#NHCPC24

NATIONAL HEALTHCARE COALITION PREPAREDNESS CONFERENCE

Visions of Progress: Sustainable Strategies for Emergency Preparedness & Resilience

Presented By:

MESH

Pediatrics and High Consequence Infectious Diseases (HCID): Challenges and Opportunities

Children's National

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Agenda

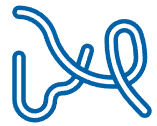
- Define HCID
- NETEC/NSPS Overview
- Prepare your STAFF for Peds Patients
- Prepare your STUFF for Peds
- Q&A

What is an HCID? The ”general” definition:

- **Severe or life-threatening**: They have a high mortality rate and may cause serious illness.
- **Highly contagious**: These diseases are often easily spread from person to person through respiratory droplets, bodily fluids, or other means.
- **Difficult to treat or lack effective treatments**: HCIDs may have limited or no treatment options, making control and containment critical.
- **Potential to cause an outbreak**: They can cause significant public health impacts if they spread in communities, hospitals, or other settings.

Evolution of the NSPS

The NSPS evolved from an earlier tiered system – the Regional Ebola Treatment Network (RETN) – which was stood up in response to the 2014 Ebola outbreak. Since then, the NSPS has grown and shrunk based on active emergency responses, but current efforts aim to make the NSPS more sustainable.



Ebola Outbreak

COVID-19 Pandemic

2014 | **2015** | **2018** | **2020** | **2021** | **2022**

In response to Ebola, ASPR established the **RETN** with 10 RESPTCs and established the National Ebola Special Pathogen Training and Education Center **(NETEC).**

In addition to the RESPTCs, **SPTCs and Assessment Centers** were established to provide more access to care facilities.

In response to COVID-19, ASPR **rebranded** the RETN to become the NSPS, and expanded its mandate to include all special pathogens.

NETEC rebranded in 2019 to the National Emerging Special Pathogen Training and Education Center, inclusive of all special pathogens.

To expand the tiered system for special pathogen response, ASPR tasked NETEC with developing the **NSPS Strategy** for a more coordinated system.

NETEC continues to lead the **NSPS Strategy Implementation** which includes developing the NSPS System of Care minimum capabilities for each Level and providing coordination support.

NSPS Overview

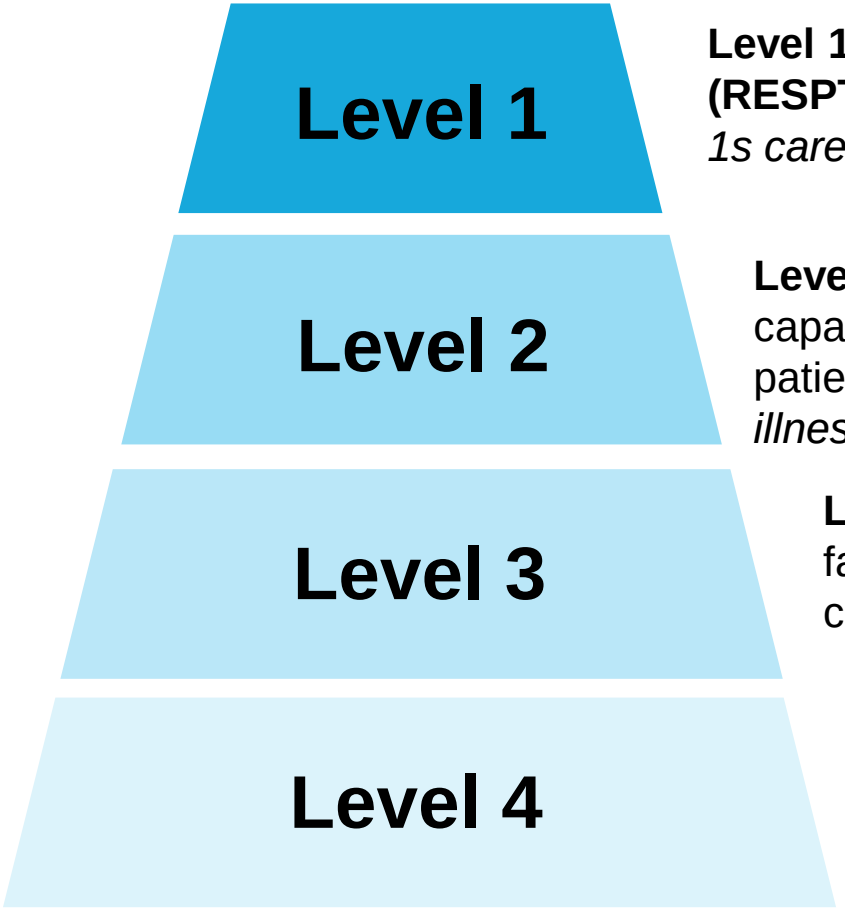
What is the NSPS?

The National Special Pathogen System (NSPS) is a tiered System of Care with four facility levels (e.g., Level 1, Level 2, Level 3, Level 4) that have increasing capabilities to care for suspected or confirmed patients with High Consequence Infectious Diseases (HCIDs).

NETEC SERVES AS THE COORDINATING BODY OF THE NSPS

H.R.2617 - Consolidated Appropriations Act, 2023 ***"directs NETEC to serve as the NSPS coordinating body… [responsible for] establishing a robust NSPS and integrating NSPS with other health care delivery systems of care for emergencies..."***

The Tiered System of Care



Level 1 facilities, or Regional Emerging Special Pathogen Treatment Centers (RESPTCs), are regional resources hubs which provide highly specialized care. *Level 1s care for patients for their duration of illness.*

Level 2 facilities, or Special Pathogen Treatment Centers (SPTCs), have the capacity to deliver specialized care to clusters of patients and serve as primary patient care delivery centers. *Level 2s can care for patients for their duration of illness.*

Level 3 facilities, or Assessment Centers, are widely accessible care delivery facilities, able to conduct limited basic laboratory testing, stabilize patients, and coordinate rapid patient transfer. *Level 3s can care for patients for 12-36 hours.*

Level 4 facilities, or All Other Healthcare Facilities, can identify, isolate, inform, & initiate stabilizing medical care; protect staff; and arrange timely patient transport to minimize impact to normal facility operations.

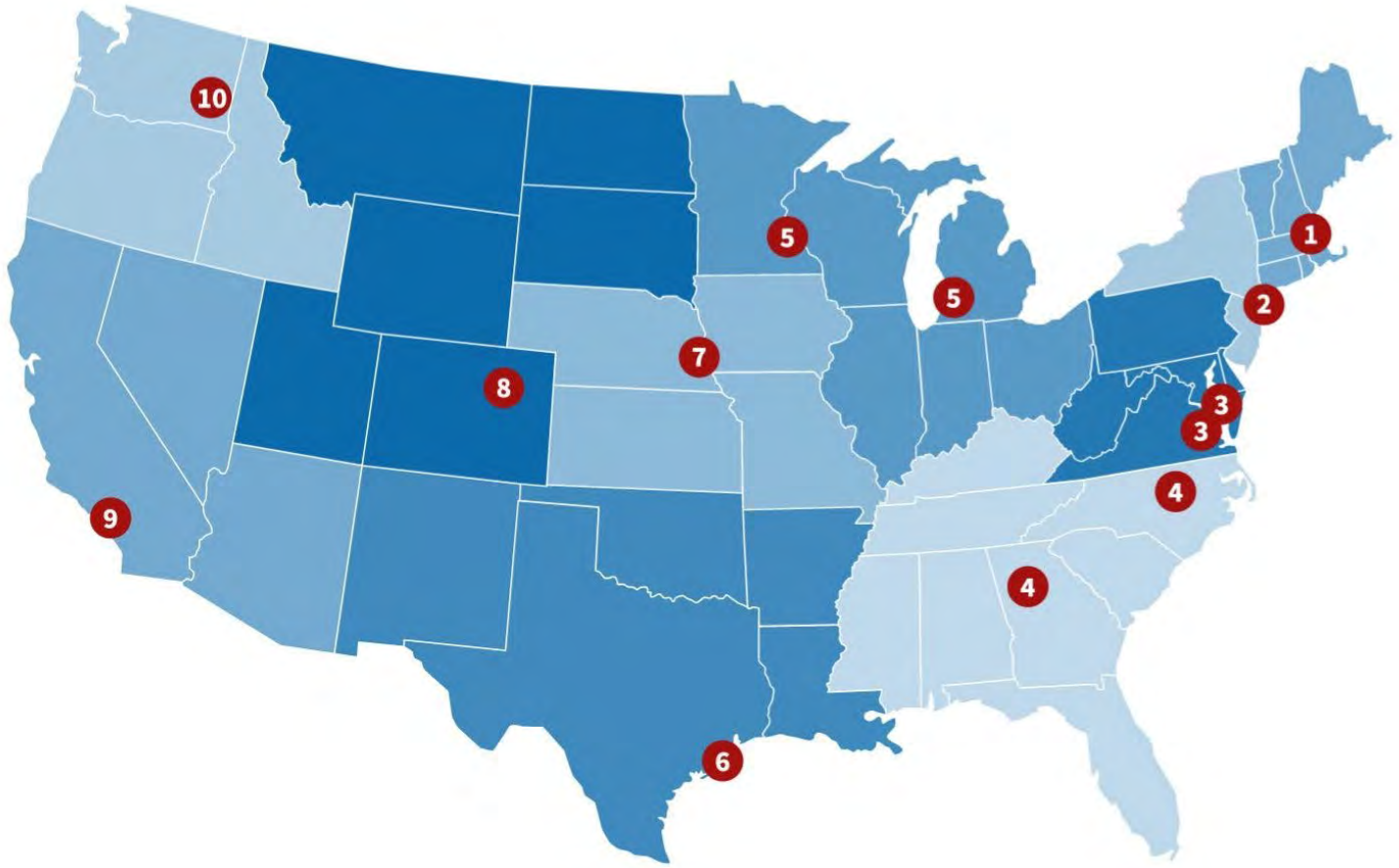
Components of the NSPS

The NSPS is a **hub-and-spoke model** where ‘hubs’ (Level 1s) provide supporting centralized services to the ‘spokes’ within their domains (Level 2-4s)

NETEC	*Is the NSPS Coordinating Body and provides resources to NSPS members*
Level 1 RESPTCs	*Provides regional coordination and outreach, resources, & highly specialized care*
Level 2 SPTCs	*Provides highly specialized care for the duration of illness*
Levels 3 and 4	*Provides short term safe care and/or coordinates rapid patient transfer to a Level 1 or 2*

EMS connects facilities throughout the NSPS.

Regional Emerging Special Pathogens Treatment Centers



1. **CT, ME, MA, NH, RI, VT**
   Massachusetts General Hospital
2. **NJ, NY, PR, VI**
   NYC Health + Hospitals / Bellevue
3. **DC, DE, MD, PA, VA, WV**
   Johns Hopkins Hospital
   MedStar Washington Hospital Center
4. **AL, FL, GA, KY, MS, NC, SC, TN**
   Emory University Hospital
   UNC Health
5. **IL, IN, MI, MN, OH, WI**
   University of Minnesota Medical Center
   CoreWell Health
6. **AR, LA, NM, OK, TX**
   University of Texas Medical Branch
7. **IA, KS, MO, NE**
   University of Nebraska Medical Center/Nebraska Medicine
8. **CO, MT, ND, SD, UT, WY**
   Denver Health & Hospital Authority
9. **AZ, CA, HI, NV, AS, MP, FM, GU, MH, PW**
   Cedars-Sinai Medical Center
10. **AK, ID, OR, WA**
    Providence Sacred Heart Medical Center & Children's Hospital

Locate your regional contacts, including physician, nursing, pediatric, and operations leadership, as well as local and state health partners.

Components of the NSPS

The NSPS is made up of a four-level tiered System of Care

Level 1 – *Regional emerging special pathogen treatment center and hub*

Level 2 – *Special pathogen treatment center*

Level 3 – *Assessment center*

Level 4 – *All healthcare facilities*

The NSPS Coordinating Body is led by NETEC and provides *services to* NSPS facilities such as…

Education & Training

Consultation and Assessment

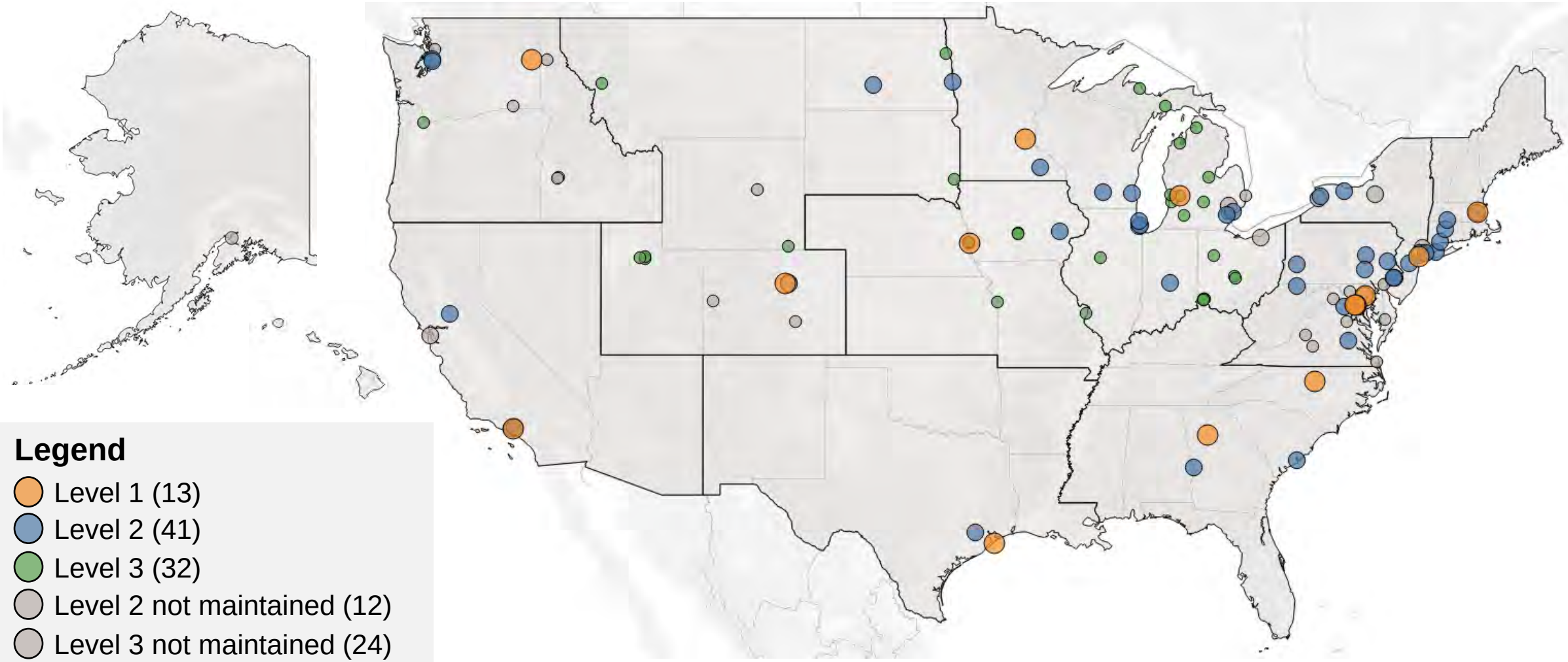
Special Pathogen Research Network (SPRN)

International Partnerships & Programs

Additional partners, such as EMS and public health, are essential for the coordination of the System

Draft System of Care Current State Map

Please note that data collection is in progress and not all regions are fully visualized



Legend

- Level 1 (13)
- Level 2 (41)
- Level 3 (32)
- Level 2 not maintained (12)
- Level 3 not maintained (24)

High-Level Minimum Capabilities Comparison

The table is intended to provide a high-level sample of quantifiable difference across levels and does not include all minimum capabilities.

Capabilities	Level 1	Level 2	Level 3
Care Duration	Duration of illness	Duration of illness	12-36 Hours
Capacity for VHF, airborne	2 VHFs 10 airborne	1-2 VHFs 4 airborne	1+ isolation space
PPE Supply	2 VHF cases for at least 7 days onsite (with plans to support 21 days of care)	1-2 VHF cases for at least 7 days onsite (with plans to support 21 days of care)	3 VHF cases for 12-36 hours (before resupply)
Exercises	Quarterly	At least twice annually	At least once annually for mystery patient exercise
PPE Training	Quarterly	At least 2x annually	At least 1x annually
Skills Training	Quarterly	At least annually	--
Lab Testing Ability	Clinical lab testing	Clinical lab testing	Point-of-care onsite clinical lab testing

PREPARE YOUR STAFF FOR PEDS

CHiRP

CHILDREN'S HIGH RISK PATHOGENS TEAM

Full Scale Exercise: July 2024

VIDEO OF EXERCISE

https://youtu.be/mXxzpUN-__Q

Communication

Intra-organizational Communication

Whom

Department of Health –local, state

NSPS sites

Health Care Coalitions

Critical Access sites

EMS / transport

CDC

What

Testing coordination

Transportation Coordination

Public messaging

Family monitoring

SME support

Disposition process

Inter – organization Communication

Organization huddles

Include all necessary stakeholders

Written communication plan

Incorporate family needs

Routine and daily huddles

Medical care status

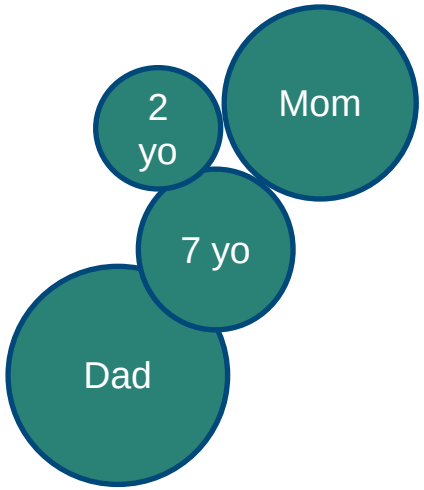
Staff structure

Communication lead

Patient isolation

Communication with child's family

- Unified communication
- Identify 1-2 roles to consistently communicate with the family
- Sign out communication
- Avoid conflicting information
- Clear, transparent, simple



President

Director

Child
Life

Nurse

Nurse

Respiratory
Therapist

Nurse

Patient

Case
Managers

Doctor

Mom

Pediatric Stage Considerations

Overarching principles

Invasive procedures

Anxiety
Separation

Fear
Illness
Procedures
New environment

Pain experience

Infants and Toddlers

Total dependence

- Feeding
- Diaper changes
- Communication
- Emotional support
- Comfort items

Separation Anxiety

- 8 months to 3 years
- Cries, screams, clings to parent, tantrums
- Verbally and physically aggressive
- Physically tries to escape/find parent
- Sad, withdrawn, regress, refuse to eat/drink

Pre and School Age

- Somatization of emotions
- Sleep disturbance
- Guilt and shame
- Need to understand why
- Autonomy, choices, participation
- Beware the passive child
- Comfort items
- Ipad with movies/games/education

Teens

- Reliance on friends
- Social media
- Fear appearance and stigma
- “Act” Brave
- Prior trauma or medical events
- Self autonomy
- education/movies/games on ipad

Prepare Your Stuff for Pediatrics


AND THEY THOUGHT THEY COULD
CONSIDER ME AS A TINY ADULT

Remote Preparation and Support for Procedures

- Working with in room staff to facilitate education, preparation and support to patient about procedures and plan of care

- Real medical materials for specific procedures
  - Active ownership, participation and cooperation in process
  - Dispel misconceptions and fears
  - Familiarization with new materials

Enhancing Family Presence in Healthcare

Utilizing Technology for Connection

Technology can play a vital role in keeping families connected. Most children are familiar with using phones, tablets, or computers for video chats, making it easier for them to communicate with loved ones in healthcare settings.

Encouraging Physical Presence

Whenever possible, aim for physical presence of family members. This could be through a unit window or by training parents on how to use personal protective equipment (PPE) to safely visit their loved ones.

Normalization Strategies for Prolonged Isolation

Work with patient and family to support individualized needs to make space more comfortable and engaging for patient.

- Favorite toys
- iPad for diversional normalization, distraction during procedures and communication
- Room Decorations
- Designated play area (non procedural space) in room
- School engagement

Working with family to maintain connection with parents, siblings and peers.

- Supporting sibling education about medical process
- Protected family time
- Setting daily routine

https://www.youtube.com/watch?v=LBrp2esVPfs

Questions and Answers

Take Home Considerations for Pediatrics

1. Work closely with your support team:
    1. Child life/Social work
2. Prepare patient tablets/iPads with individual with preloaded content and headphones
3. Children will have fear and anxiety that present differently at different ages
4. Have a communication plan that employs risk communication
5. Educational content ready to go
6. Once admitted need to consider strategies for prolonged isolation

- QR code for

Timmy’s Ambulance Ride