MNCYN & LHSC COVID-19
Weekly Paediatric Regional
Teleconference Update
Minutes

Date: April 2, 2020
1600-1630 hrs.

Moderators: Leanne McArthur, Kristine Fraser

Present: Leanne McArthur, Kristine Fraser, Gwen Peterek, Alison Stevenson, Kelly Finlayson, Sepi Taheri, Tim Lynch, Henry Roukema, Anna Gunz, Jennifer Ouellette, Colleen Ouwendyk, Colleen Ford, Jocelyn Patton-Audette, Leanne Paton, Andrea McPherson, Amanda Sonnenberg, Pam Murray, Carrie Gavigan, Thomas Lecroix, Dana Howes, Crystal Edwards, Kerri Hannon, Brandon Garant, Jessica Kooger, Shannon Sampson, Jackie Koufie, Kirsten Blaine, Paul Kerr, Ram Gobburu, Bryan Giles, Joel Warkentin, Katie Forbes, Sarah Dineen, Alissa Howe-Poisson, Marilyn Koval, Jackie Koufie, Mary Rae,

Item #1: Welcome/Regional Updates, COVID-19 Cases (Leanne McArthur)
Discussion: COVID-19 Case Update

- London: 79 cases, 18 hospitalized, 9 resolved, 3 deaths
- Ontario: 2793 cases, 53 deaths, 2052 PUI, 831 resolved
- Huron-Perth: 16 cases, 0 deaths
- Windsor: 128 cases,1 death, 268 PUI
- Chatham: 8 cases, 0 deaths
- Lambton: 56 cases, 6 deaths
- Detroit: 2472 cases, 83 deaths
- Michigan: 9343 cases, 333 deaths
- Paeds Deaths: 2 in US (6-week old in Connecticut who was medically fragile, other in Chicago), 1 child in UK, 1 child in Belgium
- Prevalence remains low in children, but still really important to watch
- Screening – people are not always being honest with routine F/U appointments etc., Ministry trying to address this through public communications, etc.

Action Items:

- Dr. Lacroix in Sarnia asked about MDI dosing – Kristine will send the information from MNCYN website on dosing and Health Canada future use request form.

Item #2: Children's Hospital, LHSC Updates
Discussion:

Alison Stevenson: No updates

Action Items: None

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Item #3: MNCYN Updates (if applicable) (Leanne/Kristine)
Discussion: Kristine Fraser CPS released another article yesterday on Paediatric Asthma & COVID-19

1. https://www.cps.ca/en/documents/position/paediatric-asthma-and-covid-19
    a. Currently, there is no evidence to suggest young asthmatics are at increased risk for COVID-19 infection, however there is a theoretical possibility a child with asthma who is positive could experience asthma exacerbation & serious morbidity due to the combined effects on the respiratory tract
    b. Concerns have also been raised regarding oral corticosteroid use in COVID-19 positive individuals, based on the possibility of increased viral replication
    c. Current guidelines recommend children with asthma should remain on their current controller medications, asthma exacerbations should be aggressively treated, including the use of oral corticosteroids when needed. Nebulization should be avoided, if possible, due to aerosolizing transmission risk.
    d. Close monitoring of medication shortages is required. The Canadian Thoracic Society has a **table of comparative ICS medication doses** to help guide alternate prescribing

2. Resources page has been updated and posted, now separated into perinatal, paediatric, general resources and infection control & PPE resources. Currently there are 36 resources.

Action Items: None

Item #4: Regional Q&A, Open Discussion
Questions

1. **Family Physician (Marilyn Koval) from Sioux Lookout:**
    - Looking for paediatric clinical pathways, especially for our northern Nursing Outposts away from Sioux Lookout. We are following adult literature & what is being said about importance of oxygenating the lungs and being prepared.
    - Use HiOx masks with Hepa Filters to give higher FiO2 with lower flow as we only have concentrators in the northern Nursing Stations, these go up to 10L/min, while some only go to 5L/min. With paediatric patients, we may not see the numbers or get enough cases to guide treatment, but with adults, we max at 6L/min
    - ***What is the threshold for starting O2 in children & what are the preferred O2 delivery systems? How else can we provide max oxygen? Should we be getting paediatric sets to be able to give higher FiO2 to children? What about antibiotics?***

A: Dr. Sepi Taheri (LHSC):

- Everyone grappling with producing guidelines
- Just came off a nation-wide paediatric T-CON & hoping to have guidelines out in next 24 hrs & we will post these *these are fluid and may change in the future
- These guidelines will be based on the experience of people from China & Paediatric Respiratory Society Guidelines as well as SickKids Guidelines
- Need to define as either mild, moderate or severe disease in children, vast majority of children will fall into mild or moderate group, very few will be severe
- Children need oxygenation to be above 92%, not 90% which may be acceptable with bronchiolitis, but not when they are indeterminate.
- Children usually require minimal interventions
- Antivirals are not useful at all in children and should only be utilized in a Paediatric Critical Care setting in consultation with ID if at all

Q: Marilyn Koval: In nursing stations, we cannot do Rapid test for influenza. What if you miss the flu?

A: Sepi Taheri:

- **Mild Disease**: No antibiotics, acetaminophen for fever
- **Moderate Disease**: may see significant cough, headache, fatigue, myalgia, pneumonia, no need to do CXR, only do minimal amount of tests, may use oral Amoxil, plus Azithromycin as some may have co-infections with mycoplasma
- **Severe Disease**: may need to add Ceftriaxone

Q: Marilyn Koval: Once we get to 4L up north or the minute a child needs oxygen, we will move them out of the community. What is the most appropriate way to escalate the delivery of O2 (high-flow)? We have high flow and are putting a mask over top of the high-flow. We can't use non-rebreather masks unless they have a filter, we only have concentrators at 5L or 10L, so we will use hi-ox mask with a Hepa filter & can get FiO2 of about 80%.

A: Sepi Taheri:

- Anyone who needs 2-4 L FiO2 to maintain saturation at or above 92%, not safe to be kept & needs to be moved to a higher level of care
- Keep max 4 L/nasal prongs so it is not aerosolizing procedure
- Check bloodgas, if evidence of significant hypoxia noted at 4L & struggling to keep sats above 92%, need to get them to a PCCU/ICU
- If hypercapnic & possibly going into respiratory failure, may need to go to high-flow as next step
- If they require intubation, needs to be done in a negative pressure room & N95 masks

A: Ana Gunz: We love high-ox, but if you have algorithm to use high-flow, use that. Put mask over hepa filter, no different than with adults, temporize these pts. & keep in mind the need to transfer them out

- Ornge does not transport with high-flow right-now, even before pandemic they were not
- Start high-flow if necessary & then make decision with ICU team
- Intubation not the best idea, the sicker children often don't have COVID-19, we do not want to lose the gains we have made over the years by not intubating as much and using other non-invasive ventilation like high-flow
- Transport times for those that need high-flow will be longer, better to use the paediatric transport team versus Orgne.
- CH-LHSC is the only true paediatric team. We use a hepa filter with full face mask.
- For these kids, transport will take longer, can use SA carrier
- Recommend high-flow to temporize kids in the meantime

Marilyn: We had first case in Sioux Lookout. In community alone, I have 5 kids with hypoplastic left ventricle & I am very worried about these kids

2. **Tom Lacroix: Sarnia:** I worry about the day-to-day practice & wanted to know if we have any real guidance of what to with children with regular with colds? Are we going to be able to tell families every time a child has a sniffle, they don't need to do a 14-day quarantine?

A: Sepi Taheri:

- This is an evolving situation; we need to improve testing capabilities & rapidity of testing.
- Vast majority of children will have a common cold, very mild, but we need to look into increasing our testing capabilities and until that time, I am afraid this may be what they need to do (self-isolate).
- Rapid test will be a game changer, in South Korea, they did rapid tests and all positive tests had to stay home which flattened the curve
- Currently there is a delay of about 24H at LHSC getting results, but it can take 48H in community
- **Leanne:** From TCON with GTA last night, they said a Rapid test will be available, but will depend if labs can run it – Turn- around time for negative test is 8 minutes and 13 minutes for a positive
- **Sepi:** Children often present with GI symptoms, such as abdominal discomfort, nausea, vomiting & diarrhea. Montreal had their first case of an 8-year old child presenting with appendicitis, no respiratory symptoms and was COVID-19 positive. Children may

present with a surgical presentation such as appendicitis or intussusception with fever (not always febrile), therefore we should have a high suspicion with these children as it could be pro-inflammatory presentation.

- Recently heard of a community contact with paediatricians in London and now all will need to isolate themselves for 14 days, so basically all the community offices will need to be closed, this is quite critical. We don't have the answer Tom.
- **Anna:** FDA in US just approved test which takes for 15 mins, hasn't been verified yet

No other questions

Action Items: Add Clinical Pathway guidelines to MNCYN website once available.

Adjournment: 1630 hrs.