Pediatric Respiratory Virus Surge Response- Fall/Winter 2022-23

After-Action Report/Improvement Plan

April 10, 2023

INCIDENT OVERVIEW

Incident Name	Pediatric Respiratory Virus Surge Response – Fall/Winter 2022-23
Response Dates	November 2022 – February 2023
Scope	This review covers the actions taken by the Pediatric Pandemic Network to support healthcare response to the pediatric respiratory medical surge Incident in Fall/Winter 2022-23.
PPN Capabilities	☐ Capability 1: Partnerships with Preparedness Systems ☐ Capability 2: Community Partner Collaborations ☐ Capability 3: Improved Pediatric Readiness ☐ Capability 4: Increased Capability of Telehealth ☐ Capability 5: Dissemination of Pediatric Care Guidance
Objectives	1. Develop and Utilize Response Plan 2. Maintain National Situational Awareness 3. Conduct Information Sharing with Stakeholders 4. Develop and Disseminate Resources and Best Practices
Threat or Hazard	Pediatric medical surge impacting multiple areas of US concurrently due to increased healthcare utilization in pediatric populations from multiple respiratory conditions including RSV, influenza, and COVID-19.
Sponsor	The Pediatric Pandemic Network (PPN) is supported by cooperative agreement funds from the Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB).
Participating Organizations	The PPN is a national network of 10 pediatric specialty hospitals (hub sites), other children's hospitals, academic institutions, community partners, disaster organizations, and individual experts. The PPN is closely linked with the HRSA supported EMS for Children Innovation and Improvement Center (EIIC) and ASPR supported Pediatric Disaster Centers of Excellence (PD-COE), which include WRAP-EM, Gulf 7 for Kids, and Region 5 for Kids.
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ANALYSIS OF OBJECTIVES AND CAPABILITIES

Aligning incident response objectives and capabilities provides a consistent taxonomy for evaluation that transcends individual events to support preparedness reporting and trend analysis. Table 1. includes the incident objectives, aligned capabilities and performance ratings as observed during the incident and determined by the evaluation team.

Objective	PPN Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Develop and Utilize Response Plan	None Specified		X		
Maintain National Situational Awareness	None Specified			X	
Conduct Information Sharing with Stakeholders	Partnerships with Preparedness Systems; Community Partner Collaboration		X		
Develop and Disseminate Resources	Dissemination of Pediatric Care Guidance		X		

Ratings Definitions:
- Performed without Challenges (P): The tasks and activities associated with the 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 tasks and activities associated with the 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 tasks and activities associated with the 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 tasks and activities associated with the capability were not performed in a manner that achieved the objective(s).

Table 1. Summary of Objective and Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated capability, highlighting strengths and areas for improvement.

Objective 1: Develop and Utilize Response Plan

As a nascent network, a defined response role for PPN as an entity had not been established, nor had an Emergency Operations Plan been developed to guide activation. However, it became clear that PPN does have a role in supporting its members and the broader pediatric care community during significant events that impact pediatric populations. This objective reflects both the need for PPN to maintain readiness to support responses, and the need to develop a defined process that can be followed in future events.

Capability: None Specified

Strengths
Strength 1: The depth of subject matter expertise allowed for the development of ad-hoc response actions to meet the identified needs for PPN response.
Strength 2: The willingness of PPN members to engage in a timely and substantial manner is notable.
Strength 3: Organic engagement and coordination with PD-COEs and EIIC was established and sustained throughout the response.

Areas for Improvement
Area for Improvement 1: No response support activation protocol is in place for the PPN.
Area for Improvement 2: The role of PPN to support impacted pediatric facilities and populations (response role) has not yet been clarified.

Objective 2: Maintain National Situational Awareness

This objective details the strengths and challenges related to shared situational awareness within the pediatric hospital community during the pediatric respiratory virus surge. This includes bed occupancy and availability, staffing constraints, supply, equipment, and medication shortages, and the awareness of systems implemented to support load leveling and patient placement.

Capability: None Specified

Strengths
Strength 1: The sustainment of ongoing weekly WRAP-EM/PPN Situational Awareness calls allowed for critical, if informal, sharing of situational awareness across pediatric hospitals and related systems across the US. This included opportunities to share constraints around space to treat patients, staffing, supplies, patient movement coordination, and systems of care.
Strength 2: The ASPR Regional Virtual Pediatric Townhalls were a valuable vehicle to hear about impacts to pediatric providers from multiple HHS Regions in a coordinated manner.
Strength 3: The utilization of existing datasets, such as state dashboards, PsyStart, HHS Protect Data, the CDC COVID Data Tracker, HHS Secretary's Operation Center (SOC), and the HHS Supply Chain Control Tower provided some level of national situational awareness.

Areas for Improvement

Area for Improvement 1: Although Region V for Kids utilized a Redcap reporting system for member hospitals that could have served as a tool for utilization and surge reporting for the broader PPN, administrative barriers to rapidly expand across PPN member sites limited full implementation.

Area for Improvement 2: HHS data sources, including HHS Protect, HHS SOC data, and HHS Supply Chain Control Tower were not utilized in the best way possible to support cross-partner awareness of the impacts across the Nation.

Objective 3: Conduct Information Sharing with Stakeholders

This objective details the work conducted by PPN to support vertical and horizontal information sharing during the pediatric respiratory virus surge. Vertical information sharing includes messaging passed across the response tiers, to include individual facilities, healthcare coalitions, states, HHS Regions, and the US Government. Horizontal information sharing includes messaging passed laterally among the stakeholders engaged in the response, including pediatric hospitals, community hospitals, EMS providers, and outpatient providers.

Capability: Partnerships with Preparedness Systems; Community Partner Collaboration

Strengths

Strength 1: The transition of the WRAP-EM COVID-19 Weekly partner call to a weekly WRAP-EM/PPN Emerging Issues call was an extremely valuable vehicle for information sharing across the PPN membership and stakeholders.

Strength 2: The partnerships between PPN, EIIC, and PD-COEs ensured that relevant stakeholders could be identified, engaged, and available to receive messaging through use of these partners to communicate to specific stakeholder groups.

Strength 3: The opportunity for PPN leadership to participate in ongoing federal interagency calls ensured that USG could receive briefings on conditions "on the ground".

Strength 4: The responsiveness of the PPN Communication team allowed for rapid dissemination of information throughout the PPN and on the website.

Strength 5: Engagement of additional partner organizations, such as AAP, CHA, and Healthcare Ready served to increase information sharing with PPN stakeholders more broadly than internal reporting alone.

Areas for Improvement

Area for Improvement 1: As noted in Situational Awareness, information sharing was limited to informal sharing of general trends in medical surge status, mitigation/contingency strategies implemented, and although useful and informative, did not provide tactical data.

Area for Improvement 2: A number of internal and external partners developed and provided situation reports during the event (HHS ASPR, Healthcare Ready, CHA). Although these were

shared within PPN, there was no coordinated structure for the release of situational awareness products to PPN stakeholders.

Objective 4: Develop and Disseminate Resources

This objective relates to the capacity of the PPN to participate in the development of ad-hoc clinical and knowledge resources and to disseminate these resources to stakeholders.

Capability: Dissemination of Pediatric Care Guidance

Strengths
Strength 1: A variety of systems are available to the PPN to disseminate guidance to its stakeholders, including Proofhub and email lists.
Strength 2: The website team is responsive to requests to post information and guidance as needed, and to track metrics such as downloads or views.
Strength 3: Social media channels have been established that can direct followers to information sources.

Areas for Improvement
Area for Improvement 1: Although the processes are in place to share information internally with PPN stakeholders, they are not as well defined for pushing information to a wider audience.
Area for Improvement 2: There are limits to the ability of PPN to track the full impact of dissemination, especially if documents are reshared.

APPENDIX A: IMPROVEMENT PLAN

Objective	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Develop and Utilize Response Plan	No response support activation protocol is in place for the PPN.	Develop a standardized process for activation of PPN response.	PPN	NetOps	3/2023	7/2023
Develop and Utilize Response Plan	The role of PPN to support impacted pediatric facilities and populations (response role) has not yet been clarified.	Engage HRSA, HHS, and PD-COEs to clarify the optimal gap area for PPN to be included.	PPN	NetOps	3/2023	7/2023
Maintain National Situational Awareness	Although Region V for Kids utilized a Redcap reporting system for member hospitals that could have served as a tool for the broader PPN, administrative barriers to rapidly expand across PPN member sites limited full implementation.	Develop a voluntary situational awareness reporting tool to be used by PPN members sites and additional stakeholders.	PPN	ID	3/2023	8/2023
Maintain National Situational Awareness	HHS data sources, including HHS Protect, HHS SOC data, and HHS Supply Chain Control Tower were not utilized in the best way possible to support cross-partner awareness of the impacts across the Nation.	Pursue formal agreement from HHS/ASPR to share situational awareness data with PPN response team.	PPN	NetOps	3/2023	6/2023
Conduct Information Sharing with Stakeholders	As noted in Situational Awareness, information sharing was limited to informal sharing of general trends in medical surge status, mitigation/contingency strategies implemented, and although useful and informative, did not provide tactical data.	Formalize and standardize the information sharing topics that will be used in later responses, inclusive of the survey/tool noted above.	PPN	All PPN	3/2023	8/2023
Conduct Information Sharing with Stakeholders	A number of internal and external partners developed and provided situation reports during the event (HHS ASPR, Healthcare Ready, CHA). Although these were shared within PPN, there was no coordinated structure for the release of situational awareness products to PPN stakeholders.	Formalize and standardize the information sharing topics that will be used in later responses, inclusive of the survey/tool noted above. Also, determine how partner reports will be incorporated.	PPN	NetOps	3/2023	7/2023

TLP CLEAR: DISCLOSURE IS NOT LIMITED

Objective	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Develop and Disseminate Resources	Although the processes are in place to share information internally with PPN stakeholders, they are not as well defined for pushing information to a wider audience.	Include response dissemination plan as a section of PPN response plan.	PPN	Comms	3/2023	7/2023
Develop and Disseminate Resources	There are limits to the ability of PPN to track the full impact of dissemination, especially if documents are reshared.	Develop tracking mechanisms for receiving dissemination metrics.	PPN	Comms	3/2023	7/2023

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APPENDIX B: PPN HUB SITE MAP

APPENDIX C: FUNDING DISCLAIMER