COVID Crisis
Monumental Changes for Health Care
MOSHPIT

MASKS

OUTDOORS

SOCIAL DISTANCING

HANDWASHING

PERSONAL & PUBLIC RESPONSIBILITY

INFORMATION

TALKING TO PROFESSIONALS
UMMC

COVID 19 Tracking - DTC and UMMS

Including Cap Regional

Our Values
Respect and Integrity | Teamwork and Collaboration | Excellence and Innovation | Diversity and Inclusion
UMMC

- 68 COVID 19 Patients
  - Critical Care/IMC (45) – T6S(18), MICU(10), 10W(11), T5S(5), T4S
  - Acute care (23) - 13W (14), 13E (6), S5B (2), AED
  - 38 Vented, 3 HFNC, 3 Trach collar
  - 19 ECMO – T6S-16, T5S-3 (Total 22 in house – 3 W6)

- 31 PUI (Person Under Investigation)
  - 10E, 11A (2), 13E, 3DS, C3E/W, C5E, C7E, C8, C9E/W
  - W5B (2), T3S, T5S, AED (13), Peds ED
  - Women’s/Children’s – PICU, MBU

- COVID Recovered (6)
  - 10E, 10W, 11A, 13E(2), T5N

- To Date 362 COVID positive patients cared for (+6)
  - 232 Patients discharged
  - 53 deaths (no change)

- MTC – 8 COVID 19 in house
  - 2 ICU, 6 Acute care
  - 8 PUI
Hospital Systems Overwhelmed

Testing
PPE
Beds
Ventilators
Personnel
Finances
Supply chain
State of MD commits $2.7M to expand pipeline
Validations For CDC EUA and Seegene assays begin
Begin adding trained technicians: increase capacity
CDC EUA validation complete: start processing patient samples
Community testing begins (nursing homes and Eastern Shore chicken plants)
Expanded pipeline operational (estimated)
Seegene validation complete (estimated)

1,000 tests/shift
3,000 test /24 hrs
6,500 tests/shift
20,000 test /24 hrs

Current capacity: CDC EUA
Expanded capacity: CDC EUA
COVID Patients

What we don’t know – how to treat

Exposure $\rightarrow$ Infection (attack rate)

Infection $\rightarrow$ Disease (symptomatic) $\rightarrow$ Transmission

Disease $\rightarrow$ Severe disease (hospitalized)

Severe disease $\rightarrow$ Critical disease (ICU, intubated)

Why is the pulmonary or endothelial disease so severe?

What are the determinates of immunity? B cells (Abs), T cells, Innate immunity? Are there ‘good’ and ‘bad’ Abs?

How long lived is immunity?
Non-COVID Patients

What we don’t know – how to avoid/prevent

Exposure \(\rightarrow\) Infection

Infection \(\rightarrow\) Disease

Disease \(\rightarrow\) Severe disease

Severe disease \(\rightarrow\) Critical disease

Why is the pulmonary disease so severe?

What are the determinates of immunity?

How long lived is immunity?
Non-COVID Patients

Consequences

Visits, Clinics, Elective procedures all canceled

Patients and families afraid to come to offices and hospitals

Increased mortality and morbidity for other diseases

‘Elective’ procedures are now urgent and emergent with worse outcomes

Non-COVID services curtailed

Marked increases in inefficiency and throughput
Faculty, Staff, Trainees

What we don’t know

Exposure $\rightarrow$ Infection
Infection $\rightarrow$ Disease
Disease $\rightarrow$ Severe disease
Severe disease $\rightarrow$ Critical disease

Why is the pulmonary disease so severe?
What are the determinates of immunity?
How long lived is immunity?
Going Forward

Diagnostics – PCR (infection), Abs (exposure)
Therapeutics
Vaccines, Prophylactics
Supply chain
Institutional leadership
Re-organization of patient-caregiver interaction – ‘Zoom clinic’
  Limited by availability of technology
  Limited by administrative response, e.g., CMS, insurance
We’ve become like our dogs
We wander around the house all day
looking for food
When we get too close to strangers
we’re told “no”
We get really excited about a car ride
When our friends walk by, we wave “hi”
to them through the window.