

Leadership Briefing Update 04/05/2020:

1. The governors call for ventilators and PPE to be sent to NY. UPMC is in constant contact with the State Dept. of Health and the governor's office. Obviously we do not want to send anything to New York that we will need to use for our own patients. However there can be no doubt that the city's need is much greater right now. We do not know how this will turn out, but will keep an eye on the situation.
2. The Bioquell machine that reprocesses the N95 masks has broken down. They are expecting the necessary part to arrive Monday morning, and should be able to get it running right away. In the meantime, we will still have masks to wear. If you have a mask you used previously and kept in a paper bag, you can re-use it tomorrow.
3. The alarming increase in COVID cases we saw at the end of last week has not continued through the weekend, however the ICU census has continued to rise. Much too early to tell where this will end up, but we will continue to prepare for the worst and hope for the best.
4. As we get closer to the peak number of COVID cases in the hospital, it is most likely that staff will have to be reassigned if they are not working clinically. The days of half our staff working from home while the other half is here are numbered. This is being organized centrally based on responses to the survey.
5. There is a developing shortage of wipes (I assume Cavi-wipes) A substitute is in planning to address. PPE is in reasonably good supply.

Update from Dr. Eaton on 04/03/2020:

1. I mentioned in the town hall that the hospital was planning for how to respond to codes with COVID+ patients. This brought to mind a similar issue in the OR: STAT calls. Typically many (many) people rush in to help for a STAT call. That may put people at risk if the event is around intubation or extubation (as it often is). So please be attentive to minimizing the number of people in the room. If you respond to a STAT and there are already lots of people there, strongly consider leaving the room. If you are the second or third attending to respond, please consider becoming a traffic cop and getting other excess people to step out.
2. Routine pre-op testing for surgical patients is being rolled out shortly. For now, we are not recommending any change in our management, since we don't really know what the sensitivity of our test is, nor the current prevalence of COVID-19 in our population. We are doing some research on this and will have more information soon.
3. Gown: a large number of the isolation gowns have come in, BUT these are the last we will be getting for a month and what we received only represents a 2 week supply at current use rates (which will likely increase). Supply Chain is looking for alternatives, and so are we. More to come on that as well. In the meantime, please conserve if you can. WE do not recommend reusing a gown that is potentially contaminated, but we shouldn't use more than we need to to be safe.
4. We are also developing a system to hand out PPE in a controlled manner. Dr. Sabnis's office really isn't ideal in many respects, and we will find something better.
5. As you know we currently access the Pyxis machines with fingerprint, which is tough with gloves on. Rather than have everyone take gloves off, we are reprogramming all machines to open with password – same one you use for e-mail, etc.

## Q&A

1. *Can I use my professional allowance to buy my own PPE?*

We feel we are providing a safe form of PPE for everyone. However if there is something you would like to buy, like a P100 respirator or a tougher face shield, then yes, you can get reimbursed from your AA. Please keep in mind you need to have a plan for cleaning/decontaminating your PPE. Let me or Stew know if you are not sure how to clean your own PPE.

2. *When I got fit tested for my N95, they told me they didn't have enough P100 respirators and I would have to share one; really!?*

You will not have to share a respirator. Please let me or Stew know if this happens, and we can find a solution.

3. *When they gave me my P100, they said the filters only last a week and there were no replacement filters, so I would have to find my own. REALLY!?!?*

P100 respirators are made for use in industrial applications where dust is a major problem. In those conditions, the filter may only last a week before they clog. Our environment is obviously far cleaner. The air in the ORs is already filtered. So we expect these filters to last several weeks at least. We will also look into finding some replacement filters just in case.

4. *Nurse keep asking me why I wear an N95 all the time or wear the gown the whole case – what should I tell them?*

Try this:

There are two reasons that the anesthesia care team does things differently:

1. Intubation/extubation exposes us to a larger amount of aerosols and droplets (which is why we ask you to leave the room at these times)
2. We are trying to conserve our limited resources

This explains why we wear more PPE (#1) and why we sometimes continue to wear this PPE (#2).

So when you see us continuing to wear our n95's around the OR halls, that's related to #2.

When we wear a gown during the entire case, that's related to #2.

*It is often stated that tracheal intubation is an aerosol generating procedure as well, but if done correctly (as described below) aerosols should NOT be generated during intubation." If that is the case and if intubation has been done correctly with RSI, why the wait for 10 minutes?*

The statement about aerosols and intubation is my common sense view of the matter. However, essentially every source I read states that intubation is an aerosol generating procedure. No scientific basis or reference is supplied. However, a very important issue here is that people feel safe, even if it means that we are taking measures that are not scientifically necessary, but only reduce an extremely low risk to an even lower risk. I'm sure there will be pressure from some of our OR colleagues (you know who they are) to come into the room immediately after intubation. Others will watch the clock and not move until the full 10 minutes have passed. I think those people have to make their own decisions.

*Same for extubation, successful, no coughing, wait the 10 minutes?*

Better evidence for aerosols in this situation, and probably less impact on flow, but same principles apply. Individual responses will vary based on risk aversion. People who fasten their seat belts moving the car from the driveway to the garage will wait 10 minutes. Skydivers maybe not.

*And your preamble mentions that there is are some differences for asymptomatic patients, but I don't read any?*

There are two different documents. The "OR Patient Management..." document cover asymptomatic or "unknown status" patients. The "Known or suspected..." document applies to diagnosed patients or other patients who are strongly suspected by symptoms and history.

*Finally, and not specifically outlined here, but what should we be doing with all of our patients who have been extubated but are in the PACU. Should they be wearing masks?*

There has been no external guidance on this. If patients are coughing a lot, it would be reasonable to put a surgical mask on them, as has been suggested for COVID patients, or to administer oxygen with a mask instead of nasal cannula. No data to support either practice, but reasonable.

*In lieu of that happening should the staff be wearing masks, and if yes, procedure masks, surgical masks, N-95 masks?*

Again, no data or external guidance. There is enormous concern that all this will exhaust supplies of N95s, and it is important to remember (as stated in the preamble) that COVID appears to be primarily or almost exclusively a droplet/contact transmitted disease. So eye protection and a surgical mask is reasonable.

*Where do I find paper bags to store n95s if I am reusing my n95 each day?*

There has been a lot of talk about keeping masks for more than one day, and re-using. If you will review the guideline I sent out, we are not yet recommending re-use, but just extended use. Extended use is continuing to wear the same mask for a whole day and discarding at the end of the day. We will look to get guidance from Infection Prevention if the supply situation becomes more problematic than it is now.

*I don't fit into an n-95, how do I access a PAPR/CAPR for use during intubation/emergence?*

We need to know everyone for who this is an issue. If N95s don't work for you, please let me or Dr. Lustik know. I don't have a firm answer yet, but will develop one.

*Let's say I can't get an appropriate mask for intubation/emergence...then what?*

Call Dr. Eaton or Dr. Lustik.

We really need to stay ahead of mask availability, anticipate inadequate supply and develop a response. Right now, there are adequate supplies of N95s, but the use rate will be jumping up, and we will need to keep an eye on this. There is a URMedicine-wide teleconference every morning where the availability of PPE (and all other COVID essentials) is discussed in detail.

*I heard that the ten-minute rule was eliminated. What's up with that?*

Today an anesthesia team was emerging a patient according to the guideline. The patient woke up a little wild, and the circulator rushed in to help keep them on the table. The circulator was appropriately concerned, mostly about patient safety. There was some quick conferencing (with some briefly confusing messaging) and it was decided to provide the OR nurses with an N95 they could keep in their pocket for such emergencies. So the ten-minute rule stays in place, but the circulator will be watching through the door and can respond with appropriate PPE if necessary.

*Can the attending leave the room during the post intubation/extubation 10 minute time period?*

No. The door needs to stay closed during this time.

*It seems like I am actually re-using my N95, and not just doing "extended use." (It's hard to eat with an N95 on). What should I do with it when I take it off?*

Good point. Extended use, which is what we recommended earlier, means you are wearing it all day, without taking it off. "Limited re-use" means we are taking it off and putting it back on. The CDC recommends two choices for what to do with masks between uses:

- Hang used respirators in a designated storage area
- Keep them in a clean, breathable container such as a paper bag

Dr Karan has kindly brought a supply of paper bags, which are in Dr. Sabnis's back office (where the PPE is). We will also install a rack in there to hang them on if people feel they want this option.

The CDC also recommends:

- Clean hands with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (if necessary for comfort or to maintain fit).
- Avoid touching the inside of the respirator. If inadvertent contact is made with the inside of the respirator, discard the respirator and perform hand hygiene as described above.
- Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check. Discard gloves after the N95 respirator is donned and any adjustments are made to ensure the respirator is sitting comfortably on your face with a good seal.
- discard the mask after 5 uses.

*Should the OR nurses and surgeons also be wearing N95 masks?*

No, not unless they have to be present for an aerosol generating procedure. If we are following the guidelines, there should be no surgeon, nurse or tech in the room during intubation or extubation – just the anesthesia team.

*Should we get everyone out of the room for 10 minutes for intubation for a “blue Immediate?”*

Probably not. It is likely that in a real emergency the nurses/techs will still be setting up during induction, and often the surgeons need to start immediately. If a 10 minute wait would compromise patient safety, then everyone in the room should have aerosol protection.

*Do we have plenty of PPE?*

Depends on the type. We have plenty of surgical masks, and enough N95s for now. Both types of masks continue to come in. Ditto isolation gowns. Enough gloves for now, although there are issues with the countries that manufacture many of these. We are keeping an eye on that.

CAPR disposable (DLC faceplate): These are in short supply- less than 2 weeks at current use rate. We are currently looking at ways to reprocess for re-use. We should NOT be throwing CAPR disposables any more. There is a bin in Dr. Sabnis’s back office (with biohazard bag in it) to collect them.