COMMENTARY

Learning to live with COVID-19: Postpandemic life will be reflected in how effectively we leverage this crisis

Four strategies can help us navigate through the COVID-19 health emergency, and lessons learned can guide thinking on future health care delivery and educational initiatives

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While often compared with the Spanish influenza contagion of 1918, the current COVID-19 pandemic is arguably unprecedented in scale and scope, global reach, and the rate at which it has spread across the world.

Unprecedented times

The United States now has the greatest burden of COVID-19 disease worldwide.[1] Although Boston has thus far been spared the full force of the disease's impact, it is likely only a matter of time before it reaches here. To prepare for the imminent surge, we at Tufts Medical Center defined 4 short-term strategic imperatives to help guide our COVID-19 preparedness. Having a single unified strategy across our organization has helped to maintain focus and consistency in the messaging amidst all of the uncertainty. Our focus areas are outlined below.

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1 Flatten the curve

This term refers to the use of "social distancing" and community isolation measures to keep the number of disease cases at a manageable level. COVID-19 is spread almost exclusively through contact with contaminated respiratory droplets. While several categories of risk have been described, the US Centers for Disease Control and Prevention (CDC) defines disease "exposure" as face-to-face contact within 6 feet of an infected individual for more than 15 minutes without wearing a mask.[2] Intervening at all 3 of these touchpoints effectively reduces transmission. Interventions include limiting in-person meetings, increasing the space between individuals (both providers and patients), and routinely using personal protective equipment (PPE).

Another effective strategy is to divide frontline providers into smaller units or teams to limit cross-contamination: the inpatient team versus the outpatient team, the day team versus the night team, the "on" team versus the "off" team. If the infection lays one team low, other providers can step in until they recover and return to work.

Visitor policies should be developed and strictly implemented. Many institutions do allow one support person in labor and delivery (L&D) regardless of the patient's COVID-19 status, although that person should not be symptomatic or COVID-19 positive. Whether to test all patients and support persons for COVID-19 on arrival at L&D remains controversial.[3] At a minimum, these individuals should be screened for symptoms. Although it was a major focus of initial preventative efforts, taking a travel and exposure history is no longer informative as the virus is now endemic and community spread is common.

Initial preventative efforts focused also on high-risk patients, but routine use of PPE for all encounters clearly is more effective because of the high rate of asymptomatic shedding. The virus can survive suspended in the air for up to 2 hours following an aerosol-generating

procedure (AGP) and on surfaces for several hours or even days. Practices such as regular handwashing, cleaning of exposed work surfaces, and avoiding face touching should by now be part of our everyday routine.

Institutions throughout the United States have established inpatient COVID-19 units—so-called "dirty" units—with mixed success. As the pandemic spreads and the number of patients with asymptomatic shedding increases, it is harder to determine who is and who is not infected. Cross-contamination has rendered this approach largely ineffective. Whether this will change with the introduction of rapid point-of-care testing remains to be seen.

2 Preserve PPE

PPE use is effective in reducing transmission. This includes tier 1 PPE with or without enhanced droplet precaution (surgical mask, eye protection, gloves, yellow gown) and tier 2 PPE (tier 1 plus N95 respirators or powered air-purifying respirators [PAPR]). Given the acute PPE shortage in many parts of the country, appropriate use of PPE is critical to maintain an adequate supply. For example, tier 2 PPE is required only in the setting of an AGP. This includes intubation and, in our determination, the second stage of labor for COVID-19–positive patients and patients under investigation (PUIs); we do not employ tier 2 PPE for all patients in the second stage of labor, although some hospitals endorse this practice.

Creative solutions to the impending PPE shortage abound, such as the use of 3D printers to make face shields and novel techniques to sterilize and reuse N95 respirators.

3 Create capacity

In the absence of effective treatment for COVID-19 and with a vaccine still many months away, supportive care is critical. The pulmonary sequelae with cytokine storm and acute hypoxemia can come on quickly, require urgent mechanical ventilatory support, and take several weeks to resolve.

Our ability to create inpatient capacity to accommodate ill patients, monitor them closely, and intubate early will likely be the most critical driver of the case fatality rate. This requires deferring outpatient visits (or doing them via telemedicine), expanding intensive care unit capabilities (especially ventilator beds), and canceling elective surgeries. What constitutes "elective surgery" is not always clear. Our institution, for example, regards abortion services as essential and not elective, but this is not the case throughout the United States.

Creating capacity also refers to staffing. Where necessary, providers should be retrained and redeployed. This may require emergency credentialing of providers in areas outside their usual clinical practice and permission may be needed from the Accreditation Council for Graduate Medical Education to engage trainees outside their usual duty hours.

4 Support and protect your workforce

Everyone is anxious, and people convey their anxiety in different ways. I have found it helpful to acknowledge those feelings and provide a forum for staff to express and share their anxieties. That said, hospitals are not a democracy. While staff members should be encouraged to ask questions and voice their opinions, everyone is expected to follow protocol regarding patient care.

Celebrating small successes and finding creative ways to alleviate the stress and inject humor can help. Most institutions are using electronic conferencing platforms (such as Zoom or Microsoft Teams) to stay in touch and to continue education initiatives through interactive didactic sessions, grand rounds, morbidity and mortality conferences, and e-journal clubs. These are also a great platform for social events, such as w(h)ine and book clubs and virtual karaoke.

Since many ObGyn providers are women, the closure of day-care centers and schools is particularly challenging. Share best practices among your staff on how to address this problem, such as alternating on-call shifts or matching providers needing day care with "furloughed" college students who are looking to keep busy and make a little money.

Avoid overcommunicating

Clear, concise, and timely communication is key. This can be challenging given the rapidly evolving science of COVID-19 and the daily barrage of information from both reliable and unreliable sources. Setting up regular online meetings with your faculty 2 or 3 times per week can keep people informed, promote engagement, and boost morale.

If an urgent e-mail announcement is needed, keep the message focused. Highlight only updated information and changes to existing policies and guidelines. And consider adding a brief anecdote to illustrate the staff's creativity and resilience: a "best catch" story, for example, or a staff member who started a "commit to sit" program (spending time in the room with patients who want company but are not able to have their family in attendance).

Look to the future

COVID-19 will pass. Herd immunity will inevitably develop. The

question is how quickly and at what cost. Children delivered today are being born into a society already profoundly altered by COVID-19. Some have started to call them Generation C.

Exactly what life will look like at the back end of this pandemic depends on how effectively we leverage this crisis. There are numerous opportunities to change the way we think about health care and educate the next generation of providers. These include increasing the use of telehealth and remote education, redesigning our traditional prenatal care paradigms, and reinforcing the importance of preventive medicine. This is an opportunity to put the "health" back into "health care."

Look after yourself

Amid all the chaos and uncertainty, do not forget to take care of yourself and your family. Be calm, be kind, and be flexible. Stay safe. ●

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