American Society of Anesthesiologists™

Central Line
Episode Number 12
Episode Title – COVID-19 Town Hall 4/23/20
Recorded April 2020

(SOUNDBITE OF MUSIC)

VOICE OVER:

Welcome to ASA's Central Line, the official podcast series of the American Society of Anesthesiologists, edited by Dr. Adam Striker. Slides, and a video recording of this April 23rd Town Hall are available at asahq.org/covid19info.

DR. ADAM STRIKER, HOST:

Welcome to another episode of Central Line. I'm Adam Striker. Today we're sharing more information from ASA's most recent COVID-19 Town Hall, bringing you up-to-date information from our experts in the field. Here's what they said:

DR. MARY DALE PETERSON:

Good evening everyone. I welcome you all again to our fifth Town Hall in 6 weeks. Welcome to my fellow anesthesiologists, members of the anesthesia care team, anesthesiologist assistants, nurse anesthetists, anesthesia techs, and administrators and executives. We also welcome and value our relationships with attendees from across a number of specialties and other organizations that continue to work with us to save lives.

We are fighting tonight on multiple fronts. We're fighting for our patients' lives in the ICUs, battling a disease we still don't completely understand. We are fighting to make sure we have the right PPE to protect us so we can be there for our patients and go home to our families. We are fighting for economic relief because our operating rooms have been shut down or repurposed for COVID-19 patients. And we are fighting to protect patient safety and preserve the anesthesia care team. The leadership of ASA and many of our members, along with our staff, have worked day and night to give you the voice you deserve, to provide you with recommendations on appropriate PPE, to list considerations for reopening our operating rooms, or successfully advocating for economic relief. We are here for you. We are 54,000 members strong.

But I need your help. If you are a member, but haven't yet renewed your 2020 membership, I ask that you do so right away at www.ashq.org/renew. If you're not an ASA member and have found value in these Town Halls, and the other vast resources we have provided to help all anesthesia professionals during this planet pandemic, please join us. You can find more information about ASA and member benefits at www.asahq.org/benefits. Every single member of the anesthesia care team, residents and administrative executives are welcome to join ASA. This is a vital time for our specialty and together we can, and we will, win these battles.

As you might have expected, quite a bit has happened since our last Town Hall. Last Friday, we released a joint statement titled The Roadmap for Resuming Elective Surgery after COVID-19 Pandemic with The American College of Surgeons, The American Hospital Association, The Association of Perioperative Registered Nurses. I have heard from many of you that these were just in time as many are starting the process of opening up elective surgery schedules.

On Saturday, the ASA endorsed The Society for Ambulatory Anesthesia statement on resuming ambulatory anesthesia care. And finally on Monday, we released a revised and strengthened statement on PPE. Um, the ASA statement on facility requirements for personal protective equipment is on our website now.

I am also excited to announce a new joint statement with The American Society of Health-System Pharmacists regarding minimizing medication waste during this pandemic. For years, the ASA has advocated for common sense policies and regulation that protects patient safety and ensures that we don't waste or discard perfectly good drugs. These recommendations that unused or unopened medications used in operating rooms should not be discarded without first considering the options for isolation, disinfection and segregation. It also supports appropriate evidence-based science to extend beyond use dates on drugs used for treatment of COVID-19 patients. It's about time.

At our last Town Hall, I asked you to send your experiences with how COVID-19 has changed your daily life in practice, and you responded. We've heard from those of you who have volunteered to take care of patients in the hardest-hit communities of New York, New Orleans and Detroit. We've heard first-hand stories about the rigor of suiting up to protect yourselves, and how you're strategizing to protect your families, while maintaining your commitment to care for the critically ill. We've heard the importance of maintaining positive mental health during these trying times. Thank you. And please keep these stories coming. It's really important that the world hears about the courageous things you do and it's also important to record these experiences for

patients, future anesthesiologists, policymakers, historians, maybe your grandchildren. Your experiences are invaluable. They matter to me, and to your colleagues. Please submit your stories and personal experiences at www.asahq.org/covidstories.

Tonight's first speakers are members of both the ASA and The Society for Neuroscience in Anesthesiology and Critical Care, or affectionately known as SNACC. Our first speaker is Dr. Deepak Sharma who practices at the University of Wiscon, of Washington in Seattle. Dr. Sharma is president of SNACC and will be discussing some neuroanesthesia challenges during COVID-19 and the anesthetic management of acute ischemic stroke.

Our second speaker is Paul Gars, Dr. Paul Garcia from Columbia University in New York City. Dr. Garcia will be discussing anesthesia for electroconvulsive therapy.

And our third speaker in this section is Dr. Beverly Philip, ASA President-Elect. Dr. Philip will provide a discussion on the road map for resuming elective surgery after COVID-19 statement, and other considerations for groups beginning the discussion on restarting elective surgeries. We'll have our, a question answer session after Dr. Phillips' presentation.

I'm also happy to note that Dr. Dorothea Rosenberger, ASA Chair of the Committee on Neuroanesthesia and Dr. Alana Flexman, Secretary-Treasurer of SNACC, will be answering your questions in the Q&A box in real time. Dr. Grant Lynde, Chair of our Quality Management Department Administration Committee, is also answering, um, questions.

After this grouping of the clinical presentation, we will have an economic presentation. So I now welcome Dr. Sharma for his presentation. Deepak?

DR. DEEPAK SHARMA:

Thank you, Dr. Peterson, and good evening everyone. Thank you for being with us here today. Here's my disclosures, in the time of COVID, we at SNACC, the Society for Neurosciences in Anesthesiology and Critical Care, uh, have tried to focus on your anesthesia-specific clinical guidance. And to this effect, uh, SNACC has come up with a clinical practice recommendations on some important areas. This information is available on our website and it is also being published by means of two manuscripts in the Journal of Neurosurgical Anesthesiology, which are also open access.

Below you see the list of topics that are covered in these practice recommendations, and today we're going to be focusing primarily on stroke thrombectomy and electroconvulsive therapy.

So, my objective today is to provide some practical recommendations for the anesthetic management of endovascular treatment for acute ischemic stroke during the COVID-19 pandemic. And I'll do that based on the recommendations provided by the consensus statement. Our goal is to provide guidance for optimal neurological outcome for patients while minimizing the risk for healthcare professionals, and at the same time facilitating a judicious use of, uh, resources.

So the topic of stroke is important even outside of the COVID pandemic, because stroke, as you know is the second most common cause of death worldwide and it's the third most common cause of disability globally.

Now, there is some data from the current pandemic, which, which demonstrates the association of neurological symptoms in COVID patients. Here's a study from Wuhan, China which demonstrates the presence of neurological symptoms in 36 (sic) patients COVID-19. It seems that these manifestations are more common in those patients who have a more severe infection, and acute cerebrovascular diseases have been documented in about 5.7%. It seems that the acute cerebellar disease manifests typically at around day 10, although it can can be anywhere from day 1 to day 18 of hospitalization.

This correspondence, uh, looks at the experience from, uh, France and demonstrates the neurological features in severe COVID infection. What's interesting to note here, is that, of the patients who receive MRI during hospitalization, all of the 11 patients have perfusion abnormalities. In that image on the right side of the screen, you can see reductions and cerebral blood flow in the frontal and the temporal lobes, while the occipital and parietal lobes seems to be relatively well profused. Interestingly, acute ischemic strokes were documented in 3 of 13 patients in this small series.

The next slide, uh, is a series from a single center in Wuhan looking at data from 221 patients. And in this series, uh 5% of patients develop acute ischemic strokes, again, a significant proportion of patients. Additionally, about half a percent of patients in the series also suffered from cerebral venous sinus thrombosis, and another half percent from cerebral hemorrhage. What's important to note is that the patients who developed a cerebrovascular disease with COVID pandemic, they were typically older than those who did not. They tended to have a more severe infection and they were also more likely to have associated comorbidities including diabetes and hypertension. Importantly

these patients also demonstrated, uh, some evidence for inflammation and for hypercoagulable states. As you can see in the table to the right of the screen the CRP and D-dimer levels in patients who had uh, cerebrovascular disease was significantly higher than those who did not.

Now, in general, the incidence of thrombotic complications in critically ill patients with COVID-19, uh, in this study from Netherlands has been estimated to be about 31%. And most of these are pulmonary emboli but importantly there are significant cerebrovascular events and in the series about 3% of patients had, uh, strokes.

Now, for the patients who have large vessel occlusion leading to a stroke as we all know endovascular therapy involving thrombectomy is, is critical to improving neurological outcomes of these patients and has to be delivered in a time-sensitive manner.

Interestingly enough, the stroke thrombectomy can be performed under both general anesthesia, as well as monitored anesthesia care. However, the debate about the optimal anesthetic technique, general anesthesia or monitored anesthesia care, has probably been one of the most interesting ones to watch in the last decade in neuroanesthesia. If I were to summarize the information, I would say the earlier data from retrospective studies demonstrated some association of exposure to general anesthesia with poor neurological outcomes, although that could not be substantiated by the subsequently performed randomized controlled trials.

Now, the practice patterns however, are very variable. This is a survey, uh, we did last year, and if you look at the data just from the United States, it seems like we have an equipoise with half the respondents reporting preference for general anesthesia and another half reporting preference for monitored anesthesia care.

So for an already controversial area, things became interesting with the COVID-19 pandemic because there was a suggestion about preferably intubating all patients undergoing stroke thrombectomy. In other words, giving general anesthesia to all these patients. And this concern seems to have potentially started with some discussions with our IR colleagues who thought it probably safer for the patient to remain intubated during the procedure while avoiding the risk of exposure to, to the healthcare personnel.

Now, obviously, this was concerning and so SNACC decided to commission a task force comprising stroke experts from across the world including North America, Europe, as well as Asia, and came up with this, uh, consensus, uh, document. Importantly this consensus document has been endorsed by all stakeholder societies that are listed on

this slide, uh, and I'd like to spend the remaining time talking a little bit about what the statement recommends. And, it should be pretty straightforward.

So here are the broad goals for stroke thrombectomy during COVID-19. First and foremost, we have to ensure optimal patient outcomes. At the same time, you also have to ensure the safety of healthcare personnel, and we have to do this in the setting of resource conservation. In terms of optimal patient outcomes, the most important thing probably is early revascularization, so time is of essence. Whatever we do we have to be expeditious and facilitate early reperfusion. Now, it's understandable that, uh, things might be relatively less efficient during the COVID pandemic, but at the same time, it's important to optimize the hemodynamic parameters to make sure that the brain is adequately profused while revascularization is being planned. Uh, this means, um, the, the care providers should make sure that the recommended goals for hemodynamics are followed, and currently they are to keep the systolic blood pressures between 140 to 180 ml of mercury. At the same time, uh, optimization of oxygenation and ventilation is important. Normal capnia is recommended for patients with stroke. And the key thing here is to, to avoid any emergent conversion from monitored anesthesia care to general anesthesia during the endovascular treatment itself, cuz this can be really unsafe for the patient.

It can be equally unsafe for the healthcare providers as well, and in general to ensure the safety of the personnel, we have to minimize the exposure, which means have only as many people in the room as essential, and use airborne precautions.

Now what's unique about caring for patients with stroke, um, is, is, is a few things and first of which obviously, is the timeliness of care that we talked about. So given that, we are typically not able to wait for the results of even the rapid COVID test to come back, and we have to proceed assuming that the patient is positive. As you all know most IR suits are not negative pressure and they often are actually not located close to the emergency department. So what happens as a result is that the patient, uh, may often be transported from one location to the other, from the emergency department, CT scanner, IR suite, back to radiology, then to the Intensive Care Unit over a relatively short period of time, and therefore potentially exposing a number of, uh, healthcare personal to the risk of exposure.

Now there are some basic considerations for stroke thrombectomy. First of all, any aerosol generating procedures should be avoided unless necessary. What this means is we should not be intubating these patients unless we need to. Either for the patient factors or for protection of the health care personnel. Like I said before, it's the emergent conversion from MAC to general anesthesia, which should be the key goal to avoid.

Coughing and sneezing may be unsafe for the providers as well as for the patient themselves. Inadvertent patient movement during thrombectomy is not desirable.

Now that said, if we were to look at the data about the relative effectiveness of general anesthesia vs. monitored anesthesia care in patients with stroke thrombectomy, irrespective of COVID, these randomized control trials demonstrated a non-inferiority of general anesthesia to MAC, as long as the hemodynamic parameters are maintained, which means if, if appropriately done, general anesthesia may actually be safe for patients with ischemic strokes.

So while dealing with an individual patient, obviously we have to account for the patient's neurological and medical status, as well as the risk factors for the providers before we pick general anesthesia or monitored anesthesia care. In general, the threshold to use general anesthesia may be reviewed during the current pandemic.

Essentially it boils down to the same concern. Of the anesthesiologist is, is concerned that there may be a risk of potentially requiring an emergent conversion from MAC to GA, then it's best to just start with general anesthesia. Now, that said, not all patients undergoing endovascular therapy will require general anesthesia or intubation.

So the task force has come up with some recommendations on factors that may be considered by the clinicians to select those patients who may be preferred for general anesthesia. And these includes, obviously patients who have acute respiratory distress or patients who have hypoxemia requiring high-flow oxygen. Patients who are actively coughing, and are unable to lie still, should also be intubated. Those who are unable to protect their airways or actively vomiting, obviously need intubation. Patients with the posterior circulation strokes, and those who have more severe stroke as indicated by a high (sic) stroke scale score or low GCS, should be preferably receiving general anesthesia as well. And finally patients who are agitated or uncooperative or aphasic should be receiving general anesthesia preferably. The manuscript as well as, uh, as well as the consensus document on the website, uh, provides this decision tree that may be handy to use for the providers.

Now, in terms of some specifics of management of general anesthesia, uh, airborne precautions should be used as for any other COVID patient requiring general anesthesia. Just keeping in mind that this might not be happening in the typical location. If possible, it's preferable to intubate the patient in a negative pressure airborne isolation room and given the fact that most IR suites are not negative pressure and these patients arrive in the emergency department where there may be a possibility to use a negative pressure location. Anesthesiologists could consider using that as a location to

safely secure the airways. That said, any delays should be minimized and while awaiting intubation, um, and induction of anesthesia, it's important to make sure hemodynamics are, are stabilized.

Uh, patients with COVID have, uh, have been reported to have associated myocardial injury and so anesthesiologists should anticipate hypotension and be prepared to quickly intubating with vasopressors or inotropes. There's no preference for either intravenous or inhaled anesthetic techniques, um, and as, as would be obvious, any nasal or esophageal temperature probes should be avoided. And finally, at the end of thrombectomy, the patient should be extubated again, preferably in a negative pressure airborne isolation room if possible. And this, this may be a location in the Intensive Care Unit or whatever the institutional capacity is. Importantly, care should be taken to avoid coughing as much as possible using standard measures.

Now, that said, there will be patients who will receive monitored anesthesia care and it's important to think about strategies to safely provide MAC to these patients and prevent any emergent conversion to general anesthesia, as has been discussed before. It's recommended that patient should wear a surgical mask during the procedure and oxygen flow should be as low as possible to achieve an oxygen saturation of more than 94%. It's important to use, uh, only as much sedation as necessary. The key thing to think about here is to avoid excessive sedation leading to airway obstruction and the potential need to either provide jaw thrust or chin lift or maybe the use of oropharyngeal airway, which may get the anesthesiologist too close to the patient's airway.

We don't make any specific recommendations for pharmacological agents and it's best for the clinicians to use the agents that they are most familiar with in this particular setting. And obviously, there needs to be preparation to safely convert to general anesthesia, if needed.

Now, beyond thinking about the choice of general anesthesia and monitored anesthesia care, which obviously has has taken a lot of attention, there are several other things that one has to think of, and as I have highlighted it's important to, to maintain the physiology and adhere to the hemodynamic and oxygenation and ventilation goals, but at the same time it's really important that any significant changes in institutional practice be carefully implemented, uh, to prevent any inadvertent consequences. Um, multidisciplinary consensus, even at a local level, is important and there may be a need for education around it, and, and the importance of this cannot be overemphasized.

It is also an important aspect of, uh, measuring quality during these difficult times because changing practice could lead to changes in patient outcomes which may or

may not be positive and, and therefore it's recommended that quality measures and patient outcomes be carefully monitored.

Now, obviously, this is a consensus, uh, recommendation-based advice. There are no data directly examining the impact of the COVID-19 on the outcomes of endovascular therapy. And so that has to be appreciated. Obviously, these recommendations may not be universally applicable and each individual institution will have to make uh, make its own adaptations to it. And importantly, the recommendations may need to be updated, if a very rapid diagnostic test for COVID-19 were to become available.

So with that, um, I would like to summarize by saying that the institutions that currently use general anesthesia for all endovascular therapy, just continue to do so with added airborne precautions. At the same time, the institutions that preferably use monitored anesthesia care should consider carefully lowering the threshold for using general anesthesia, and then think about how and where that can be administered.

Importantly, any workflow changes should be very carefully implemented and as I mentioned earlier, these recommendations may have to be updated as, as new information, particularly about the disease itself or testing, or particularly if rapid testing becomes available.

And that's all I have for now. Thank you very much for your time.

DR. MARY DALE PETERSON:

Thank you so much Deepak, and our next speaker is Dr. Garcia. Paul?

DR. PAUL GARCIA:

Thank you very much, Dr. Sharma. Thank you Dr. Peterson, ASA and the Anesthesia Patient Safety Foundation for the invitation to speak.

Of course, we've been very busy in New York during the pandemic, but I have to acknowledge the outstanding support that we received. Many private and academic anesthesiology practices and many regional and state anesthesiology societies have donated supplies while we face this challenge. Not only have we received exceptional and innovative gear, including PPE, we also really appreciate the delivery of food and refreshments to the healthcare personnel spending long hours day and night caring for these patients. So, thank you. Lastly, thank you to the anesthesiologists who temporarily

relocated to New York to help with the crisis. It's really a privilege to work alongside such fantastic human beings.

Today, I'm going to talk about our recent ECT experiences at Columbia University Medical Center. I have no conflicts of interest. Here in New York, we didn't have much time to prepare for COVID, and knowledge regarding the transmission of the disease was scare. So our management in the ORs and the ECT suite needed constant modification based on the availability of new information. Like many disasters and emergency situations, mental health services remain a vital part of crisis management. In addition to heightened stress and fear, the social isolation with the coronavirus pandemic increases the risk of self-harm in severely affected patients.

Clearly for some patients, ECT is life-saving therapy. Of course, the majority of this talk will focus on our procedural and policy modifications enacted to prevent transmission and ensure safety for our patients and our healthcare workers and we'll start with kind of a timeline.

It's hard to believe that we almost now have two months of experience of care during the pandemic. New York had its first cases of Coronavirus early in March and around that time Governor Cuomo was declaring a state of emergency. We were already in discussions amongst the ECT providers in psychiatry and among the SNACC members online about how to modify ECT.

As the number of cases started to rise, we limited our patient selection for ECT to only those patients with the most severe symptoms and those most likely to benefit from treatment. We also took steps to minimize coughing, including intramuscular injections and glycopyrrolate 20 minutes before the procedure began. And we also had the most experienced person handle the mask ventilation when it was necessary. In the first two weeks of the pandemic, testing resources were scarce in New York and we screened our ECT patients only by symptoms. We had stepped up our questionnaires, really investigating fever, asking questions about anosmia, cough, sick contacts, etc. At that time, N95 masks were in short supply and reserved only for aerosol generating procedures on positive patients or patients under, under investigation, that is, symptomatic patients with test results pending.

During the third and fourth weeks, we became more concerned with asymptomatic transmission. This became abundantly clear when one of our recently treated acute stroke patients developed symptoms and tested positive for Coronavirus days after admission to the hospital. At that time, we did not have tests widely available and did

not yet have rapid testing. We began to treat every patient as potentially positive in the OR and in the ECT suite, and this led to great concerns over PPE availability.

Even with these concerns, the psychiatrists and the members of our neuroanesthesia division felt strongly to continue this necessary service. We became accustomed to reusing the N95 masks with regular OR masks on top, with face shields, and using impermeable gowns. We limited personnel in the ECT suite, as we did not have access to a negative pressure room. We also used HEPA filters on all, and continued to use our anesthesia machines.

In the last 3 weeks, a few things have changed regarding ECT care. We now have testing available in less than 1 hour. We have trialed a plexiglass shield to limit aerosolization. Those, uh, modifications uh, continue. One of our patients developed symptoms and tested positive while hospitalized. This patient had previously tested negative 3 times and had nine ECT treatments prior to testing positive. The last treatment of this patient was 13 days ago, and none of the healthcare workers involved in the patient's care have experience symptoms or tested positive.

This graphic comes from a manuscript in preparation from the Society for Neuroscience in Anesthesia and Critical Care. It summarizes some of the most pertinent recommendations for ECT during this pandemic.

The guidelines state that once a patient has tested positive, a 14-day wait period should commence after a subsequent negative test. Also, really want to emphasize that optimal preoxygenation is important in patients that you expect to avoid mask ventilation.

And to summarize the SNACC recommendations, those performing ECT during the coronavirus virus pandemic should seriously consider the following recommendations. First, consider the environment. If a negative pressure room is available, it may increase the safety of healthcare workers and their patients. Make sure the room and equipment are disinfected appropriately after each patient. Strongly consider glycopyrrolate and or other drugs to minimize coughing, especially when mask ventilation is expected. Hyperventilation should be very carefully considered. At Columbia, we do ECTs on many hospitalized patients that may not be able to tolerate several minutes of apnea and we elected to mask ventilate most of our patients. If you're going to choose apnea for the duration of the ECT, of course preoxygenation is essential. Patient should, of course, be recovered wearing OR masks, and the amount of personnel involved in recovery room care should be kept to a minimum.

In summary, the airway management for ECT represents the significant risk of viral infection for novel, novel Coronavirus disease. This could be a transmission from patient to patient, or from patient to healthcare worker, or from healthcare worker even to patient.

As the disease escalated in New York City, our mental health services really remained integral to our emergency response in the disaster planning for our institution. Our modifications were developed during the pandemic and required many updates. In order to meet the needs of the patients, while also properly protecting our healthcare personnel, New York Presbyterian Hospital Columbia University and the New York State Psychiatric Institute created modifications. It's possible that as we learn more about Coronavirus disease, there are other modifications of these recommendations from SNACC or from your local, modification of those recommendations, will be necessary.

In short, the modifications are aimed at triaging appropriate patients for ECT and COVID-19, as well as alteration in equipment and medications necessary for the procedure. I do appreciate your attention.

DR. MARY DALE PETERSON:

Thank you so much Paul, and our next speaker is, uh, Dr. Beverly Philip who will speak about resumption of elective surgeries. Beverly.

DR. BEVERLY PHILIP:

Yes, um, thank you very much. Uh, the surgical care for these common conditions has always been an important part of healthcare. But as you know as the COVID pandemic grew, we needed to save those resources for the care at hand.

The CMS recommended at the, as the pandemic grew, to reduce all non-essential surgery. The, and the professional organizations responded. The American College of Surgeons, uh, addressed this trying to encourage its members actually to reduce surgery, and a week later, because this effort needed to be mostly disciplinary ASA joined with the American College of Surgeons to set up a triage to recommend a multidisciplinary triage decision-making team.

So we reduced elective surgery, and then as a week or two passed, in early April, what we found is that, for better and worse, we're getting past the surge. This is a slide from the University of Washington group and although in that shaded pink, we were

expecting a huge surge in many locations, it, it reached high levels and others nonetheless, you're starting to see the, the brunt of it passing. And because of this impact on patients who needed this deferred care, as well as on the economy, many of us started thinking how we going to resume non-essential but needed surgery, but the point is we need to do it safely.

What happened then, is the Federal Government, at the same time, seeing the same data, the Federal Government and major professional organization, organizations, we offered expert recommendations, and they all came out within several days of each other. The, uh, there was a policy statement on opening amer, again. The next morning, the, the, our joint recommendation from ASA, the College of Surgeons Association, The Hospital Association, ARN, we had all been working together the entire week for a roadmap to resume elective surgery safely.

At the same time, our, the SAMBA, which focuses on outpatient and ambulatory care had prepared their statement and by Sunday of every same weekend, C, CMS had come out with their practical implications. I should point out, we don't have time to react, to go into them in detail, but many of the specialty societies issued specific guidances related to their specific areas of care. What I want to do now is go over, I think one of the two major documents will help guide you on how to do this safely.

So this is the roadmap for resuming elective surgery after COVID-19 pandemic. If you, uh, do not access, have it already, it is on the ASA website and downloadable. And, I want to go over to the major principles and the major recommendations.

Number one is, when do we start this? There actually is substantial expert opinion that you need to wait till there's a real reduct, you should wait, until there's a real reduction in new COVID cases, and several of the experts, and the references are there, recommend waiting till you see a consistent decline in new cases which can take up to 14 days after the proposed peak. And, also, you need to have, before you start taking on elective surgery, you need to have sufficient personnel and resources that you're not resorting to a crisis standard of care for those who are already in the hospital.

The next major principles re, relates to testing, that we need testing to protect the staff and to maintain patient safety. You need a policy on patient testing. You need to decide what test you're going to use, how accurate are they, when are you going to do them to provide useful pre-op information as to the patient's COVID status. And if you don't have testing, then you have to resort to creating a safe environment. These are administrative and facility controls to limit exposure. And if you don't know the patient's COVID status, you have to treat as though they are infectious with full appropriate PPE.

Some of the other principles are involved having adequate PPE and supplies for what you plan to do. And I want to emphasize, this is not just for the operating room. This is specifically for all procedural areas as well. You need a policy, uh, to decide what prioritization you're going to do. It needs to be composed of the major component leadership, surgery, anesthesiology and nursing, and you need objective criteria for prioritization and implementation of the change.

You need policies to address the issues related to care. I think the one that is of particular concern and our, in our particular area of interest, are policies to the preoperative area. The issue here is we need to reassess patient health status. We need to know where this patient is now. I want to add that the ASA put in this multi, special, specialty document that anesthesiology-led preoperative assessment services can really coordinate this patient care.

We think of COVID as being a respiratory illness. I think we're all learning by now, that is one component of this iceberg, that also we need to look at cardio pulmonary, cardiac function as well and the other organ systems that may have heart and lung residual effects on patient. In addition to what, for a, a preoperative evaluation, I also want to point out this document specifically recommends that the surgeon has advanced directive discussions with patients typically in a frail in the elderly and anyone who is COVID positive, and the other main point, pre-op, if to plan for post acute care. Plan pre-op, what do you, what is going to, the patient going to need after the surgery?

The rest of the phases of care are, are, go through the reassessment of what we do. What about our checklists, our timeouts? Intra operatively, depending on the patient's COVID status, we need policies. Who's going to be there for the aerosol-generating portion of the procedure, PPE, who do you want in the room? Post-op, the surgeons, uh, requested that we put an emphasis in on standardized recovery care protocols because not all the usual teams, the expert anesthesiologists and nursing teams may not be there working with a surgeon as it had been before this pandemic. And again, and emphasis, post-discharge care, you have to plan and know that if you're going to spend a patient, planning to send a patient, to a facility that it's has space, and it's safe to go to.

I want to touch on a few other principles. We should be collecting data both for, to hone our personal care and to collect data about what to do and, two other COVID-related issues, safety and risk mit, mitigation. What about policies for distancing, visiting and, last and absolutely not least, plan for, with a resumption of surgery, what are we going to do about healthcare well-being? What are we going to do about messaging to patients?

The other major, uh, document that I think is worth going over, some of the points of, are the CMS recommendations that came out, as I said in parallel with this. They are, uh, similar to, uh, in many ways overlap with the four specialty expert opinions, and for much the same reasons. There are some key considerations I want to point out. They do emphasize, you have to make these decisions on how to expand based on the incidence of COVID-19 in your area, and what's happening. Is it getting actually decreasing?

What CMS did recommend, and is not in other recommendations, is to consider establishing is what they call non-COVID care zones. This is to screen all patients, staff, visitors, before going in. And what they mean by screening is, system review and a temperature check for everybody. What they are recommending if you should establish areas that are dedicated to the care of non-COVID patients, and they should be separate from the COVID care areas as much as possible. And specifically, staff should not cross over between COVID and non-COVID zones. They specifically talk about don't do rounds in the COVID area and then come out to the non-COVID area afterwards.

For PPE, the CMS recommends, during this recovery period, that healthcare providers and staff should wear surgical masks at all times in the facilities, and patients should wear some face covering, a surgical mask if they have, but if they bring it from home, that is certainly better than nothing. And as always, an emphasis on conserving PPE.

Facility, how to limit, uh, how to implement distancing to limit the risk of infection, and on testing. They came out, uh, relatively softly. They're some very general recommendations here about when adequate testing capability is established, patients should be screened before care and staff in these facilities should be regularly screened.

Since the care is likely to begin in the ambulatory environment where we are not going to lean on our hospitals, uh, SAMBA proactively decided for ambulatory anesthesia that focuses on outpatient ASC, non-OR, office space care, put out their own recommendations and they recommend again, a step recovery. When a community has a low incidence, cases are decreasing and you have enough PPE. Specifically be cautious about performing surgeries that might require transfer of care. Start with low-risk, shorter procedures, move to more advanced ones as the pandemic lessens and look at ways to do anesthesiologist-led pre-op evaluation remotely, if possible.

Well, those are the major proposals on what to do. So what are the problems? What are the barriers to getting this done? First of all, the, uh, there is the issue of professional safety and by this, I mean the, uh, the ongoing lessening, but still ongoing issue about

having enough PPE. Uh, ASA has been very strong in this regard. Frontline professionals have to have appropriate PPE to be safe, and if your facility still can't provide them for you cuz they have shortages, you can, you can buy your own appropriate PPE and wear it at work. The, uh, not only does the ASA, that the ASA recommends it, but the Joint Commission says that this is okay to do.

Now, the issues of barriers to resuming surgery are not just about the, uh, the facility and the providers. There's an issue with patients. Uh, there are, we are seeing across the country, that has been a decrease in emergency visits. Hospitals are now viewed as places where if you're, you can get sick with COVID, and you go and may do badly. So there's a varied concern about patient willingness to come for care, some will, some will not. I think they're going to be more comfortable going to, uh, separated ambulatory surgical facilities at first, but be aware that there is an issue here.

The second patient-related issue is patient safety. There are many, um, reports of patients who come into hospital and then have surgery and do badly afterwards, test positive afterwards. So the issue of patient safety in the, when there is still COVID in the community, is, is an issue that I think that you need to explore in your facility. Is this an informed consent issue? Is it, is, if this, how elective is this surgery? What are the options available?

And that brings us, of course, to the last big point, which is testing for COVID, the tests that are available, and how to do them. And I want to cover, very briefly, uh, sort of four major points. When a patient's infectious, when our test's positive, how accurate are the tests, and what if the test is negative? This is, uh, a graph of looking at when patients are infectious. And this is some data from, uh, looking at testing patients and looking at the virus that they shed into their nasopharynx. What we see from, what you have on the vertical side is the number of, basically, the, the number of, uh, virus particles and you can see that the vertical line in the middle of there at day zero is when the patient became symptomatic. The infectiousness, the viral load, occurs from about 2 days before, 2-3 days before, to before the patient becomes somatic, and continues beforehand. I want to emphasize that there is an incubation period that is described as a median of five days, but can be as long as 2 to 11 days. And I want to, by the way, at this point, particularly step back and give a particular thank you to Dr. Dan Cole, who has, uh, shared his expertise in this entire testing area and has shared uh, some of his, uh, valuable material with me here.

The next question is sort of what tests are available? I want to first start on the, some on the lower right, where the current hot topics about antibody testing. This means that a patient has had an infection. It's a nice thing, would be nice, but the problem is we really

don't know much about what this is, what this is actually telling us yet. First of all, if there are antibodies we have no idea if these patients are then immune, and in addition, these tests, which are particularly very new, the validity of these tests is, uh, really not certain yet.

I want to point out that the development of antibodies tends to start, first early antibodies, about 5 days into symptom onset, and increases over time. This is after symptom development, but I want to go now to the picture in the upper right, which is about viral shedding. Those patients likely have active disease, and you'll see the term PCR testing. This is what we're talking about here. And again, you have a, a rising line as patients become, as their viral load increases. When you cross that horizontal line, they, is there a point where the test will be able to tell, will become positive? And, that the infectious level of virus continues when it become symptomatic and tapers off over, usually, over the next 15 days. That last downward slant is not to scale. What I want to point out here, is this is for symptomatic patients. The same graph, the same pattern, all virus shedding occurs for asymptomatic patients. So if you limit your testing, why some facilities are proposing only testing symptomatic patients, you are absolutely assuredly going to miss infectious patients. This is the point behind doing universal preoperative testing.

There are a number of issues here with, that you need to know about. What are the limitations of the testing that we have? There are now about 42 tests utilized in the United States, and most of them utilized under order called Emergency Use Authorizations, which means they have had very, a minimum testing, but it is limited. The, the clinical accuracy of these tests is not always certain. And I want you to know two terms and then we'll come back to a third one later. First of all what you hear how to describe these tests, is the sensitivity of the test. This, the sensitivity describes, identifies the true positive that when the test is positive, the patient is actually sick. And most of the COVID tests are pretty good at that, if it's positive the patient is likely, is infected with a disease.

The specificity is the true negative rate, so that if the test is negative is the patient, is that the patient is also negative? The patient is also healthy. This is where the issues lie, and the clinical real-world specificity of these tests, while it's all been described as being 90% in a test tube, in the real world, this can be as low as mid 60s.

So, what about the real world issues? We have this issue of false, uh, negatives where the test is negative and the patient is sick. Here again, we come back to the need for testing. And why does this happen? There issues with the sampling, with storage, with test performance, any, a whole, uh, uh, litany of reasons. Other issues with testing, the

turnaround time, some of them are, are un, you get answers on 1 hour, some it takes several days, and that leaves a period where the patient can become infected, even though they've tested negative before your surgery. Many of the tests, particularly the faster ones, have a limited test capacity per day, in, in, in the in the tens and twenties and fifties. Some sites do not have testing availability. The College of, of Pathologists that accredits testing centers, that approximately nine hundred, only about nine hundred of its eight thousand facilities, offer testing. So you may have to send it out. That leads to yet more delay. And, there are issues with supply shortages that hamper testability, the swabs are not available, reagents not available, sometimes PPE not available.

So, how do you know what's going on in your world? You have to go to the lab that you are working with and ask them the specifics. Now, this is some of the questions that you need to know to ask, to know what your real world in, environment is.

I want to go back to one last point now. The point about the specificity, the true negative, where the test is negative and the patient is healthy. So how can we tell how accurate this test is? Which of our patients actually is negative, and which is not? There's another statistical test that is called the negative predictive value. You should know the term, and what this lets you predict whether the negative test actually represents the patient. And what it depends on, is the prevalence of COVID in your community. If you have one of these clinically lower specificity tests, I can give you some numbers.

Community prevalence that's very often quoted is about 2%. This may or not be real, it's probably an underestimate, but you'll see this number in the literature. If the community prevalence is 2% and you have a test that has a low specificity, you can be missing about 4 patients in 500 who are actually positive, and the test misses it. That means if you're in a larger center, that's, can do, it has a surgical load of 100 patients a week, you're going to see 4 patients a week of patients who are actually totally, are actually positively ill with this, with this, uh, disease and you'll miss it.

It's the prevalence goes up, if you're more of a hot spot, such as New York City, there any incidence is around 15%. That means you're going to miss 6 patients out of every hundred. That's going to be a lot of COVID-positive that your test is unable to test you. This is the negative predictive value, I, I, have great caution that the 2% prevalence that is said in the community is a, very often, an underestimate because we are not doing total population testing. We are only testing mostly patients who think they have been symptomatic. So I think that 2% prevalence, can well rep, I and many others, think that 2% prevalence represents, among those who think they may have had the disease, not

among the population. In, uh, New York, as I said it's at 15%. In one of our local community hot spots, it's 34%. So take care.

That brings me to the very sort of last point. We need to develop our own road maps for resuming elective surgery and these are some steps that you can do to, to help establish your plan. Number one, you have to have an assessment, all what the local prevalence of COVID-19 is in your community, and that means critically assessing what this data actually represents. How many patients have been tested? What does this testing really mean? Then you have to look at yourself. Assess your facility's resource availability. You have the workforce, you have the facility and supplies you need, you have PPE, and what are you going to do about that testing problem?

From a, from your own practice in your facility, you're going to need a governance team that, uh, from, from the anesthesiology team, from surgery, from nursing to develop policies that everybody can live with, without friction, and develop local policies to guide your implementation and your case prioritization.

What I want to point out is that whatever it is, we need to go about this in a conservative and scientific fashion, but safety always has to be first. And it's about the patient safety, who's coming in to have procedures. Thank you very much.

DR. MARY DALE PETERSON:

All right, well, thank you so much, uh, Dr. Philip. And now we have a few minutes and we kind of used up a little bit of our question time, but we have a few minutes, um, for questions. And so I'd like to start off with, um, Sharma. I know there are a couple people in the Q&A boxes who were asking why, um, you don't recommend using a nasopharyngeal or oral probe? And don't forget to unmute yourself Deepak.

DR. DEEPAK SHARMA:

Thank you, Dr. Peterson. Um, yeah, so I think the concern, so the concern there is the disruption of the nasopharyngeal or the pharyngeal membrane, um, as a process of insertion of the nasal esophageal temperature probe. Just to avoid that, it's better not to use those probes. Also particularly when using the esophageal temperature probes, it may occasionally be difficult removing the probe smoothly, which might require the anesthesiologist to (sic) more with the secretions. Um, something that could be easily avoided and finally at the end of the procedure when the esophageal probe is taken out, there could be a chance of accidental aerosolization or droplets coming out that one

may not be very guarded against. So, just for extra caution, I will submit there is no specific evidence I have to back that up.

DR. MARY DALE PETERSON:

Okay, so really it's, if you're worried if this COVID seems to like a nasopharynx and all that, not to stir it up. Um, so would you recommend an axillary, or what other temperature monitoring would you recommend?

DR. DEEPAK SHARMA:

Right, any alternative, and you often times these patients, um, particularly for strokes, um, get, um, fully placed, so we could use a bladder temperature monitor.

DR. MARY DALE PETERSON:

Great, thank you so much. So, Dr. Paul Garcia. Let's see, we got several ECT questions here. Um, let's see, occasionally, when you have an urgent ECT for acute catatonia or mania patients, many of those patients are morbidly obese. What would a policy for ECT look like for those specific patients?

DR. PAUL GARCIA:

So, um, that's a good, great question. The morbidly obese of course are more likely to desaturate and, um, may have a difficult mask ventilation as well. In those cases, it should depend on a lot of factors. One is, is the testing available in your area and have they tested negative? You know, if they're an in-patient have they tested negative maybe even more than once, and how long have they been hospitalized? But I would say that in the full PPE, kind of taking every precaution, a lot of anesthesiologists have favored using an LMA for ECT with a Jackson-Rees circuit and that could certainly be an option.

I'd also say that these plexiglass shields with some, um, vacuum in a non-negative pressure room seem to show some promise as well. So you can kind of get these plexiglass shields and use your, your hands inside of them. Those I think would be the, uh, two ways that I would proceed, and lastly I would emphasize that that person would be pre oxygenated for you know, five to seven minutes in order to make sure that every hemoglobin molecule has some oxygen on it.

DR. MARY DALE PETERSON:

Right, and thank you so much. And Dr. Beverly Philip, let's see, any guidance on how long COVID-positive patients should wait after testing positive before being allowed to have elective surgery?

DR. BEVERLY PHILIP:

Yes, uh, bet a, a patient whose COVID-positive should not be having elective surgery. They are at risk to themselves and they are at risk to everybody else in the, uh, the who cares for them as well. It is important that a patient test negative. Uh, there are recommendations to have two sequential negative tests. I want to emphasize there is risk to the patient here as well as to the providers.

DR. MARY DALE PETERSON:

So, but we don't really do know how long that's going to be necessarily. Is that correct?

DR. BEVERLY PHILIP:

I think that as, uh, very often after, it is um, after 14 days after first symptoms is when they're, many are recommending the first, uh, test to test for negativity and you want to be testing at that point until you have a negative test.

DR. MARY DALE PETERSON:

OK, great, thank you so much. Um, Paul, another one on, um, ECT. Some psychiatrists rely on visual seizures, what would be the recommendation if the patients are intubated? And then there's a second follow-up question, how to decrease a seizure threshold if they were intubated and there is no methohexital in the hospital?

DR. PAUL GARCIA:

So, an intubated patient, you can, um, control their respirations. So hyperventilation could be controlled in an intubated patient. So, if you're relying only on visual seizures, that's a good question. I would say that if, if, if you're having trouble generating a seizure, as can happen in patients coming for ECT, with an elderly brain or, um, other comorbidities, there's, uh, many different pharmacologic options you might consider besides just switching from propofol to methohexital. One interesting option would be to consider, especially in an intubated patient, sevoflurane, which may not have such an effect on seizures as propofol would. Etomidate is also a, an option. And like I said, you

could control the ventilations if the, if the patient was already intubated. I, I'm not exactly sure that answers all points of that question, and it's a little confusing to me.

DR. MARY DALE PETERSON:

OK. All right. Well, thank you so much, and, Deepak, there's a question here. Have stroke centers been seeing an increased number of patients presenting with ischemic stroke during the pandemic?

DR. DEEPAK SHARMA:

So that's actually a very interesting question. And obviously we don't have, um, data quite yet. But, um, while we all have seen the news reports about hospitals in the New York region seeing a lot of ischemic strokes requiring thrombectomy, there's others that are actually not seeing as many strokes and there's some concern that the patients, uh, who are at home with the stay-home orders are actually potentially ignoring their stroke symptoms or symptoms of other conditions. And, and some patients have been reported, again mostly through media, where they did eventually come to the hospital, and was found that they were waiting to report their symptoms primarily from the hesitation of going to the hospitals. Um, in my communications with, uh, stroke centers elsewhere in the country, I understand there are places that have gotten really busy in terms of number of thrombectomies they're doing and there are others which have actually not seen or seen a lot of change. Um, and there may be some others where the patients are preferring not to come because they, those hospitals um, are recognized as COVID centers, so to say. So I think it really depends on where we are in terms of volume we are seeing.

DR. MARY DALE PETERSON:

Thank you. And I know that was a discussion, Dr. Philip and I were on a call earlier today with the European Society and they were saying that since so many people are not working now, they're not as stressed out, and that's why they're having strokes and heart attacks. I'm not sure I believe that, when there's people in food lines, and everything else. But anyway, uh, I think time will tell what that looks like.

So, I want to thank our, our clinical panelists right now. Um, I wish I had a whole lot more time for questions. I just want to, uh, um, you know, reassure everybody that's on the call before we go to our final section of the pro, program tonight that, um, we expect that additional FAQs and materials will be generated regarding elective surgeries in the

days and weeks ahead. Um, and so please be on the lookout for the Monday morning outreach, as well as another email from, um, ASA, um, on this topic.

Three weeks ago, um, Nora Matus, our AAS Director of Congressional and Political Affairs spoke about provisions within the CARES Act that ASA secured to help your practices. Nora is joining us tonight to give us an update on the federal relief legislation, of which more was passed this week. We also have, um, Julio Davila, certified professional accountant principal at Davila Advisory, um, in St. Louis who will discuss taxes, accounting, and best practices and administering the various funds recently authorized to groups and practices. And Sharon Merrick, our Director of Payment and Practice Management is available to answer questions after these presentation. So, Nora?

DR. NORA MATUS:

Thank you, Doctor Peterson, uh, and good evening everyone. Um, I'd like to begin by asking everyone to help ASA advocate, uh, as effectively as possible on your behalf. Uh, the ASA COVID survey is targeted to your practice administrator, and, uh, or executive, and uh, we're asking that they complete the survey, open until May 1st, uh, so that we can assess where additional support and economic relief is needed. Uh, our, uh, ASA Payment and Practice Management Director, Sharon Merrick, uh, is available to them should they have any questions.

Approved by the Senate on Monday, and passed overwhelmingly by the House of Representatives just a few hours ago, enhancement funding to the CARES Act brought an additional $220 billion dollars in additional economic relief to healthcare providers, hospitals, and small businesses. There are significant plus ups in grants for healthcare providers in the SBA paycheck Protection Program, uh, loan program, and a new 25 billion dollar funding for anational testing effort.

You can find detailed information, updates, as well as program applications on the ASA website at www.asahq.org/economic impact.

So the Public Health and Social Services Emergency Fund started out as a hundred billion dollar grant program, now expanded to 175 billion dollars for eligible healthcare providers. This program is designed to help with healthcare related expenses, as well as lost or foregone revenues associated with COVID-19.

I want to just say at the outset there is very little clarity about how the funds are disbursed, when they'll be dispersed, and the conditions upon which they'll be disbursed.

On April 10th, CMS dispersed 30 billion dollars on to Medicare fee-for-service providers. Tomorrow the fund is poised to disperse an additional twenty billion dollars to Medicare facilities and providers based on the providers 2018 net patient revenue. There are also some additional funds that will be disbursed to hospitals in hot spots and rural communities. Some providers will receive payment based on revenue data they submit in CMS cost reports, and providers without adequate CMS cost report data on file will need to submit revenue information to the portal at the very bottom of this slide. The portal is open and you are able to submit data at this time. Additionally, providers who receive funds automatically a will also have to provide revenue information for verification.

I want to also point out in the status update, the bottom, or just above the portal, you'll note that terms and conditions apply. These grant funds come with terms and conditions to which you must attest and they include among a number of other items a ban on balance billing, and salary caps at the executive level too or $197,300.

Unfortunately, guidance has been distributed a little more slowly than the grant programs, funds, and a ASA is continuing to engage with the department to learn more, obtain more guidance and clarity about the conditions and terms of these grants as well as certain eligibility criteria.

I want to point out for anyone who received funding in the first tranche of 30 billion dollars, the attestation is due within 30 days of receipt. And if you accept the funds and do not and do not normally attest you will be deemed to have attested. Please review the terms and conditions of very closely with your legal and accounting teams.

So funding for the Paycheck Protection Program has more than doubled. It started out at 249 billion dollars. It received another three hundred and ten billion dollars in today's legislation. This program offers up to 100% loan forgiveness if a practice maintains its payroll for up to eight weeks following receipt of the funds The initial launch of this program stumbled. There were national banks who prioritized the applications of commercial bank account customers, and there were other banks, national banks, that were very slow to participate or declined to participate at all.Some practices found relief in approaching community banks and credit unions both of whom accepted a new customers. In this batch of funding, Congress set aside 60 billion dollars of for community banks and credit unions to ensure that there is ready access to these funds.

If you have not yet already applied for the PPP program, or Paycheck Protection Program, you should consider doing so immediately. There's considerable competition for these funds. Some applications were submitted and not funded. If you are looking for an SBA lender, we noted this evening that SBA had updated as of today, it's list of lenders of by community. You can search that on your website from the Paycheck Protection Program cage.

So, just a moment about the economic injury disaster loan grant program. This also received significant infusion of new funding today. This program, as a recap, provides up to $10,000 in an advanced emergency payment to practices that have received a precipitous drop in their revenues. Advances are paid out within 3 days of approval, but you do have to apply for an economic injury disaster loan. You don't have to accept the loan, but, uh, in order to accept the grant.

And then just a word about the Economic Injury Disaster Loans. This original program was increased by 40 billion dollars for a total of 50. And this provides up to 2 million dollars to practices with low interest loans of working capital.

So these funds are all available until expended. And again, if you are interested in applying we would encourage you to do so as soon as possible.

In closing, I just like to talk about next steps. Congress is already at work on the next COVID relief package. We expect that to be a much more broadly applied bill. This was a very narrowly targeted bill today just to provide additional funding to the CARES ACT. And we at ASA are already engaging Congress on behalf of your practices. If your practice administrator has not completed the survey, please ask them to do so, so that we can make sure that everyone receives the support that they need.

Thank you for having me and I'll turn this back over to Dr. Peterson.

DR. MARY DALE PETERSON:

Thank you so much, Nora. I really appreciate it.

And now I'd like to introduce Julio Davila, who will give our next presentation, which I'm sure y'all are all waiting for, the tips and pitfalls I guess of some of these grant and loans. Thank you, Julio.

JULIO DAVILA:

Uh, thank you, Dr. Peterson. Uh, good evening and thank everybody for having me here. I will go over some of the accounting and tax issues associated with the PPP, the Economic Disaster Loan, and the Public Health and Social Services Emergency Fund Grant. There's a lot to go over, so let's get started.

As Nora talked about, the PPP program was started by the CARES Act. And the point of the program was to help small business cover ... payroll costs.

They're generally very generous to the borrower, there's no credit application, the terms are the same for everybody, there's only 1% interest over a couple years, and the loan is completely forgivable, assuming you meet the program requirements.

Know so like how to get one, where to apply?

Loans are attained via your local SBA lenders, as Nora had mentioned, but … In other words, you need to work to your bank and not the SBA directly. Hopefully now that they've replaced the funds, more people will have access to these funds. As local banks are the underwriters, and the government CARES Act didn't specify any document requirements, each lender had to scramble developed their own list of required documents to include with the application. So this can vary from bank to bank. So I can't tell you exactly what you're going to need. But I did want to provide some recommendations for some of the documents you can start collecting if you do intend to apply for a PPP loan. If you're not self-employed, and in this case I mean you do not file a Schedule C on your individual tax return, you likely need documents from the column listed employer. You'll need your payroll records, payroll tax filing, your health insurance, and retirement plan benefit records. Those are considered part of the payroll costs. And the final bullet point on the list is something that I don't think many people are aware of: the national payroll providers have developed reports that are already reflecting the approved payroll costs. If you have a max that you do for your employee of $100,000 you can include, these reports already have that for you, so it can be a big Time Saver.

If you're self-employed, new SBA guidance asks you to provide evidence to substantiating your self-employed status: your invoices, bank statements, etc. They're also requiring that you provide your 2019 Schedule C. If you have not yet filed your individual tax return, you'll be asked to prepare it as though you had prepared your tax return. So you're going to have to prepare it as it will appear when you file your tax return. And if you're self employed and you have employees, then I would gather the same documents you see on the employer side.

We'll look at the PPP loan forgiveness requirements, Nora alluded to these earlier. If you meet the use requirements presented on the slide, you are eligible for complete loan forgiveness. The amount forgiven is dependent on two things. First, the loan proceeds must have been used for the approved uses over the eight week period, with 75% of the proceeds used to cover payroll costs. Additionally, you must have maintained the number of employees and pay levels. This is in keeping with the overall goal of the Paycheck Protection Program which is to keep people employed. So full-time-equivalents are reduced and/or wages are significantly reduced for employees that make less than $100,000 a year, the lender will reduce the amount of the loan forgiveness.

As payroll costs have to make up 75% of loan proceeds, we can take a brief look at some of the items that are not considered payroll costs when you're considering the use of these funds. And many of you may be familiar with some of these.

You cannot count more than $100,000 in compensation for any individual employee. Federal employment tax, uh your FICA tax, those, your employee portion or FICA taxes do not count as payroll costs. Wages for which credit were received, those are not allowed as payroll costs. Credits were abused on wages paid, so you can't consider the payrolls costs, that would be considered double-dipping. Payments to an independent contractor are not considered payroll costs. The assumption is independent contractors will apply for their own loan. And if you are self-employed you got an issue by the SBA specifically said that you cannot include your health insurance and retirement benefits as payroll costs. You can include for your employees but not for yourself. And finally corporations, … S corporations, can only include payroll payments that are listed as wages. Distributions and dividends are generally considered return of capital and therefore not payroll.

If your PPP loan is completely forgiven, how does that affect you tax wise? One of the most appealing aspects of the PPP loan is that there is no cancellation of debt income associated with forgiveness, so you won't receive a 1099-C and forgiveness will include both principal and interest so that's always great news.

The question that sometimes come up is: are the expenses paid via the PPP loan deductible? I'm not aware of any guidance issued by the CARES Act, issued, and the CARES Act definitely doesn't mention it However, there is a long standing IRS tenant that deductions are never allowed on tax-exempt income. And I believe that same principle will apply here. So do not count on being able to deduct those expenses.

We can move on to some issues with the income, emergency income disaster loan advance. This loan is also also mentioned… of up to $10,000 to applicants that will not have to be repaid. And although they call this a loan, it actually behaves more as a grant, which you know, ultimately what it means, the forgiven amount will be considered taxable income.

You can apply for both the PPP loan and the disaster loans. And if you've already applied for disaster loan, and you received it sometimes since January 31st and April 3rd, and you used it for payroll, the advance will just be rolled into your PPP loan and the 10,000 will reduce your forgiveness amount. So … even if they forgive the whole PPP you'll still have to pay on that 10 grand. If you use it for other expenses then the advance is just a grant, and you pick up the income. However in both cases, you will avoid taking a big tax hit just because of using the funds to pay for necessary business expenses, those business expenses will offset that income.

We will quickly go over the public health and social services emergency fund grant. So this is a grant, so the concept of loan forgiveness doesn't really apply here. The funds received will be considered taxable income. But like with the emergency income disaster loan grant, you can use the accrued expenses to to offset income, the grant, it'll be 6.2% of your 2019 Medicare Revenue. So I think it's important to adjust your estimate in your planning accordingly, your tax…. And how much so, depends on your situation. This is particularly true if you're paying safe harbor estimate based on prior year income. For those that may not be aware, those estimates are suggested payments to help keep you on track and avoid any underpayment penalties. The IRS is not expecting or demanding that you pay a predetermined amount each quarter. In truth, you're only responsible for paying estimates on income earned in any given quarter. So a drop in taxable income to correspond to the drop in estimated tax payments. I can't possibly go over everybody's exact fact pattern, so the items on the on the slide just to give you a little bit of a guideline as do your tax estimates, you're thinking about what your tax load is going to be, just consider the grant is taxable as income and back out any expenses paid via the PPP loan, those will not be deductible when you're doing this. If you're not comfortable doing this yourself, I would suggest maybe talking to your accountant to run an estimate for you. It could be worthwhile, especially if you're used to paying a lot of money in estimates, it would be nice to hold on to that cash for a little bit longer.

I want to address a critical aspect affecting all of these programs, that is the record-keeping. The PPP loan and the PHSFCS grant have specific uses of funds that need to be tracked in the way that can be verified later. With regard to the PPP loan, the debt is not automatically forgiven. You must request forgiveness from the lender. To do so, you

must be able to show appropriate uses of funds as well to certify that the funds were used for authorized purposes. So I suggest you sit with your team and determine which of your expenses qualify, and how are they calculated. Depending on your entity, qualifying payroll costs can vary so make sure you understand which conditions apply to you. I also suggest that you develop a process to document the expenses and uses. I can understand it can be a challenge to keep track of everything, especially when trying to be compliant across at least two different set of rules.

I've heard some people suggest opening a separate bank account to hold these funds. You can also add an account in your chart of accounts … Alternatively, you can use a process similar to employee expense reimbursements. So in other words, you know, you collect receipts and documentation before you approve, you know, release of the funds.

But in short, find a process that works for your systems that you have in place. The last thing you want is when everything gets back in, to have to go back and spend time trying to, to dig up the receipts and making sure he did things the right way.

And the last item on the slide is something that kind of gets lost in the shuffle. Just to be aware that the PPP and the economic injury disaster loan did not lose a … . So if you have other debt that is subject to debt covenants, you may want to keep an eye on your ratios. Your debt covenants, used for a lot of places, you know, you're increasing debt, you're loring income and that could possibly put you in violation of some of those covenants. If you find that is the case, you may want to get in front of it and talk to your banker. The banks have discretion to waive the right to call notes due to violation of debt covenants. So I just need to be a good practice to you know get in front of it, you know rather than wait for an angry letter or phone call that you're in violation of your debt covenants.

I would like to wrap things up and address what happens if funds are misused. Just know if you do use it, you know, you make a mistake, you did use it inappropriately, you will be required to pay back any funds you use for unauthorized purposes. Now in the case of deliberate misuse, you know, you do this in … then they can be charged for fraud. I'm not an attorney so I can't tell you, you know, the legal consequences of it, but you know, it's just good to know that that's out there.

So let's just try to keep up with that record keeping and keeping track of how these funds are used.

The last thing is just, you know, you guys are in the field, just be safe out there. Thank you so much for your time. And I will be around for some question. Thank you.

DR. MARY DALE PETERSON:

Well thank you so much, Julio. So we do have some questions here. So the first one. Are furloughed employees of publicly traded companies eligible for any of these government programs?

JULIO DAVILA:

Not these that I talked about you today. If you're furloughed, especially if your an employee, the PPP program, the economic disaster … wouldn't apply to you. The ones your best at is looking at unemployment. Part of the CARES Act was a beefing up of the unemployment benefit you can receive. But, I cannot tell you specifically what it is because that is all handled at the state level … check with your state unemployment commission and see what benefits that you're entitled to and how to you apply for those benefits

DR. MARY DALE PETERSON:

Well an add-on, I guess, for unemployment is, what it's 600 a week that they add on to whatever state unemployment is?

JULIO DAVILA:

Yes. Yes. I think it's $600 a week. But there is another, added benefit that whatever is the legal time that the state is required to pay unemployment benefits, the CARES Act added I believe 12 weeks to that. So if the state says you have 24 weeks of unemployment, now you're guess is 36 weeks of unemployment.

DR. MARY DALE PETERSON:

Got it. Here's one. How about employees who retired because of COVID, but are included in the loan? Is that a problem with loan forgiveness if the FTE is maintained?

JULIO DAVILA:

If the FTE is maintained, it is not. There's actually no guidance, nothing specific on what to do if an employee leaves for whatever reason. You didn't fire them. They decided to

retire. They decided to, you know, move to another state. So there is no guidance on that, but what we do know is the test is on equivalent FTEs, so as long as you have employee, within, that to fill that void, you are still good on the forgiveness.

DR. MARY DALE PETERSON:

And there's a leeway, a percentage leeway in there? …employees have to be the same in one period versus the next?

JULIO DAVILA:

Yes, there's, uh, I didn't go into it, because it can sound kind of confusing. But the way they're calculating the FTEs, they're looking at the number of employees you would have in a period the year before or the last quarter. You can choose how many FTEs you have, how many do you have at the end of this period. And they'll take that percentage and that's you know, what they're going to reduce the loan forgiveness on. However, they do give you an opportunity to I guess … to cure any firing that you did. Let's say, you know, your hit pretty hard and knee jerk reaction fired people. You have, if memory serves, until June 30th to bring people back on and kind of get yourself to the right number FTEs.

DR. MARY DALE PETERSON:

Great, And I think I'm going to make this one probably that the last question. DoI understand correctly from your presentation that the PPP dollars used for payroll are not subject to federal taxes?

JULIO DAVILA:

They are, they are not. Yeah the PPP loan forgiveness, you will not pay tax on that forgiveness about that. They've made that pretty clear.

DR. MARY DALE PETERSON:

Well what I've learned from some of my colleagues is that looks like the accountants are going to actually stay in business because it's kind of complicated to keep track of all this, and so I do appreciate all your expertise tonight in helping all of our members, you know, tread through the economics of this. So I want to thank Nora and Karen you were standing by as well and Julio for your time on the on the economics.

And so I realized today, actually, I think it begins tomorrow morning, is the beginning of Ramadan, a time of sacrifice, empathy and community. I know many of you, regardless of your faith or belief system, are sacrificing a lot as you work in difficult circumstances. I also know that we have many in our communities who are less fortunate than us, worrying where their next meal is coming from. Last week, I gave you a ASA update via Zoom to the District of Columbia Society of Anesthesiologist and was happy to see that they raised $3,460 for Martha's Table, a nonprofit supporting children and their families in a clear sense of what it means to be part of a larger community.

I've certainly enjoyed being a part of our ASA community. This week I was saddened to see it a letter from the VA that devalued the strong work of our VA anesthesiologist, anesthesiologists who have been deployed to ICUs and now the VA wants to diminish their role in the operating rooms. The next morning, I had a message in my inbox, I had two actually messages in my inbox, giving me encouragement. One had of prayer. And the other had a beautiful mural of a physician with angel wings standing on a Covid virus of the earth.

That is how we lift each other up in this long marathon we are running. I hope as we begin to open our ORs to elective surgeries, we can start to feel a new normal, imperfect as it may be. I hope for those who have been without work that you are renewed. We will continue to answer your questions as we are able and continue to fight for what is right: patient safety, physician-led care, and the advancement of our wonderful profession.

Thank you all and goodnight.

DR. ADAM STRIKER:

Thanks for joining us. We'll continue to keep you updated here on Central Line. And for more information, you can find video of the original Town Hall at asahq.org/covid19info where other COVID-19 resources can also be found. Stay safe and join us again.