Foundation *for* Healthy Communities

2019 Novel Coronavirus

After-Action Report Master Executive Summary

Granite State Health Care Coalition
September 2023

The Granite State Health Care Coalition is an initiative of the Foundation for Healthy Communities financed under a contract with the State of New Hampshire, Department of Health and Human Services, with funds in part by the State of New Hampshire and/or such other funding sources as were available or required, e.g., the United States Department of Health and Human Services.

Since 2020, health care, public health, emergency medical services, and emergency management agencies have developed and implemented strategies to mitigate the impacts of COVID-19. Some partners have begun to see a much-needed reprieve as they move toward recovery and a "new normal." Planning for continued surges of COVID-19 infections as well as potential future emerging special pathogens remain ongoing. At the writing of this Report, partners, and members continue to fight to protect the public's health, more than 36 months into the pandemic.

The purpose of the *2019 Novel Coronavirus: After-Action Report Master Executive Summary* is to:

1. Capture and share activities and experiences of GSHCC members and partners over the duration of COVID-19 Response and Recovery phases;
2. Offer an updated analysis of response and recovery activities from September 2020 through June 2023;
3. Tie together common themes across the previously four GSHCC reported phases; and
4. Provide recommendations to enhance current and future planning and recovery efforts.

It is important to note that there are variances in every GSHCC member and partner organization's capabilities and resources. Not all recommendations contained within the *2019 Novel Coronavirus After-Action Reports* and *Executive Summaries* will apply to every organization. Not all strengths and areas for improvement may be applicable to each individual agency or organization, and individual experiences may vary. Identified strengths and areas for improvement represent the collective experience of members and partners during extended response through recovery from COVID-19; between February 2021 through June 2023.

Continued evaluation and assessment of recovery efforts in New Hampshire may take years to be fully realized. However, the Report contributes to the Granite State Health Care Coalition's effort to support members and partners in improving emergency preparedness and recovery capabilities statewide.

As an initiative of the Foundation for Healthy Communities, the Granite State Health Care Coalition led the development of the *2019 Novel Coronavirus Master Executive Summary* under a contract with the State of New Hampshire Department of Health and Human Services (NH DHHS) in partnership from the New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Emergency Preparedness, Response, and Recovery. The United States Department of Health and Human Services (HHS) provided grant funding to the state, which financed this project.

Methodology

Over the course of the last three years, the GSHCC team collected data and feedback from various sources using multiple methods. Each subsequent activity aimed to gather additional detail on emerging themes and shared experiences.

GSHCC COVID-19 AAR Online Questionnaire

The GSHCC conducted multiple online questionnaires that characterized the participant's direct involvement in COVID-19 response and recovery activities, including specific questions regarding agency activities, partner collaboration, gap analyses, and vulnerable populations. The questionnaire included open-ended and multiple-choice questions.

Key Informant or Stakeholder Interviews
Additionally, members of the GSHCC team had the opportunity to conduct one-on-one interviews with select individuals that played vital roles within COVID-19 response and recovery. Interviewees represented hospitals, public health, EMS, Emergency Management, and other healthcare and public health stakeholders from state, regional, and local jurisdictions. The one-hour interviews, conducted in a conversational format, included specific talking points and inquiries used to focus the discussion. These talking points were informed by themes identified in the GSHCC COVID-19 AAR Online Questionnaires. The review team assured participants their responses would not be subject to attribution to support a candid dialogue.

The GSHCC team also reviewed open-source information over the course of COVID-19 response and recovery to develop a common picture of recovery throughout New Hampshire. These sources include:

- NH DHHS Press Releases,
- NH DHHS Health Alert Network (HAN) Messages,
- NH Governor-directed Emergency Orders,
- NH State Emergency Operations Center (SEOC) Situation Reports, and
- Other Open-Source Reports and References.

Organization of Master Executive Summary

The findings within the 2019 Novel Coronavirus After-Action Report Master Executive Summary address the "HPP-PHEP Domains of Preparedness" for each of the 2019 Novel Coronavirus phases, which have been adopted and modified by the GSHCC Team.

Successes and areas for improvement may not be universally experienced across every sector. For some, a listed success was experienced as an area for improvement and vice versa. Key findings are associated with a domain based on a root-cause analysis of participant observations and experiences. Additional analysis of identified strengths and areas for improvement with accompanying observation statements and narrative provides a further context within each key finding statement. Each of the *2019 Novel Coronavirus After-Action Reports* also contain several appendices to provide additional references and supporting data.

This Master *Executive Summary* and the previous iterations of the *2019 Novel Coronavirus After-Action Reports (AARs)* supports the ongoing efforts of the Granite State Health Care Coalition to support members and partners through continued response and recovery efforts. More specific and detailed information, including an evaluation of prior activities can be found within the previous iterations of the GSHCC COVID After-Action Report:

- The *2019 Novel Coronavirus Response* Mid-*Event After-Action Report*, released February 2021, covers initial COVID-19 response activities through September 2020. This phase of response includes initial State of Emergency declarations as well as the first community-based testing locations, initial stay-at-home guidance, PPE shortages, and the Federal government's announcement of Operation Warp Speed.
- The *2019 Novel Coronavirus Response Extended Response* After-Action Report released October 2021, covers COVID-19 response activities between October 2020 and June 2021. This phase included the initial rollout of COVID-19 vaccines as well as the appearance of COVID-19 variants within the state. This timeframe also included the expiration of the NH Mask Mandate and the conclusion of the NH State of Emergency and closure of the NH State Emergency Operations Center and Joint Information Center.

- The *2019 Novel Coronavirus Response After-Action Report 3* released November 2023 covers COVID-19 response activities between July 2021 through June 2022. During this phase, surges in COVID-19 cases were seen spurred by the Delta and Omicron Variants. During this phase, tens of thousands of COVID-19 vaccines were made available through 2 "Booster Blitz" vaccination clinics to assist with surging cases.
- *The 2019 Novel Coronavirus Recovery After-Action Report, released in September 2023, covers COVID-19 recovery activities* between July 2022 through June 2023. During this phase, response transitioned to recovery activities and a "new normal". The expiration of both the Federal Public Health Emergency and State of NH Public Health Incident also saw the ending of certain COVID-19 response flexibilities among responders.

Summary of Notable Successes and Areas for Improvement

Notable Successes

The COVID-19 pandemic resulted in unprecedented response and recovery efforts across the healthcare and emergency management continuum. In general, inter-agency collaboration contributed to integrated healthcare system response and recovery. This collaboration must continue to sustain mitigation efforts and preserve partners' and members' ability to maintain essential healthcare services.

The GSHCC review team identified the following examples that represent notable successes throughout the healthcare system over the course of extended COVID-19 response and recovery:

- Locally forged relationships and community partnerships have been, and continue to be, successfully leveraged to fill gaps in healthcare and public health infrastructures.
- Virtual meeting platforms have continuously provided a tremendous opportunity for partners to meet while balancing conflicting priorities and public health guidance.
- Leveraging Juvare as an information management system, though with challenges, proved to be a useful tool for maintaining situational awareness and fulfilling federal reporting requirements.
- COVID-19 response strengthened the community of hospitals and created a mechanism by which resources can be shared across the state.

Areas for Improvement

Response to and recovery from the COVID-19 pandemic required GSHCC members and partners to implement plans and supporting procedures during a demanding and resource-intensive event. There are several key opportunities for improvement (not all-inclusive) that may improve future planning and recovery needs if addressed.

- Inconsistent alignment between state and CDC guidance created confusion among healthcare partners.
- Sources providing guidance were inconsistent, and information varied depending on the authority releasing it.
- A lack of inclusion of appropriate stakeholders in planning efforts created significant challenges for partners.
- Constantly shifting guidance and priorities with little to no advance notice to partners, and in some cases receiving information at the same time as the public, caused confusion and did not allow for sufficient time to implement required activities.

- Frequent turnover of staff, including those in key positions across organizations engaging in response and recovery activities, led to a loss of institutional knowledge as well as a drop in organizational capabilities.
- Frequent changes to the vaccination documentation systems did not adequately meet the needs of responding agencies administering vaccines in the field.

Strengths and Areas for Improvement by Domain

Community Resilience

Strengths

1. Pre-existing community partnerships contributed to a more efficient and collaborative response efforts at the local level.
2. COVID-19 response strengthened the relationships between healthcare entities and created a mechanism by which resources can be shared across the state.

Areas for Improvement

1. Prior training, understanding, and implementation of roles and responsibilities under the Incident Command Structure (ICS) Model was inconsistent across the healthcare continuum to address the competencies or capabilities required for a pandemic response.
2. Strategy and operational directives that addressed the current response environment were often in conflict with or contradictory to pre-existing plans developed at the agency or community level.
3. The duration of this response has far surpassed assumptions made in existing emergency plans.

Incident Management

Strengths

1. Organizations continued to engage concerned members of the community throughout the COVID-19 response and recovery phases.
2. Regional partnerships proved to be valuable for resource and information sharing. This foundation proved to be critical for the duration of response activities.
3. Prioritizing inventory management allowed organizations to effectively address supply needs.

Areas for Improvement

1. Significant confusion surrounding state level chain of command and incident command leadership statewide persists across community sectors and jurisdictions.
2. Inconsistent alignment between state and CDC guidance caused partners to be caught between state, Centers for Medicare & Medicaid Services (CMS) rules, and other healthcare accreditation organizations and standards of practice.
3. A lack of inclusion of appropriate stakeholders in recovery and planning efforts created significant challenges for partners.

Information Management

Strengths

1. Virtual meeting platforms such as Zoom and Microsoft Teams continued to provide tremendous opportunity for partners to meet while balancing conflicting priorities.
2. Leveraging Juvare as an information management system, though with challenges, proved to be a useful tool for maintaining situational awareness and fulfilling federal reporting requirements.
3. Informational and coordinating calls, emails, as well as Health Alert Network (HAN) notifications proved to be valuable for partners remaining informed.

Areas for Improvement

1. Guidance did not always clearly specify or delineate rules and guidance for all healthcare entities and license types, which contributed to confusion for some on how to proceed.
2. Constant shifting of guidance and priorities, with little to no advance notice to partners ahead of the public, caused confusion and delays in implementation.
3. Duplication of efforts, inconsistent dissemination of information, and information coming from a variety of sources led to confusion, inefficiency, and inconsistent implementation of guidance.
4. Information, such as Health Alert Network (HAN) notifications, could be difficult to locate and was not in a searchable format, which required extensive effort to locate or research specific guidance.

Surge Management

Strengths

1. Overall, partners felt that there were appropriate partnerships, relationships, or agreements in place at the community level to manage ongoing medical surge effectively and efficiently. If needed, these resources were available.

Areas for Improvement

1. Staffing shortages across sectors, without clear processes for replacing vacancies, contributed to a loss in institutional knowledge and lost operational capacity.
2. Pre-existing strategies, assumptions, and plans for alternate care sites (ACSs) are largely viewed as implausible as they cannot be implemented without significant modifications and augmentation of available resources.
3. Internal and external medical surge plans were often not previously tested or were built as plans were being implemented which hampered response and the understanding of implementation and operations protocols.

Countermeasures and Mitigation

Non-Pharmaceutical Interventions/Community Mitigation Measures

Strengths

1. State (NH DHHS) support with testing and responsiveness to outbreaks in congregate living facilities was instrumental to ongoing containment and mitigation efforts among vulnerable populations.
2. Quality assurance processes and procedures were in place and were followed across mobile and fixed vaccination sites.

Areas for Improvement

1. Shifting quarantine and isolation guidance caused inconsistent implementation.
2. Global supply chain shortages presented significant issues for organizations across sectors in maintaining quality and quantity of personal protective equipment (PPE) and presented the need for PPE stockpiling, rotation, distribution, and implementing PPE burn rates.
3. Non-pharmaceutical interventions were not implemented effectively or properly enforced during the initial phase among partner agencies and local jurisdictions.
4. Difficulty and delay in reaching vulnerable populations, including the homebound, those experiencing homelessness, and those living in rural settings with no access to transportation.

Responder Safety and Health

Strengths

1. Staff and personnel safety was a priority across all sectors early in the response.
2. Agencies that proactively addressed the physical, social, and emotional needs of staff have seen better outcomes in staff retention and morale.

Areas for Improvement

1. Processes for ensuring staff remained fully vaccinated was inconsistent across healthcare systems.
2. Many agencies lacked systems to monitor staff for physical, mental, and behavioral health needs or failed to anticipate or provide accessible mental and behavioral health services to staff.

Vaccine Distribution

Strengths

1. The flexibilities and waivers provided to leverage EMS personnel significantly augmented the number of personnel within the workforce who were authorized to administer vaccinations.
2. State-managed fixed sites and supersites were effective mechanisms to administer a large number of vaccinations to high volumes of patients over a short period of time.

Areas for Improvement

1. Vaccination sites were often not accessible for certain vulnerable populations.
2. Subject Matter Experts and organizations working with vulnerable populations were not included in the decision-making process.
3. The vaccination documentation systems did not adequately meet the needs of responding agencies administering vaccines in the field due to frequent system modifications.
4. Lack of initial vaccination policy contributed to issues such as ensuring consistent training, personnel and equipment utilization across all vaccination sites.
5. The operationalized vaccination plans significantly differed from existing plans that partners had developed and trained partners to implement.

Conclusions and Next Steps

Sustained COVID-19 pandemic response and recovery efforts have demanded a conscious effort from partners and members from across the health care and public health continuum. The key findings and observations found within this Novel Coronavirus After-Action Report Master Executive Summary are meant to serve as a high-level quick read that may not apply equally across all sectors. The toll of extended response of over 36 months has not gone unnoticed and is felt by all. Although significant accomplishments were displayed throughout the response phase, lessons learned and best practices must now be integrated into future preparedness and planning efforts. The perseverance, grit, and dedication of health care workers, public health practitioners, EMS, first responders, and emergency managers serving the residents and visitors of the State of New Hampshire is commendable. Through this evaluation effort, the GSHCC team has gained insight into key factors that have contributed to successes that strengthened resilience through recovery.

Next Steps

GSHCC members and partners are encouraged to develop internal after-action reports and improvement plans (AAR/IPs). These AAR/IPs will summarize and evaluate response and recovery capabilities specific to their organization's recovery efforts as well as begin the process of identifying and implementing corrective actions to build and sustain future planning, response, and recovery capabilities.

At the time of writing this report, the COVID-19 pandemic recovery process continues as communities and organizations address non-COVID related high patient numbers throughout the healthcare continuum while actively determining how to properly fund, support, staff, and provide on-going services into the future.