Pediatric Situational Awareness: Regional Metrics in Disaster Cycle





Deanna Dahl Grove, MD

Objective

Increase situational awareness pertinent for children and families within the disaster cycle for regional stakeholders through specific metrics.

Background

- Children make up 20% of the US population and are uniquely impacted physically and emotionally by disasters.
- ASPR funded 2 Pediatric Disasters Centers of Excellence in 2019, situational awareness was a key deliverable.
- Tools created to assist communities in addressing hazards, Hazard Vulnerability Assessment (HVA) and Threat Hazard Identification and Risk Assessment (THIRA). Populations data for specific groups such as children/families are not included.
- Disaster response could better serve children/families if measures specific to this group were included in mitigation planning.

Social and physical determinants of health



Different communities in the United States

Process

- Define audience
- Review current recommendations for metrics specific to children
 - National Pediatric Disaster Coalition
 - Articles
 (http://www.ny2aap.org/pdf/Disaster/229.p
 df)
 - National Survey of Child health
 - ASPR HPP Pediatric Annex
- Review publicly available data sources with pediatric data points

Methods

Using a modified delphi process, 9 domains (Table 1) were originally identified by the Emergency Medical Services for Children (EMSC/EIIC) disaster domain and the two pediatric Pediatric Disaster Centers of Excellence. The scorecard (first three domains) was piloted in 3 states Regional Healthcare Coalitions (RHC) and a follow up usefulness survey (9 questions) was created to understand how the scorecard may be used.

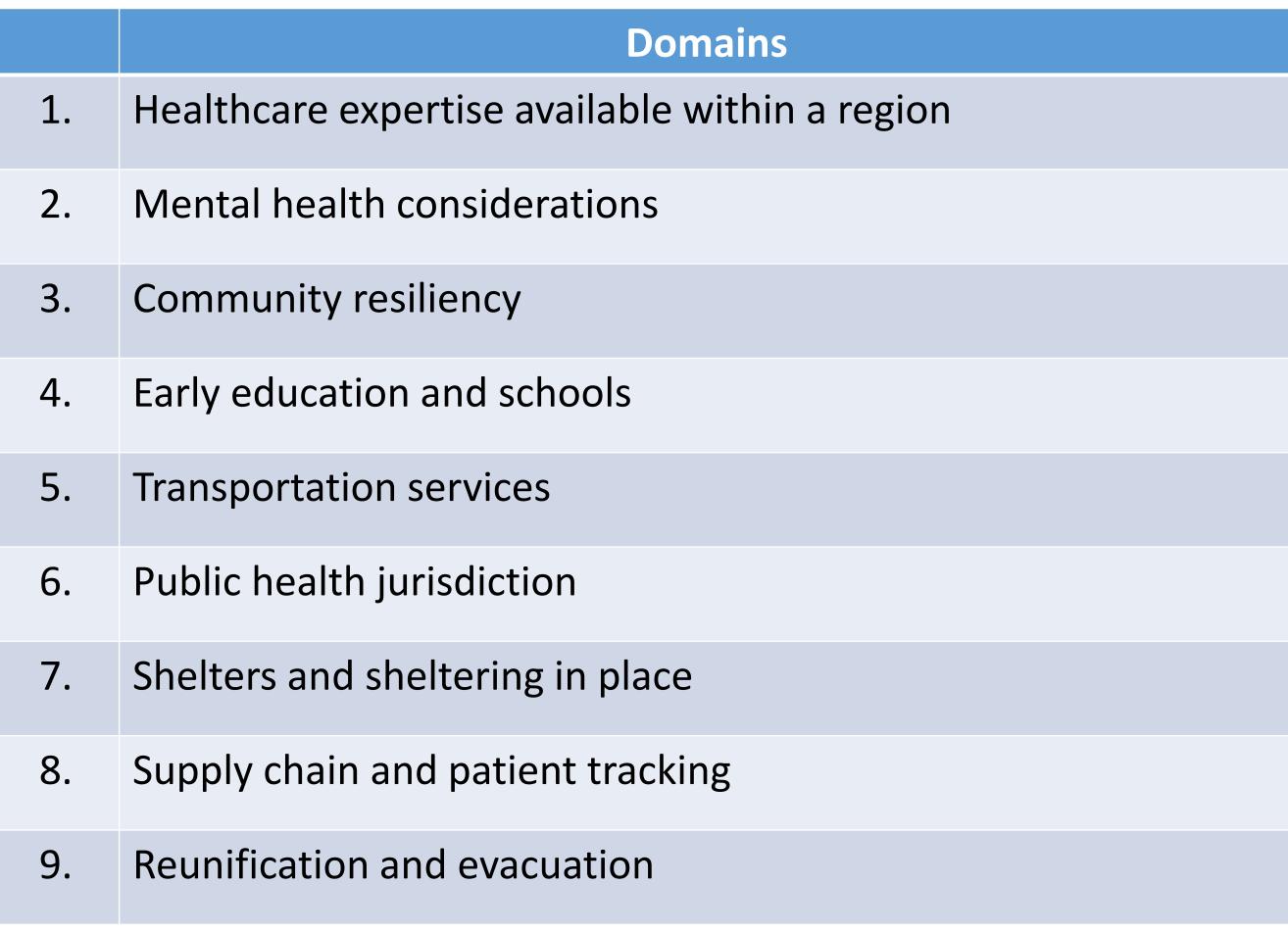


Table 1: 9 Domains infrastructures and support mechanisms that exist and could be

to healthcare coalitions or communities when considering children and families within a region

Results

The first 3 domains listed in Table 1 were included in the scorecard. A usefulness survey (9 questions) was completed by 12 of 25 RHC's whom completed the scorecard, as an IRB approved study.

This scorecard in a good initial effort at compiling existing resources and census data as a component of pediatric preparedness...

I would like to have a benchmark to measure against...

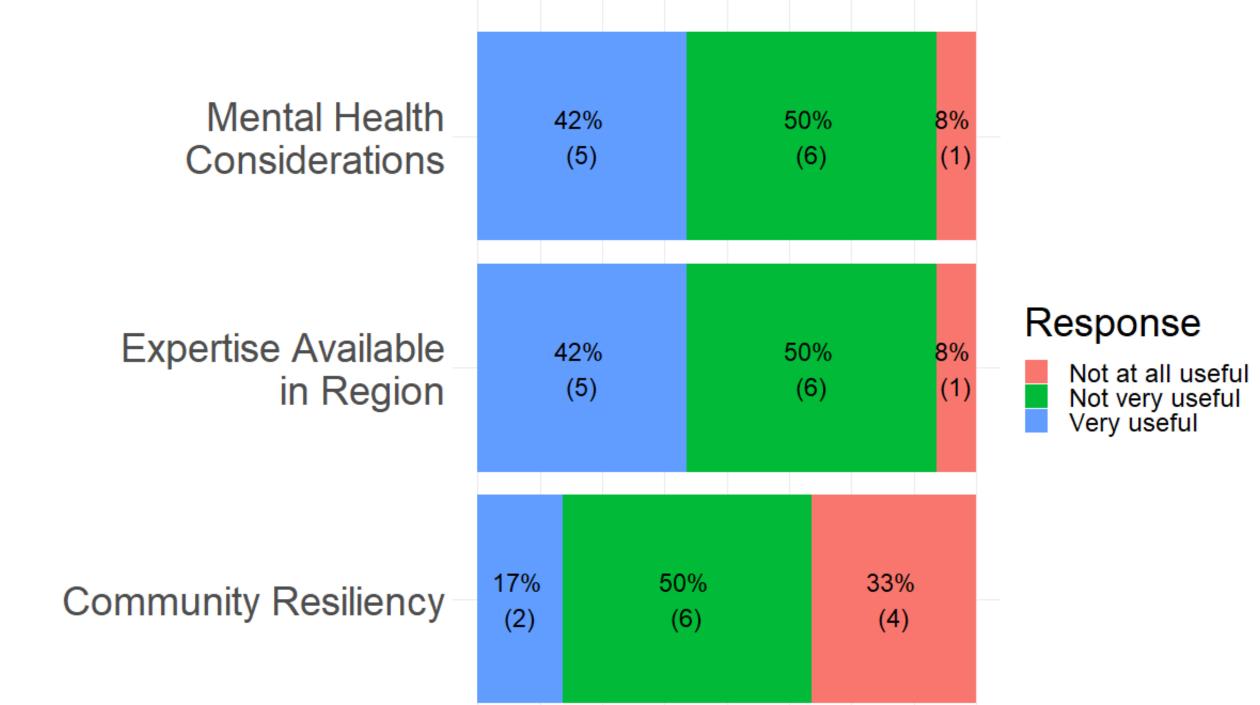
We understand pediatrics is a gap in our region due to limited resources...

As preparedness professionals, guidance on strategies to close gaps that we may see in the scorecard would be helpful...

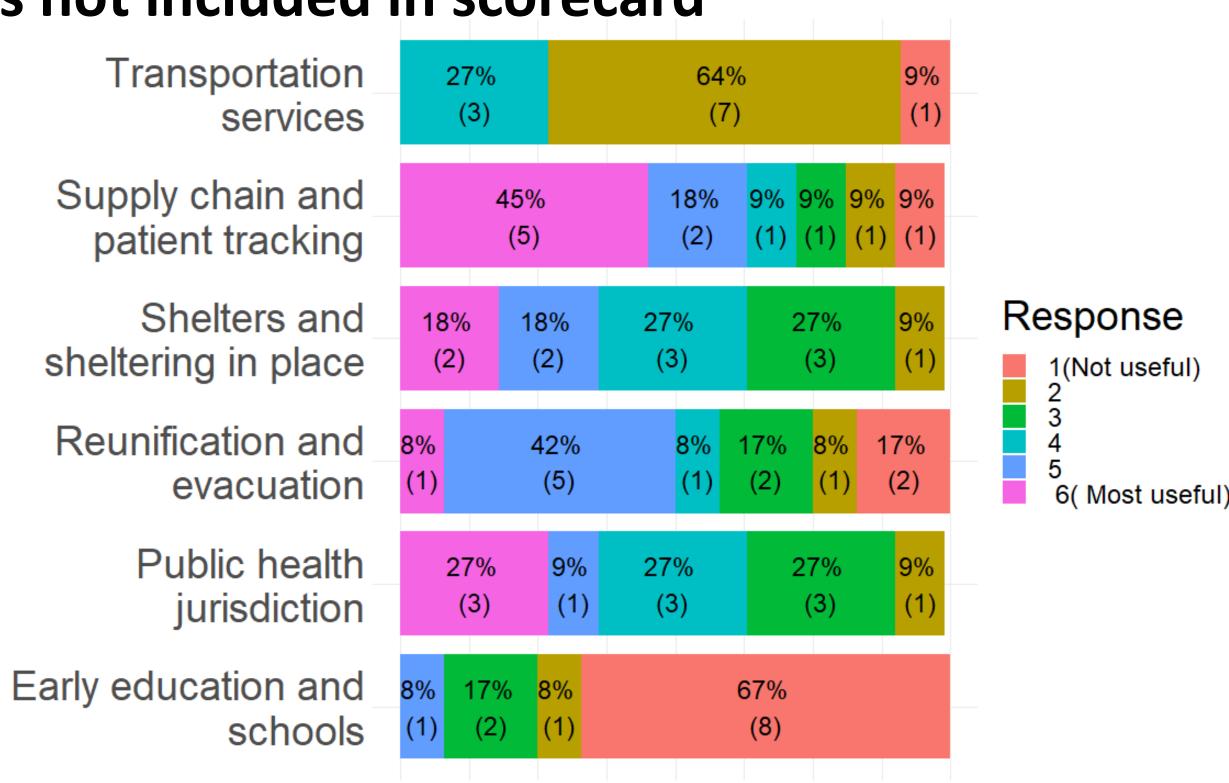
I KNOW THIS DATA IS IMPORTANT AND WILL BE HELPFUL BUT I'M NOT SURE WHERE TO TAKE IT FROM HERE....

The project described were supported by Award Number [U3REP190615-01-01) from the Office of the Assistant Secretary for Preparedness and Response (ASPR). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of ASPR or the Department of Health and Human Services.

Three domains included on scorecard



Domains not included in scorecard



Conclusion

- 9 domains within scorecard align well with HPP Pediatric Annex released in 2019 to inform areas that are vulnerable for children and families
- First iteration of scorecard was cumbersome
- Explanations for data interpretation was not clear to users leading to scorecard not being useful most often
- Use of the scorecard can help inform planning when used with the pediatric HVA
- Overall there are not open source federal databases that have data points that support all 9 domains

Next Steps

- Implement redesigned scorecard in conjunction with pediatric
 HVA on line
- Revision of scorecard to include more detailed explanations and API to assist with filling data points - on line
- Work with federal entities to encourage collection of data related to pediatrics/families in disasters to inform mitigation strategies