



Sites Represented Among Call Attendees:

- Henry Ford Health System (Detroit, Allegiance, West Bloomfield)
- DMC (Sinai-Grace, Huron Valley-Sinai, Children's Hospital of Michigan)
- Spectrum Health (Lakeland, DeVos Children's Hospital)
- Beaumont Health (Troy, Royal Oak, Farmington Hills)
- St. Joseph Mercy Hospital Ann Arbor
- Sparrow Hospital
- Hurley Medical Center
- Covenant HealthCare
- St. Mary Mercy Livonia
- Michigan Medicine
- Munson Medical Center
- Lurie Children's Hospital Chicago

MEDIC Coordinating Center Staff Attendees: Keith Kocher, Michele Nypaver, Jason Ham, Michelle Macy, Andy Scott, Alyson Stone, Carrie Smith, Megan Hogikyan, Christie Radden, Joan Kellenberg
DISCUSSION TOPIC: Unique Considerations for COVID19 in the Pediatric Population

Town Hall Goals:

- Share and discuss special considerations for working with the pediatric population during this COVID19 pandemic
- MEDIC is in a unique position as a convener and connector of EDs across the state of Michigan
- We are at our core a learning collaborative
- This Town Hall grew out of a perceived need for the opportunity for all of us to share and learn from each other during this moment of crisis, and especially as relates to ED operations

Site-by-Site Status Check

- 1. What is your experience with COVID19 infections in children?
 - a. Criteria for testing
 - b. Current PPE standards for pediatric patients
 - c. Treatments considered aerosolizing?
 - d. Visitor policies





Spectrum Health DeVos Children's

- Testing requirements for pediatric patients aligns with testing requirements for adults
 - Testing kids admitted to hospital with fever/respiratory symptoms, as well as kids who are immunocompromised, and kids who are coming from a resident pediatric facility or group home
- As of today have tested 82 pediatric patients, majority inpatient, all negative
- PPE standards, any patient coming into the ED with any respiratory symptoms +/- fever is being put in respiratory precautions, providers are wearing gloves, gown, eye protection, masks
- Just stood up triage tents outside
 - Patient presenting with fever and respiratory symptoms are going through the triage tent, get vital signs, brief history and physical, and if deemed well enough they are not actually coming into the emergency department
- Everything with the exception of a normal nasal cannula is being treated as aerosolizing
 - N95 mask or PAPR required in these cases, minimizing the number of providers in the rooms where these treatments are being rendered
- Very strict visitor policy, one caretaker allowed in the room with any patient
 - If caretaker is asymptomatic they do not wear a mask, if they have respiratory symptoms they are to wear a mask
- Low ED volumes overall, seeing 1/3 to ½ of patients typically seen in the ED

Sparrow Hospital

- Assuming COVID for all resuscitations vis-à-vis PPE
- Visitor policy was initially one parent, has moved to two parents
- Testing aligns with adult policy, primarily patients admitted with respiratory symptoms, no positive cases yet
- All ED volumes are down

Munson Medical Center

- Testing follows state/CDC guidelines, correlates with adult site guidelines
- Observing standard PPE guidelines for asymptomatic kids
- For PUI/COVID positive patients following droplet contact guidelines, if patient is being given something aerosolized following "airborne" protection guidelines
- 1 visitor, making some case-by-case exceptions for specific cases
- Volumes are very low
- Triage tent set up and ready to go, haven't started it yet because haven't had volume yet to justify it
 - Working to determine age cut off for children able to go through the triage tent unaccompanied





o Reached out to MEDIC Clinical Champion at St. Joseph Mercy Ann Arbor (Dr. Lee Benjamin) to learn about policy in place there currently for children

St. Mary Mercy Livonia

- Following CDC guidelines for testing
- Any patient who walks into the ED is given a mask
- If concern for COVID, providers are using facial shields with goggles, surgical masks, contact gowns, gloves
- Drive through up and running
 - Higher volumes seen during the week, swabbing ~30-50 patients
 - Lower volumes on the weekends, swabbing ~20 during the day and another 10-15 at night
- Use N95s or PAPR for high risk procedures like intubations or nebulizers, these haven't happened too much yet for pediatric patients yet
- 1 parent per child visitor policy

Michigan Medicine

- 1 PUI pediatric patient, not hospitalized
- Following CDC guidelines for testing
- COVID hotline that calls directly into infection control staff so that if there is a patient who doesn't
 meet the guideline for testing but ED provider would like to have tested, this service can help
 adjudicate those scenarios
- MM now requires all providers wear a surgical mask on entry to the hospital, during ED shift (changing w care of respiratory droplet pts and those w potential for COVID).
 - Providers in CES wear surgical mask all shift, and weeye protection on entry to rooms with respiratory droplet isolation and special pathogen COVID suspicion
 - Pts w respiratory symptoms also wear a mask
 - Pts are placed on droplet precautions for respiratory symptoms, special pathogen for COVIDsuspected or COVID-positive
 - o Children w respiratory complaints are prioritized to negative pressure rooms
- Aerosolized treatments: high flow nasal cannula, nebulizers used for asthma treatment, NIV, intubation
 - Questions surround patient's episode of ED care when precautions change. Example patient in respiratory droplet and are presumed to be routine respiratory illness, later determined to need aerosolizing procedures and/or escalated care.
 - Any child in respiratory distress requiring resus bay = full special pathogen precautions PPE (N95, hat, eye shield, impermeable gown, double glove)
- 1 person visitor policy, flexible for extenuating circumstances (e.g. end of life care)
- Transition to inhalers (MDIs) instead of nasal cannulas and aerosolized nebulization for asthma (see MDI Q&A at the end of this document)
- Have patient room phone numbers on every room window to limit persons entering the room and enables providers to call into the room from outside once the initial evaluation is over





• Beginning enhanced video consultation options for consultants in specific patients to limit exposures in COVID PUI/positive ED patients and preserve PPE

DMC Children's Hospital of Michigan

- Following CDC guidelines for testing
- Triage tent up outside
 - Doing as much questioning/questionnaire completion and triage outside in tent as possible
 - Doing as much by phone as possible
- Switched over as many asthma treatments as possible to MDIs (metered dose inhalers), trying to stay away from nebulized treatments
- Strict one person per patient visitation policy (exceptions are grave cases/death/dying)
- Have not had any positive tests, ready to accept young adults if needed
- ED volume is low, sharing staff with other hospitals in their market

DMC Huron Valley-Sinai

- Pediatrics department is currently closed to conserve resources, planning to re-open on Friday
- Following PPE and testing guidelines at the doctors' discretion
- One visitor at bedside policy

DMC Sinai-Grace

Switching to MDIs (metered-dose inhalers) for pediatric patients

Spectrum Health Lakeland

- Pediatric inpatient unit is turned into COVID unit
- All pediatric patients likely to go home within 36 hours or less NOW stay in ER for treatment
 - Pediatric hospitalists are co-managing these patients
 - o If pediatric patients are sicker, they will be moved to DeVos Children's
- Tried to switch as much as possible to MDIs
 - o Currently experiencing a critical shortage of MDIs, have about a 6-day supply
- All upper respiratory kids are getting COVID/droplet precautions coming in
- 1 parent per child unless extenuating circumstances, try to room all together
- ED volumes down 35%-45%
- No positive pediatrics cases as of today

Beaumont Health Farmington Hills

• For children under 21 years parents & visitors are permitted, otherwise very strict until further notice no visitors allowed at all Beaumont sites, with some exceptions in which they can only have one





Hurley Medical Center

- Following same PPE/testing guidelines for pediatric patients as for adults
- Volumes in ED are low
- 1 adult caregiver per patient in the pediatric ED, allowing 2 primary care giver adults in the inpatient area, no siblings/extended family permitted
- Created a column for security in the EPIC electronic health record to record the name of the people visiting to ensure the same visitors are returning, limiting exposure to multiple visitors
 - Exceptions for end of life care etc.
- Public safety, unit managers and infectious disease team are working together to ensure everyone visiting is asymptomatic

St. Joseph Mercy Hospital Ann Arbor

- Testing limited to the CDC guidelines, not able to provide testing to everyone due to limited supply
- 3 pronged screening system for kids to determine if they meet the definition for testing
 - Drive through that is managed primarily by APPs on other side of the hospital from the ED so that patients coming to just be screened for testing are not actually going through the ED
 - If a patient arrives to the ED, allowing children age 15 and up to go through the tent screening process without a parent, trying to limit exposure of asymptomatic family members
 - Younger children come into the ED and get testing according to CDC criteria
- Encouraging all providers to wear a surgical mask and eye protection, regardless of patient's chief complaint
 - Many adult patients are presenting with non-respiratory illness symptoms (e.g. diarrheal illnesses, altered mental status, trauma patients) who end up being COVID positive
- Droplet precautions for anyone considered high risk
- Aerosolized procedures include high flow breathing treatments, do not have MDIs currently, intubations are considered aerosolized
 - Some commentary (EMRAP) currently in the national community about whether or not these procedures actually meaningfully aerosolize the virus
- 1 visitor policy unless extraordinary circumstances

Lurie Children's Hospital Chicago

- Have had 9 positive tests among 117 tests sent primarily from the ED
 - Now shifted to testing for only admitted kids
 - Now have in-house testing
 - Only hospitalized 1 child who was positive, they were tested because they were getting admitted for chronic disease exacerbation (didn't have fever or COVID symptoms)
 - The rest of the positive patients were managed via outpatient care
- Teams are cohorting kids according to anticipated aerosolized procedure needs
 - Put tracheotomy/ventilator-dependent kids and kids needing continuous nebulizers into negative pressure room





- Have a pod in the ED that is more negative-pressure than not which is used preferentially for children with respiratory symptoms
- Other hospitals in Chicago are shutting down pediatric inpatient spaces to make room for adult cases, so those kids are being transferred to Lurie Children's Hospital per transfer agreements in place
 - Seems most of these transferred children are unlikely to be COVID+
- Providers within the system at large have started testing positive through community spread or home contact
 - All providers are supposed to be monitoring their temperatures twice daily and not reporting to work if they have respiratory symptoms

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Open Discussion

Metered dose inhalers (MDIs)

- DeVos
 - Respiratory therapists have gone to a multi-use policy for MDIs due to the possibility of a shortage
 - Previously would have dispensed the inhaler home with the patient but are no longer doing this
 in order to maintain supplies
- SJMH AA
 - o Previously used MDIs as multi-use
 - o Short on MDI supply and seems will not be restocked soon due to national demands
- SMML
 - Short on MDIs, allowing patients to use their own if they bring them in
 - Hospital is saving MDIs for inpatient use so strictly using nebulizers in the ED right now

Sectioning ED into "clean vs. dirty" respiratory areas?

- Munson
 - Trying to cohort parts of the ED
 - One side for respiratory cases
 - Cohorting in waiting rooms
 - Part of this includes vertical, rapid discharge from the waiting room before the tent system is needed
- Hurley
 - Trying to cohort adults into a pod in the ED
 - Pediatric pod is separate from the adult pod
 - Switched the observation unit to a COVID holding unit for PUIs
 - Switched some inpatient units to cohort individuals
 - Working on additional policies to help safely cohort patients as the volume of cases increases





- HF Allegiance -
 - Waiting room is shut down
 - Vertical triage process starts at the door with taking temperature, mask application, questionnaires
 - Same applies for pediatrics and adults
 - Aerosolizing procedures are same as adults, switching to all MDIs, not using high flow in pediatric cases
 - Pediatric ED visits almost non-existent, hardly seeing any kids at all
- St. Joseph Mercy Hospital Ann Arbor -
 - On the adult side they are taking patient phone numbers and asking them to wait back in their cars until they are called to be seen in the tent – this could theoretically apply for young adults as well (alternative to social distancing in a waiting room)

Age cut off for MDIs in kids?

• Even infants can get MDIs, they just need to breathe in and out 6 times and they will get the delivery of the medication as long as you have a mask that fits them

Low number of children tested and low number of positive pediatric cases reported

- CHM in Detroit still has a significant number of pending tests
 - Patients who are admitted are being discharged and are improving, so based on symptoms and the fact that these kids are improving it is assumed their tests will come back negative
 - About a third of all tests sent have come back so far, all negative
- Believe Seattle Children's had not yet hospitalized a child with COVID
- Believe there has been one PUI at Michigan Medicine, do not believe this patient was hospitalized
- Believe that kids serve as a vector for COVID even when they don't experience severe symptoms, and significant concern is that adult healthcare providers are exposed to these kids and those providers may be more susceptible to COVID