During this office hour...

- Discuss data collection and tools/resources

- Provide overview of the PPN Analytics Portal

- Brainstorm potential benefits/use for PMHCA teams

- Q&A

Data Collection and Tools/Resources

- Are there any questions from those on the call?
    - Data collection methods?
    - Data collection resources/tools?
    - Analysis questions?

PPN Analytics Portal

March 29, 2024

Amie Barda, PhD
Manager, Data Science & Analytics, Rainbow Quality

University Hospitals
Rainbow Babies & Children's

Cleveland | Ohio

Who is the Pediatric Pandemic Network?

Mission

In collaboration with the nation's children's hospitals and their communities, the network will coordinate, prepare, and enable high-quality, equitable, research-based pediatric care in emergencies, disasters, and pandemics.

Vision

Improving health outcomes of children and the resiliency of children, families, and communities impacted by emergencies, disasters, and pandemics.

PPN Hub Sites and Key Partners
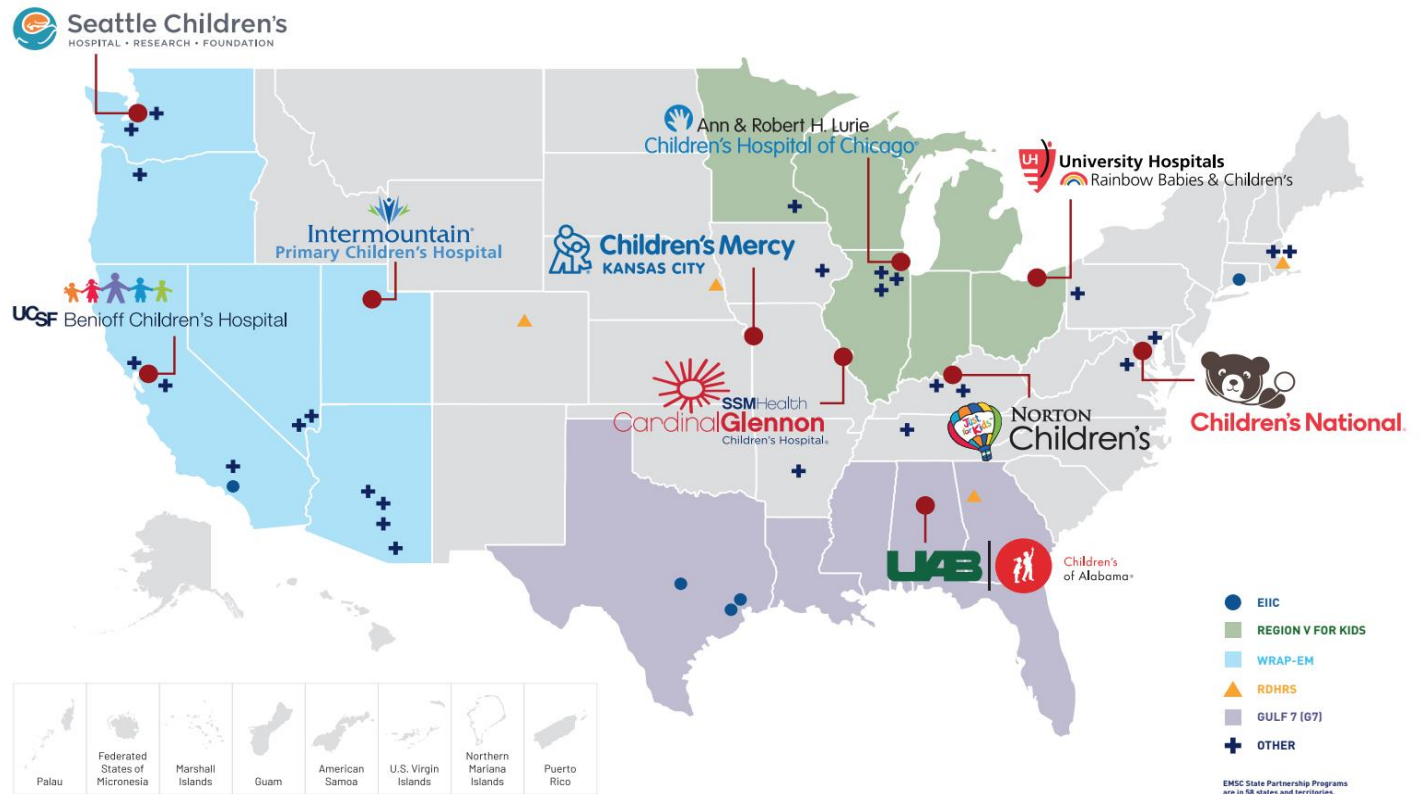
Goals of the PPN

- Increase children's hospital's partnerships with local, state, regional, and national emergency preparedness systems.

- Collaborate with community partners to address disparities and ensure health equity.

- Improve the pediatric emergency readiness of healthcare systems, including hospital and prehospital systems.

- Increase the capability of telehealth systems to address the unique needs of children and families.

- Accelerate the real-time dissemination of research-informed pediatric care.

Quality Improvement Collaboratives

- "Organized, multifaceted approach that includes teams from multiple healthcare sites coming together to learn, apply, and share improvement methods, ideas, and data on service performance for a given healthcare topic"[1]

- Benefits of QI collaboratives:
  - Improve participants' knowledge, problem-solving skills, and attitude toward a problem
  - Network with other professionals
  - Shared learnings/knowledge of effective practices
  - Improvement in healthcare system from applying collaboarative knowledge/learnings

- Challenges for QI collaboratives:
  - Lack of resources and/or engagement
  - Differences in care processes by healthcare system/setting
  - Legal barriers (DUAs)
  - Secure ways to share/view data in real-time to monitor progress (often requires custom application build)

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PPN Analytics Portal Purpose & Overview

- Purpose:
  - Overcome barriers to data sharing for pediatric collaboratives
  - Reduce time required to set-up collaborative data projects between healthcare systems/organizations
  - Centralized resource for curated pediatric datasets

- **<u>Secure</u>** platform to deploy/manage custom data and analytics solutions

- Central data repository in which PPN members and affiliates can store/access datasets under single DUA

- Key functional characteristics:
  - Support for any cross-institutional data project ("collaboratives"), including, but not limited to:
    - Quality improvement (QI) collaboratives
    - Research collaboratives
    - Operational collaboratives (e.g., surveillance data collection, surveys)
  - Rapid, customizable project set-up
  - Real-time reporting/analytics support (i.e., custom interactive project dashboards)

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Current Portal Design & Capabilities

- Business application—core focus is on supporting functionality

- Support for customizable, cross-institutional collaborative data projects. Key customizable features include:
  - Project information sections with support for document uploads & hyperlinks
  - Data collection structure and forms (specific support for PDSA cycles)
  - Interactive reports/dashboards with support for live data connections
  - Ability to search for & request approval to participate in collaborative projects

- HIPAA-compliant security of de-identified data. Includes:
  - Encrypted transfer protocols
  - Secure storage with robust backup capabilities and failure support through existing UH infrastructure
  - Option to integrate institutional SSO process into portal to facilitate user login and increase security
  - Assigned institutional "admins" who manage user & institutional data security
  - Institutional-level data only shown to users with appropriate permissions

- Basic notification system to support critical user activities

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Core Activities for Portal Users (role-dependent)

Create/sponsor a project with portal team assistance

Manage institutional user security
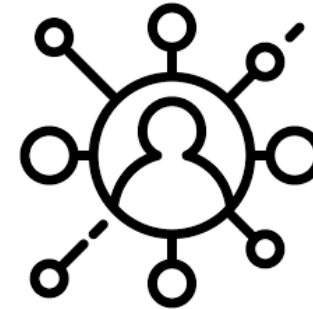
Search for projects to join

Enter/edit project data

View/interact with project dashboards & reports

Find & request datasets for use

Connect and interact with other portal users*

*Feature not yet available

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Portal Demonstration

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Benefits of Registering for Portal

- Central, secure location to collect/store data for cross-institutional projects

- Single place for institution to manage participation in data projects across PPN, EIIC, Region V & other affiliates

- Dedicated site administrator puts data security into the hands of each institution/site

- Rapid, customizable set-up for data collection and real-time interactive reporting

- Cross-project/dataset reporting and extraction is feasible

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Determining Projects Suitable for Portal

- Requires cross-institutional data collection with need for ongoing reporting

- Reporting on a cross-institutional dataset where individual institution data security is a concern

- Ongoing reporting on a data source that needs to be shared across multiple institutions

- Interactive data displays/reporting is desired

- Shared file storage, editing, and/or management

- Data being collected from only a single institution

- One-time data collection with no intended re-use of data

- Reporting that should be publicly accessible

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Data Collection & Analysis Tools for Smaller-scale Projects

- Data storage tools
    - Microsoft Excel, Google Sheets
    - Microsoft Access
    - DropBox, Google Drive, One Drive
    - Clinical/research data management softare
        - RedCap, Castor, Medidata Rave, Oracle Clinical One
        - Cloud- or institution-hosted
    - Survey websites—SurveyMonkey, Qualtrics, Google Forms

- Data analysis and visualization tools
    - Excel, Google sheets
    - Visualization/dashboarding (BI software)—PowerBI, Tableau, Qlik Sense
    - Web analytics—Google Analytics, Hotjar, Woopra, Chartbeat, SEMrush
    - Programming/stats software—R/Python/SAS/MATLAB/Minitab/Stata

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Portal Demonstration Screenshots

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Demo topics list (follows screenshot order)

Landing page view—overview of all projects with basic info
- Open enrollment vs required approval to join
- Dates
- Project type
- Status
- Security access—edit ability vs not

Basic user notifications on changes

Menu options for entering collaborative (dictated by status)

Collaborative information views
- Tags/categories
- Information pages
- Sponsors, documents, users tabs—not editable, dictated by user assignments & uploads

Collaborative data entry
- View current entries
- Create a new entry & show data form
- Dashboard interactivity
    - Filters
    - Hover on map visual
    - Expand view in table
    - Info tabs for multiple views

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My Collaboratives

Home Page › Collaboratives

🔓 Pediatric Readiness Quality... ⋮

Collaborative Dates: 6/1/2023 to 5/31/2024
Last Modified: 3/28/2024

Status: Collecting Data

♻ PDSA Cycle   📝 Read/Write Access

🔒 FEMA Region V Situational... ⋮

Collaborative Dates: 9/27/2023
Last Modified: 3/28/2024

Status: Collecting Data

📝 Read/Write Access

🔓 Catheter-Related Bloodstream... ⋮

Collaborative Dates: 12/21/2023
Last Modified: 3/28/2024

Status: Closed

♻ PDSA Cycle   📖 Read Only Access

🔓 Hospitalization Prevention for... ⋮

Collaborative Dates: 12/27/2023 to 2/1/2024
Last Modified: 3/28/2024

Status: Recruiting

♻ PDSA Cycle   📖 Read Only Access

🔒 The Pediatric Hazard Vulnerability... ⋮

Collaborative Dates: 3/13/2024
Last Modified: 3/22/2024

Status: Collecting Data

📝 Read/Write Access

Test Children's Hospital

lity...

/31/2024

📝 Read/Write Access

🔒 **FEM**

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Status: (

stream...

⋮

📖 Read Only Access

🔓 **Ho**

Collabor

Last Moc

Status: |

♻ PDSA

Notices

Collaborative set to Collect Data status

Collaborative 'Hospitalization Prevention for People Living with Coronary Heart Disease - DEMO' is now ready for data collection.

🕐 Thursday, March 28, 2024 5:40 PM

Mark read   Delete

Collaborative has been closed

Collaborative 'Catheter-Related Bloodstream Infections (CRBSI) Reduction QI- DEMO' has been closed.

🕐 Thursday, March 28, 2024 5:39 PM

Mark read   Delete

Collaborative set to Collect Data status

Collaborative 'Pediatric Readiness Quality Collaborative - DEMO' is now ready for data collection.

🕐 Thursday, March 28, 2024 5:38 PM

Mark read   Delete

You are now a Collaborative User

You have been added as a Collaborative User of the

Notice history

🔓 Hospitalization Prevention for People Living with Coronary...

Collaborative Dates: 12/27/2023 to 2/1/2024

Last Modified: 3/28/2024

📁 View

Status: Recruiting

♻️ PDSA Cycle

📖 Read Only Access

🔓 Catheter-Related Bloodstream Infections (CRBSI) Reductio...

Collaborative Dates: 12/21/2023

Last Modified: 3/28/2024

📁 View

📄 View Report

Status: Closed

♻️ PDSA Cycle

📖 Read Only Access

FEMA Region V Situational Awareness Surveillance - DEMO

COLLECTING DATA   FEMA REGION V

Start Date : 09/27/2023   **End Date** :

Data Collection

FEMA Region V Situational Awareness Reporting Form   Add Record ⊞   View Records 📁

| Background | Purpose | Data Collection Overview | Resources | Sponsors | Documents | Collaborative Users |

In 2019, the U.S. Department of Health and Human Services' Assistant Secretary for Preparedness and Response (ASPR) established the Eastern Great Lakes Pediatric Consortium for Disaster Response (EGL-PCDR) as one of ASPR's two Pediatric Centers of Disaster Excellence (PDCOEs). EGLPCDR is comprised of six children's hospital and other key strategic partners, all located within the region. The six hospitals are:

1. University Hospitals Rainbow Babies and Children's Hospital (Cleveland, Ohio)
2. Cincinnati Children's Hospital (Cincinnati, Ohio)
3. CS Mott Children's Hospital / University of Michigan (Ann Arbor, Michigan)
4. Nationwide Children's Hospital (Columbus, Ohio)
5. Children's Hospital of Michigan (Detroit, Michigan)
6. Spectrum Health / Helen Devos Children's Hospital (Grand Rapids, Michigan).

Collectively, working as the APPR PDCOE, these partners harness and develop best-practices on disaster preparedness and response and share them with other children's and nonchildren's hospitals and affiliated entities in the region. The goal is to help advance a national model of pediatric disaster preparedness and response by providing a multipronged approach to address gaps within pediatric care across the disaster cycle spectrum of mitigation, preparedness, response, and recovery.

The PDCOE's deliverables centered on the following five activities, which are described in this report:

1. Develop coordinated pediatric disaster care capability
2. Strengthen pediatric disaster care preparedness plans and healthcare system coordination for pediatric medical surge
3. Enhance statewide and regional pediatric medical surge
4. Increase and maintain healthcare professional competency through development and delivery of a standardized training program
5. Enhance situational awareness of pediatric disaster care capacity, capability, and assess regional readiness.

Test Children's Hospital

FEMA Region V Situational Awareness Surveillance - DEMO

FEMA Region V Situational Awareness Reporting Form

2 records   **+ Create New Record**

Record ID	Version	Status	Created	Last Updated	Action
S-1-192	v1.24	Complete	01/24/2024	1/24/2024	
S-1-193	v1.24	Complete	01/24/2024	01/24/2024	

< Previous   Page 1 of 1   Next >

ASPR EGL Situational Report for the Region V for Kids

0%

Site Information

Hospital Location *

Select... ▼

Your Email Address (For Confirmation Purposes Only) *

Report for prior week ending on *

mm/dd/yyyy 📅

Data Reporting Start Date: *

mm/dd/yyyy 📅

Data Reporting End Date *

mm/dd/yyyy 📅

Next

Regional V for Kids Situational Awareness Dashboard

Hospital Location

| All | ∨ |

Date

| Last | ∨ | 12 | Weeks |

EMERGENCY DEPARTMENT

Average ED Volume	Average ED Mental Health Visits	LWBS
1.15K	**24.22**	**36.16**
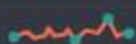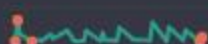
BED OCCUPANCY

Hospital Occupied Beds	NICU Occupied Beds	PICU Occupied Beds
451.33	**84.33**	**30.10**
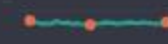
RESPIRATORY INFECTION WEEKLY POSITITY RATE TRENDS

Hospital Location	COVID-19	Influenza B	RSV	Influenza A
⊞ Illinois				
⊞ Indiana				
⊟ Michigan - Eastern				
⊟ 2024				
⊞ February				
⊞ March				
⊞ Michigan - Western				
⊞ Minnesota				
⊞ Ohio - Central				
⊞ Ohio - North				
⊞ Ohio - South				
Total				

Average Respiratory Infection Positivity Rate for Observation Period

Select Respiratory Infection

| COVID Positivity Rate Total |
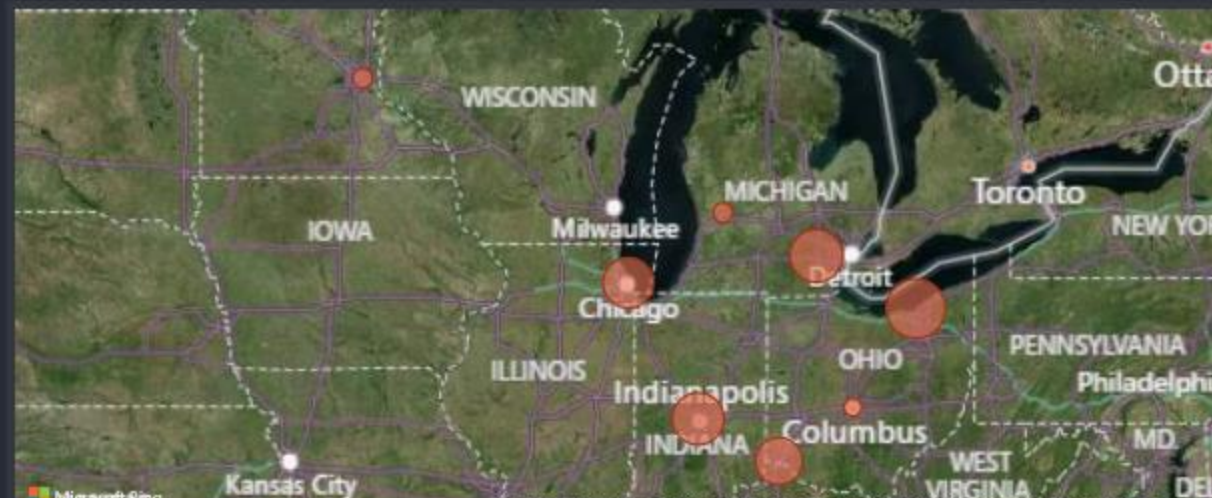
Upcoming May and June Webinars/Office Hours:

May 21– Emergency Department Provider Insights on Pediatric Mental Health: Possible Role of the PMHCA with Ann Dietrich. I 3-4PM ET

June 13 –Toolkit Tutorial Webinar: PMHCA ED Expansion– Installation Phase with Oklahoma PMHCA | 2-3 PM ET

June 25 - Office Hours: Meet with a QI Coach-Key Driver Diagram Drafting and PDSA Assistance - prep for July Meeting in Cleveland-| 3-5 PM ET

EIIC
EMSC Innovation and
Improvement Center