Sites, Systems & Guests Represented By Call Attendees:
- St. Joseph Mercy Health System
- Michigan Medicine
- Munson Medical Center
- Hurley Medical Center
- Beaumont Health System
- Henry Ford Health System
- Spectrum Health Lakeland
- Spectrum Health Helen DeVos Children’s Hospital
- MidMichigan Medical Center
- DMC Children’s Hospital of Michigan
- Holland Hospital
- Michigan Surgical Quality Collaborative

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: “Re-entering Emergency Medicine on the Other Side of the COVID19 Curve”

Grand Rounds Goals:
- Learn how emergency departments across Michigan are planning for re-entry into post-crisis phase, living with COVID19 in the long-term
- 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 Grand Rounds 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 care and operations

Grand Rounds Format:
1. Brief Context
2. Michigan Health Systems Present ED Planning
   a. Spectrum Health Lakeland
   b. Hurley Medical Center
   c. St. Joseph Mercy Hospital Ann Arbor
   d. Beaumont Health System Royal Oak
   e. Henry Ford Health System Detroit
3. Questions & Answers

DISCLOSURES: All speakers reported NO disclosures.
**Brief Context**

- Within the past couple of months, MEDIC has hosted multiple town halls and one Grand Rounds on the COVID-19 response among emergency departments within our network.
- This is not business as usual, we will be living and working in an era with COVID-19 for the foreseeable future.
- Our institutions are beginning to think about activities to get back to something closer to “medicine as usual.”
- Goal for this Grand Rounds is to draw on lessons being learned from health systems across Michigan.

**Health System Presentations – each presenting site reviewed the following for their ED:**

- **What changes in ED operations are planned in response to your health system’s opening of other patient care activities?**
  - Triage
  - COVID19 patient testing
  - Patient flow
  - Staffing
  - PPE
  - Facilities
  - Disposition destinations

- **What is your ED’s biggest challenge in this next phase of COVID19 as hospital systems ramp up other patient care activities?**
  - Coordinating of ED activity with new health system activity
  - Prediction of ED volumes
  - Matching safe staffing models to ED volume
  - Challenges to PPE stock
  - Maintaining safety for COVID vs unknown COVID patients during ED care
  - ED staff wellness
  - Ensuring patients feel that they can safely come to the ED again

- **Does your site have specific metrics to define when changes to ED operations will go into effect?**

- **Were there any ED operations instituted during COVID19 determined to be successful such that your institution plans to keep these permanently?**

**Spectrum Health Lakeland**

- West side of the state did not see the same surge of COVID-19 cases that the east side of the state did.
- Early on Spectrum Health Lakeland stood up outdoor triage tents, based on modeling thought they would be overrun with COVID cases, this really never came to fruition.
  - Took down tents about 2-2.5 weeks ago
- Biggest challenge has been significant drop in volume, 25-45% drop in volume across the three EDs.
  - Pared back hours drastically.
Main hospital in St. Joseph cut back 75% of hours for double coverage, dropped APP coverage by >60% to try and match the volume

- Challenges moving forward with this are really trying to prognosticate what the volume looks like and when they should activate and try to go back to normal
  - Currently taking a week-by-week look at this including day-by-day updates to providers
  - Did not expect this level of management of financial aspects of all caregivers and the impact on them in the reduction of hours and reduction of shifts
  - Managing this unexpected change in staffing needs and the financial impact on providers has been one of the biggest challenges
  - Right now they have a goal of 2 days in a row with 85% of the average volumes then they would flex up staffing but have not come close to that yet

- Now doing a rapid COVID turnaround test for all patients who are going to be admitted, all Level 1 trauma, all cath lab patients and anyone who will be discharged out to communal living who has even the most remote COVID symptoms
  - This has helped with disposition
  - Even a few weeks prior it was challenging to get patients back into AFCs or nursing homes
  - Now set up a disposition where all patients will be tested

- Increasing work with county health department for screening high risk health care workers with mild symptoms or community members who meet the CDC guidelines

- Have drive-through testing areas and when those are closed there are special screening areas within all three ERs
  - Can send these as batched tests and get those results within 24 hours
  - Large increase in the number of tests they are doing
  - Staying consistent at about 10% positive tests

- Challenges related to staff wellness
  - At beginning they were very touched by community outpouring of support, lots of support from local restaurants and groups donating meals to the ED
  - 2-3 weeks ago parameters were changed due to concern for health of all the workers so that only individually wrapped meals could be brought into the hospital, this led to a significant drop in donations during that time
  - Seeing fatigue in staff, newness is over, new norm of donning and doffing PPE is tough, keeping staff engaged in a lower volume environment is an interesting challenge

- Some positive operations elements that have come out of this include:
  - Meticulous handwashing, CDiff rates plummeted to almost 0 throughout the hospital
  - Almost universally, the visitor restrictions have been found to be very helpful for providers, helps them be efficient in the care process
    - Discussing this looking ahead to the new normal, how much do they look at restricting visitors in the ED?
Hurley Medical Center

- Handled some things really well up front, some things were more difficult
- From a triage-screening perspective, implemented icons in Epic to help identify patients who answered yes to some of the screening questions like if they had cough or fever to isolate those patients early – even in triage - so that providers didn’t walk into a room unaware of a need to take PPE precautions
  - Epic icons included one for screening question symptoms, when the patient was being test, and then whether that test was positive or negative
- Conserved PPE quickly up front
  - Put a plan into place for re-sterilizing N-95s, this helped Hurley avoid the kinds of PPE shortages some other facilities may have experienced
- Testing and downstream implications have been a challenge
  - Testing for Hurley was very slow to arrive, they were sending specimens to the state to test for almost the first month, and this had a 5-7-day turnaround time for results
    - This was very challenging with admitted patients as well as homeless patients, those who living in AFC homes or nursing homes i.e. patients who couldn’t be safely discharged to their previous living situations with a pending test
- The CDU (normally the chest pain unit) became a unit for patients with a pending COVID test
  - Hurley has since flexed these spaces back down, with the unit serving as half COVID, half regular operations
- Hurley has many PAs that normally cover a fast-track area in the front of the ED, they were able to reallocate this coverage as the volumes dropped to the back or to the ICU
  - Predict this will ultimately benefit Hurley having these PAs with experience and training working with very sick patients when these PAs come back to work in the ED
- Have eliminated one pediatric shift (from three pediatrics shifts down to two) per day
  - Also flexed the pediatrics area at times to see lower acuity adults while pediatrics volumes are very low
- Hopeful volumes are starting to tick back up, but this is still anxiety-provoking
- Eliminated hall beds, hopeful this stays it is excellent
- Hurley has eliminated all visitors for anyone over 18
  - It’s been helpful from an efficiency of care perspective
  - Probably better to allow for one visitor for end of life decisions/nursing home patients to help facilitate conversations that are difficult to have over the phone
- Hurley has a daily safety huddle held by the Chair for the whole hospital
  - Previously this was held on one of the hospital floors that few or none of the ED providers could make it to, with only about 40 people attending
  - Started to do this huddle on a Google Hangout so everyone can get this update daily at 8 am
    - Approaching capacity of 250 people at these daily meetings
- Going forward, biggest challenge is trying to figure out how to re-open surgeries, are we going to test or just operate with full PPE
St. Joseph Mercy Hospital Ann Arbor

- Quickly ramped up screening tents for low risk patients to keep them from contaminating the rest of the ED
  - As that evolved found that those well enough to utilize this tent were going to the drive through, this has been taken down in the last couple of days so no longer screening through the tent
- Attempting to cohort patients within the ED with some “COVID-cold zones” as the hospital has been doing
- A successful item to note is that our relationship with the hospital in developing alternative care pathways, creating capacity for patients
  - These care processes along with the drop in ED patient census has led to no prolonged stays in the ED for patients awaiting beds
- Biggest challenge is reopening the ED and developing trust within the community, both internally with primary care providers and externally with the patients
  - We can keep patients safe in the ED and the hospital
  - Screening all patients through a paucity of entrances to the hospital
    - Everyone is screened prior to entry into the ED (prior to triage or registration)
    - Anyone flagged gets a mask and is put directly in a COVID bed rooms
- Altered staffing patterns, feeling the same struggles as other sites mentioned
- Working on staff wellness, continues to evolve
  - Having video meetings for clinical and operational updates as well as social webinars for staff to just share with each other
  - Generating professionally moderated wellness webinars for the entire staff, working to see if it would be useful to develop one specifically for frontline medical staff and ED providers
  - Developed an 80-page resource book for the entire medical staff
    - Numerous sources of communication and no singular source of truth, trying to take down the barrier of what is the latest and greatest with this electronic book
  - Psychologist private coach offering 1:1 coaching session to help people get through this time
- Telehealth as a potential big win for St. Joseph Mercy
  - Had already been working on telehealth, and rapidly ramped this up doing things like medical screening exams via telehealth and optimizing tele-triage
  - Established e-PPE – “internal telehealth”
    - Video cameras and audio in the patient rooms, provider can talk to the patient from their computer station without using contact PPE, risking provider/others’ exposure
    - Hopeful this is continued to be used
    - Facilitated by the In-Touch platform (third-party vendor) in the ED
  - Generating telehealth outpatient follow-up platform
  - Have a home oxygen plan for those with no risk factors, but suspected COVID, to go home with oxygen and a video platform for follow-up
Hopeful this can be leveraged post-COVID for things that would otherwise routinely be admitted for

**Beaumont Health System Royal Oak**

- Unique ED operations that pandemic has allowed Beaumont to put forward
  - Initially saw a large uptick in the amount of COVID patients
  - Also saw a decline of all other patients (strokes/heart attacks/appendicitis etc.) beginning in April until about a week and a half ago
    - As COVID cases have dropped they have started to see some of these more “classic ED” conditions
    - Still a very restricted volume of patients, however, volume is 65% down from typical with pediatrics volumes down about 85%
    - Reduced number of clinical hours that attending staff are working
    - Nurses and APPs are working reduced hours and using a PTO bank
  - Tentatively plan to continue this staffing strategy for the next two months
  - Hopeful more shifts can be added back as the volume demands
- Within the pediatric emergency area, we’ve seen innovation in a focus on wellness:
  1. Our pet therapy team created a YouTube video of all of our dogs
  2. Our child life therapists created a wonderful document that gives parents activities to do with our children to help during this stressful time
- Started to develop an idea of “parallel hospitals” to try and help encourage patients who should come to the ED for care
  - Stationing an APP at the front door from 6am-midnight
    - 2 entrances, one for screening likely-COVID-positive and one for screening COVID-unlikely
    - Triaged separately from each other, rooms in ED separate from each other
  - Specific hospital floors are designated COVID and others are non-COVID
  - Messaging this information to PCPs and the public at large – we are keeping staff, patients, facilities separate, trying to address the fear of “catching coronavirus” if you come to the ED for care
- Allocation and emphasis on PPE
  - Worked hard to make sure PPE is on time, correct, and available across the hospital system
  - Curbside testing, started early in the pandemic, in the first few weeks saw 200-300 patients per day through this
    - Think this could be used for a bad flu season or other infectious disease outbreaks for which people need tests
    - Helped to generate increased revenue and ability to bill for the visits early on
- Biggest challenge is the monetary side, how to adequately run and staff department with severely reduced volumes, have already had to drastically reduce staffing model, hopeful this is temporary

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Henry Ford Health System Detroit

- Similar experience to Beaumont and others
- Tent adjacent to ER, split and sort patients into separate entrances, has helped patient feel safe
- Volumes are down 60%
  - Cut nursing, senior staff shifts to try and right-size staffing
- Closed urgent care in ED in the pediatric area, shifting those patients into general population of mixed acuity
- What’s the next phase to help the ED look and feel normal so that patients feel comfortable?
  - Bottom line – need the tent for the space to separate while the disease prevalence is this high, even though recognize that it can be concerning for patients to see the tent upon arrival
  - Looking at everything on a two-week cycle, reassessing:
    - Do we need the tent?
    - Can we maintain on this staffing model? Can we eliminate more staffing?
  - Opening up for urgent surgeries, pivoting drive through testing to help assist surgical colleagues with screening the surgical patients
  - HFH has in house testing including some STAT testing with 1-2-hour turnaround
- Significant questions now include:
  - What do we do with people with 3 week positive tests?
  - What about patients who no one thinks are COVID-positive but test is still pending?
  - Navigating the ED flow as COVID is still prevalent, if decreasing
- As old business comes back working on maintaining safety for non-COVID presentations as ERs fill back up
- Hard to plan for this exactly without putting our toe into the water of increased volumes

Moderated Question & Answer Session

Key Lessons from Speakers Solicited via Email Post-Call:

“What we learned: The COVID epidemic forced our Medical Center to communicate in new ways, and the use of technology in our communications has greatly improved the breadth of the audience that can be part of daily informational updates throughout the hospital. In addition the flexibility demonstrated by our staff--nurses, PAs, and physicians--to care for patients in different physical spaces and to flex into areas where we were needed is a skill that we will carry forward and will continue to allow us to provide exceptional care to our patients.” – Molly Bolton, MD, Department of Emergency Medicine, Hurley Medical Center, Assistant Professor University of Michigan – Department of Emergency Medicine

“Covid has forced us all to change rapidly to the unknown. Although a great challenge, we learned a lot in the process. We now have a stronger working relations with many local and regional organizations and have learned to leverage technology to enhance communication with our patients and their families. We've also gained a greater working understanding of life with PPE, improved triage processes and the strain of changing
"COVID19 has presented emergency department[s] with unique challenges, as well as, opportunities to innovate and grow to meet these challenges. I continue to be impressed by the creativity and resilience of the emergency medicine community in adapting to this pandemic. One lesson learned from this was the need to have an adaptive staffing model to meet patient demands. Typically, we have been able to have relatively predictable volumes and could match that with a rigid staffing model. In this pandemic, we have experience both highs and lows of volume, and have needed to learn to adapt to that." – Michael Gratson, MD, MSHA, FACEP, Senior Staff Physician Beaumont Health, Department of Emergency Medicine Beaumont Hospital Royal Oak

"We learned that together with our hospital partners, we could remove barriers to innovative care solutions for our patients while protecting our providers and conserving PPE. By rapidly standing up telehealth infrastructure and IT platforms to perform screening exams, serial evaluations within the ED, and in home follow-up, we place the interests of all stakeholders at top of mind." – Lee Benjamin, MD, MBA, FACEP, FAAP, Medical Staff Officer, Director of Pediatric Emergency Center Clinical Operations, St. Joseph Mercy Hospital Department of Emergency Medicine

“It was helpful to hear the similar challenges we, as emergency providers, share across the state as we try to re-enter 'normal' ED operations. Sharing strategies for this adjustment has been helpful as we make difficult decisions around staffing and patient flow.” – Seth Krupp, MD, Medical Director, Vice Chair of Operations, Department of Emergency Medicine, Henry Ford Health System Detroit