WELCOME to the

*Learning Together About COVID-19*

Session will start in less than 15 minutes
Prognostication & Goals of Care in the COVID-19 pandemic

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Conflict of Interest Disclosure Statement

No Conflicts of Interest
I’m sure you have seen tables like this...

<table>
<thead>
<tr>
<th>Age</th>
<th>Case Fatality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50</td>
<td>&lt; 0.5%</td>
</tr>
<tr>
<td>50 – 60</td>
<td>1%</td>
</tr>
<tr>
<td>60 – 70</td>
<td>4%</td>
</tr>
<tr>
<td>70 – 80</td>
<td>10%</td>
</tr>
<tr>
<td>&gt; 80</td>
<td>20%</td>
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</tbody>
</table>

Adapted from:
Verity *et al.* Lancet 2020
Onder *et al.* JAMA 2020
But what about prognostication for individual patients with severe illness?

COVID-19 critical illness and COVID-19 ARDS is similar to “regular” critical illness and “regular” ARDS, and I think standard prognostication tools are likely to work well*

SOFA score frequently used and easy to calculate

*My opinion with some evidence Zhou et al. Lancet 2020
<table>
<thead>
<tr>
<th><strong>PaO₂</strong></th>
<th><strong>Norm: 75 - 100 mm Hg</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FiO₂</strong></td>
<td><strong>See Evidence for estimating FiO₂ from oxygen flow/delivery rates</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>On mechanical ventilation</strong></td>
<td><strong>Including CPAP</strong></td>
</tr>
<tr>
<td></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>Platelets, ×10⁴/µL</strong></td>
<td></td>
</tr>
<tr>
<td>≥150</td>
<td>0</td>
</tr>
<tr>
<td>100-149</td>
<td>+1</td>
</tr>
<tr>
<td>50-99</td>
<td>+2</td>
</tr>
<tr>
<td>20-49</td>
<td>+3</td>
</tr>
<tr>
<td>&lt;20</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Glasgow Coma Scale</strong></td>
<td><strong>If on sedatives, estimate assumed GCS off sedatives</strong></td>
</tr>
<tr>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>13-14</td>
<td>+1</td>
</tr>
<tr>
<td>10-12</td>
<td>+2</td>
</tr>
<tr>
<td>6-9</td>
<td>+3</td>
</tr>
<tr>
<td>&lt;6</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Bilirubin, mg/dL (μmol/L)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt;1.2 (&lt;20)</td>
<td>0</td>
</tr>
<tr>
<td>1.2-1.9 (20-32)</td>
<td>+1</td>
</tr>
<tr>
<td>2.0-5.9 (33-101)</td>
<td>+2</td>
</tr>
<tr>
<td>6.0-11.9 (102-204)</td>
<td>+3</td>
</tr>
<tr>
<td>≥12.0 (&gt;204)</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Mean arterial pressure OR administration of vasoactive agents required</strong></td>
<td><strong>Listed doses are in units of mcg/kg/min</strong></td>
</tr>
<tr>
<td><strong>No hypotension</strong></td>
<td></td>
</tr>
<tr>
<td>MAP ≤70 mmHg</td>
<td>+1</td>
</tr>
<tr>
<td>DOPamine ≤5 or DOBUTamine (any dose)</td>
<td>+2</td>
</tr>
<tr>
<td>DOPamine &gt;5, EPINEPHrine ≤0.1, or norEPINEPHrine ≤0.1</td>
<td>+3</td>
</tr>
<tr>
<td>DOPamine &gt;15, EPINEPHrine &gt;0.1, or norEPINEPHrine &gt;0.1</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Creatinine, mg/dL (μmol/L) (or urine output)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt;1.2 (&lt;110)</td>
<td>0</td>
</tr>
<tr>
<td>1.2-1.9 (110-170)</td>
<td>+1</td>
</tr>
<tr>
<td>2.0-3.4 (171-299)</td>
<td>+2</td>
</tr>
<tr>
<td>3.5-4.9 (300-440) or UOP &lt;500 mL/day</td>
<td>+3</td>
</tr>
<tr>
<td>≥5.0 (&gt;440) or UOP &lt;200 mL/day</td>
<td>+4</td>
</tr>
</tbody>
</table>

**SOFA Score 10-11 = 50% mortality, MDCalc.com**
An estimate of ARDS mortality

- EOLIA Trial, NEJM 2018

- Mean age 55, mean SOFA score 10.5, really bad ARDS

- No ECMO, 45% mortality
Or think like an ICU doctor...

- What was their functional status pre hospital?
- How many organ systems have failed?
- Are there effective treatments?
... and estimate meaningful outcomes

• What are the chances of full recovery? How long will it take?

• What’s the most likely outcome of this illness?

• How likely is a long term need for tracheostomy, oxygen, dialysis, feeding tube, nursing home?
The purpose of prognostication is not to be right - it’s to help patients and families be prepared.
COVID Goals of Care: when resources are available

SET UP

"This is a difficult and scary time with COVID. I'm hoping we can talk about what is important to you, so that we can provide you with the best care possible. Is that okay?"

ASSESS

"What do you understand about how COVID could affect your health?"

"Is it OK if I share what I know about how COVID is affecting people like you?"

SHARE

PRE-ILLNESS: "Most people who get COVID get better on their own. However, people who are older or have other health problems like yours can get very sick and may not survive. The treatments that we use to try to help people live, like breathing machines, may not work. If they do work, recovery from the illness is uncertain. We really hope that you don't get the virus, but it is important to prepare in case you do."

IF ILL: [NORMAL RISK]: "Because there is uncertainty about how COVID affects people, we are asking everyone to share what would be important if they got very sick and couldn't speak for themselves."

[HIGH RISK]: "Because of your [high risk condition], if you get really sick, I worry that treatments like breathing machines or CPR are not likely to work or get you back to the quality of life you had before."

EXPECT & RESPOND to EMOTION (see over)

EXPLORE

"What would be most important for your healthcare providers or loved ones to know if you became very sick and couldn't speak for yourself?"

FOLLOW-UP PROMPT: "Given all that’s going on, what are you most worried about?"

"What abilities are so critical to you that you can’t imagine living without them?"

EXAMPLE:

- Some people need to be able to do things for themselves like eating or bathing, in order to say life is worth living; other people need to be able to interact meaningfully with loved ones, and others say life is life, no matter the quality. How about you?"

"Is there anything you would NOT be willing to go through to try and survive a COVID infection?"

EXAMPLE:

- If we think they may not help or would cause suffering, some people make decisions to avoid treatments like breathing machines or CPR if they get very sick. If that happened to you, have you thought about the treatments you may or may not want?"

WHO SHOULD WE SPEAK TO if you are unable to speak for yourself? Do they know what you’ve told me?"

CONSIDER:

Creating an advance directive; inviting their decision-maker to participate in a discussion

CLOSE

"I’ve heard you say that ___ is really important to you. Keeping that in mind, and what we know about your illness, I recommend ___ How does this plan seem to you?"

CONSIDER:
- POLITICAL and Code Status Order change
- Time-limited trial of life support

"We will do everything we can to help you and your family through this."

Note Template: COVID/GOALS

COVID GOC to use ONLY for crisis standards of care

SHOW

the guidelines

"Here’s what Dartmouth-Hitchcock is doing for people with this condition; [describe the intervention relevant to the patient]"

HEADLINE

what it means for the patient’s care

- We will give your loved one intensive comfort measures here on the floor. We don’t do CPR if her heart stops.
- We will care for you on the hospital floor, and will not transfer you to the ICU. We don’t do CPR if your heart stops.
- We will support your loved one with a breathing machine in the ICU.

AFFIRM the care you will provide

- We will provide [describe treatments] and we hope you and your loved one will recover.

RESPOND to emotion

- I wish we weren’t in this terrible situation; [see other strategies above]

EMPHASIZE

that the same rules apply to everyone

- We are using the same rules with every other patient at D-H. We are not singling you out.

NURSE: Responding to Emotion

EXAMPLE

NAME

name the emotion you see in front of you

- I can see you are frustrated
- This must be overwhelming

UNDERSTAND

try to put yourself in their shoes

- I can’t begin to understand how hard this has been
- I can only imagine how shocking this must be

RESPECT

- I can see how hard you have been working to stay healthy
- I can see what an amazing advocate you are for your mother

SUPPORT

- We will do our best to make sure you have what you need
- I also wish we had more resources. This is an extraordinary time

EXPLORE

- Could you share more with me about ___?
- Tell me what ___ means to you

For additional suggested language to use in challenging conversations, go to: https://www.vitaltalk.org/guides/covid-19-communication-skills/
“This is a difficult and scary time with COVID. I’m hoping we can talk about what is important to you, so that we can provide you with the best care possible. Is that okay?”
Assess & Prepare

“What do you understand about how COVID could affect your health?”

“Is it OK if I share what I know about how COVID is affecting people like you?”
Share

IF ILL:
[NORMAL RISK]: “Because there is uncertainty about how COVID affects people, we are asking everyone to share what would be important if they got very sick and couldn’t speak for themselves.”

[HIGH RISK]: “Because of your [high risk condition], if you get really sick, I worry that treatments like breathing machines or CPR are not likely to work or get you back to the quality of life you had before.”
## Expect Emotion

<table>
<thead>
<tr>
<th>NURSE: Responding to Emotion</th>
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</thead>
</table>
| **NAME** name the emotion you see in front of you | “I can see you are frustrated”  
“This must be overwhelming” |
| **UNDERSTAND** try to put yourself in their shoes | “I can’t begin to understand how hard this has been”  
“I can only imagine how shocking this must be” |
| **RESPECT** | “I can see how hard you have been working to stay healthy”  
“I can see what an amazing advocate you are for your mother” |
| **SUPPORT** | “We will do our best to make sure you have what you need”  
“I also wish we had more resources. This is an extraordinary time” |
| **EXPLORE** | “Could you share more with me about…” |
Elicit Values & Priorities

“What would be **most important** for your healthcare providers or loved ones to know if you became very sick and couldn’t speak for yourself?”

“Given all that’s going on, what are you most **worried** about?”
Critical Abilities

“What abilities are so critical to you that you can’t imagine living without them?”

“Some people need to be able to do things for themselves like toileting or bathing, in order to say life is worth living; other people need to interact meaningfully with loved ones, and others say life is life, no matter the quality. How about you?”
Trade-offs

“Is there anything you would NOT be willing to go through to try and survive a COVID infection?”

If we think they may not help or would cause suffering, some people make decisions to avoid treatments like breathing machines or CPR if they get very sick. If that happened to you, have you thought about the treatments you may or may not want?
What about CPR?

Pre-conversation: calculate GO-FAR score
www.mdcalc.com/go-far-good-outcome-following-attempted-resuscitation-score

Explore prior conversations
Have you ever talked with anyone about your wishes for CPR?

Permission to share outcomes
Would it be OK if I shared what I know about how effective CPR is for people like you?
“Who should we speak to if you’re unable to speak for yourself? Do they know what you’ve told me?”
Close: give your plan. I've heard you say ___ is really important to you. Keeping that in mind, and what we know about your illness, I recommend _____. How does this plan seem to you?

CASE: 75 year old M w/ excellent functional status, HTN, DM2 admitted with COVID; sat 89%, altered mental status. Conversation w/spouse.

Critical ability: ability to think for himself

Tradeoffs: A ventilator is OK to try and survive COVID, but “let him go if he’ll have to live on machines for the rest of his life.”

No CPR – “He wouldn’t want to live if his brain was all messed up”
<table>
<thead>
<tr>
<th>Patient/family understanding of COVID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>***</td>
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</tbody>
</table>

**COVID Information provided to: ***
- Based on clinical assessment, this person is felt to be at ***high/moderate/low risk of needing intubation.***
- Based on clinical assessment, this person is felt to be at ***high/moderate/low risk of death.***

**Goals of care:**
**Goals/Fears/Worries: ***

Minimum acceptable function: @CAPHE@ would not want life prolongation if @HE@ could not ***

Trade-offs:
***@HE@ is NOT willing to undergo ***intubation/CPR/other***
***In order to live longer, @HE@ would be willing to undergo ***intubation/CPR/other***

Family/Agent Awareness of PT’s Goals: ***

**Recommendations Made:**
- ***time limited trial of ***, re-evaluate in *** days
- ***code status change to:

- ***P/COLST: CPR YES/NO; full treatment/ selective interventions/ comfort-focused care
- ***change in goals of treatment to comfort measures only

**Advance Care Planning:**
COSTL/POLST/DNR on file? ***
Advance Directive on file? @ADVDIRST@

- **If yes:** Healthcare Agent name *** and phone number ***
- **If no:** Surrogate decision maker following NH Order of Priority:
  1. Spouse
  2. Adult son/daughter
  3. Parent
  4. Adult brother/sister
  5. Adult grandchild
  6. Grandparent
  7. Adult aunt/uncle
  8. Close friend
  9. Financial power of attorney
  10. Guardian of patient’s estate

○ Surrogate name *** and phone number ***
What if they don’t want hospitalization?

### Symptom Management Resources

[https://tinyurl.com/DHMCPallCareResources](https://tinyurl.com/DHMCPallCareResources)

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**FEVER**

- Cooling blankets, cool cloths, ice packs, light sheets, fan
- **Acetaminophen** 500 mg PO every 4 hours OR 650mg PO every 6 hours PRN temp >38.5°C (101.3°F) with discomfort. Max 3,000 mg/day from all sources is recommended in outpatient settings
  - Dispense: Available over the counter

**COUGH**

- **Codeine plus guaifenesin liquid** (2-20mg/mL): 5mL every 4 hours PRN cough. Max 60 mL/day
  - Dispense: 2-20mg/mL oral liquid; #120 mL

**DYSPNEA/SHORTNESS OF BREATH (or PAIN)**

- **Morphine** 5-10mg PO/SL every 4 hours PRN shortness of breath (or pain)
  - Take 5mg for mild-moderate pain 1-6 or air hunger; 10mg for severe pain 7-10 or air hunger
  - Dispense: 2mg/mL oral liquid, #90 mL OR 20mg/mL concentrated liquid, #15 mL

If morphine is contraindicated (ADR, renal insufficiency):
- **Oxycodone** 2.5-5mg PO every 4 hours PRN shortness of breath (or pain)
References

Ariadne Labs  https://www.ariadnelabs.org/coronavirus/clinical-resources/covid-conversations/

VitalTalk  https://www.vitaltalk.org/guides/covid-19-communication-skills/