Twenty years ago, I was in the middle of my critical care fellowship year when we admitted a patient that was “found down.” The patient was comatose, and we really did not have a lot of information or leads to guide our therapy. The patient had been admitted to the surgical ICU on the presumption that he was a trauma patient, but after the initial work up found no injuries, we were left with a long list of possible diagnosis and extensive detective work in front of us.

Slowly, the pieces of the puzzle started to come together: some family members showed up, tests came back, and diagnostic procedures were undertaken. We also placed appropriate lines for infusions and monitoring. So, there we were, my attending and I, refreshing the computer every so often waiting to learn the mixed venous saturation or the lactic acid. We discussed whether we should consider ethylene glycol or other poisons and waited for the ultrasound tech to perform an evaluation of the carotids while the nurses other team members worked feverishly on him. The interesting thing about this case is that we continued rounding on the rest of the ICU from inside this patient's room, hidden from view of the rest of the unit.

After a while, I asked my attending why we were there. It would have been much easier to continue rounding in the nurse’s station, or in the desks available throughout the unit. He answered, “Miguel, neither you nor I have the slightest clue what’s wrong with this guy, but the fact that we’re present at the bedside, makes a significant difference for everyone. For the nurses, because they feel supported that we are here, as lost as everyone else. For the family, because if something bad were to happen they would like to know that the people who are trying to help him are next to him. And for us, because our duty is to be wherever we are needed most, and now this is here.”

Those teachings are clearly applicable to exactly one year ago, when the world was “found down” having been felled by a little-known virus seeding destruction and death at alarming proportions. And our specialty should be extremely proud to say, one year later, that we were present next to those who needed us, sometimes clueless, many times fearful, but with the fortitude to help not only those affected but the entire medical community who depended on colleagues like us to be continued on page 2

Miguel Cobas, MD, FCCM
President, SOCCA
University of Miami
Miami, FL

Click here to view or print the SOCCA INTERCHANGE newsletter.
at the forefront of efforts to tame and control an epic—hopefully once in a lifetime—pandemic.

This has been a difficult year, and while it has tested our resolve like no other, anesthesiologist intensivists have really stepped up to the challenge. As I talk with more and more of our members, it is obvious that each one of us had to make sacrifices to sustain our mission and support our patients’ wellbeing, and this endeavor has been nothing short of inspiring precisely because of how arduous it has been.

SOCCA continues to be present for our patients and for our constituency. We are more relevant than ever: over the last few months we have reached over 1000 members, and we will continue to devise new ways to keep fellows and young intensivists engaged with a multiplatform strategy that better suits today’s fast-paced learning environment and rapid deployment of resources.

And now, as winter gives way to spring, there is a renewed sense of beginning. In the global health arena, there seems to be light at the end of the tunnel in the form of many effective vaccines being deployed worldwide with significant success. Ironically, the pandemic has forced us to be more creative and more responsive to the needs of the membership than ever. We have never had so many activities going on at so many levels as we do now. The enthusiasm of our constituency is at an all-time high as reflected in outstanding participation in our committees and initiatives.

Spring brings our flagship event, the SOCCA Annual Meeting, in partnership with the IARS, on May 14th. For 2021 it has been completely revised and reengineered. The education committee has worked very hard to put together not only an extraordinary program in terms of scientific divulgation but also keeping it fresh and allowing for networking and participation at all levels of training, and I hope to see most of you there.

So now more than ever, I invite you to participate at any level within our Society, to join our Annual Meeting, but perhaps more importantly, I will ask you to be present right there, at the bedside, helping those who need it the most. We have come a long way, and things are starting to look up. As I once learned, even when we are not sure if we are doing it right, being present is the best way to find out.

PRESIDENT’S MESSAGE continued from the cover

COMMITTEE ON RESEARCH UPDATE

The SOCCA Committee on Research is currently engaged in multiple efforts to expand the scientific objectives of the society. First, the committee has developed a series of short surveys targeted to SOCCA members to assess diverse aspects of anesthesiology-led intensive care. These include: clinical practice patterns, research initiatives and mechanisms of support, current and future models of anesthesia-based ICU training and education, anesthesiology intensive care engagement in the COVID-19 pandemic, and point of care ultrasound utilization in clinical practice. These surveys will be disseminated to SOCCA members in the coming months with results subsequently disseminated broadly so that we may better understand the strengths of our practice, areas for improvement, and future directions for the growth of anesthesiology-led intensive care.

Second, the committee has recently created three new subcommittees to further advance our strategic goals: Subcommittee on Data, Subcommittee on Research Network, and Subcommittee on Task Forces and White Papers. These subcommittees are responsible for driving unique initiatives to enhance the research productivity of SOCCA and its membership. Deliverables will include peer-reviewed scientific publications and the creation of sustainable multicenter research collaborations.

Third, the committee continues to collaborate with other professional societies in order to improve patient care and scientific dissemination. As one recent example, SOCCA is currently partnering with SASM and SAMBA to establish evidence-based guidelines on perioperative management of patients with obstructive sleep apnea.

Finally, the committee is firmly committed to supporting the growth of early-career clinicians and scientists. As such, the committee is actively seeking engagement and committee membership applications from early-career professionals.

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Chair, SOCCA Committee on Research
Johns Hopkins University
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Matthew A. Warner, MD
Vice Chair, SOCCA Committee on Research
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Rochester, MN
COMMITTEE ON COMMUNICATIONS UPDATE
We Need You!

There is no doubt that both SOCCA and its individual members are busier now than ever. SOCCA has expanded its efforts in every domain, and with this growth there is a need for continued evolution and revitalization of our communications efforts. Our blog, the SOCCA Drip, the Interchange newsletter, @SOCCA_CritCare, electronic mailers, and related efforts are all member-driven initiatives. In order to keep pace with increasing demands and feature the work done by our members within the organization and externally, we must come to embody the proverb, “many hands make light work.” Accordingly, the Committee on Communications continues to seek motivated volunteers interested in one of the three following areas:

(1) Interchange and the SOCCA Blog. Written and edited by members for the benefit of members, Interchange and the SOCCA Blog are a paired effort seeking to both keep the membership abreast of developments within the society, spotlight information of relevance to the membership, and highlight the accomplishments of our members.

(2) The SOCCA Drip. Biweekly, the SOCCA Drip seeks to pull together notable internal and external developments that are of interest to the membership. The SOCCA Drip therefore represents an opportunity to keep the membership abreast of developments in the peer-reviewed literature, within the specialty, or across institutions.

(3) Social Media. Our Twitter account @SOCCA_CritCare represents a collective effort from members of the Committee on Communications and other committees. Through a variety of collaborative tools, committee members have the opportunity to plan and deploy promotional content ahead of time in addition to the more familiar dynamic of ad hoc engagement with the membership and public via Twitter.

Please reach out to Vivian Abalama (vabalama@iars.org) to express your interest.

On a closing note, the Committee is again delighted to offer this issue of Interchange as a service to the membership. Perhaps in keeping with the times, ethical, personal, and administrative perspectives on the end of life emerged as a strong theme. Juxtaposed on the other end of the spectrum, we are proud to feature the SOCCA Recommendations for Parental Leave and Lactation with a forward by Dr. Brigid Flynn. Some months back, Dr. Shahla Siddiqui penned a piece on the deleterious impact of restrictive visitation policies and then—unthinkably—was later beset by personal tragedy when her mother took ill and such policies prevented her presence at the bedside. Presented here as a paired submission, Shahla’s words stand as a moving testimonial to the anguish she and countless others have faced over the past year.

Craig S. Jabaley, MD
Chair, SOCCA Communications Committee
Emory University
Atlanta, GA

EARLY CAREER WORKING GROUP
Call for Involvement!

The SOCCA Early Career Working Group held its first meeting on January 28, and it was a success! We discussed how we want to organize the group and what we hope to accomplish together. Our top priority will be to keep fellows and early career members engaged in the society. We are currently planning to organize several webinars, including advice for residents applying for fellowship, advice for fellows applying for jobs, and early-career guidance for fellows reaching the end of fellowship before starting their jobs. We are also planning to create more avenues for mentorship within the society to help connect junior and senior members of SOCCA, in addition to hopefully encouraging more junior members to become involved with education and research. We also hope to set up a networking event in conjunction with the Annual Meeting. A survey was distributed after the meeting to get more specific feedback from those members who were not able to attend the call as well, and we will continue working toward including everyone’s ideas.

Our next meeting will be April 7, 2021 at 5:00pm CST. Please register for the meeting, and do not hesitate to reach out at any time by e-mail to alisha_bhatia@rush.edu with questions or ideas!

Alisha Bhatia, MD
SOCCA Membership Committee Vice-Chair
Rush University
Chicago, Illinois
ANNOUNCEMENT

SOCCA Recommendations for Parental Leave and Lactation

INTRODUCTION

We are pleased to announce the newly published SOCCA Parental Leave and Lactation Recommendations. This initiative was undertaken in hopes of providing support for intensivists who are new parents by birth or adoption and/or breast feeding. The document exemplifies the role SOCCA takes to support all intensivists in their personal endeavors, to enhance mental and physical health and well-being, and to continue championing women in critical care.

In order for the SOCCA Board of Directors to accomplish this historic task, we sought guidance from the writing group for the American Society of Anesthesiologists (ASA) Statement on Personal Leave. In so doing, the recommendations put forth by SOCCA are supported by the ASA. While recommendations are often subject to modification at the discretion of individual employers, we hope that publication of this document via SOCCA will allow for meaningful conversation followed by acknowledgement of the personal needs of new parents who also practice critical care medicine. SOCCA believes the acceptance of appropriate work-life balance is paramount to the advancement and the sustainability of anesthesiology critical care medicine for generations to come.

SOCCA RECOMMENDATIONS FOR PARENTAL LEAVE AND LACTATION*

1. Employers of critical care anesthesiologists should have explicit written policies that support and define parental leave and lactation support.
   a. These policies should include statements on birth, adoption, surrogacy and care of a sick family member.
   b. Type of leave, payment schedule, insurance coverage, incentive pay if applicable and duration should be specified.
   c. Institutional parental leave policies should not be more restrictive than applicable federal and state laws.
   d. Lactation accommodations should include private space and reasonable time including patient care assistance if needed.

2. SOCCA encourages parental leave should be paid time away from work and not require use of vacation or sick days, however, it is ultimately the responsibility of the employer to inform employees on all policies regarding parental leave.

3. SOCCA discourages from the ‘front-loading’ or ‘back-loading’ of calls to compensate for missed calls during parental leave.

4. The critical care physician has the responsibility to notify their employer of changes to personal or family status as soon as reasonable.

5. Critical care physicians should be offered maternity leave of at least 6 weeks (vaginal delivery) or 8 weeks (Cesarean delivery) and paternity leave of at least 6 weeks with the option to extend the leave.
   a. Parents should have the option to break up the leave time over a period of 6 months with flexible scheduling for child care associated needs.

6. Critical care physicians with lactation needs, should be reasonably accommodated with private space and adequate time for pumping.

*All in concordance with the ASA Statement on Personal Leave²

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Background:

The Society of Critical Care Anesthesiologists (SOCCA) recognizes the invaluable contributions made by intensivists who also have familial duties. The training and diligence required to obtain and maintain a career in critical care anesthesiology is formidable. Additionally, the daily work of critical care practice involves an innate stressful environment. As such, SOCCA wishes to recommend a guide for paid time off for intensivists who have children either by pregnancy, adoption or surrogacy. Furthermore, lactation needs should be addressed with adequate space and time allotments. The following recommendations are set forth to protect employment and to honor healthy and fulfilling home lives. SOCCA believes that the promotion of work-life balance will benefit departments, hospitals and patients in numerous ways by retaining high quality critical care anesthesiologists who feel dedicated to their workplace.

Other Medical Society Statements on Family Leave:

Parental leave is linked to health benefits for both children and parents. As a precedent, the American Society of Anesthesiologists endorsed a recommendation stating that physician anesthesiologists and anesthesiology residents/fellows should be offered maternity leave of at least 6 weeks (vaginal delivery) or 8 weeks (Cesarean delivery) and paternity leave of at least 6 weeks with the option to extend the leave. Physician anesthesiologists and anesthesiology residents/fellows who become parents outside of pregnancy (such as via adoption or surrogacy) should be extended the same benefits. The American Academy of Pediatrics endorses 12 weeks of paid family leave based on scientific benefit to the child. The American College of Surgeons (ACS), The American College of Obstetricians and Gynecologists (ACOG), The American College of Physicians (ACP) all endorse paid parental leave for all workers that includes maintenance of full benefits and 100% of pay for at least 6 weeks.

Evidence of need:

Recent surveys of women in anesthesiology have provided evidence for the need to understand and offer support for child bearing physicians. One survey of 1827 women anesthesiologists, demonstrated that approximately 1 in 10 would counsel a student against a career in anesthesiology due to obstacles pertaining to motherhood, and this was associated with altering one's timing and number of children due to job demands. In another survey study in respondents identifying as female (n=519), half of respondents (51%) felt that the number of children they had, or did not have, was due in part to career choice. Over a third of respondents worked in institutions that did not provide any form of maternity leave excepting the use of sick and/or vacation days in order to receive pay following the birth of a child (35%).

Lactation spaces were only suitable to 1/3 of respondents. Many women identified that breastfeeding options were limited by lack of time, space and other inconveniences. Breast milk feeding has been linked to numerous health benefits in children such as stronger immune systems, fewer infections, lower rates of infant mortality, lower incidences of ADHD and obesity. Additionally, parents who breast milk feed have up to six times less absenteeism from work. Furthermore, federal law requires employers to provide reasonable break time for an employee to express breast milk for her child for one year after the child's birth each time such employee has need to express the milk (Section 7 of the FLSA). Employers are also required to provide a place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk. ACGME has recently added similar requirements for residents who are need of lactation spaces, with the addition of refrigeration storage and helpful additions of a computer and phone for work-related purposes.

As for work life balance, the survey found that 60% of female anesthesiologists reported that they were responsible for the majority of household duties and that work-life balance was less than ideal for 45%. Notably, 42% of respondents limited roles at work or went part-time due solely to demands of home life. Overwhelmingly, participants felt that women in medicine need to work harder than men in medicine to achieve similar goals (90%). This finding may be attributed to the stress and obligations associated with child bearing, lactation and home responsibilities.
However, these data could represent discrimination in medicine as identified by another on-line survey. Of 5782 respondents, 66% reported experiencing female gender discrimination and 36% reported maternal discrimination. Of those reporting maternal discrimination, 90% reported discrimination based on pregnancy or maternity leave, and 48% reported discrimination based on breastfeeding. Notably when broken down by medical specialty, anesthesiology ranked highest as the specialty for physicians to experience maternal discrimination.

Furthermore, previous authors have coined the term “medical pipeline theory” reflecting a dwindling percentage of women physicians advancing academically. For example, in anesthesiology, this “pipeline theory” has been demonstrated in that women represent 34% of anesthesia residents, 37% of full time anesthesia faculty, but only 18% of full professors and 11.5% of anesthesiology department chairs. Surprisingly, in 116 years since inception of the American Society of Anesthesiologists began, only four women have made it up the ranks to president. However, the “pipeline theory” has recently been refuted to reflect that there may be institutional bias instead of a leaky “pipeline”. In other words, the cause of these areas of underrepresentation is not that there is an insufficient number of women, but that there is a process involving implicit or unconscious bias leading to gender disparities in medicine.

Institutional and financial benefits associated with Parental Leave Policies:

When analyzing outcomes associated with maternity and paternity leave practices, evidence demonstrates that departments and institutions benefit from parental policies. Not only financially, but also academically. The Top 12 U.S. Medical Schools’ ranked both by funding by the National Institutes of Health and academic ranking by the US News & World Report all have childbearing leave policies with salary support. The mean length of full salary support was 8 weeks (range 6-16). Similarly, 53% of academic surgery departments at top-ranked academic centers offer some form of paid parental leave to faculty surgeons. In fact, the higher the ranking, the more likely the institution offered paid parental leave. It is unclear if institutions that implement parental policies attract top talent or if parental policies improve faculty morale and productivity leading to higher rankings. Either way, these policies advance departments.

Currently, there is an on-going shortage of intensivist in the United States. There is extensive evidence that intensivist presence is associated with decreased mortality rates for critically ill patients. While intensivists bring experience and expertise in the care of critically ill patients that non-intensivist physicians do not possess, they also bring leadership skills which lead to improved team performance. This in turn, may also lead to improved multidisciplinary team job satisfaction and encourage the retention of ICU nurses, respiratory therapists, ICU pharmacists and other critical team members. Indeed, there is robust evidence that maintenance of ICU team atmosphere is a key component in the provision of high-quality critical care to patients of increasing complexity and with increasingly diverse needs.

Retention of highly trained workers is important for departmental finances. For an organization, the cost of physician burnout can range from $500,000 to more than $1 million per doctor. This estimate includes recruitment, sign-on bonuses, lost billings and onboarding costs for replacement physicians.

* Since the document has neither been presented to nor approved by either the ASA Board of Directors or House of Delegates, it is not an official or approved statement or policy of the Society. Variances from the recommendations contained in the document may be acceptable based on the judgment of the responsible anesthesiologist.

REFERENCES:


MEDICAL ETHICS

Family Visitation at End of Life in the Intensive Care Unit During a Pandemic

COVID-19 has drastically changed how end-of-life care is practiced in the intensive care unit (ICU). Safety concerns for society limits family visitation but is contrary to patient and family-oriented care. This article provides an ethical analysis of the pros and cons of having family members present at the death of a critically ill patient with COVID-19 and provides a framework that can be used in future surges.

Ethics of family visitation

Is it ethical to deprive families from being present at the bedside of a dying patient with COVID-19? This article will argue that considerations pointing towards a more relaxed policy of family visitation simply outweigh those pointing towards a stricter policy, especially when contextually scrutinized against the stakes of decision-making. The following sections are divided into the rationale for visitation limitations, the impacts of the current strict visitation scenario in place at some institutions, arguments against such policies, and finally proposed solutions.

Why is not allowing families at the bedside of a dying patient harmful?

Limitations to patient visitation are commonplace internationally to reduce the risk of disease to and from visitors, patients, and healthcare workers. This has marked an abrupt change from the nearly-universally accepted contributions of family and loved ones to patient- and family-centered care, which have been championed by major professional organizations. Such restrictions grew out of an early dearth of information about how SARS-CoV-2 was spread and steps by which this spread could be mitigated. Additionally, intermittent PPE supply chain limitations would have placed an undue burden on healthcare facilities to adequately equip visitors. As our knowledge has evolved, it is now clear that simple procedures (e.g., universal masking) can help to mitigate the transmission of SARS-CoV-2 without the use of sophisticated PPE. However, the restrictive nature of some visitation policies has not evolved in response to this knowledge. While some centers have adopted tiered visitation protocols linked to community epidemiology indicators, such approaches may clamp down on visitation when it is needed most: amidst the influx of patients during times of heightened community spread.

Why should we allow families at the bedside of a dying patient?

The ethics of end-of-life care rely on empathy and emotional responsiveness. Getting families through the difficult stage of accepting the prognosis, building rapport and trust, and progressing through the stages of grief to let go peacefully all require time and multiple interactions between the care team(s) and family members. The presence of family members at the bedside of a dying patient in the ICU is not only comforting for the patient, even if they are minimally conscious, but is also comforting for the families and enhances the quality of end-of-life care being delivered. This experience can provide closure and acceptance in ways that any amount of distanced communication alone may not offer. Families also feel some sense of participation and control when they are able to offer solace to the patient, even if the patient is unconscious. This compassion for the family members comes from an active regard for another’s welfare with sympathy, tenderness, and emotional involvement. Good clinical care requires this insight, and a physician who acts according to clinical norms without aligned concern and sympathy for the suffering person and their families may seem non-compassionate. We owe something to the families without a direct duty of care in this unique context. This obligation arises from current constructs of justice and commitment, which encapsulates patient-family-healthcare provider relationships. These difficult decisions are traditionally made face-to-face and with family members having access to the patient.

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She was breathing laboriously and had all but lost consciousness. In the subcutaneous tissues of her right arm, a syringe pump was delivering morphine and midazolam to help her breathe more easily and prevent the seizures she had been having earlier. Her right cheek still twitched periodically. She was in her daughter's home surrounded by her grandsons and daughter. Just yesterday she had opened her eyes and smiled at her loved ones, tracking their movements. But she had stopped eating or drinking almost ten days earlier and stopped speaking too. Yet her breathing had been comfortable until tonight. Now, every breath seemed to be coming with tremendous effort. At her side was an iPad, which was reflecting her image 5,000 miles away on Facetime. Her two other daughters were watching from across the Atlantic.

I was one of them. She was my mother.

Various restrictions due to the pandemic had precluded me from being by her side. Virtually watching her slowly die with Hospice care was the best my younger sister—who was in New York—and I could do. Over the past 14 hours we had almost continuously watched her every breath, every twitch, every moan, and every anguished moment. I have almost 20 years of experience in critical care, have delivered terminal end-of-life care to hundreds of patients, and empathized with their families saying how I understood their anguish and suffering. I was wrong.

Just the week earlier I had helped manage three patients after being terminally extubated when further life-prolonging therapy was deemed non-beneficial. The families watched on Facetime as they breathed in distress, and we allowed an hour's visit at the end to hold the patients' hands as their loved ones passed on. We expressed our condolences and, even with the sincerest of intentions, we moved on to some other humdrum activity of the ICU. I never imagined the enormity of the loneliness, desperation, and helplessness families must go through simply watching their parents or spouses or children die remotely via a device. Being able to hold and hug and kiss them brings closure that when denied can lead to unmeasurable pain. As three physicians, my sisters and I thought we would be strong watching our mother perish after comfort measures were instituted. But these measures are never just 'comfort,' and no matter how elegantly done, watching someone die on a device is simply cruel and a cause of insurmountable grief. Expressions of angst and sorrow are nature's way of easing the pain of losing a loved one and also offer solace to the dying patient. It is a right for which families deserve to ask.

My mother’s death so far away has left a deep and lasting mark on me, and I will forever relive that moment with every patient that dies in the ICU. The ethical and moral distress that families feel at their loss of control in providing a loving passage for their family members at the time of death cannot be underestimated. The COVID-19 pandemic has produced myriad ethical entanglements, but not having families at a patient's side during their difficult journey of dying is possibly the biggest ethical and morally problematic one with which healthcare will have to reckon. These decisions must be weighed against the benefit of protecting staff from potential exposures from family members in the ICU, however, these rules should be balanced in a way to provide a humane and dignified death to our patients and comfort to their loved ones so that they can go on in life.

Until then I get solace from this verse:

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Do not stand at my grave and weep 
I am not there. I do not sleep. 
I am a thousand winds that blow. 
I am the diamond glints on snow.
I am the sunlight on ripened grain. 
I am the gentle autumn rain. 
When you awaken in the morning’s hush 
I am the swift uplifting rush 
Of quiet birds in circled flight. 
I am the soft stars that shine at night. 
Do not stand at my grave and cry; 
I am not there. I did not die.

- MARY ELIZABETH FRYE
Conclusion

Without the widespread dissemination of a vaccine, the threat of another COVID-19 wave looms in the future. In such a scenario, institutions and hospitals must remain prepared with infection control policies in place. Given that the downsides of restricting visitation do not outweigh our current ability to mitigate the risks, these should include family visitation in general and presence during end of life care in particular. If such policies entirely preclude family visitation, there will be much greater grief for countless people. Having families present to say goodbye to their loved ones is ethically justified, and it is therefore the responsibility of the health care teams and organizations to make this possible.

REFERENCES

Postoperative pulmonary complications have been recognized and appreciated by physicians since symptoms of pneumonia were first described by Hippocrates, the father of western medicine, in 460 BC. Despite our extensive familiarity with this pervasive ailment, pneumonia remains the third-most common postoperative complication with an overall incidence of 1.3-1.8\%\textsuperscript{1}. Data from The American College of Surgeon's National Surgical Quality Improvement Program (NSQIP) calculated an estimated 1.8\% incidence of postoperative pneumonia with a 17\% mortality within 30 days across academic, community, and VA hospitals. Globally, 234 million surgeries are performed annually, and approximately 50 million occur in the United States. A conservative postoperative pneumonia incidence of 1\% would therefore place the US at 500,000 cases of postoperative pneumonia. With hospital-acquired pneumonia carrying a median cost of $16,505-64,639 USD, this would suggest an economic burden in excess of $8.2-32.3 billion per annum\textsuperscript{2}.

Anesthesiologists and surgeons have recognized this problem and a number of studies have identified the perioperative factors of various surgical populations and intraoperative preventative strategies of varying success\textsuperscript{3,4}. Functional status, age, ASA class, COPD, preoperative sepsis, and smoking within one year before operation, and the type of operation were all risk factors identified by NSQIP in calculating the aggregate risk of postoperative pneumonia. Given that many of these preoperative risk factors are nonmodifiable at time of surgery, research has focused on determining effective perioperative strategies to mitigate postoperative pneumonia risk\textsuperscript{5}. Increasingly, attention has been devoted to preoperative rehabilitation to reduce postoperative pulmonary complications with positive results\textsuperscript{6}. As little as four weeks of strength and endurance training reduced postoperative respiratory morbidity in patients undergoing lung cancer resection\textsuperscript{7}. Caparelli and colleagues found an application of a simple oral care bundle resulted in a tremendous reduction in postoperative pneumonia\textsuperscript{8}.

A systematic review and meta-analysis by Odor and colleagues was able to identify several interventions that could reduce the incidence of postoperative pulmonary complications: use of enhanced recovery after surgery pathways, prophylactic mucolytics, postoperative continuous positive airway pressure non-invasive ventilation, lung protective intraoperative ventilation, prophylactic respiratory physiotherapy, epidural analgesia, and goal directed fluid and hemodynamic modalities. However, the accumulated evidence for these interventions is of only low to moderate quality, and the authors recommended better trial designs\textsuperscript{9}. Combined interventions, such as those in the I COUGH pulmonary care program, have proved to be more effective at reducing the incidence of postoperative pneumonia versus individual interventions\textsuperscript{10}. Six major components were grouped as part of the strategy executed via a standardized order set: incentive spirometry, coughing and deep breathing, oral care, understanding (patient and family engagement and education), getting out of bed frequently (at least 3 times daily), and consistent head-of-bed elevation. After implementation of this program, the authors found that the incidence of pneumonia fell from 2.6\% to 1.6\% and unplanned intubations decreased from 2\% to

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1.2%. Unlike a drug regimen, these types of bundled clinical interventions take substantial elbow grease from engaged participants to create an enduring institutional culture change. In turn, we believe studies like these represent an additional opportunity for perioperative physicians and surgical intensivists to take the lead in reducing postoperative pneumonia via:

- Institutional level education on early recognition of postoperative pneumonia.
- Providing leadership and research opportunities on intraoperative lung protection strategies.
- Championing the development of bundled care processes for the reduction of postoperative pneumonia.
- Development of multi-disciplinary preoperative rehabilitation opportunities for high-risk patients.
- Monitoring and correction of system-related delays in treatment of postoperative pneumonia.

As SOCCA’s 2021 Annual Meeting is rapidly approaching, we look forward to an exciting discussion about our specialty’s role in these matters, as Drs. Bender, Shaefi, Bartels, and Khanna examine potential interventions to assist in improving clinical outcomes in this important area. Be sure to be there!

REFERENCES


Billing for Advance Care Planning: A Missed Opportunity?

Advance care planning (ACP) is a process that supports adults at any age or stage of health in understanding and sharing their values, goals, and preferences regarding future medical care. The goal of ACP is to help ensure that people receive medical care that is consistent with their preferences during serious and chronic illness. At the Cleveland Clinic, we operationally defined ACP as having two elements: documentation of the surrogate decision-maker in the electronic medical record (EMR) for all adult patients and goals of care discussion documentation for seriously ill patients. Ideally, this conversation between a seriously ill patient with a chronic condition and their primary provider would happen long before the moment of a critical illness crisis.

However, intensivists are often the first providers to have these conversations with patients or their loved ones. It can be challenging to establish an effective rapport and engage with patients or their loved ones during these emotionally charged discussions. It takes empathy, compassion, and an open mind on our parts to communicate clearly what patients or their loved ones can anticipate based on the decisions they make. The conversations are nuanced by the patient’s personal beliefs, culture, religion, language barriers, medical literacy, and previous interactions with the healthcare system. Our goals as intensivists should be to help patients and their loved ones make informed decisions that are congruent with their personal goals and priorities. The ACP discussion is often documented within the daily progress note. Alternatively, it is currently recommended that healthcare systems dedicate separate space within the EMR to document ACP as a “single source of truth” for easy access and shared understanding across providers. At the Cleveland Clinic, the End-of-Life Center in collaboration with the Information Technology department has pioneered an ACP navigator for Epic and created an ACP note type with a template for uniform documentation (Figures 1-3). This navigator is available to other systems to adopt.

Intensivists routinely have these discussions but may be unaware of associated opportunities for professional charge capture. ACP falls under “individual billing” by licensed independent providers per state law, such as that done by physicians, clinical nurse specialists, nurse practitioners, and physician assistants. Non-independent licensed providers have to be qualified and authorized to provide these services in the state that they practice. They are referred by the licensed independent provider, and they can bill under “team billing”.

Time spent on ACP conversations for critically ill patients should be counted toward critical care time within the interval billing framework. Critically ill patients deemed to have capacity should be engaged for an ACP discussion. For patients deemed to lack decision-making capacity, the provider will have their ACP conversations with the surrogate decision maker/s by state hierarchy. Time spent on these conversations aggregates towards the total critical care time on that calendar day. From a billing standpoint, critical care reflects the time required for directly managing the patient, composing the note, evaluating laboratory values, independently evaluating radiographic images, discussing the patient’s care with consultants, and...
and—importantly—ACP conversations. Within a 24-hour day, the first 74 minutes of these activities are captured with a 99291 CPT code and any additional time equal to or greater than 75 minutes is captured with a 99292 code in blocks of 30 additional minutes.

ACP billing opportunities are often missed when the ACP discussion is conducted with patients (or their surrogates) who are not critically ill and would normally be assessed an evaluation and management (E&M) code (e.g., CPT 99232 for level 2 or 99233 for level 3). In this scenario, ACP discussions can be captured with additional CPT codes. Illustrating this, we present a case scenario from an ICU within a regional satellite hospital.

Case: A 76 year-old male with history of hypertension presented to his primary care provider with a one year history of weight loss. This prompted abdominal computed tomography, which demonstrated a pancreatic mass with lesions involving the liver, for which a biopsy was done. Three days later he presented to a free-standing Emergency Room with fever, malaise and dyspnea. He had a modestly elevated lactate of 4 and was requiring 2 liters of supplemental oxygen via a nasal cannula. The emergency room called the ICU with a diagnosis of community acquired pneumonia and requested ICU admission for closer monitoring. After reviewing the chart, it was noted the biopsy revealed metastatic pancreatic cancer. We admitted the patient, gently resuscitated him, and lactate and oxygen requirements resolved within a few hours. The patient was assessed a level 2 E&M code (i.e., CPT 99232). When the patient’s spouse arrived, we had a 20-minute ACP discussion with them. Given the gravity of his diagnosis, he did not want to receive cardiopulmonary resuscitation or to be intubated and mechanically ventilated.

In this scenario with a patient assessed an primary E&M code rather than a critical care code: CPT code 99497 can be used for 16 to 30 minutes of face-to-face ACP conversations and CPT code 99498 for subsequent 30 minute blocks. Table 1 details the average payments for the billing codes [3]. During the COVID-19 pandemic, CMS published the Interim Final Rule allowing telehealth services to bill CPT 99497 and 99498 via virtual (audio and video) or audio only visits [4].

ACP discussions in the context of a critically ill patient should be ideally documented in a separate ACP note and accounted for in the aggregate critical care billing time. ACP discussions for patients assessed E&M codes should be documented separately in an ACP note and billed for according to the duration of the conversation by the separate time-based codes 99497 and 99498.

Table 1: Description of CPT Codes and national average payment

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>National Average Non-Facility Rate/Facility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>99497</td>
<td>Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; first 30 minutes, face-to-face with the patient, family member(s), and/or surrogate</td>
<td>$85.99/$79.54</td>
</tr>
<tr>
<td>99498</td>
<td>Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; each additional 30 minutes (List separately in addition to code for primary procedure)</td>
<td>$74.88/$74.52</td>
</tr>
</tbody>
</table>

continued on page 15
FEATURED ARTICLE  Billing for Advance Care Planning  continued from page 14

Figure 1: Advance Care Planning navigator in Epic

Figure 2: Advance Care Planning template

Figure 3: Advance Care Planning note template

REFERENCES


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Obstructive sleep apnea (OSA) is the most common form of sleep-related breathing disorder encountered in the perioperative setting. It is defined by recurrent upper airway collapse, potentially leading to decreased oxygen levels during sleep and an increased risk of long-term cardiovascular illness1. While OSA is more prevalent in surgical candidates than in the general population2, between 60-90% of patients remain undiagnosed3. OSA has been associated with a high risk of perioperative complications4 and a resultant increase in hospital cost and resource utilization2,4-9.

While recommendations for preoperative screening10 and intraoperative management11 of this vulnerable population has been published, there remains a lack of evidence-based practice recommendations regarding postoperative management. Evidence-based triaging system of suspected or known OSA patients is needed for patients who are admitted to the hospital following surgery, to appropriately allocate resources for management and optimization of OSA status. Moreover, there is lack of clear guidance on counseling of patients for post-discharge care, and evidence-based recommendations are needed in consultation with patient partners. This is particularly important for patients undergoing ambulatory surgery as they are discharged home to an un-monitored setting on the day of surgery and may be on opioid medications postoperatively. In addition, significant proportion of vulnerable inpatients also transition from the relatively well monitored PACU and ICU to the general care floor of the hospital that may not have adequate surveillance to allow early detection of critical changes in ventilatory status12.

To address these gaps in knowledge, the Society of Anesthesia and Sleep Medicine (SASM) is leading an ambitious collaborative project with the Society for Ambulatory Anesthesia (SAMBA) and the Society of Critical Care Anesthesiologists (SOCCA) to develop evidence-based guidelines for postoperative management of patients with OSA. This endeavor will complement the SASM’s evidence-based guidelines on preoperative10 and intraoperative11 management of OSA patients, as well as the SAMBA consensus statement for management of these patients in the ambulatory setting13.

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References:


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Friday, May 14, 2021

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Education Session I:
Leadership Beyond the Bedside in the ICU – The Leadership Shadow You Cast

Oral Scientific Abstract Session I

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Preventing Postoperative Pulmonary Complications – Are There Low-Hanging Fruits?

Lifetime Achievement Award and Young Investigator Award Presentations

Education Session III:
ECMO: Beyond Cannulas, Flow or Patient Selection

Oral Scientific Abstract Session II

Education Session IV:
A Look Back at the Surge: What We Found Ourselves Doing That We Never Anticipated

Closing Remarks

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FRIDAY, MAY 14, 2021

Education Session I: Leadership beyond the Bedside in the ICU - the Leadership Shadow You Cast
10:10 am – 11:20 am
Moderators: Megan Anders, MD, University of Maryland School of Medicine, Baltimore, MD and Christina Hayhurst, MD, Vanderbilt University Medical Center, Nashville, TN

10:10 am – 10:30 am  Your Leadership Shadow in the Institution - Do You Understand Your Sphere of Influence?
Liza Weavind, MBBCh, FCCM, MMHC
Vanderbilt University Medical Center, Nashville, TN

10:30 am – 10:50 am  Navigating Leadership While Under-Represented in Medicine: Battling Imposter Syndrome and Staying True to Yourself
Meghan Lane-Fall, MD, MSHP
Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

10:50 am – 11:10 am  Leading in Our Societies and Advocating for the Next Generation of Intensivists
Sheela Pai Cole, MD
Stanford University School of Medicine, Stanford, CA

11:10 am – 11:20 am  Moderated Panel Discussion and Q&A

Break
11:20 am – 11:30 am

Oral Scientific Abstract Session I
11:30 am – 12:30 pm

1. Breakout Room #1 – Basic Science Session 1: Neuroscience
2. Breakout Room #2 – Basic Science Session 2: Immunology and Physiology
3. Breakout Room #3 – Basic Science Session 3: Organ Dysfunction
4. Breakout Room #4 – Machine Learning, Data Science, Tele-ICU
5. Breakout Room #5 – COVID-19 Intensive Care 1

Break
12:30 – 12:40 pm
Education Session II: Preventing Postoperative Pulmonary Complications - Are There Low-Hanging Fruits?
12:40 pm – 1:55 pm

Moderators: Aurora Quaye, MD, Massachusetts General Hospital, Boston, MA and Ana Fernandez-Bustamante, MD, PhD, University of Colorado School of Medicine, Aurora, CO

12:40 pm – 12:55 pm Mechanical Ventilation - Surgical Approaches are Changing Intraoperative Realities
Patrick Bender, MD
University of Vermont Medical Center, Burlington, VT

12:55 pm – 1:10 pm Hyperoxia - When Good Intentions Lead to Bad Outcomes
Shahzad Shaefi, MD, MPH
Beth Israel Deaconess Medical Center, Boston, MA

1:10 pm – 1:25 pm Residual Neuromuscular Weakness - Bundle up for Success?
Karsten Bartels, MD, PhD
University of Nebraska Medical Center, Omaha, NE

1:25 pm – 1:40 pm Detection of Respiratory Compromise Beyond the PACU - What are we missing?
Ashish K Khanna, MD, FCCP, FCCM
Wake Forest University School of Medicine, Winston-Salem, NC

1:40 – 1:55 Moderated Q&A

Lifetime Achievement Award and Young Investigator Award Presentations
1:55 pm – 2:55 pm
Moderator: Robert Stevens, MD, FCCM, Johns Hopkins University, Baltimore, MD

1:55 pm – 2:00 pm Lifetime Achievement Award Introduction

2:00 pm – 2:20 pm Lifetime Achievement Award Presentation
2:20 pm – 2:25 pm Q&A

2:25 pm – 2:32 pm Young Investigator Presentation #1
2:32 pm – 2:35 pm Q&A
FRIDAY, MAY 14, 2021

2:35 pm – 2:42 pm  Young Investigator Presentation #2
2:42 pm – 2:45 pm  Q&A
2:45 pm – 2:52 pm  Young Investigator Presentation #3
2:52 pm – 2:55 pm  Q&A

Break
2:55 pm – 3:00 pm

Education Session III: ECMO: Beyond Cannulas, Flow or Patient Selection
3:00 pm – 4:00 pm
Moderators: Angela Johnson, MD, University Hospitals Cleveland Medical Center, Cleveland, OH and Peter von Homeyer, MD, FASE, University of Washington, Seattle, WA

3:00 pm – 3:15 pm  Mobile ECMO: Integration into Hospital and Regional Structures
Vadim Gudzenko, MD
David Geffen School of Medicine at UCLA, Los Angeles, CA

3:15 pm – 3:30 pm  Nurse vs Perfusionist ECMO: Pros and Cons: Considerations for Implementation
Joseph Meltzer, MD
University of California, Los Angeles, CA

3:30 pm – 3:45 pm  Just Because You Can, Should You? Emotional Burden of ECMO Programs
Anahat Dhillon, MD
University of California, Los Angeles, CA

3:45 pm - 4:00 pm  Moderated Q&A

ASA Update
4:00 pm – 4:15 pm
Dr. Beverly Philip, ASA President

Session designated for ABA MOCA® Patient Safety CME Credit
Oral Scientific Abstract Session II

4:15 pm – 5:15 pm

1. Breakout Room #1 – COVID-19 Intensive Care
2. Breakout Room #2 – Epidemiology and Population Science
3. Breakout Room #3 – Education and Quality
4. Breakout Room #4 – Cardiac Surgery and ECLS
5. Breakout Room #5 – Topics in Intensive Care
6. Breakout Room #6 – Perioperative Medicine

Break

5:15 pm – 5:25 pm

Education Session IV: A Look Back at the Surge: What We Found Ourselves Doing That We Never Anticipated

5:25 pm – 6:40 pm

Moderator: Nicholas Sadovnikoff, MD, Brigham and Women’s Hospital, Boston, MA

5:25 pm – 5:40 pm Palliative Care on the Front Lines of the Surge
Rebecca Aslakson, MD, PhD, FAAHPM, FCCM
Stanford University School of Medicine, Stanford, CA

5:40 – 5:55 pm Stretching ICU Spaces, Equipment and Personnel to Accommodate and Unprecedented Patient Volume
Vivek Moitra, MD
Columbia University Medical Center, New York, NY

5:55 pm – 6:10 pm ECMO for the Epidemic - the Good, the Bad, the Lessons
Michael Nurok, MBChB, PhD, FCCM
Cedars-Sinai Medical Center, Los Angeles, CA

6:10 pm – 6:25 pm Importance of Networking during a Global Pandemic
Allison Dalton, MD
The University of Chicago Medicine, Chicago, IL

6:25 pm – 6:40 pm Moderated Q&A
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