COVID-19

An Opportunity to Reframe Our Approach to Healthcare

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In many regards, the outbreak of COVID-19 could be considered what Nassim Nicholas Taleb denotes as a "Black Swan" event. According to this theory, a Black Swan is an event that comes as a surprise, has a major effect, and is often inappropriately rationalized after the fact with the benefit of hindsight.

A few months ago, we all heard of a "new virus" that was impacting people's lives on the other side of the globe. But it was distant and remote at best. Fast forward and, at the hands of the COVID-19 pandemic, we find ourselves learning how to "social distance" and experiencing what could be a catastrophic blow to the economy. Amid these challenges, there is an opportunity for us all to connect with family, support one another and assess our views of how best to deliver patient care.

On Wednesday, March 18, the Centers for Medicare and Medicaid Services issued recommendations that

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elective procedures be postponed during this outbreak. This was not an edict but a recommendation. This is currently being managed at the state level. Just as there appears to be a gray area with the definition of "social distancing" which has some members of our home communities pointing fingers at one another, the basis for defining elective procedures seems to be similarly vague, leading members of the healthcare community to question one another.

ASCA's (Ambulatory Surgery Center Association) framework for differentiating elective from urgent procedures could be a strong compass—it defines cases that should proceed as those in which a "months-long delay would increase the likelihood that the patient would develop significantly worse morbidity or prognosis."

In the vascular procedural spectrum, the truly emergent and truly elective procedures are clearly defined. There is no debate that ruptured aneurysms, acutely ischemic limbs, and venous thrombosis with phlegmasia require immediate intervention. On the other end of the spectrum are the various varicose vein therapies. While these have proven benefits, they can clearly be categorized as elective. What falls between these ends of the spectrum is very much under debate. Factors that define the degree of necessity include clinical presentation, risk/benefit ratio of the procedure and whether the delay would result in further complications. These factors are further influenced in our current healthcare climate by limited hospital resources such as PPE and the geographic impact of COVID-19 patients.

Potential case examples that warrant further investigation of need are presented:

A stable patient with End-Stage Renal Disease currently dialyzing via a tunneled dialysis catheter in need of long-term arm access is currently being delayed at most hospitals. It is widely accepted that the duration of indwelling hemodialysis catheters is related to numerous complications. How long is it safe to delay access surgery and leave these catheters in place?

A patient with chronic critical limb ischemia and non-healing tissue loss of their foot that needs revascularization is being delayed at some centers. While many of these patients can wait, separating the ones that need more urgent intervention requires thoughtful analysis.

A patient with chronic left leg edema and disabling venous insufficiency with iliac vein compression (May-Thurner syndrome) is generally considered non-urgent. That patient may have to wait several weeks to months to receive definitive intervention, which may be delayed further by the prioritization of other cases once this pandemic has passed. Does it make sense to delay this case when it could potentially be treated with a 30-minute outpatient intervention with considerably less exposure as would be faced in the hospital?

These represent a small sample of risk-reward analyses those of us in the vascular community are currently dealing with. There are no clear guidelines dictating what is currently appropriate for cases that fall toward the middle of the spectrum. In addition, the multiple specialties providing care in the vascular arena may have different viewpoints, muddying the waters even further. What may be inappropriate in a large metropolitan area hit hard by the pandemic may be well served in a smaller community with minimal impact. While this should never guide care, there have also been discussions about the legal implications in potential delays in treatment.

Many aspects of healthcare have been uniquely affected by the COVID-19 pandemic. It has never been more critical for us, as a vascular community, to set an example by answering these questions thoughtfully, ethically and within the context of our current healthcare crisis. Judgment and a strong moral code should be exercised with more vigilance than ever. If we don't lead by example, our decisions will be made for us. Before casting judgment of our fellow caregivers, we must consider the complexity of the factors that have influenced their decision, including geography, the concentration of infected patients, availability of resources to manage these patients safely and the clinical risk of delay.

Now having explored a spectrum of emergent to elective vascular cases, it may make sense for

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some physicians in certain geographic areas to address an appropriate site of service for these procedures during this uncertain health crisis.

Reconsidering the role of office-based labs

Through the news, social media and our own observations, we are hearing of hospital systems overtaxed with patients and a significant lack of PPE supplies (masks, gowns, gloves). In addition, over the last 12 months, there have been numerous facilities closing, even major centers such as Hahnemann University Hospital in Philadelphia. No doubt, this is also contributing to the shortage of beds we're seeing in hospitals. Considering this, in some communities, it may be appropriate to reconsider the role of outpatient procedural centers like OBL's (office-based labs), ASC's (ambulatory surgery centers) or AOH's (ASC-OBL Hybrids) during this pandemic. And possibly, to move procedures out of the hospital to these outpatient sites of service during this outbreak. Here are a few reasons to support this option:

First, at the time of writing this, in geographies hit the hardest, available OR/lab staff in the hospital are being redeployed within the hospital to care for the influx of COVID-19 patients. This not only pertains to doctors and clinical staff, but also those support staff who transport, clean, and stock supplies as well. With some hospitals already being overwhelmed with COVID-19 patients, staff members are being reallocated to other parts of the hospital. Those staff members who work in the vascular lab and operating room are already well versed in sterile field and PPE protocol and their skill sets can be beneficial elsewhere.

Another reason to advocate moving procedures to outpatient centers rather than waiting for the opportunity to treat them in the hospital is due to the greater number of staff needed to provide a safe and successful outcome in the hospital vascular lab or operating room than in the outpatient space. Usually, at an outpatient facility, these procedures can be completed with two support staff as opposed to three to four at the hospital. This will yield less potential for clinical staff to either become infected with COVID-19 or infect their patients/ peers. These outpatient facilities will have substantially fewer patients sitting for treatment in waiting areas, yielding a lower potential for patient-to-patient or patient-to-caregiver infection.

Third, these freestanding centers are very specialized in their clinical focus. With a small highly specialized staff, procedure time and room turnover time are reduced as compared to their hospital counterparts. This reduces the risk of transmission, procedural infection, and complications.

Finally, there is a cost advantage. This advantage is two-fold. For the patient, the potential co-pays could be reduced. However, the greater benefit will be for the payors, especially CMS who will be paying for a patient population that may be most drastically affected by COVID-19 related illnesses. Procedures in the outpatient space generally cost 50 percent of the equivalent procedure in the hospital. Reducing the burden of healthcare costs during this response to the COVID-19 pandemic will be imperative.

Months from now, hopefully, the response to the COVID-19 pandemic will be found to have been appropriate. However, there may be two opposite viewpoints from the experience gained by COVID-19: 1) Leaders overreacted and the threat was not as bad as was thought, or 2) We didn't act soon enough to unburden and de-risk hospitals and their patients. If cases are not moved from the hospital to the outpatient facilities, is there a better way to collaborate with these clinicians and their centers to ensure we are meeting patient needs?

Hindsight may paint a very different picture of what is being experienced today. But, in the face of uncertainty, it is our responsibility to ensure that the best opportunity for a safe positive outcome was provided to those cases that required attention AND as a medical community, we supported one another in that decision-making process. V