Northeast Tennessee Healthcare Preparedness Coalition COVID-19 Pandemic Response

After-Action Report/Improvement Plan

8JUN2021

Handling Instructions

- The title of this document is the Northeast Tennessee Healthcare Preparedness Coalition COVID-19 Pandemic Response After Action Report/Improvement Plan.

- The information gathered in this plan is classified as Confidential under TCA10-7-504(a) (21) (A) (ii) and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval is prohibited.

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- As of June 30, 2021 this serves as the AAR for the COVID-19 response. Please note, as the response is ongoing, this AAR maybe subject to edits and additions.

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Executive Summary

The Northeast Tennessee Healthcare Preparedness Coalition (NET HCC) began the COVID-19 response in late February/Early March 2020. The Northeast Tennessee region received the first positive test result on 3/10/20 in Sullivan County one of the 8 counties covered by the NET HCC.

The State of Tennessee began seeing a surge of positive COVID-19 cases starting in early March 2020. As a result, NET HCC began discussions with coalition members about the available resources in the region that could be used during the pandemic. Coalition members needed PPE resources as shortages of supplies in the national system became evident. There was also an increased need for communication and reporting between Coalition members. NET HCC began a process for distribution of resources including PPE. The RHCs communicated with TDH and EMA agencies in the region to share this information and to set up temporary distribution working in conjunction with the hospital system for storage and local EMA partners for request. Coalition members were also able to reach out to RHCs for other resource support requests including morgue trailers, PAPRs, triage tents, and staffing resources.

NET HCC also worked with coalition partners to set up communication and regular situation updates within the healthcare and governmental community. HCCs were tied into regional leadership updates, healthcare system updates, public health updates and established communication to LTC facilities and other licensed care subcommittee members. A Vulnerable Populations Coordinator (VPC) was initially established to onboard LTCs into the healthcare resource tracking system (HRTS). This role was later expanded to assist with COVID response and communications. HRTS was utilized as the reporting system for all hospital data into the national data reporting system.

On December 11, 2020 the U.S. Food and Drug Administration issued the first Emergency Use Authorization for a vaccine for the prevention of Coronavirus Diseases 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus (SARS-CoV-2) in individuals 16 years of age and older. The EUA allowed Pfizer-BioNTech COVID-19 Vaccine to be distributed in the U.S. On December 18, 2020, the U.S. Food and Drug Administration issued an Emergency Use Authorization (EUA) for the second Vaccine for the Prevention of Coronavirus Disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The EUA allowed the Moderna COVID-19 Vaccine to be distributed in the U.S. for use in individuals 18 years of age and older. The State of Tennessee began receiving Pfizer and Moderna vaccine the week of December 21, 2020 and first doses were administered before and after Christmas 2020. The State of Tennessee saw a very large surge of cases after the Christmas holiday through late January 2020. The healthcare coalition helped ensure that during the initial phased rollout of the vaccine to healthcare workers, all healthcare workers were notified and able to receive vaccine at POD locations throughout the region. In addition, processes were developed to help facilities distribute vaccine amongst their patients and staff.

As of 6/21/21 the State of Tennessee has reported 866,027 COVID-19 cases, 12,516 deaths, and thousands of hospitalizations. The Tennessee Department of Health and other Healthcare Providers have administered 5,166,747 vaccines with 41.2% receiving at least one dose of vaccine and 36.1% of the population completely vaccinated.

Overview

Incident Name	Northeast TN Region COVID-19 Pandemic Response
Incident Dates	February 2020 – Present
Scope	Real-time Pandemic response to (SARS-CoV-2) COVID-19.
Mission Area(s)	Prevention, Protection, and Response, Recovery
Domains and Core Capabilities	HPP: Capabilities 1-4
Objectives	1. Assist the regional healthcare system to manage a surge of COVID-19 patients. 2. Ensure effective communications to all Coalition members including community leaders, healthcare system executives and healthcare facilities. 3. Assist healthcare facilities with resource requests and supplies necessary to effectively manage a medical surge of infectious patients. 4. Ensure effective data reporting for local, state and national databases. 5. Assist with vaccine distribution to healthcare workers and healthcare facilities in the region. 6. Assist with additional response projects related to increasing capabilities within the region to handle COVID response. 7. Assist the regional healthcare system in ongoing recovery and preparedness efforts from COVID-19 surge.
Threat or Hazard	(SARS-CoV-2) COVID-19
Scenario	The Northeast Tennessee Healthcare Preparedness Coalition assists with Pandemic response in Carter, Greene, Hancock, Hawkins, Johnson, Unicoi, Washington and Sullivan Counties in Northeast Tennessee. The Pandemic response is a result of the spread of (SARS-CoV-2) COVID-19.
Sponsor	Northeast Tennessee Healthcare Preparedness Coalition

Participating Organizations	Healthcare Facilities in the 8 county region of Northeast Tennessee
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Analysis of TDH-Northeast Region Point of Dispensing Capabilities

Table 1. Summary of Healthcare Preparedness Capability Performance

Objective	Domain/ Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Assist the regional healthcare system to manage a surge of COVID-19 patients to the region	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge		S		
Ensure effective communications to all Coalition members including community leaders, healthcare system executives and healthcare facilities	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge		S		
Assist healthcare facilities with resource requests and supplies necessary to effectively manage a medical surge of infectious patients.	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge		S		
Ensure effective data reporting for local, state and national databases.	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health		S		

Objective	Domain/ Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
	Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge				
Assist vaccine distribution to healthcare workers and healthcare facilities in the region	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge		S		
Assist with additional response projects related to increasing capabilities within the region to handle COVID response	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge		S		
Assist the regional healthcare system in ongoing recovery and preparedness efforts from COVID-29 surge.	Capability 1: Foundation for Health Care and Medical Readiness Capability 2: Health Care and Medical Readiness Capability 3: Continuity of Health Care Service Delivery Capability4: Medical Surge				
Ratings Definitions:					

Objective	Domain/ Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)

- Performed without Challenges (P): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- Performed with Some Challenges (S): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

- Performed with Major Challenges (M): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- Unable to be Performed (U): The targets and critical tasks associated with the healthcare preparedness capability were not performed in a manner that achieved the objective(s).

Objective 1: Assist the regional healthcare system to manage a surge of COVID-19 patients to the region

Strengths

The **FULL** capability level can be attributed to the following strengths:

- **Strength 1:** NET HCC had a pre-established stockpile of resources that were available to assist healthcare facilities during surge of COVID-19 patients.
- **Strength 2:** Regional RHCs were under public health as a lead agency during the pandemic response. This enables the HCC to communicate public health information reliably during the response.
- **Strength 3:** Established relationships within the healthcare community prior to the pandemic response led to easier communications during the response.
- **Strength 4:** Worked with other coalition members to assist healthcare facilities during the response including TDH, EMA, and the hospital system.
- **Strength 5:** Brought in additional personnel, Vulnerable Populations Coordinator, National Guard Infection Prevention strike team, to assist with response
- **Strength 6:** VPC and National Guard Strike Team were able to assist LTCs and assisted living facilities with Infection Prevention, Respiratory Protection Programs and other related response needs.
- **Strength 7:** Helped manage resource request flow between regional, state and national partners including handling SNS logistics
- **Strength 8:** Assisted with additional resource requests at healthcare facilities including morgue trailers, body bags, PAPRs, EMS supplies.
- **Strength 9:** Initial one time testing of all residents and staff was conducted at all long-term care and assisted living facilities

- **Area for Improvement 1:** There was limited supplies available through the SNS or state to assist with response.

  Reference: Annex B NER SNS Plan 2020 PPHR/Pandemic Plan

  Analysis: Prior to COVID-19, the coalition had established with healthcare facilities that SNS could be requested to assist once local resources have been overwhelmed. SNS supplies were limited and the state did not have any available resources initially. Eventually supplies were available to assist. Local response will need to rely on local resources for an extended period of time and needs to be stocked adequately.

- **Area for Improvement 2:** Alternative vendors lists were not readily available and it was difficult to vet new potential vendors. Multiple false vendors began appearing and it was difficult to distinguish the reputable vendors.

  Reference: Highly Infectious Disease Annex

  Analysis: A list of alternative vendors will need to be established and maintained for coalition members. There is a need to partner with state officials to help establish a list for reputable vendors.

- **Area for Improvement 3:** Additional HCC members necessary to response were identified during COVID-19 response including healthcare executives, regional leaders and funeral homes.

  Reference: HID Annex

  Analysis: Although the coalition was able to establish partnerships with additional HCC members that were necessary to response, pre-established relationships with response partners would have been beneficial. It will be necessary to maintain these relationships with partners going forward with regular updates of HCC activities.

Objective 2: Ensure effective communications to all Coalition members including community leaders, healthcare system executives and healthcare facilities

Strengths

The **FULL** capability level can be attributed to the following strengths:

- **Strength 1:** NET HCC had pre-established communication methods including Tennessee Health Alert Network, TNHAN, and Healthcare Resource Tracking System, HRTS.

- **Strength 2:** Partnerships were established prior to the COVID pandemic with multiple healthcare facilities including hospitals, EMS, Long Term Care, and EMA.

- **Strength 3:** EMA outreach early on during the pandemic helped to reduce duplication of effort in the region and assisted facilities with PPE needs prior to TEMA and FEMA availability of supplies.

- **Strength 4:** Established online communication methods with Coalition Members to avoid in person meetings.

- **Strength 5:** NET HCC was able to share information to Coalition Members from TDH and local public health as RHCs are under the public health structure.

- **Strength 6:** NET HCC was represented at the healthcare system Corporate Emergency Operations Center and with the regional leadership meetings regularly.

- **Strength 7:** Extended outreach to additional coalition members to share information related to response.

- **Strength 8:** VPC was able to onboard most partners into HRTS.

- **Area for Improvement 1:** Regular communication of current situation and current response efforts would have been beneficial for all partners.

  Reference: HID Annex

  Analysis: Coalition Members would have benefited from weekly response effort updates within the community and current situation updates as all partners were busy conducting their own facility response. Consider establishing mechanism to distribute information and situation updates weekly or regular basis during long responses.

- **Area for Improvement 2:** NET HCC did not regularly update website or social media to communicate response efforts.

  Reference: HID Annex

  Analysis: Coalition should update website and implement social media platforms to more effectively communicate response efforts.

- **Area for Improvement 3:** Social media platforms and sharing information for the coalition is somewhat restricted due to RHC being under the TDH media structure.

  Analysis: Consider establishing structure to share Coalition response efforts separate from TDH.

Objective 3: Assist healthcare facilities with resource requests and supplies necessary to effectively manage a medical surge of infectious patients.

Strengths

The full capability level can be attributed to the following strengths:

- **Strength 1:** PPE, ventilators, and tents for space were available from the HCC during the initial response.

- **Strength 2:** Established request procedures for resource needs early on during the pandemic.

- **Strength 3:** Worked with EMAs and RMCC to help establish a centralized request procedure within the region prior to outside support to avoid duplication of efforts.

- **Strength 4:** RMCC served as a centralized point for resource requests prior to implementation of EMA Survey 123.

- **Strength 5:** RMCC developed process at hospital facilities to relay information early for COVID-19 patients. RMCC would relay immediate bed availability or have EMS stay in ambulance until ED relayed availability.

- **Area for Improvement 1:** NET HCC communication of resource inventory and request procedures could have been communicated more effectively.

  Reference: NET HCC HID Annex

  Analysis: NET HCC could have included updated inventory lists via website and regularly through established communication. Resource request processes had to be adapted multiple times to ensure centralized requests and ensure requests were received. Real time tracking of inventory had to be established during response.

- **Area for Improvement 2:** Although NET HCC had resources in stock to assist healthcare facilities, inventory lists were not up to date and several PPE items including N95 masks had expired.

  Analysis: The inventory lists were updated during the pandemic and N95 masks were included in the emergency shelf life extension per the CDC recommendations. However, inventory lists will need to be maintained on a regular basis going forward. Additionally, PPE supplies will need to be rotated within the healthcare system in order to maintain effectiveness of PPE.

Objective 4: Ensure effective data reporting for local, state and national databases.

Strengths

The full capability level can be attributed to the following strengths:

- **Strength 1:** HRTS and TNHAN were valuable resources as alerting and reporting mechanisms.

- **Strength 2:** All LTC facilities were onboarded into the HRTS system via training completed by the VPC.

- **Strength 3:** HRTS served as the reporting mechanism into the national reporting system allowing visibility at the local and state level.

- **Area for Improvement 1:** Reporting requirements for hospitals was cumbersome and difficult at times during the response.

  Reference: hrts.tn.gov

  Analysis: The list of data reporting elements was very long. Initially these had to be uploaded manually be each facility creating difficulty with reduced staffing at facilities.

Objective 5: Assist with vaccine distribution efforts to healthcare workers and healthcare facilities in the region.

The full capability level can be attributed to the following strengths:

- **Strength 1:** NET HCC member organizations followed a phased approach to ensure equitable distribution of vaccine.

- **Strength 2:** Pre-established contact information between coalition members was valuable to assist with dissemination of information related to POD sites and processes.

- **Strength 3:** Maintaining continued communication to LTC and Assisted Living facilities to ensure residents are able to receive initial and second doses of vaccine after the National Pharmacy partnership had ended.

- **Area for Improvement 1:** There was not a defined process for initial and second doses of vaccine to be given at long term care facilities after the end of the federal pharmacy partnership which created the need to develop an informal process for getting vaccines to LTC and Assisted

Living residents. This led to a gap in time and differing processes between health departments in the region to deliver vaccine to that vulnerable population.

Analysis: Process for ensuring vaccine doses are available to LTC and assisted living going forward needs to be maintained especially as variants continue to increase in the population and LTC residents and staff change over time.

- **Area for Improvement 2:** Many Coalition members who were willing to distribute vaccine waited for vetting and approval from TDH for long periods of time. Onboarding established vaccine providers could have helped to alleviate the strain on public health delivering vaccine to the public during the initial phases.
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Analysis: Provider information should be maintained and additional local/regional support could be utilized to onboard facilities going forward.

Objective 6: Assist with additional response projects related to increasing capabilities within the region to handle COVID response.

The full capability level can be attributed to the following strengths:

- **Strength 1:** NET HCC partnered with Regional EMS and hospitals to create decon lockers that could be used to decon ambulances at the hospital facilities in order to decrease turnaround time on the ambulance.

- **Strength 2:** NET HCC also partnered with EMS to add video laryngoscopes to EMS ambulances to reduce exposure to EMS responders during intubation process.

- **Strength 3**: NET HCC was able to support the increased need for ventilators in the region deploying portable vent cache and adding additional units to the hospital system.

- **Strength 4**: Mobile hospital was equipped and available for deployment to agencies. Additional triage tents were added as a resource in the region.

- **Area for Improvement 1:** Additional PPE stockpiles will need to be rotated in conjunction with Coalition members to ensure up to date and effective PPE stockpiles within the region.

Objective 7: Assist the regional healthcare system in ongoing recovery and preparedness efforts from COVID-19 surge.

- **Strength 1:** Assisting development of After-Action Reports for coalition members to ensure improvement of response.

- **Strength 2:** Disaster Mental Health Strike Teams were deployed to assist with mental health issues among staff at various healthcare facilities

- **Strength 3:** Mental Health First Aid, Critical Incident Stress Debriefings were offered for all healthcare facility staff in the region.

- **Strength 4:** HPP assisted the region's response bringing in Disaster Medical teams to assist in staffing during the highest medical surge periods of the pandemic.

- **Strength 5:** Additional morgue space capacity had been added prior to the pandemic through the HCC in coordination with Forensics Center and Ballad Health system.

- **Area for Improvement 1:** Assist Coalition members to identify staffing and resource needs moving forward. Both of these were identified during the pandemic as areas of concern within the region.

- **Area for Improvement 2**: Assist Coalition members to formalize CONOPS planning. Although facilities were able to manage the response, having formalized planning for Continuity of Operations when staffing shortages are severe as in during the pandemic, could make a better response in the future.

- **Area for Improvement 3**: Continue to assist healthcare coalition members with preparedness training for emergency responses and professional development in emergency planning in the future.

Appendix A: Improvement Plan

This IP has been developed specifically for TDH – Northeast Region as a result of "FIGHTFLUTN2019" conducted on November 19, 2020.

HPP Objective/ Capability	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Capability 3: Continuity of Health Care Service Delivery Objective 3	There were limited supplies available through the SNS or state to assist with response.	Ensure facilities plan to rely on own supplies for beginning of response. Regional stockpiles will be important as a supplement. State and Federal SNS assets may be tied to assisting larger regions and facilities in the country. Additional days on hand of supplies and PPE cache will need to be added to facility CONOPS planning.	RHC/Facility Contacts	Various	2020	2021

Capability 3 Objective 3	Alternative vendor lists were not readily available and it was difficult to vet new potential vendors. Multiple false vendors began appearing and it was difficult to distinguish the reputable vendors.	Thorough supply chain assessments and vetted alternate vendor lists will need to be available.	Coalition members/RHC	Various	2021	2022
Capability 1 Objective 1	Additional HCC members necessary to response were identified during COVID-19 response including healthcare executives, regional leaders and funeral homes.	Ensure regular invites and updates to coalition contact list.	RHC	NET HCC	2021	ongoing

Capability 2 Objective 2	Social media platforms and sharing information for the coalition is somewhat restricted due to RHC being under the TDH media structure.	Discuss and collaborate with TDH on ensuring messaging from NET HCC	RHC	TDH/NET HCC	2021	ongoing
Capability 2 Objective 2	Regular communication of current situation and current response efforts would have been beneficial for all partners.	Regular situation reports need to be sent to all members during a long response.	RHC	NET HCC	Ongoing	ongoing

Capability 2 Objective 3	NET HCC did not regularly update website or social media to communicate response efforts.	Ensure updates are posted to information sharing platforms for members. Work with TDH on creating information sharing platforms for all CMs.	RHC	NET HCC	Ongoing	ongoing
Capability 2 Objective 3	NET HCC communication of resource inventory and request procedures could have been communicated more effectively.	Regular interval updates on resources on hand should be sent to all members. This could be combined within regular situation report updates	RHC	NET HCC	Ongoing	ongoing

Capability 3 Objective 3	Although NET HCC had resources in stock to assist healthcare facilities, inventory lists were not up to date and several PPE items including N95 masks had expired.	Ensure regular checks of inventory are in place with process for rotation of stock.	RHC/Various facilities	NET HCC	Ongoing	ongoing
Capability 2 Objective 2	Reporting requirements for hospitals was cumbersome and difficult at times during the response.	Work with TDH partners to help alleviate burdensome reporting for facilities. Work with TDH on reporting platforms beneficial to response for all coalition members.	RHC	NET HCC/TDH	Ongoing	Ongoing

Capability 4 Objective 2	There was not a defined process for initial and second doses of vaccine to be given at long term care facilities after the end of the federal pharmacy partnership. This created the need to develop an informal process for getting vaccines to LTC and Assisted Living residents. This led to a gap in time and differing processes between health departments in the region to deliver vaccine to that vulnerable population.	Continue to address regionally any gaps in delivery of vaccines and assist in process for LTC/ALF vaccination. Plan for additional vaccine doses and how those should be administered at nursing homes. Assist with TDH improvement planning.	VPC/NET HCC	Various	Ongoing	ongoing
Capability 4 Objective 9	Many Coalition members who were willing to distribute vaccine waited for vetting and approval from TDH for long periods of time. Onboarding established vaccine providers could have helped to alleviate the strain on public health delivering vaccine to the public during the initial phases.	Assist with TDH improvement planning. Continue to liaison with healthcare providers in the region and continue to add additional CMs for information sharing and collaboration	NET HCC	Various/TDH	Ongoing	ongoing

Capability 3 Objective 5	Additional PPE stockpiles will need to be rotated in conjunction with Coalition members to ensure up to date and effective PPE stockpiles within the region.	Work with Coalition Members including the regional hospital system to develop a process to rotate PPE stock	NET HCC/Ballad/Various	RHC	2021	2022
Capability 3 Objective 3	The HCC should assist coalition members to pre-identify staffing and resource needs moving forward. Both of these were identified during the pandemic as areas of concern within the region.	Assist with CONOPS planning for Coalition Members	Various	RHC	2021	2022

Capability 3 Objective 5	Continue to assist healthcare coalition members with preparedness training for emergency responses and professional development in emergency planning in the future.	Continue to offer and suggest training on emergency response and preparedness	NET HCC	RHC	Ongoing	Ongoing