbreak occurred in your Health Center's area in the last five years? If so, please describe.

    a. How did your Health Center participate in the response?

    b. Did you make any changes to your policies, procedures, or protocols based on that experience?

8. *[If participant indicated yes it would be possible to modify your existing space to accommodate additional patients].* How would your Health Center modify the existing physical space and manage resources to handle a large influx of patients above normal operating conditions?

9. You indicated your Health Center [could modify space, supplement staff, extend operating hours, or had disaster supplies] How long could your center maintain those emergency responses? *(prompt for 1-12 hours, 12-24 hours, 1-3 days, or more)*

10. Can you describe the protocols or agreements your Health Center has in place with other healthcare providers to accept referrals of patients with minor illness or injury?

    a. Do these agreement covers referrals during an emergency?

    b. *If participant indicated they don't have a plan or protocols for accepting referrals of patients with minor illness or injury* – What is the reason your Health Center doesn't have one?

Emergency Preparedness: Procedures and Collaborations

11. What types of preparedness exercises has your Health Center conducted?
    a. What scenarios have been tested at your center?
    b. You indicated your center has not tested [insert function] – Why not?
12. Has the staff at your Health Center received emergency preparedness training?
    a. If no: Why have they not been trained?
    b. If yes: What has the training focused on?
13. To what extent does your Health Center participate in emergency preparedness activities with your local healthcare coalition, health department, emergency management agency, hospital, or other partners?
    a. What support would your center need from these partners to effectively participate in an emergency response for an infectious disease outbreak?
    b. What support would your center need from these partners to effectively participate in an emergency response for a sudden onset or no notice incident?
    c. Which concerns your Health Center more: The center's ability to adequately respond to a slow evolving emergency like an infectious disease outbreak or a sudden onset/no notice emergency?
    d. What is the specific scenario that concerns your Health Center the most?
    e. How interested is your Health Center in participating in more emergency preparedness activities?
    f. What would motivate your Health Center to become engaged in other preparedness activities?

Legal and Financial

14. In what ways would you envision your Health Center's process for seeking reimbursement for services rendered during an emergency being different than how you normally bill for services?
15. Do you have any concerns about your center's liability or malpractice coverage for services rendered during an emergency? If so, please describe.
16. What challenges, if any, has your Health Center encountered in meeting the requirements of the Centers for Medicare & Medicaid Services (CMS) Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule?
    a. How have you overcome those challenges?

Conclusion

Thank you. Those are all of the questions I have for you today. Is there anything else you'd like to share that you believe will be helpful to our project?

Your feedback today was extremely valuable and we appreciate your willingness to share your insights. As I mentioned at the beginning, this is one of several interviews that we will be conducting. Your name and Health Center name is not connected to your responses. We will analyze the collected data across all interviews for major themes and trends. We will then document our findings in a report. Thanks again for taking time out of your busy day to share your feedback.

APPENDIX C: HELPFUL PREPAREDNESS AND RESPONSE RESOURCES FOR HEALTH CLINICS

While some of the resources in this appendix were developed for specific audiences – such as physician offices or hospitals – they contain information that could easily be modified for use by or applied to health clinics. Local, state, regional, and national primary care organizations and other stakeholder groups may be able to assist health clinics in identifying additional resources specifically developed for health clinics or for the overall healthcare community in their geographic areas.

ASPR TRACIE Resources

Topic Collections

- Ambulatory Care and Federally Qualified Health Centers (FQHC)
- Continuity of Operations (COOP)/Failure Plan
- Emergency Operations Plans/Emergency Management Program
- Epidemic/Pandemic Influenza
- Exercise Program
- Explosives (e.g., bomb, blast) and Mass Shooting
- Hazard Vulnerability/Risk Assessment
- Healthcare-Related Disaster Legal/Regulatory/Federal Policy
- Mental/Behavioral Health
- Natural Disasters
- Responder Safety and Health
- Training and Workforce Development
- Utility Failures

Other ASPR TRACIE-Developed Resources

- After the Flood: Mold-Specific Resources
- CMS Resource Page
- Disaster Behavioral Health: Resources at Your Fingertips
- EMTALA and Disasters
- Health Care Coalition Influenza Pandemic Checklist
- HIPAA and Disasters: What Emergency Professionals Need to Know

- Hurricane Resources at Your Fingertips
- Medical Surge and the Role of Urgent Care Centers
- Select Health Care Coalition Resources
- Select Mass Violence Resources
- Tips for Retaining and Caring for Staff after a Disaster

Other Resources:

ASPR

- Hospital Preparedness Program (HPP)
- HPP Infographic
- Planning for Power Outages: A Guide for Hospitals and Healthcare Facilities
- Planning for Water Supply Interruptions: A Guide for Hospitals and Healthcare Facilities
- Public Health Emergency Declaration Q&As
- Working Without Technology: Hospitals and Healthcare Organizations Can Manage Communication Failure

American Academy of Family Physicians

- Actions to Take After a Disaster
- Business Planning Checklist to Prepare Family Medicine Offices for Pandemic Influenza
- Checklist to Prepare Physicians' Offices for Pandemic Influenza
- Disaster Response and Recovery

American Academy of Pediatrics

- Preparedness Checklist for Pediatric Practices

Association for Professionals in Infection Control and Epidemiology

- Infection Prevention for Ambulatory Care Centers During Disasters

Association of State and Territorial Health Officials

- Collaborating with Community Health Centers for Preparedness
- Developing Partnerships with Community Health Centers for Emergency Preparedness Planning

California Emergency Medical Services Authority

- Hospital Incident Command System

Centers for Disease Control and Prevention

- Medical Office Preparedness Planner: A Tool for Primary Care Provider Offices
- Selected Federal Legal Authorities Pertinent to Public Health Emergencies

Centers for Medicare and Medicaid Services

- Emergency Preparedness Rule
- Quality, Safety & Oversight Group - Emergency Preparedness

Community Health Care Association of New York State

- Working with Your Community: Preparing for Emergency Response

Department of Homeland Security

- Government Emergency Telecommunications Service (GETS)

Drexel University Dornsife School of Public Health

- Primary Care Medical Practices and Public Health Emergency Preparedness

Emergency Medical Services Agency, Los Angeles County

- Ambulatory Surgery Center Guide to Disaster Preparedness and Response

Federal Emergency Management Agency

- IS-200.HCA: Applying ICS to Healthcare Organizations

National Association of Community Health Centers

- Developing and Implementing an Emergency Management Plan for Your Health Center
- Emergency Management/Continuity of Operations

National Nurse-Led Care Consortium

- Preparedness Resources (includes spring 2018 webinar series)

The Joint Commission

- Integrated Care Certification

The National Academies of Sciences, Engineering, and Medicine

- Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response

APPENDIX D: ACRONYMS

AIR	All-inclusive Rate
ASPR	Assistant Secretary for Preparedness and Response
BPHC	Bureau of Primary Health Care
CHC	Community Health Center
CMS	Centers for Medicare and Medicaid Services
COOP	Continuity of Operations Planning
CPR	Cardiopulmonary Resuscitation
EMA	Emergency Management Agency
EMR	Electronic Medical Record
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
ESF	Emergency Support Function
FQHC	Federally Qualified Health Center
GETS	Government Emergency Telecommunications Service
HHS	U.S. Department of Health and Human Services
HPSA	Health Professional Shortage Area
HRSA	Health Resources and Services Administration
ICS	Incident Command System
MUA	Medically Underserved Area
NACHC	National Association of Community Health Centers
OSHA	Occupational Safety and Health Administration
POD	Point of Dispensing
PPE	Personal Protective Equipment
TRACIE	Technical Resources, Assistance Center, and Information Exchange

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