



FEATURES

[Albany Update | 29](#)

[Ask the Experts | 13](#)

[Education | 9](#)

[EMS | 7](#)

[New York State of Mind | 25](#)

[Pediatrics | 17](#)

[Practice Management | 5](#)

[President's Message | 2](#)

[Research | 11](#)

[Sound Rounds | 3](#)

INSIGHTS

[Imposter Syndrome and Navigating Change in an
Uncertain World | 14](#)

[Making Sense of the Authorized Outpatient COVID
Treatment Options | 24](#)

EVENTS

[2022 New York ACEP Scientific Assembly | 12](#)

[ACEP Leadership & Advocacy Conference | 8](#)

[Calendar | 32](#)

[Call for Abstracts | 31](#)

[Call for Board and Councillor Nominations | 15](#)

[ED Director Forum | 23](#)

[New York ACEP Advocacy Day | 30](#)

[New Speaker Forum | 28](#)

[Professional Development Lecture - Negotiate Effectively | 16](#)



Empire State EPIC

PRESIDENT'S MESSAGE



Keith E. Grams, MD FACEP
Chair, Emergency Medicine
Rochester Regional Health

Some EM Resolutions

Although a bit hokey to start the year talking about resolutions, I would like to offer a few thoughts. Here are three considerations as you are making your New Year's "emergency medicine resolutions".

Check Expectations

I have had the privilege to practice emergency medicine for several years. As time has gone on, I have slowly picked up a few things along the way. Several colleagues picked these up faster, however, evidently, I am a little bit slow. One of my delayed learnings deals with the feeling of frustration I would often get, both in the administrative and clinical world. Administratively, I seemed constantly hit with various items, from various people who just cannot comprehend what our team was going through. I would often get "frustrated", almost feeling attacked by these volleys. This also occurs commonly on the clinical floor while working directly with patients, team members, consultants, etc. After an embarrassingly long time, I finally realized that my frustration was my fault. It was essentially an allowed reaction to external stimuli in conflict with my internal expectations. By checking and altering my expectations (and with quite a bit of effort), I was able to minimize and even eliminate most of this annoyance. Of course, the angst was never helpful anyway and the resultant change has led to some saved stomach lining.

We are still neck-deep in the pandemic with all the associated challenges that continue to pile up. Each new layer brings a new series of tests. Accordingly, each of these layers brings the need to reevaluate and check expectations. Commonly, physicians are looked to as the leader in the emergency department, the proverbial "captain of the ship". Patients expect us to have the ability to improve any issue affecting their care and satisfaction – from ensuring they get a tuna sandwich to magically finding them a bed in the overcrowded hospital. Our team looks to us as well, though perhaps not to the same extent, as they understand the situation better. Even so, the team does look to the physician to help set the tone – the "emotional temperature" of the department. If the captain of the ship is losing their cool, then the department can spiral. Whether we like it or not, it appears the current pandemic forecast is unchanged – a continued storm of patients, tornados of hospital overcapacity and hurricanes of staffing shortages. No, it is not fair. Yes, it sucks. However, this is our reality. These are the brutal facts of our current situation. I suggest we need to consider adjusting our internal expectations to meet this forecast. That way we can better help minimize our frustration levels along with our team's, saving even more angst along the way.

Be Part of the Solution

Now is the time for continued teamwork in supporting each other as we move forward. I had the opportunity last week to attend one of our departmental meetings, where the local leaders did a wonderful job outlining the situation and suggesting solutions. A physician jumped on a soapbox and went on a tirade about the current picture, continually referring to it as "just rearranging deck chairs on the sinking ship". No solutions were offered, just repeating the aspects of the current state in the prolonged complaint. Unfortunately, that is the mentality of some – looking at how it affects them without examining the entire picture. Instead, let us resolve to look at this from a different vantage point. We should be looking at ways to continue to get creative and eke out everything we can to support our team as they care for patients. To "rearrange" the prior analogy - rather than sit in a deck lounge chair, arms crossed, griping about the current situation, now is the time to roll up your sleeves and use the items strewn about helping to build life rafts. Always better to lead solutions instead of dwelling on the problems.

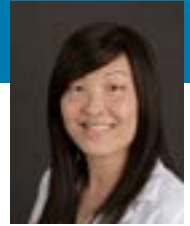
Dedicate Time for Compliments

No matter the arena, we all like compliments. I challenge you to watch for the good. Even in the direst of shifts, there is always something that can be highlighted. Whatever you need as a reminder – a Post-it Note on the computer, a check box on your paper list (for us older docs), or any other type of visual cue – just make sure you do it. Better yet, take the time to jot or email a quick note. Many of our departments now have "kudos cards" or other mechanisms for staff feedback (if you do not have this, I would encourage you to get it in place). Invest the few minutes of your time to help encourage someone along the way.

I look at a lot of numbers and charts each month to review quality projects and team performance. Unfortunately, most of the past focus has been on misses and potential problems. 2022 will be different. Stealing a lesson from a colleague (thanks Steve), a portion of the review time is now dedicated to seeking out those who are leading the way – the real stars. Of course, we will need to continue to follow performance, though each review will now conclude with a few notes to those that are defining the standard.

The forecast is challenging and a bit scary. Perhaps a slight change in focus is in order as we weather the current times. Consider; 1) checking expectations, 2) ensuring you are a part of the solution and 3) being generous with your compliments. With that, best wishes for the coming 2022!

SOUND ROUNDS



Penelope C. Lema, MD RDMS FACEP

Vice Chair, Faculty Affairs

Director, Emergency Ultrasound

Associate Professor, Department of Emergency Medicine
Columbia University Vagelos College of Physicians & Surgeons



Guest Author

Simone Rudnin, DO

Director of Medical Student Education
Staten Island University Hospital
Department of Emergency Medicine



Guest Author

Catherine Park, MD (PGY-2)

Emergency Medicine Resident
Staten Island University Hospital
Department of Emergency Medicine

Ultrasound-Guided Pericapsular Nerve Group (PENG) Block

Background

Traumatic orthopedic injuries are a common chief complaint in the Emergency Department (ED). The definitive treatment can range from emergency repair surgery to semi elective procedures. In the interim, pain management is critical and modality of anesthesia can vary. Hip fractures occur commonly in the elderly with comorbidities and often require surgical repair to provide analgesia and restoration of mobilization. While intraoperative pain can be controlled with general anesthesia, pre- and post-operative pain management utilizes a combination of non-opioid analgesics, peripheral nerve blocks and oral or parenteral opiates, when necessary.

It has been shown regional anesthesia results in less pulmonary complications and mortality when compared with general anesthesia.² Common peripheral nerve blocks used to provide analgesia in hip fractures include femoral nerve block, fascia iliac block, lumbar plexus block and the pericapsular nerve group (PENG) block. The PENG block is a relatively novel technique. Compared to the other techniques, the PENG block has the advantage of preserving motor abilities, while still providing significant pain relief.¹

Advantages

- Peripheral nerve blocks provide opioid-sparing pain relief, thus, avoiding adverse side effects and the need for frequent re-dosing.
- There is ease of patient positioning for the procedure. Patient will lay supine which is preferred in those with an acute hip fracture or even chronic pain.
- The PENG block specifically targets the pain-sensing nerves (femoral, obturator and accessory obturator nerve) to significantly reduce pain while sparing the motor nerves to allow for movement as tolerated, thus, avoiding significant motor weakness.
- This provides longer lasting relief with decreased risk of systemic anesthetic toxicity.
- The ultrasound guided PENG block technique reduces the risk of femoral nerve or vascular damage.

Indications

- Acetabular Fractures
- Femoral Neck Fractures
- Hip Dislocations

- Intertrochanteric Femoral Fractures
- Pubic Ramus Fractures

Technique

The PENG block targets the articular branches supplied by femoral, obturator and accessory obturator nerves within the hip joint to provide pain relief through sensory articular branches while preserving the motor function of the quadriceps.

- Prepare all monitoring and resuscitation equipment at bedside.
- Place the ultrasound machine on the opposite side of the bed relative to the patient's hip with the patient lying in a supine position. This allows for ease of access to the patient's anatomy with a clear line of vision to the machine. (Figure 1)
- Identify the proper anatomic location for the block. Place the linear or curvilinear transducer in a transverse position over the AIIS.
- Align the transducer with the pubic rami and rotate 45 degrees to align parallel to the inguinal crease.
- Move the transducer medially along the axis until the AIIS and iliopubic eminence and psoas tendon is clearly visible.
- Prepare the nerve-block needle (22G x 80mm) by priming the line with normal saline.
- Sterilize the injection site with chlorhexidine or alcohol swabs.
- Drape the area in a sterile fashion.
- Place ultrasound gel on the ultrasound probe, cover with the sterile probe cover and place the sterile ultrasound gel on the cover.
- Use a 1 cc insulin syringe with 1% lidocaine to create a skin wheal where your nerve block needle will be inserted.
- Using an in-plane technique, insert the nerve block needle, bevel-up, at the site of the wheal that was created.
- While inserting the needle, hold constant negative pressure to allow for aspiration with deeper progression to ensure no vessels are traversed. (Figure 2)
- Once at the target site, with the IPE and psoas tendon in view, hydrodissect the musculofascial plane with normal saline.
- After adequate hydrodissection, switch the normal saline injector with the anesthetic. Inject 20-33 cc of Bupivacaine 0.5% under the psoas tendon into the musculofascial plane between the psoas tendon anteriorly and pubic rami posteriorly. (Figure 3)

SOUND ROUNDS



Figure 1. Left hip PENG Block. The ultrasound machine is situated opposite the side of the PENG block. A linear ultrasound probe is used for an in-plane approach with the needle.



Figure 2. The block needle (white line) enters from the lateral aspect of the patient to avoid the vasculature located medially (FA). The needle is placed through the iliacus muscle and targeted underneath the psoas tendon.

AAS=Anterior inferior iliaca spine, FA = femoral artery, IPE=Iliopubic eminence



Figure 3. The anesthetic fluid appears hypoechoic underneath the hyperechoic psoas tendon. Once the anesthetic is injected underneath the psoas tendon, the psoas tendon moves away from the iliopubic eminence.

Tips

- Utilize the linear probe to obtain clear vision of landmarks versus the curvilinear probe.
- Hydrodissection allows for separation of the plane to better localize injection site and spreading of the anesthetic across the proper plane.

Contraindications

- Allergy to anesthetics
- Inadequate time since discontinuation of anticoagulation (ASRA guidelines)
- Infection at injection site
- Patient refusal
- Systemic anticoagulation with INR>1.5

Complications

- Anesthetic toxicity
- Bleeding
- Infection
- Nerve damage

References

1. Del Buono R;Padua E;Pascarella G;Soare CG;Barbara E; (n.d.). *Continuous Peng Block for hip fracture: A case series*. Regional anesthesia and pain medicine. Retrieved December 1, 2021, from <https://pubmed.ncbi.nlm.nih.gov/32796133/>.
2. Neuman MD;Silber JH;Elkassabany NM;Ludwig JM;Fleisher LA; (n.d.). *Comparative effectiveness of regional versus general anesthesia for hip fracture surgery in adults*. Anesthesiology. Retrieved December 1, 2021, from <https://pubmed.ncbi.nlm.nih.gov/22713634/>.

PRACTICE MANAGEMENT



Joseph Basile, MD MBA FACEP
Interim Chair, Department of Emergency Medicine
Staten Island University Hospital, Northwell Health
Chair, New York ACEP Practice Management Committee



**Guest Author
James Kenny, MD**
Department of Emergency Medicine,
Staten Island University Hospital, Northwell Health
Member, New York ACEP Practice Management
Committee



**Guest Author
Keith Hemmert, MD**
Medical Director, Department of Emergency Medicine
Associate Director, Fellowship in EM Administration
and Leadership, Hospital of the University of
Pennsylvania

Finding the Balancing Point: Communication with Staff in the Virtual Era

Introduction

“We can’t hear you. You’re on mute.” Have you heard that line lately? Once per week or once per day? One thing is certain: we will continue to hear it. Just like the rest of the world, Emergency Departments (EDs) across the state and country have had to adapt to the new world of balancing virtual, hybrid and in-person communication. Unlike other industries or even some medical specialties, going completely virtual was never an option for Emergency Medicine. But how do we strike the right balance between virtual and in-person? Each of us has undoubtedly benefitted in one way or another from a meeting being virtual rather than in-person – but the opposite is also true. In an attempt to answer the “balancing point” question, we discussed the topic with various ED leaders throughout the state in order to summarize their observations from the past two years and develop a collection of lessons learned.

Why It Will Stay

The flexibility afforded by virtual meetings provides an opportunity for work-life balance that was not possible before COVID. Staff have additional options as they navigate family responsibilities, commuting, clinical work, meetings and conferences. This is especially true for those with less flexible schedules, such as nocturnists. This flexibility also extends itself to regional or national conferences that may otherwise be impossible to travel to or fully attend. Ultimately, it translates to more time, which can be dedicated toward other personal and professional endeavors and potentially improve wellness.

Broader scale and improved accessibil-

ity are two additional advantages of virtual communication. More people can attend virtual meetings and conferences and the pool of available speakers is larger. Furthermore, virtual meetings provide an opportunity to ensure all the “correct” people are present, which can be challenging when in-person attendance is required. This is particularly true during impromptu crisis management situations.

Lastly, working remotely has the potential to save cost. Less traveling, commuting and family care expenses certainly aids employees on an individual level. This extends to non-clinical administrative staff who potentially benefit the most from reduced expenditures and may feel safer outside of the hospital. Departments can also obtain outside speakers for internal conferences without the financial commitment of full honorariums or travel reimbursements.

The Downsides

The greatest concern is the unknown long-term effect on culture. There is a general feeling that virtual communication leads to a decreased sense of camaraderie and engagement which makes it more challenging to develop a sense of community at the workplace. Managing an ED requires developing relationships, internal and external to the department. This becomes exponentially more difficult without face-to-face conversations. While seemingly trivial at times, small exchanges such as a “water cooler talk” help build rapport and a broader network of contacts. These relationships often convert to very tangible dividends over time. It is difficult to predict how multiple years of these lost opportunities will affect the cohesiveness

within EDs and between departments in the hospital.

There are also certain circumstances where the known downsides of video communication are exacerbated. This is particularly evident when the group is too large, there is no clear agenda or when body language is needed. When the group is too large or the meeting disorganized, it is easy to mentally disengage given the innumerable distractions available to us on our computer or at home. Many of us have also found that attendees are more disengaged when their camera is off. Keeping the group focused with clear meeting objectives and requiring that cameras are activated can help mitigate these effects. However, even with a camera, the nuances of nonverbal communication are not as well conveyed over video. Minor social queues may be lost, which risks miscommunication or misinterpretation that could have been avoided in-person.

Despite these concerns, leaders can still demonstrate support. Various approaches used to overcome physical distancing include frequent check-ins while on shift or over a text message, daily or weekly update emails, building a transparent environment where all ideas are taken into consideration and fostering communication between the ED and hospital leadership. Ironically, this latter strategy can be easier to facilitate over a video conference. Nonetheless, it is not clear that these strategies can fully mitigate the engagement lost from impromptu interactions when staff are on site.

Lessons Learned and Future Considerations

As we approach two years of many meetings

on the computer, there are a few questions we need to consider:

- How much is the physical distancing of video communication affecting group cohesion, relationship-building and culture?
- What is the impact of virtual communication on staff wellness?
- Does the flexibility of remote work improve wellness or is it actually offset by decreased professional engagement?
- How can we maximize staff engagement without risking safety or penalizing those who truly benefit from the flexibility?

As we contemplate the answers, it is a safe bet that virtual communication will never completely recede. Therefore, we must learn from our experiences in order to navigate the pros and cons and manage the long-term consequences. Several lessons learned we felt were worth sharing can be divided into the four categories below. Using these as a guide may help leaders strategically integrate virtual communication in order to minimize its negative effects.

Conclusion

As we move through the serial waves of COVID and our social distancing policies ebb and flow, we need to recognize that we are in a new era of professional communication. The virtual era is here to stay. However, it behooves us all to recognize the various advantages and pitfalls associated with it. Navigating the balancing point between creating and maintaining a positive culture and allowing employees flexibility will be a critical component of how EDs are managed in the future.

How Virtual Can Be Advantageous
Works well when it is the only option (i.e., emergency surge meeting, COVID)
Potential for everyone to be heard given one speaker at a time and chats are read by all
Chat conversations can reveal valuable information
Small group and one-on-one interactions can still be effective
Meeting Organization and Preparation Considerations
Minimize unnecessary meetings or inviting unnecessary attendees
Preparation and efficient agendas key to minimizing disengagement
Creative and innovative presentations augment engagement
Need at least two people to manage a larger meeting: one primary speaker/presenter and one moderator/chat monitor
Infrastructure Considerations
Need reliable Wi-Fi and IT support
Additional hospital IT infrastructure advantageous (i.e., improved conference room speakers/microphones)
Modern computers with video capability are necessary
Dual computer monitors can allow for more efficient work
Improved home IT setup advantageous, but cost may be pushed to employees (certain industries pay for this)
Pitfalls
Serial meetings lead to videoconferencing fatigue
Hybrid meetings are more work to organize than only in-person or only virtual
Potential for more distractions at home than in the office
For delicate issues or conversations, video does not adequately convey body language
For less critical meetings, in-person engagement is superior

The authors would like to thank Dr. Kirby Black, Dr. Rodrigo Kong and Dr. Penelope Lema for their time and insight.

EMERGENCY MEDICINE NORTHERN NEW YORK STATE

Fantastic opportunity for B/C, B/E, **FELLOWSHIP TRAINED**, Emergency Medicine Physician! This hospital employed position is with a not-for-profit community healthcare facility certified for 94 beds. Its core programs in emergency medicine, acute care, hospitalist medicine, and critical care are supplemented by outpatient health services in northern NY, and by specialist care in over 25 different specialties, including a robust orthopedic surgery and sports medicine program and the Center for Cancer Care. **Physicians associated with this position work no less than 144 hours per month, rotating between 3 hospitals in the area. All 3 hospitals are within 35 minutes of the main emergency department!** There is also APP support on every shift and typically a second physician! **Visa Physicians are also asked to Respond**

JIVISA & HIB VISA for 2022 & 2023

A robust compensation package is offered! Compensation starts at \$250.00 per hour Plus \$25,000.00 Sign on Bonus, \$15,000 Relocation & \$4,800/year loan repayment

The city is located in Northern New York and has a city population of 30,000 residents. It is the cultural and educational hub of Northern New York. Lawrence County is one of the best places to live in New York. The city offers residents a dense suburban feel and most residents own their homes. Many young professionals live in this city. Four seasons of fun awaits you amid the picturesque Adirondack Mountains of Upstate New York. Clarkson University, SUNY Potsdam, and St. Lawrence University are in this city. International Airports are in Massena and Ogdensburg NY and are 30 to 45 minutes away. You are also near Montreal, Canada.

For in depth details

Call or Email your CV to

Shielah/Marsh Group

Cell 757 696-0868 slipp@marshgroup.com



Joshua Moskovitz, MD MBA MPH FACEP
 Associate Director of Operations
 Department of Emergency Medicine, Jacobi Medical Center
 Chair, New York ACEP EMS Committee



Guest Author
Cecily Swinburne, MD MPH
 Emergency Medicine Fellow
 Albany Medical Center



Guest Author
Michael Dailey, MD FACEP FAEMS
 Chief of Prehospital and Operational Medicine
 Albany Medical Center

Medical Students Take to the Woods to Learn Wilderness Medicine

On a crisp October morning, a group of medical students stood in the woods deciding what materials they should salvage from their wrecked plane. They would use these supplies as they evacuated from the remote crash site. Some items seemed useful, like a map or tarp, while others were more cumbersome than helpful, like skis or an oxygen tank. Once they gathered their supplies, they started their trek back to town.

This wasn't a real plane crash; this was part of a scenario-based wilderness medicine event for medical students at Albany Medical College. For the second year in a row, teams of medical students came together to compete in a timed event that included several hands-on wilderness medical scenarios, a written toxicology scenario and some asynchronous survival tasks.

This year the teams encountered a massive hemorrhage from a bear attack, glissading gone wrong with an impaled ice ax and a fishhook in the eye. Each team had to take care of their patients with the limited equipment they were carrying in their backpacks. At the end of each station, there was a quick debrief to discuss the main objectives of each station and teams were awarded bonuses or penalties depending on how well they cared for their patients.

At one station, they were thrown into a rafting scenario in which their team had capsized their raft in a rapid. There were multiple patients, including one who drowned and required resuscitation while another had a dislocated shoulder, limiting his ability to physically help with rescuing his teammates. A third teammate was uninjured but stuck in the raft on the far side of the river. After the urgent medical needs were addressed, teams had to construct a z-rig to haul their teammate and the raft back to the near shore. Few participants had much rope experience but fortunately there was a reference card they could consult in exchange for penalty minutes added onto their overall time.



Scenario based wilderness medicine competitions have become a popular tool for teaching wilderness medicine. Medical Wilderness Adventure Race (MedWAR), a national organization that sanctions races, was created in the early 2000's (www.medwar.org). They designed events based on the idea that one can talk about wilderness medicine topics in a classroom but that wilderness medicine skills are best practiced when practitioners are "cold, tired, wet, and hungry".¹ Since the original race in Georgia, MedWAR has expanded to many sites across the US and Canada. There is even an annual race hosted by the Emergency Medicine Residents Association held in conjunction with National ACEP.



Besides the official races, a number of medical schools host events for their medical students. One school in the Midwest hosts an annual race for first and second-year medical students. They have found pre-clinical students gain wilderness medicine knowledge as well as learn triage, communication and teamwork skills.²



One of the strengths of these events is they require participants to treat simulated patients in outdoor settings with the tools they have. Through my personal experience teaching wilderness medicine in a variety of settings, I have found students tend to be very comfortable verbalizing how they would take care of a patient but when asked to actually care for a patient, they have to stop and think through the practicality of their plan in the given setting. For example, they know they need to splint an ankle injury but when they are forced to make a splint out of the materials they have with them, it takes some creativity. Should they keep the shoe on or off? If they keep it on, how are they going to assess circulation after applying the splint? Now that the leg is splinted, how are they going to evacuate the patient? If they want a set of vital signs, they must actually take them. These are practical questions that rarely arise in the hospital setting but are the reality of taking care of patients in the wilderness.

Our event brought together students with a broad range of back-

grounds in outdoor skills, wilderness medicine and emergency medical services. While strong knowledge of wilderness medicine and survival skills would help a team ace a scenario, each station was designed to be accessible to students at a range of levels. There were reference cards they could buy for penalty points at some more technical stations which would walk them through some of the greater challenges such as building the z-rig. One recurring theme over the last two years is that people do not know how to tie and use knots and multiple students were heard at the end of the event commenting on how they were going to teach themselves rope skills. I guess we will see how that went at next year's race!

After the event was over, students, residents and faculty gathered to eat burritos and roast marshmallows around the fire that one of the teams had built as part of the race. It was a time to debrief the scenarios but also to network with people at different stages of medical training. The day was full of camaraderie, teamwork and time outdoors learning wilderness medicine in preparation for our next wilderness adventures and for next year's race.

References

1. Ledrick, D. J. (2003). The Medical Wilderness Adventure Race (Med-WAR): a 2-year perspective on a unique learning experience. *Wilderness & environmental medicine*, 14(4), 273-276.
2. Feazel, L., Block, J., Jayawardena, A., Wehr, P., House, H., & Buresh, C. (2016). Wilderness medicine race for preclinical students. *The clinical teacher*, 13(4), 271-276.

2022 ACEP Leadership & Advocacy Conference

May 1-4, 2022

www.acep.org/lac

EDUCATION



Devjani Das, MD FACEP

Director, Emergency Medicine Clerkship

Director, Undergraduate Point-of-Care Ultrasound Medical Education

Assistant Professor of Emergency Medicine, Columbia University Vagelos College of Physicians and Surgeons



Guest Author

Stephanie Corey, MD MS

Department of Emergency Medicine, Medical Student Clerkship Director

Rochester Regional Health

Is There a Place for Radical Compassion in Emergency Medicine?

I am a board-certified Emergency Medicine physician, but I did not come to be so through any type of traditional route. I've had two separate careers and I left both because I felt unfulfilled in my roles. My life has been a constant search for the perfect job. Now, with student loan debt, a mortgage and two small children at home, I find myself practicing in a busy Emergency Department (ED) in the middle of a pandemic. Changing careers at this point is not an option. It is no secret that burn-out among us ED physicians is high and in our current climate, I am feeling it too. Now that I have officially realized there is no perfect job, I am seeking ways to love my position.

Some soul searching made me think about how I got here. I wanted to help people – a sentiment that many of us felt as we entered this profession. Do I always feel like I am helping people? Up to a few months ago, the answer to that question was a hard no. There were amazing days when I found myself truly saving critical patients' lives, but there were so many other days I found myself babysitting intoxicated regulars and going through monotonous ED workups. So, I started to wonder what I could do to turn my answer into a yes.

At my institution, we recently began hosting fourth year medical students for a month long rotation in Emergency Medicine. Recently, I spent a day with students driving around our city, visiting with people and organizations who work with certain groups of our ED patients; the undomiciled and victims of violence. Meeting with these selfless people and seeing their work, I found a tremendous amount of inspiration. We visited a homeless shelter run by Sisters of Mercy. They have a philosophy of radical compassion. They define radical compassion as “actively working to preserve,

promote and restore the dignity, value and independence of every human person without distinction or judgment.”¹ They accept anyone who needs shelter, filling cots in the dining area before turning anyone away. Speaking with the directors of Pathways to Peace, a violence prevention organization, I saw the passion and commitment they have toward preventing gang violence. These gentlemen wear pagers 24-hours a day and their life's work is to step into gang situations to deescalate and prevent violence in our community.

When I heard the conviction in the voices of the Sisters of Mercy and the directors of Pathways to Peace, I found the essence of what has been burned out of my practice and vowed to bring it back. I have since treated several patients who were undomiciled and I try to keep in mind the mantra of radical compassion. The Sisters of Mercy advised us in the ED to feed our patients and make sure they have clothing that is weather appropriate. A few weeks ago, I took care of a young woman who was addicted to heroin and alcohol with no place to go. She came to the ED asking for help with detox, but was belligerent and disruptive. She did not have a medical emergency but was in need of radical compassion. So, I sent her to an open access clinic for help with rehab after adorning her with a hat and mittens. I also provided her with as much food as she wanted, calling down to the kitchen to request additional sandwiches. The patient went from yelling and disrupting the ED to repeatedly thanking me for being kind and it was shockingly heart-warming and satisfying.

In my effort to inspire my students, I myself found quite a bit of inspiration. Student feedback also was overwhelmingly positive, noting the experience as “moving,” “inspiring”

and causing them to approach patients “leaving biases at the door.” After meeting with the Sisters of Mercy, one student commented “there was not a dry eye in the room.” Incorporating these ideas into daily practice has been rather intuitive as a result of the impact they had on me and the students involved. I love that this idealism has been internalized and I can model and teach it to my current and future students. What if we were to incorporate experiences like these into the curriculum of our residents, particularly when they are reaching the peak of disillusionment? Would we all find ourselves more fulfilled in our profession? I highly recommend seeking out the people in your community that are radically compassionate if you feel like you need some ice melted from your heart. There is no perfect job and we all went through a tremendous amount of training with certain convictions in mind. Returning to those original intentions has been quite fulfilling.

References

1. Radical Compassion. (2021). House of Mercy. Retrieved January 15, 2022, from <https://houseofmercyrochester.org/radical-compassion>.



EMERGENCY MEDICINE

Vice Chair of Clinical Operations

The Department of Emergency Medicine (EM) at Columbia University Vagelos College of Physicians & Surgeons is seeking a talented, highly motivated Vice Chair of Clinical Operations to join the executive leadership team. Reporting directly to the Chair of EM, this position will provide leadership and oversight of the clinical mission for the Department.

The Vice Chair will have a demonstrated track record as a successful clinical operations leader in emergency medicine and be able to work across disciplines within a large, diverse organization. Successful candidates will provide vision and direction for all aspects of the Department's clinical operations and will lead an emergency service which is responsive to community needs, setting the standard for excellence in the highest quality patient-centered care. The Vice Chair will provide vision and leadership for new and ongoing clinical initiatives and program development, policies and procedures, quality and safety, patient experience and satisfaction, disaster readiness, and interfaces with hospital leadership, departments and other clinical services.

The Vice Chair will promote a strong collaboration with nursing, advanced practice providers, as well as other healthcare providers and administration. In addition to promoting excellence in clinical care, the Vice Chair will be a key leader in the interdisciplinary effort focused on operational performance as well as clinical financial management for the Department. The Vice Chair will enthusiastically work towards creating a Department that is nationally recognized for its clinical, education, and research excellence.

We are seeking visionary candidates with strong interpersonal and communication skills to work collaboratively across the organization with an ability to engage, inspire, and promote excellence in clinical care.

The faculty group at Columbia staffs four EDs in the New York metropolitan area with approximately 250,000 combined annual visits: NewYork Presbyterian (NYP)-Columbia University Irving Medical Center ED with a recently completed \$100 million state-of-the-art ED renovation; NYP-Morgan Stanley Children's Hospital ED with an ACS accredited Level I Pediatric Trauma Center; NYP-Allen Hospital ED in northern Manhattan, and NYP-Lawrence Hospital ED in the Westchester village of Bronxville, NY. Our academic EM and pediatric EM faculty supervise residents from our highly successful 4-year residency program, fellows in our highly competitive Pediatric EM Fellowship program, as well as medical students and other rotating residents.

NewYork-Presbyterian | Columbia is a premier academic institution with world-class clinical facilities and programs committed to excellence in patient care, research, education, and community service. NewYork- Presbyterian Hospital is ranked #1 in the NY metropolitan area and repeatedly named to the Honor Roll of "America's Best Hospitals"; Columbia University College of Physicians & Surgeons is a top five medical school in the nation with a superb, collaborative research environment. EM faculty enjoy the academic benefits of working in one of the country's premiere academic health centers. Columbia University Medical Center is an internationally recognized leader in the creation of new knowledge and therapies to improve health in individuals and populations with sponsored research totaling more than \$600 million annually.

We seek applicants who embrace and reflect diversity in the broadest sense. Columbia University is an Affirmative Action, Equal Opportunity Employer.

Please send letter of interest, curriculum vitae, and names of 3 references to:

Angela M. Mills, MD, Chair
emrecruiting@cumc.columbia.edu

Discover. Educate. Care. Lead.

RESEARCH



Laura Melville, MD MS
Associate Research Director
New York-Presbyterian Brooklyn Methodist Hospital
Chair, New York ACEP Research Committee



Guest Author
Deborah A. Levine, MD
Associate Professor of Clinical Emergency Medicine; Associate Professor of Clinical Pediatrics, Weill Cornell Medicine, New York-Presbyterian Hospital, Komansky Children's Hospital



Guest Author
Shari L. Platt, MD
Vice Chair of Pediatric Emergency Medicine; Associate Professor of Clinical Emergency Medicine; Associate Professor of Clinical Pediatrics, Weill Cornell Medicine, New York-Presbyterian Hospital, Komansky Children's Hospital, Chief, Division of Pediatric Emergency Medicine

New York City Tri State Mis-C Consortium: How a Novel Presentation of COVID-19 in Children Led to the Rapid Development of a Regional Multi-Center Research Collaborative

The Background

In March 2020, New York City became the largest epicenter of the COVID-19 pandemic, with high numbers of adult patients presenting with critical respiratory illness.¹ While pediatric emergency medical services initially prepared to care for COVID-19 in children, it was soon recognized that younger patients were spared the suffocating sequelae of acute SARS-Co-V2 infection.

In April 2020, however, medical centers across New York City observed pediatric patients presenting with acute shock, hemodynamic instability and a spectrum of disease that resembled Kawasaki syndrome. This disease was coined, Multisystem Inflammatory Syndrome in Children (MIS-C) and thought to be a sequela of SARS-CoV2 infection or exposure.² While some children presented with critical shock, many showed milder presentations, including fever, abdominal pain and rash. Some patients presented with mild symptoms and hours later developed hypotension in the ED requiring intensive care support. The uncertainty of the course of disease prompted the need to study which patients with MIS-C will develop severe illness.

The Setting

The New York City Tri State region consists of five uniquely positioned boroughs and neighboring suburbs of Long Island, Westchester, New Jersey and Connecticut. There are more

than 20 teaching hospitals and more than 10 pediatric emergency medicine (PEM) fellowship training programs in this area, caring for a population of approximately two million children. While these centers have familiarity due to shared PEM fellowship and faculty recruitment, there has never been a formal method to share clinical experience or collaborate in a unified research process.

The Meeting

Multi-centered research develops from a shared need to answer a problem. In the pediatric emergency department we were diagnosing and managing patients with suspected MIS-C using varied clinical approaches and pathways. Clinically, we could not predict which children with MIS-C would develop severe manifestations of shock or cardiovascular dysfunction. We assembled a virtual meeting among pediatric emergency leaders in our area to address the diagnostic dilemmas surrounding MIS-C. This discussion led to the formation of a multi-center research consortium. We recognized that collaboration could yield answers more effectively. The New York City Tri State MIS-C Consortium was created with the goal of improving and standardizing the care for this novel presentation. Sites from Westchester, New Jersey, Connecticut and Eastern Long Island were added to broaden this network. In its final iteration, the research consortium comprised of 22 sites with 1-2 investigators per site invested in this project.

The Methods

The consortium first planned to design a research protocol to study MIS-C in our region. This shared collaboration allowed researchers with varied experience to contribute and share in the study process. One site took the lead as data coordinating center, drafted a project protocol for the institutional review board (IRB), created a database and initiated the process of generating data use agreements (DUA) between institutions. Once the protocol was approved at the coordinating center it was shared and then reformatted by the lead investigator at each site for approval at each respective IRB. A DUA is a legal process required when patient data is shared between different institutions. The lead site monitored the approval processes at each site, troubleshoot delays and corresponded with site investigators to facilitate completion of the research approval process.

The lead site investigator created a manual of operation (MOO); a step-by-step road map for each site investigator to use to identify eligible subjects and enter data into a HIP-PA-compliant database designed using RED-Cap. Training sessions with all site investigators were held virtually to ensure the standard collection of patient metrics.

Once data entry was complete, the database was cleaned and organized and statistical analysis was performed. All site investigators had the opportunity to review the analysis and participate in the abstract and manuscript

preparations.

Funding is an essential component in this process. Procurement of funding for statistical support was provided by the lead site, while grant funding from external sources, such as institutional and foundation grants, was sought.

Establishing authorship in this multi-center initiative is critical and ongoing updates and communication is required to maintain collaboration and equity across all contributing sites. Engagement and participation by all site investigators are the integral elements to achieve a robust and successful model. This consortium offers a vehicle for secondary analyses of the MIS-C data and future study collaborations in this dense and diverse community.

The Result

The COVID-19 pandemic created many challenges for physicians and the practice of medicine. MIS-C was a novel clinical condition not previously encountered by pediatric emergency physicians. This unique disease required a rapid response and collaboration to guide optimal pediatric emergency care. The creation of The New York City Tri State MIS-C Consortium allowed for the collective sharing of clinical experience and research expertise in a region seeing the first wave of this disease. This model may guide clinical practice but most importantly will lay the groundwork for further research collaborations to advance the emergency care of children.

References

1. Geographic Differences in COVID-19 Cases, Deaths, and Incidence — United States, February 12–April 7, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:465–471. DOI: <http://dx.doi.org/10.15585/mmwr.mm6915e4externalicon>.
2. Centers for Disease Control and Prevention. Emergency preparedness and response: multisystem inflammatory syndrome in children (MIS-C) associated with coronavirus disease 2019 (COVID-19). Health advisory (<https://emergency.cdc.gov/han/2020/han00432.asp>).



ASK THE EXPERTS

Moshe Weizberg, MD FACEP

Chair, Department of Emergency Medicine
New York Community Hospital
Chair, New York ACEP Professional Development Committee



Jennifer Pugh, MD MBA FACEP

Clinical Assistant Professor, UBMD Emergency Medicine
Associate Chief of Service, Erie County Medical Center

Creating a Culture of Well Being: Wellness Resources from the Experts

Emergency medicine physicians are respected for their resilience under high stress situations. The countless challenges we have all experienced during the COVID-19 pandemic have not made our jobs any easier. Numerous surveys show more emergency medicine physicians feel burned out but fortunately there has been an increased focus on personal and professional wellness strategies.

ACEP Programs

ACEP offers a variety of wellness programs for members including wellness sessions, peer-to-peer support and online discussion forums through the Wellness Section and Well Being Committee.

The ACEP Wellness and Assistance Program offers ACEP members exclusive access to three free confidential counseling or wellness sessions in partnership with Mines and Associates. Members can access this benefit by logging into their ACEP account.

The ACEP Wellness Section hosts the [Let's Talk Community](#) on the engagED platform. This online discussion forum is a safe space where all ACEP members can discuss ongoing challenges. Members are able to reach out to colleagues for advice and encouragement. This is the only forum on engagED that allows for anonymous posting.

The Wellness Section has also started holding virtual [Coffee House Chats](#) as a way to stay connected to our colleagues and ourselves. This program started during the ACEP Virtual Scientific Assembly in 2020 and allows participants to share their life experiences during this current wave of the pandemic.

ACEP created the [Emergency Medicine Wellness Week™](#) to help physicians become less burned out and more resilient.

New York ACEP Programs

New York ACEP offers many personal and

professional development programs throughout the year. Members can take advantage of our [Mentorship Program](#) where New York ACEP will connect you with an experienced emergency medicine physician. Areas of interest can be found on the website along with information on how to sign-up for this program.

New York ACEP also hosts a [Professional Development Lecture Series](#). Dr. Robert Strauss will be our guest for the next lecture entitled "Negotiate Effectively" April 13, 2022.

At the Scientific Assembly in July, New York ACEP members have gathered around the campfire for years during "Airway", a storytelling initiative for the emergency medicine community to come together and share the moments that make our careers powerful. Members have also participated in a social running event and cheered on emergency medicine residents during the annual volleyball tournament.

National Programs

Dr. Lorna Breen Heroes' Foundation

The wellness of our colleagues has been brought to the attention of Congress through the *Dr. Lorna Breen Health Care Provider Protection Act*, which honors the life of Dr. Breen, a respected New York ACEP colleague. This legislation supported by ACEP aims to reduce and prevent suicide, burnout and mental and behavioral health conditions among health care professionals.

This bill also supports suicide and burnout prevention training in health professional training programs and increases awareness and education about suicide and mental health concerns among health care professionals.

In the future, grants will be established for training health care providers to help improve well-being and job satisfaction. Evidence-based programs will be disseminated to help prevent and reduce suicide, burnout,

mental health conditions and substance use disorders.

National Physician Suicide Awareness Day

The Council of Residency Directors in Emergency Medicine (CORD) in collaboration with ACEP has dedicated September 17 as National Physician Suicide Awareness Day. The goal of this day is to "break down stigma, increase awareness, open the conversation, decrease the fear of consequences, reach out to colleagues, recognize warning signs and learn to approach our colleagues who may be at risk." CORD has provided a list of resources on their website to access if you or a colleague needs support.

Hospital, Departmental and Residency Based Programs

Most hospitals, departments and/or residencies have started Wellness Programs. Many groups have now established a Chief Wellness Officer position.

In 2020, Columbia University and Weill Cornell Medicine were the recipients of the New York ACEP Exemplary Commitments to Physician Well-Being Award. ED Well is a Wellness Committee at Columbia University that includes attending physicians and residents that work together on "initiatives including ongoing research regarding the impact of work environments and workplace violence" in addition to "social gatherings, health and fitness." The Weill Cornell Wellness Committee offers peer support programs, shift time adjustments, faculty breaks, mentoring, recreational activities and social events.

Challenge yourself in 2022 to spend a few minutes to connect with a colleague who may be struggling. Take advantage of one of the many wellness resources available to you through your hospital, department, residency, New York ACEP or ACEP!

Arlene S. Chung, MD MACM FACEP
Residency Program Director, Department of Emergency Medicine
Maimonides Medical Center
Member, New York ACEP Board of Directors



Imposter Syndrome and Navigating Change in an Uncertain World

I recently received an invitation to lead a virtual facilitated discussion on the topic of imposter syndrome for a Women in Medicine group based in New York State at a different hospital than my own. The participants were a lively group of bright women from different specialties and at different career stages ranging from senior resident to senior attending physician. As we talked, I reflected that the feelings of imposterism expressed by the women were strikingly similar despite the wide variability in clinical and life experience. This is consistent with what we know about imposter syndrome, which is marked by an inability to internalize success.¹ Achievement alone is not enough to quiet the anxious thoughts pinging around in our heads and many of us harbor a secret fear that the higher we go, the greater our risk of falling.

Imposter Syndrome is Everywhere

Studies show up to 70% of all people will at some point grapple with this fear that someone will finally figure out we don't deserve to be here.² Men are not immune either. Imposter feelings are the most common for everyone during times of change—graduating from medical school, graduating from residency, starting a new attending position, moving across the country, having a child, getting married. During each of these times of change we are vulnerable to falling prey to our own insecurities.

Change is Inevitable

Tiny or profound, happy or devastating, change is ambient as the air we breathe. Even the worst events in our lives can transform into the best of scenarios. Change can be both frightening and exhilarating. It can trigger thoughts of apprehension and imposterism and hopefully also at the same time bravery and courage. The past two years of the pandemic have shown us we need to learn to do more than just survive in an uncertain world.

In the brief audience discussion sessions that frequently follow many of my talks about imposter syndrome, I am often met with some

version of, *Well, that all sounds very nice but HOW exactly are we supposed to navigate change in an uncertain world when confronted with our own feelings of imposterism?* So, in the spirit of the new year, I'd like to share my best advice for surviving change in 2022. I hesitate to call these best practices as in truth, they simply represent the accumulation of life experience, reflection and wisdom that has been passed down to me from the important people in my life.

Embrace Fear

Most of us do not feel comfortable displaying the full spectrum of human emotion to our friends and colleagues, especially in the clinical setting. We have learned through training and experience that certain emotions, such as fear, sadness, guilt and shame have not earned a reputable place in the field of medicine. But it is not possible to selectively block emotions. If we block fear, we also block joy. Learning to embrace the universality of our internal experience—the good, the bad and even the ugly—is the first step toward recognizing feelings of imposterism can be normal too.

Practice Forgiveness

The most difficult aspect of practicing forgiveness is learning to forgive ourselves. It is very easy to lump shame upon our already fragile egos when faced with a new and potentially challenging circumstance. Even when we navigate it well, we can be dogged by a persistent fear that someone may find out it was just a matter of luck rather than skill. When we don't navigate change well, the subsequent shame narrative can be deafening. Learning to forgive ourselves can quiet our imposter thoughts and help us to move on in a healthier way.

Ask For Help

Many of us frequently donate our time and resources to help others in a noble display of generosity and strength. However, accepting help or (god-forbid) asking for help feels like a blatant acknowledgement that we absolutely do not know what we are doing and do not

deserve to be here. This is not true. Finding support and leaning on each other is one of the most proven ways to normalize our fears and mitigate feelings of imposterism.

Stay Open

A career in medicine has taught me that nothing is ever certain. Just when we think we might actually know something, we discover we know nothing. Life-long learning encompasses not only factual clinical knowledge but a willingness to stay humble to new experiences.

Perhaps some of this advice will resonate with you as you navigate your own circumstances. My hope is that through the practices shared here we can each learn to be more in alignment with our feelings, forgive ourselves, lean on each other and practice humility. Change is a certainty for all of us but there is no reason to feel as though we are not capable of meeting it, overcoming our own feelings of imposterism and thriving.

Here's to navigating a more hopeful year than the last.

References

1. Clance PR, Imes S. The imposter phenomenon in high-achieving women: dynamics and therapeutic intervention. *Psychotherapy Theory, Research, and Practice*. 1978;15(3):1-8.
2. Gravois J. You're not fooling anyone. *Chronical of Higher Education*. 2007;54(11). Accessed on Jan 17, 2022. Available at: <https://www.chronicle.com/article/youre-not-fooling-anyone/>.



Call for Board and Councillor Nominations

Councillor Nominations

Active members of New York ACEP interested in serving as a New York ACEP Councillor are encouraged to submit their nominations to the 2022 Nominating Committee for consideration as the committee develops the slate of candidates.

Councillors with Terms Ending in 2022

Nicole Berwald, MD FACEP
Robert M. Bramante, MD FACEP
Jay Brenner, MD FACEP
Bernard P. Chang, MD PhD FACEP
Mark Curato, DO FACEP
Mathew Foley, MD FACEP
Keith E. Grams, MD FACEP
Abbas Husain, MD FACEP

Stuart G. Kessler, MD FACEP
Daniel Lakoff, MD FACEP
Laura D. Melville, MD MS
Joshua B. Moskowitz, MD MBA MPH FACEP
Nestor B. Nestor, MD MSC FACEP
Jeffrey S. Rabrich, DO FACEP
Virgil W. Smaltz, MD MPA FACEP
Peter Viccellio, MD FACEP

Councillors With Terms Ending in 2023

Brahim Ardolic, MD FACEP
Joseph Basile, MD MBA FACEP
Kirby P. Black, MD FACEP
Erik Blutinger, MD MSc
Lauren J. Curato, DO FACEP
Sanjey Gupta, MD FACEP
Marc P. Kanter, MD FACEP

Penelope C. Lema, MD FACEP
William F. Paolo, Jr., MD FACEP
Louise A. Prince, MD FACEP
Livia M. Santiago-Rosado, MD FACEP
Virgil W. Smaltz, MD MPA FACEP
Peter Viccellio, MD FACEP
L. Carlos Zapata, MD FACEP

The Board of Directors will elect Councillors at the Friday, July 8, 2022 Board meeting at the Sagamore Resort. Members interested in representing New York ACEP at the ACEP Annual Council Meeting (September 29-30, 2022 in San Francisco) should submit a nomination form and their CV to New York ACEP. New York ACEP will be represented by 30 Councillors at the 2022 ACEP Council meeting.

Board Nominations

Active members of New York ACEP who meet the criteria and are interested in serving on the Board of Directors are encouraged to submit their nominations to the 2022 Nominating Committee for considerations as the Committee develops the slate of candidates.

Five directors will be elected by the membership through a proxy ballot distributed at least 30 days prior to the annual membership meeting. The annual membership meeting will be held Thursday, July 7, 2022 at the Sagamore Resort on Lake George.

Board Members with Terms Ending in 2022

Robert M. Bramante, MD FACEP
Penelope C. Lema, MD FACEP

Laura D. Melville, MD
Joshua Moskowitz, MD MBA MPH FACEP

Interested candidates should review the criteria for New York ACEP board nomination, board member duties and responsibilities and send a completed nomination form along with a copy of their CV to New York ACEP by April 1, 2022. Self nomination and nominations of colleagues are accepted. To request the policies and nomination form, contact New York ACEP at (585) 872-2417 or by email at nyacep@nyacep.org.

Successful nominees will be notified by May 9, 2022. Board candidates are required to submit background information on their professional career, a photograph and answer questions posed to all board candidates. Candidates will have approximately two weeks to submit material.

Nomination Deadline: April 1, 2022

Professional Development Lecture Series

Negotiate Effectively

April 13, 2022 - 7-8 pm

Join us for this free virtual member event.



Every time we interact with someone to accomplish what doesn't already exist, we are negotiating. This interactive presentation is designed to sharpen survival skills by covering the fundamental principles central to negotiating. When trying to hammer out the details of a complex negotiation or a simple everyday family discussion, meeting the needs of both parties can be tricky. This presentation will help the attendee to understand the principles of negotiation, improve skills and help both parties get what they want.

Robert Strauss, MD FACEP
Chief Medical Training Officer
TeamHealth

PEDIATRICS



Geoff W. Jara-Almonte, MD

Elmhurst Hospital Center

Assistant Residency Director, Department of Emergency Medicine
Icahn School of Medicine at Mount Sinai Hospital



Guest Author

Nitin Kuppanda, MD

Resident, Emergency Medicine
St. John's Riverside Hospital



Guest Author

Mary E. McLean, MD

Assistant Residency Director, St. John's Riverside Hospital
New York ACEP Education-Research Committee Liaison

Pediatric Considerations in Disaster Situations

Disasters often strike when we least expect it and providers may not be well-prepared for a disaster response affecting pediatric patients.

An interview was conducted with Joelle Simpson, MD MPH, Chief of Emergency Medicine and Medical Director of Emergency Preparedness at Children's National Hospital and member of the National Biodefense Science Board, which helped guide the content of this article (phone interview, December 2021). Dr. Simpson often starts off talks with hospitals and departments for pediatric disaster preparedness with the following scenario:

"Imagine that ... you have kids, ... nieces, or nephews ... when they come to stay with you, what are all the things that you need to get ready for? Now imagine a crisis and an [injured] kid of that age coming into the emergency department. How would you manage them?"

In this article, we will be discussing the most salient points of pediatric considerations for disaster responses to better prepare emergency departments (EDs) and hospitals for disasters involving pediatric patients.¹

Disaster Triage

Proper disaster triage (e.g., with [START Adult Triage](#)) is crucial for prioritizing patients who need immediate versus delayed intervention during a mass casualty incident. Patients are designated under different color classes for easy identification. Pediatric changes to the disaster triage are apparent when triaging the green tagged patients and the algorithm is titled [JumpSTART](#) (see Figure 1).² The JumpSTART algorithm specifically assesses ambulatory, respiratory, pulse and neurologic status to determine acuity.

Ambulatory: A quick way to determine which patients need immediate help during a disaster is to assess mobility limitations (e.g., patients who are unable to walk usually require immediate attention). Those who are able to walk are termed the "walking wounded" and most often do not require immediate intervention. However, when pediatric patients are involved, it is important to check to see if any of the walking wounded are carrying children in their arms that do require immediate assessment and intervention.

Respirations: During the process of pediatric disaster triage, healthcare providers must assess respiratory rate, which can provide an unexpected amount of insight into the severity of their condition. A very high or very low respiratory rate could give the pediatric patient a red designation, requiring immediate intervention within 60 minutes.

Pulses: If apneic but with a palpable pulse, rescue breaths are then indicated.

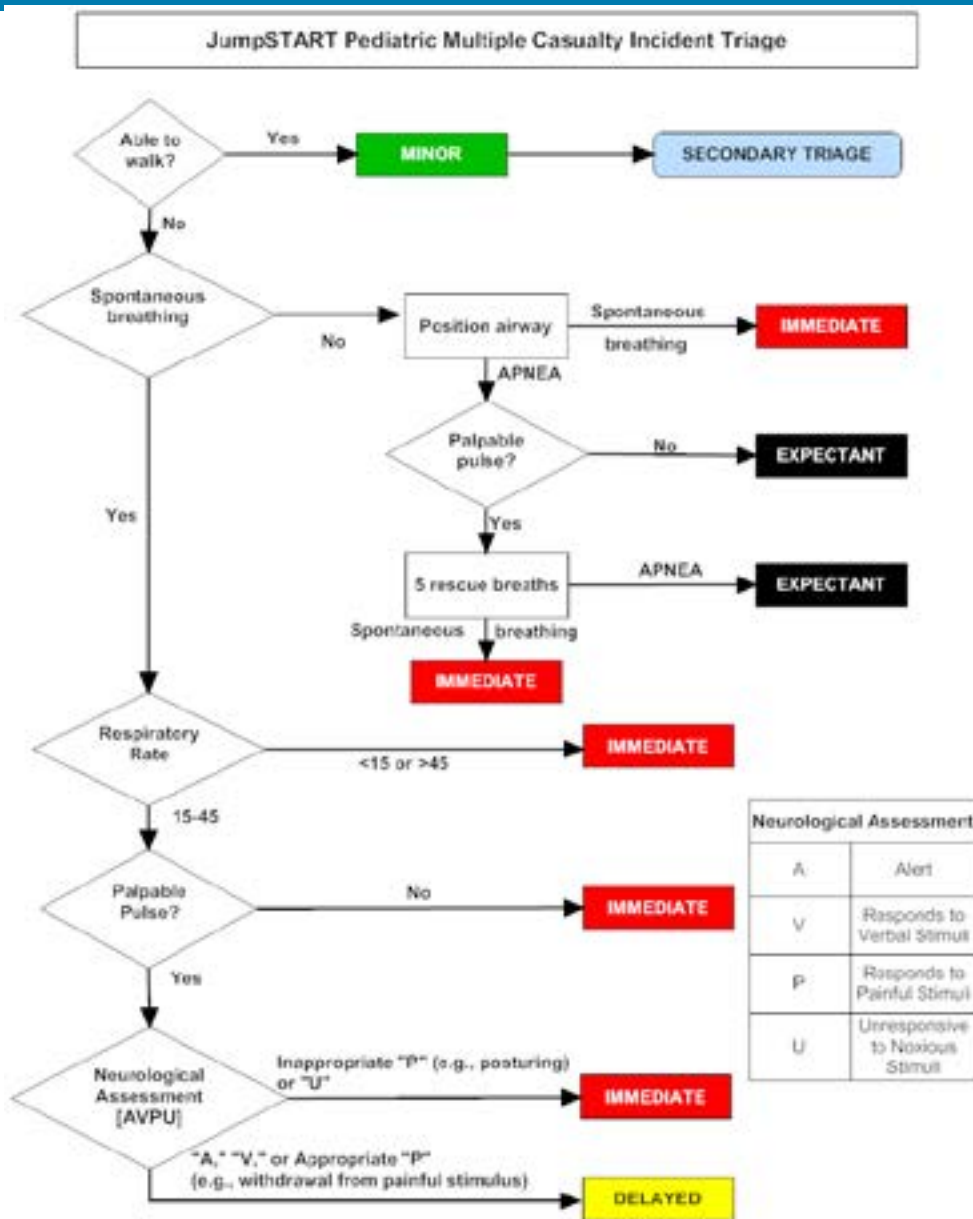
Neurologic: The last pediatric consideration is determined by AVPU (alert, verbal, painful, unresponsive). The most neurologically intact pediatric patients are classified as alert; next-best is responsive to verbal stimuli; followed by responsive to painful stimuli; and the most concerning neurologic status is, of course, unresponsive. The neurologic classification determines whether the child requires immediate versus delayed intervention.³

Physiologic Differences

Children have lower blood volume and fluid reserves compared to adults. Therefore, smaller blood or fluid loss can affect children more profoundly. This is also important to note when children are exposed to chemical agents that cause vomiting and/or diarrhea, as they can lose fluid reserves quickly. However, pediatric patients also have better vascular integrity without the atherosclerosis and other issues that come with age and thus better blood pressure compensation. Thus, it is important to distinguish subtle signs of shock, such as differentiating whether tachycardia could be due to hypovolemia/blood loss, versus agitation provoked by medical examination or disaster situation, versus pain. Children are particularly vulnerable to aerosolized agents as they have a higher respiratory rate and thus would inspire more of the agent during the same time as adults, increasing the concentration of the agent into their lungs and bloodstream. This is especially noted with agents that are also heavier in air (e.g., sarin, chlorine, etc.), which places the agent closer to the child's breathing zone due to their shorter stature. Pediatric patients' skin is also thinner and has a larger surface to mass ratio, which allows for more absorption of aerosolized agents that land on their skin.^{3,4}

Developmental Differences

Children are at different developmental stages in terms of cognition, social interactions and motor skills. Depending on their developmental stage, children may not have the cognitive skills to understand the nature of the disaster, to grasp the importance of escaping from a dangerous site or the ability to follow directions. In addition, children may not have the motor skills to leave the disaster area expeditiously. For this reason and others (e.g., difficulty of reunification, mental health, etc.), children and family should not be separated unless emergent treatment for each party is best served at separate sites.⁵ It is important to keep the



Use JumpSTART if the Patient appears to be a child.

Use an adult system, such as START, if the patient appears to be a young adult.



Figure 1: Pediatric JumpSTART algorithm for triage in mass casualty incidents and disaster situations.²

Pediatrics

family unit intact. This affects pediatric care as the emotional state of the caretakers can affect a child's response. Disaster responses must also include considerations for pediatric patients with special healthcare needs. More information on how to prepare for these patients can be found at the [CDC's website](#)⁶ and the [Disaster Survival Resource](#).⁷

Resources

The majority of children presenting to the ED are evaluated in combined (rather than specialized pediatric emergency medicine) departments – specifically, by combined departments that see fewer than 15 pediatric patients per day.⁴ Medical equipment in such departments may be improperly sized or in short supply, from blood pressure cuffs to endotracheal tubes. Pediatric formularies for medications may be unavailable and staff may not be well practiced in pediatric protocols for medication dosing. Having pediatric-specific order sets that are constructed in preparation for disasters can help improve efficiency and decrease practitioner mental fatigue during a disaster response. Decontamination equipment also affects pediatric patients differently than adults: because children are more vulnerable to temperature changes, body showers for adults may result in rapid decreases in pediatric body temperatures. Therefore, temperatures must be monitored to prevent hypothermia. For more guidance on how to utilize decontamination for children, please look into the New York City Pediatric Disaster Coalition's [Hospital Guidelines for Pediatric Preparedness](#).⁸

Staffing is another resource that must be considered for disaster preparedness. It is important to consider the role practitioners (such as resident physicians) play in disaster responses.⁹ In adult-only admitting hospitals, it is important to look for staff who have pediatric training. For example, if the hospital has a NICU, the neonatologist could be an especially useful staff member to help perform any procedures necessary on pediatric patients. It is also important to look for creative ways to utilize staff. For example, a chaplain could serve as a [Child Life](#) coordinator.¹⁰ In the same vein, pediatric-only trained health care providers must be able to care for adults. During a disaster, it is important not to separate the family. Therefore, children's hospitals ideally should be prepared to treat the parent/guardian accompanying the pediatric patient and adult hospitals ideally should be prepared to treat children along with their caretakers. This also means rooms and space in the hospitals should be able to accommodate the family unit.¹¹ To prepare for child and caretaker separation during a disaster, the American Academy of Pediatrics (AAP) has compiled a toolkit to plan for family reunification after a [disaster](#).⁵

Transport to pediatric specialty hospitals is also important. In the event of a disaster, there must be systems in place to allow for fast and easy transport of pediatric patients. It is also important to decide which hospital is arranging transportation and ensure the transport team is prepared to transport critical pediatric patients. For more information, see the [Prehospital Pediatric Readiness Toolkit for EMS Providers](#).¹²

Mental Health Needs

Children rely on having routines. When a disaster upends the routine they are accustomed to, it can have negative effects on their mental health.¹³ Developmental stage of the patient comes into play because children may not cognitively understand how to confront the disaster or work with health care practitioners. This also involves pediatric caregiv-

ers, as caregiver mental health affects their patients' reactions.

The aftermath of a disaster is also an important factor and one that must not be forgotten, particularly when children are involved. Mental health is greatly affected for pediatric patients after a disaster occurs. There has been a large rise in mental health crises in the pediatric population since the onset of the COVID-19 pandemic.¹⁴ The AAP has provided guidance on how to provide psychosocial support to children and families after a [disaster](#).¹⁵

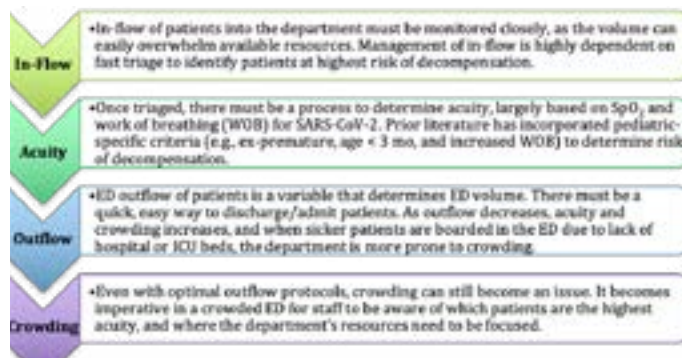
COVID-19 Considerations

The COVID-19 pandemic has renewed the medical community's awareness of the importance of disaster preparedness. Hospitals must be prepared for surges of ill patients, including pediatric patients. Concerned parents or guardians often present to the ED with their children for testing and treatment, even if the child is exhibiting mild or minimal symptoms. There are several reasons for this. The general population does not have expertise in SARS-CoV-2 signs and symptoms that warrant a visit to the ED and this is particularly problematic given social media and COVID-19 misinformation in this day and age. Additionally, while the rapidly evolving recommendations from reputable organizations (such as the World Health Organization and the Centers for Disease Control and Prevention) are necessary, the changes can also be jarring for parents and guardians. As a result, parents/guardians have a low threshold to bring their children to the ED and the increase in patient volume overwhelms hospital resources, meeting surge criteria.

In truth, pediatric patients usually recover well from COVID-19 infection, provided they are healthy children with few or no comorbidities.¹⁶ However, in some cases, severe illnesses can present as sequelae to SARS-CoV-2, such as [MIS-C](#) (multisystem inflammatory syndrome in children).¹⁷ For quick and easy guidance on how to manage MIS-C, please refer to the [Clinical Pathway](#).¹⁹

Real-World Recommendations

The best tool for the COVID-19 surge response is prevention: to reduce the number of infected patients through education and through prevention strategies such as vaccine administration.¹⁹ However, in many cases the ED is utilized after preventative measures have either failed or not been attempted in the first place. We suggest addressing ED surge response by breaking down the areas of focus into four categories: in-flow, acuity, out-flow and crowding.²⁰



We hope this article shows the major points to consider during a

disaster response when pediatric patients are involved. For more information, please see a comprehensive list of valuable [Evidence-Based Resources](#) for pediatric disaster preparedness. Please also see Dr. Kuppanda's recent manuscript entitled [An Assessment of Pediatric Resident Disaster Preparedness for the Neonatal Intensive Care Unit](#), *Disaster Medicine and Public Health Preparedness*.

References

- Center for Disease Control and Prevention. Children In Disasters: Health Professionals. Published January 27, 2021. Accessed December 20, 2021. <https://www.cdc.gov/childrenin-disasters/professionals.html>
- U.S. Department of Health & Human Services Radiation Emergency Medical Management. JumpSTART Pediatric Triage Algorithm - Radiation Emergency Medical Management. Published December 17, 2021. Accessed December 20, 2021. <https://remm.hhs.gov/startpediatric.htm>
- Bradin SA, Lozon M, Butler A, et al. Planning for Children in Disasters A Hospital Toolkit. Accessed December 20, 2021. https://www.michigan.gov/documents/mdch/Planning_for_Children_in_Disasters_15_495237_7.pdf
- Remick K, Gausche-Hill M, Joseph MM, Brown K, Snow SK, Wright JL. Pediatric readiness in the emergency department. *Pediatrics*. 2018;142(5). doi:10.1542/PEDS.2018-2459/38608
- American Academy of Pediatrics, Massachusetts General Hospital Center for Disaster Medicine. Family Reunification Following Disasters: A Planning Tool for Health Care Facilities. Published July 2018. Accessed December 20, 2021. <https://downloads.aap.org/AAP/PDF/AAP%20Reunification%20Toolkit.pdf>
- Center for Disease Control and Prevention. Children and Youth with Special Healthcare Needs in Emergencies. Published January 6, 2021. Accessed December 20, 2021. <https://www.cdc.gov/childrenin-disasters/children-with-special-healthcare-needs.html>
- Disaster Survival Resources. Special Needs. Accessed December 20, 2021. <https://www.disaster-survival-resources.com/special-needs.html#>
- Foltin GL, Arquilla B, Uraneck K, et al. Pediatric Disaster Toolkit. Published 2006. Accessed December 11, 2021. https://omh.ny.gov/omh-web/disaster_resources/pandemic_influenza/hospitals/bhpp_focus_ped_toolkit.html#eight
- Kuppanda N, Simpson J, Soghier L. An Assessment of Pediatric Resident Disaster Preparedness for the Neonatal Intensive Care Unit. *Disaster Medicine and Public Health Preparedness*. Published online November 18, 2021:1-8. doi:10.1017/DMP.2021.322
- Child Life Disaster Relief. Accessed December 20, 2021. <https://cldisasterrelief.org/>
- Emergency Medical Services for Children Innovation and Improvement Center. Pediatric Disaster Preparedness Toolkit. Accessed December 20, 2021. <https://emscimprovement.center/education-and-resources/toolkits/pediatric-disaster-preparedness-toolbox/>
- Emergency Medical Services for Children Innovation and Improvement Center. Prehospital Pediatric Readiness Toolkit and Checklist now live! Published July 27, 2021. Accessed December 20, 2021. <https://emscimprovement.center/news/prehospital-pediatric-readiness-toolkit-and-checklist-now-live/>
- Foltin GL, Schonfeld DJ, Shannon MW, et al. Pediatric Terrorism and Disaster Preparedness A Resource for Pediatricians Section Editors AHRQ Editor. Published online 2006. Accessed December 20, 2021. <https://archive.ahrq.gov/research/pedprep/pedresource.pdf>
- Leeb RT, Bitsko RH, Radhakrishnan L, Martinez P, Njai R, Holland KM. Mental Health-Related Emergency Department Visits Among Children Aged 18 Years During the COVID-19 Pandemic — United States, January 1–October 17, 2020. *MMWR Morbidity and Mortality Weekly Report*. 2020;69(45):1675-1680. doi:10.15585/MMWR.MM6945A3
- Schonfeld DJ, Demaria T, Krug, SE, et al. Providing Psychosocial Support to Children and Families in the Aftermath of Disasters and Crises. *Pediatrics*. 2015;136(4):e1120-e1130. doi:10.1542/PEDS.2015-286
- Preston LE, Chevinsky JR, Kompaniyets L, et al. Characteristics and Disease Severity of US Children and Adolescents Diagnosed with COVID-19. *JAMA Network Open*. 2021;4(4):e215298-e215298. doi:10.1001/JAMANETWORKOPEN.2021.5298
- Center for Disease Control and Prevention. Information for Healthcare Providers about Multisystem Inflammatory Syndrome in Children (MIS-C). Published May 20, 2021. Accessed January 3, 2022. https://www.cdc.gov/mis/mis-c/hcp/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fmis%2Fhcp%2Findex.html
- Children's Hospital of Philadelphia. Multisystem Inflammatory Syndrome (MIS-C) Clinical Pathway — Emergency, ICU and Inpatient. Published May 2020. Accessed January 3, 2022. <https://www.chop.edu/clinical-pathway/multisystem-inflammatory-syndrome-mis-c-clinical-pathway>
- American Academy of Pediatrics. About the COVID-19 Vaccine: Frequently Asked Questions. Published December 7, 2021. Accessed January 3, 2022. <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/covid-19-vaccine-for-children/about-the-covid-19-vaccine-frequently-asked-questions/>
- Davis T. Managing a busy emergency department. Don't Forget The Bubbles. doi:10.31440/DFTB.33887. Published August 8, 2021. Accessed January 3, 2022. <https://dontforgetthebubbles.com/managing-a-busy-emergency-department/>

List of Resources

- EMSC resource – look under Education link <https://emscimprovement.center/>
- Pediatric Disaster Center of Excellence <https://wrap-em.org/>
- <https://emscimprovement.center/domains/preparedness/asprcoe/eglpedr/>
- AAP publication on reunification <https://downloads.aap.org/AAP/PDF/AAP%20Reunification%20Toolkit.pdf>
- National Pediatric Disaster Coalition <http://www.npdcoalition.org/resources/>

Whole Community Pediatric Disaster Training

- Pediatric Disaster Response and Emergency Preparedness Mgt 439 (TEEX): <https://teex.org/class/mgt439/>
- NEW (FEMA) Community Preparedness: Integrating the Needs of Children Workshop: <https://community.fema.gov/PreparednessCommunity/s/communitypreparedness>

COVID Vaccine and Vaccination for Children

- AAP: Covid Vaccine in Children <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/covid-19-vaccine-for-children/>
- CDC: Intramuscular Injection (video): Supplies Preparation (Children Birth to 18 years) <https://youtu.be/SsCxncersKM>
- CDC: Intramuscular Injection Sites (video): (Infant to Adult) <https://youtu.be/PqSuCPnP-eYE>
- CDC eLearn Course: Immunization: You Call the Shots-Module Eighteen- Vaccine Administration (e-Learn) 2021 <https://www2.cdc.gov/vaccines/ed/vaxadmin/va/ce.asp>
- CDC: Vaccine Administration Module (interactive): <https://www2.cdc.gov/vaccines/ed/vaxadmin/va/index.html>
- Parkland Health (video): Preparing your child for vaccination <https://youtu.be/vhHpOXJE8Yk>

COVID Clinical and Surge Guidance

- CDC COVID-19 Caring for Children <https://bit.ly/2WAdxms>
- Real-Time COVID Learning Network (Pediatrics): <https://bit.ly/3y0kRar>
- EMSC Innovation and Improvement Center: COVID Resources: <https://bit.ly/2EDUEJ4>

Pediatrics

37. Pediatric Overflow Planning Contingency Response Network: Covid Lessons Learned <https://bit.ly/3ASpO71>
38. Pediatric COVID webinars and collaboratives <https://bit.ly/3msVc8r>
39. Paediatric International Patient Safety and Quality Community (PIPSQC) <https://www.pipsqc.org/>
40. Don't Forget the Bubbles: Managing a Busy Emergency Department <https://bit.ly/3D4Yq7K>
41. The Respiratory Surge - how to manage a busy ED <https://youtu.be/q4kxixFQ5gk>
42. Pediatric Surge Technical Assistance Resource (ASPR-TRACIE) <https://bit.ly/3mqOKOX>
43. Children's Hospital Association Coordinating Hospital Care for Children to Increase Capacity for Surge <https://bit.ly/3z7ueXj>
44. Children's Colorado Clinical Pathways <https://bit.ly/3sw6dXy>
45. UpToDate COVID-19 Management in Children: <https://bit.ly/37UNICT>
46. AAP Interim Guidance: <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/>
47. Yale New Haven Children's Clinical Pathways <https://www.ynhh.org/childrens-hospital/medical-professionals/clinical-pathways.aspx>
48. Children's of Philadelphia Clinical Pathways: <https://bit.ly/3k9prhC>
49. Royal College of Pediatrics National Guidance for Children During Covid: <https://bit.ly/3gfzLnc>
50. Red Book 2019 Novel Coronavirus: <https://bit.ly/3xYAM9o>
51. Pediatric Overflow Planning Contingency Network MISC protocol: <https://www.popcornetwork.org/misc>
- Pediatric Legal Issues & Crisis Standards of Care**
52. Western Regional Alliance for Pediatric Emergency Management (WRAP-EM) Legal Resource Guide (DRAFT July 2021): <https://bit.ly/2UNvsbk>
53. ASPR TRACIE Technical Assistance Pediatric Crisis Standards of Care (2021) <https://bit.ly/3xZCirB>
54. Pediatric Surge Crisis Standards of Care (module) Minnesota <https://bit.ly/3m9s6L0>
55. Patient Care Scarce Resource Strategies (Minnesota) <https://bit.ly/3zdzHvO>
56. Crisis Standards of Care - Pediatrics (Nebraska) <https://www.unmc.edu/healthsecurity/documents/Neb-Peds-CSC-Final-07-02.pdf>
57. Scarce Resource Management & Crisis Standards of Care Adult and Pediatrics (Washington Dept of Health) <https://nwhrn.org/scarce-resource-management-and-crisis-standards-of-care-overview-and-materials/>
58. Arizona Crisis Standards of Care Plan 2020 (Includes Pediatrics): <https://bit.ly/2Wp7zrb>
59. Arizona COVID-19 Addendum: Allocation of Scarce Resources in Acute Care Facilities: <https://bit.ly/3gvnPhn>
- Pediatric Disaster Mental Health and Resiliency**
60. Sound the Alarm for Kids Mental Health Resources <https://www.soundthealarmforkids.org/>
61. Special Focus: Suicide and Mental Health Emergencies Before, During, and Beyond COVID-19 (WRAP-EM/ASPR) <https://bit.ly/3gfRBX5>
62. ASPR TRACIE: Pediatric Lessons Learned from COVID-19 Speaker Series (July 2021) <https://bit.ly/3gfRBX5>
63. Child Life Disaster Relief -- <https://cldisaster-relief.org/>
64. National Center for School Crisis and Bereavement -- <https://www.schoolcrisiscenter.org/>
65. National Child Traumatic Stress Network -- <https://www.nctsn.org/>
66. Listen, protect, connect (LPC) Psychological First Aid System -- <https://bit.ly/2OGCawo>
67. Child Mind Institute <https://childmind.org/>
68. Pediatric Terrorism and Disaster Preparedness: A Resource for pediatricians. <http://archive.ahrq.gov/research/pedprep/pedresource.pdf>
- Emergency Planning and Juvenile Justice**
69. Emergency Planning for Juvenile Justice Residential Facilities (2011) <https://www.ojp.gov/pdffiles1/ojdp/234936.pdf>
70. A Toolkit for Juvenile Justice Agencies to Help People Heal During and After Natural Disasters (Child Trends) <https://www.childtrends.org/publications/toolkit-juvenile-justice-agencies-natural-disasters>
- Families of Children and Youth with Disabilities and Medical Needs**
71. CDC Children with Special Healthcare Needs <https://bit.ly/3bvpz4M>
72. HHS Public Health Emergency: Hurricane Response-Resources for Children with Special Health Care Needs <https://bit.ly/2T7C54f>
73. Complex Child (a monthly online magazine for families) <https://complexchild.org/>
74. The Center for Children with Special Needs <https://bit.ly/3dGIXxg>
75. Autism Speaks Disaster Resources <https://www.autismspeaks.org/autism-speaks-natural-disaster-resources>
76. Children with Cerebral Palsy Disaster Guidance (Seattle Children's) <https://bit.ly/3dGIXxg>
77. Emergency Preparedness for Families of Children with Special Needs (Virginia) <https://bit.ly/2T8YuOG>
78. Disaster Survival Resources Simplifying Survival: Disaster Preparedness Special Needs <https://bit.ly/360myIH>
- School Disaster and Pandemic Readiness**
79. National Association of School Nurses (COVID) <https://schoolnursesnet.nasn.org/covid19ref/home>
80. Education and Childcare Guidance (NACCHO) <https://bit.ly/3zb4NUx>
81. Emergency Planning School Safety: <https://www.schoolsafety.gov/protect-and-mitigate/emergency-planning>
82. How Schools Can Prepare (Red Cross): <https://rdcrss.org/3AXOnzF>
83. Sample School Emergency Plan (FEMA): <https://bit.ly/3gf0X5x>
84. Readiness and Emergency Management for Schools (REMS) Technical Center: <https://rems.ed.gov/>
85. Readiness and Emergency Management for Schools COVID: <https://rems.ed.gov/coronavirus>
86. School House Connection: <https://schoolhouse-connection.org/covid19-and-homelessness/>
- Child Care Disaster Resources**
87. NEW: FEMA EMI Course IS-36.A: Preparedness for Child Care Providers: <https://training.fema.gov/is/courseoverview.aspx?code=IS-36.a>
88. Child Care Aware of America: <http://usa.child-careaware.org/families-programs/resources/crisis-and-disaster-resources/>
89. The Child Care Resource Center (CCRC): <https://www.ccrca.org/providers/emergency-preparedness>
90. Childcare Disaster Preparedness (UCSF): <https://cchp.ucsf.edu/content/disaster-preparedness>
91. Institute for Childhood Preparedness: <https://www.childhoodpreparedness.org/>
- Pediatric Disaster Care Centers of Excellence**
92. Eastern Great Lakes Pediatric Consortium for Disaster Response (EGLPCDR) <http://bit.ly/313N6jD>
93. Western Regional Alliance for Pediatric Emergency Management WRAP-EM <https://wrap-em.org/>
- Pediatric Surge Planning & Annex Resources**
94. Pediatric Hazard Vulnerability Analysis Tool (EGLPCDR/EIIC) <https://bit.ly/3keRJHL>
95. Pediatric Annex for Hospital Emergency Operations Plan (Oregon) <https://bit.ly/3B7TXzj>
96. Illinois State Pediatric and Neonatal Surge Annex <https://bit.ly/368z9K1>
97. Alameda County California Pediatric Surge Plan Template <https://bit.ly/2Wyknc1>
98. Los Angeles County http://file.lacounty.gov/SDSInter/dhs/206938_cms1_206938.pdf
99. NYC Pediatric Disaster Healthcare Coalition Toolkits <https://www.programinfosite.com/pediatricdisastercoalition/resources/>

Pediatrics

100. Pediatric and Neonatal Surge Annex (ESF8 Illinois): <https://dph.illinois.gov/content/dam/soi/en/web/idph/files/publications/peds-neo-surge-annex-revisionsjuly-2020final-july-2020publicversioncombined.pdf>
101. Rady Children's Surge Planning Train the Trainer <https://bit.ly/2WtW6nt>
102. California Department of Public Health Pediatric Surge <https://bit.ly/2TOP5Z6>
103. ASPR TRACIE Pediatric Surge Annex Webinar <https://bit.ly/2T2DfxP>
104. WNY Pediatric Surge Work Group (ppt) <https://bit.ly/3khJqe6>
105. Pediatric (Non-PICU) Hospital Surge Plan Guidelines (New York): <https://bit.ly/388YgxK>
- Pediatric Data Sources for Emergency Planning**
106. Child Development Data and Statistics (CDC) <https://www.cdc.gov/ncbddd/childdevelopment/data.html>
107. COVID-19 Data: North American PICUs <https://covid19.myvps.org/>
108. Pediatric COVID Tracking Data <https://bit.ly/3APR0mU>
109. COVKID Project: <https://www.covkidproject.org/>
110. KidsCount National Data (Anne Casey Foundation) <https://datacenter.kidscount.org/>
111. KidsData (California) <https://www.kidsdata.org/?site=full>
- Prehospital Readiness and Surge**
112. Prehospital Pediatric Readiness Toolkit and Checklist (EHC) <https://bit.ly/3mqCfV>
113. Prehospital Pediatric Care Course (New York) Simulation Scenarios <https://on.ny.gov/3AVh-P9g>
114. Pediatric Readiness in Emergency Medical Services Systems (AAP) <https://bit.ly/3gm3jiY>
115. YouTube HandTevy Videos <https://www.youtube.com/watch?v=JuZ7GdEV-n8>
116. ReelDx Public Cases Learning Videos <https://public.reeldx.com/>
- Disaster Planning for OB/GYN & NICU**
117. Stanford OB Disaster Planning Toolkit: <https://obgyn.stanford.edu/divisions/mfm/disaster-planning.html>
118. American College of OB/GYN (ACOG) Hospital Disaster Preparedness for Maternity Care <https://bit.ly/2Z4SxWz> COVID-19 Obstetric Preparedness <https://bit.ly/2Tb1zO1>
- Neonatal Disaster Preparedness**
119. <https://www.cpqcc.org/content/can-neonatal-disaster-preparedness-toolkit>
120. CDC Disaster Safety for Expecting and New Parents <https://bit.ly/2WZFcwi>
121. Loma Linda Pediatric Neonatal Disaster Reference Guide <https://bit.ly/2WMP4xK>
- Pediatric Disaster Reunification Resources**
122. Children Separated by Disaster: Reunification Challenges and Resources Webinar <https://youtu.be/8mjPYn8cnFQ>
123. Family Reunification Following Disasters Toolkit (AAP): <https://bit.ly/3srTvsC>
124. National Center for Missing & Exploited Children <https://www.missingkids.org/HOME>
125. Red Cross Safe and Well <https://www.redcross.org/about-us/news-and-events/news/Learn-More-about-Red-Cross-Safe-and-Well-App-Feature-and-Website.html>
126. I Love U Guys Foundation Standard Reunification Method for Schools <https://iloveuguy.org/The-Standard-Reunification-Method.html>
127. FBI: Lessons Learned in Reunification of Children During Active Shooter Events From In the Aftermath <https://youtu.be/3sKyH68L7OE> via
128. Lurie Children's Unaccompanied Minor Reunification Checklist <https://bit.ly/2Z6ekNw>
129. Post-Disaster Reunification of Children: A Nationwide Approach <https://bit.ly/3dNpWJw>
- Pediatric Disaster & Emergency Triage Systems**
130. JumpSTART Pediatric Triage Algorithm <https://chemm.hhs.gov/startpediatric.htm>
131. SALT (Sort, Assess, Lifesaving Interventions, Treatment/Transport) <https://remm.hhs.gov/saltriage.htm>
132. Pediatric Early Warning Score (Children's Minnesota) Pre-learning Information <https://bit.ly/3mlG9wZ>
133. Detecting Pediatric Patient Deterioration Using PEWS (MD Anderson) <https://bit.ly/3AYKsT4>
134. TRAIN: Triage by Resource Allocation for Inpatients: Matching medical transport to patient need <https://www.stanfordchildrens.org/en/research-innovation/train?>
135. Emergency Severity Index 2020 Handbook (includes pediatric) <https://bit.ly/3jexrid>
136. PsySTART: Psychological Simple Treatment and Rapid Triage <https://www.oregon.gov/oha/HSD/Pages/PSYSTART.aspx>
137. Pediatric SOFA Score <https://bit.ly/3zdB65y>
- Pediatric Surge/Emergency Care Equipment & Supply Chain**
138. Pediatric Critical Supply Chain Guidance (EGLPCDR & EIIC): <https://bit.ly/3B8i4y5>
139. List of priority medical devices in the context of COVID-19 (WHO): <https://bit.ly/3B5k61Y>
140. Resources Recommended for the Care of Pediatric Patients in Hospitals (AAP): <https://bit.ly/3D6iHd3>
141. Pediatric Equipment Toolkit (EIIC): <https://bit.ly/3D7AXCO>
142. Pediatric Equipment (EMSC Massachusetts) <https://bit.ly/3keCTkz>
- Pediatric CBRNE Resources**
143. Radiation Emergency Medical Management (REMM): <https://remm.hhs.gov/index.html>
144. Infants and Children- https://remm.hhs.gov/radiation_children.htm
145. Pregnant Women and Fetus - <https://remm.hhs.gov/specialpops.htm>
146. National Emerging Special Pathogens Training and Education Center (NETEC) <https://netec.org/>
147. Pediatric Medical Countermeasures Resources for Public Health Preparedness (FDA) <https://bit.ly/2WyoJjH>
148. Healthcare Coalition Radiation Surge Annex Template (ASPR) <https://bit.ly/3muLsu4>
149. Chemical Hazards Emergency Medical Management (CHEMM) <https://chemm.hhs.gov/index.html>
- Pediatric and Adult Burn Operations**
150. Western Region Burn Disaster Consortium: Mass Casualty Operations Plan <https://bit.ly/3kl3dcA>
151. Healthcare Coalition Burn Surge Annex (ASPR) <https://bit.ly/3sFVv0A>
152. Pediatric Response Burn Surge Resources (Minnesota) <https://bit.ly/3zraePi>
153. Minnesota Burn Surge Plans and Education <https://bit.ly/3koH5Oq>
154. Pediatric Burn Surge Bridging Readiness Gaps (ppt) <https://bit.ly/3gwHehl>
155. Burn Awareness and Prevention Education and Materials (Shriners) <https://bit.ly/2WnNK35>
156. Burn Awareness for Families (NFPA) <https://bit.ly/3zgBZdl>
157. Preventing Burn Injuries (Children's National) <https://bit.ly/3ydRDVJ>
- Pediatric Emergency Care Training**
158. Translating Emergency Knowledge for Kids (TREKK) <https://trekk.ca/>
159. The Paediatric International Patient Safety And Quality Community (PIPSQC) <https://www.pipsqc.org/>
160. OpenPediatrics <https://www.openpediatrics.org/>
161. OpenWHO Training <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/training/online-training>
162. LearnPICU <http://www.learnpicu.com/home>
163. Pediatric Critical Care Society PICU Procedure Training <https://bit.ly/2Wgedav>
164. Don't Forget the Bubbles Learning Getting Started: <https://dontforgetthebubbles.com/getting-started/>
165. Don't Forget the Bubbles Modules: <https://dontforgetthebubbles.com/dftb-modules/>
- National and State Emergency Medical Services for Children Initiatives**
166. EMSC Innovation and Improvement Center <https://emscimprovement.center/>
167. EMSC Toolkits <https://emscimprovement.com>

[center/education-and-resources/toolkits/](#)

- 168. National Pediatric Readiness Project <https://bit.ly/2ljLiR>
- 169. Pediatric Readiness Quality Collaborative <https://emscimprovement.center/collaboratives/prqc/>
- 170. Children’s Emergency Care Alliance (EMSC Tennessee) Hospital and EMS Resources <https://cecatn.org/what-we-do/resource-center/>
- 171. Pediatric Disaster Preparedness <https://emscimprovement.center/domains/preparedness/>
- 172. National Emergency Medical Services for Children Data Analysis Resource Center (NE-DARC) <https://www.nedarc.org/>
- 173. Pediatric Emergency Care Applied Research Network <http://pecarn.org/>

Children and Disasters Research, Reports and Toolkits

- 174. 2020 National Academies From Hurricane Katrina to Paradise Wildfires, Exploring Themes in Disaster Human Services: Workshop 1 - Children and Youth in Disasters <https://bit.ly/2S2ZSkS>
- 175. 2020 Department of Homeland Security “Enhancing School Safety Using a Threat Assessment Model: An Operational Guide For

Preventing Targeted School Violence: <https://bit.ly/345cPAe>

- 176. 2019 Natural Hazards Center Children and Disaster Special Collection: <https://bit.ly/3cD-G6oL>
- 177. National Advisory Committee on Children and Disasters (NACCD): <https://bit.ly/3cvNaDP>
- 178. Resilient Children Resilient Communities Toolbox <https://rcrctoolbox.org/>
- 179. Institute of Medicine Preparedness, Response & Recovery Considerations for Children and Families <https://bit.ly/2LqkyQj>
- 180. 2010 National Commission on Children and Disasters: <https://bit.ly/2y7Fqcf>

American Academy of Pediatrics (AAP) Disaster Resources

- 181. Children’s & Disasters Council <https://pediatrics.aappublications.org/disaster-preparedness-advisory-council>
- 182. Healthychildren.org Building Resilience <https://www.healthychildren.org/English/healthy-living/emotional-wellness/Building-Resilience/Pages/default.aspx>
- 183. Disasters and Your Children: <https://www.healthychildren.org/English/safety-prevention/at-home/Pages/Getting-Your-Family-Disas->

[ter-Ready.aspx](#)

Federal Disaster Resources for Children and Families

- 184. ASPR TRACIE Pediatric Technical Resource <https://asprtracie.hhs.gov/technical-resources/31/pediatric-children/0>
- 185. CDC Caring for Children <https://www.cdc.gov/childrenindisasters/>
- 186. FEMA Ready Kids: <https://www.ready.gov/kids>
- 187. NHTSA Hospital Discharge Recommendation for Safe Transport of Children <https://bit.ly/35Z5Idi>
- 188. Health and Human Services/ASPR Webinar Pediatric Issues in Disasters <https://bit.ly/2WrVChH>

American Red Cross Pediatric Disaster Resources

- 189. Make a Plan <https://rdcrss.org/2WTiJA>
- 190. Pillow Case Project <https://bit.ly/2LnskKZ>
- 191. Child Safety-Before During & After A Disaster <https://rdcrss.org/2xZ2GJe>
- 192. School Disaster Preparedness <https://rdcrss.org/2YZgUF>







**New York ACEP
2022 ED Director Forum**

**Friday, May 6, 2022
8:30 am - 4:00 pm**

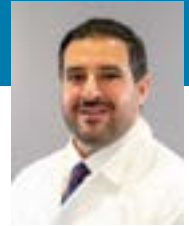
New York Academy of Medicine, 1216 Fifth Avenue, New York, NY 10029





Register Today and Save - Brochure Coming Soon

Robert M. Bramante, MD FACEP CHCQM
Chairman, Emergency Medicine
Mercy Medical Center
Progressive Emergency Physicians
Member, New York ACEP Board of Directors



Making Sense of the Authorized Outpatient COVID Treatment Options

Over the past two years, physicians across the world have had to learn and adapt to a new disease and rapidly changing recommendations for treatment and management. Emergency physicians being on the frontline of the COVID-19 pandemic and the front door of the hospital system have been tasked with sorting through and adjusting care plans on what feels like a daily basis. Early intubation versus avoiding intubation, risk to providers of aerosolizing COVID with non-invasive respiratory support, fluid restriction, utilization or withholding of steroids and an array of touted but unproven internet remedies are just a few of the many controversies and management options that have been present for physicians to evaluate, understand and implement. Despite the politicization and controversy over multiple medication, there are now multiple authorized outpatient therapeutics available as options for COVID-19.

Just over one year ago two new options became available in the fight against COVID-19. Vaccination and monoclonal antibody therapy were authorized. Vaccination was and is our pre-exposure option with benefit decreasing the risk of hospitalization, severe disease and death. However, being pre-exposure it is outside of this discussion on treatment options. Evusheld is a long acting mAb that is authorized for individuals with moderate to severe immunocompromise or unable to receive current COVID vaccinations, however, it is also outside of this discussion as it is authorized for pre-exposure prophylaxis rather than treatment. One of the early monoclonal antibody (mAb) options, Bamlanivimab alone, showed initial promise and was utilized under emergency use authorization (EUA), however, subsequent study determined it was less effective alone than other mAb options so that EUA was subsequently rescinded. At the time of this writing there are three mAb options and two oral viral replication inhibitor options authorized for use.

The mAb therapies include casirivimab/imdevimab (REGEN-COV) by Regeneron Pharmaceuticals, bamlanivimab/etesevimab by Eli Lilly and Co. and sotrovimab by GlaxoSmithKline/ Vir Biotechnology. All three options are mAbs targeted at the viral spike protein to inhibit attachment to or entry into host cells. In clinical trials all three demonstrated reductions in hospitalization and death in the 70-80% range. Of note, the trials were all performed in the pre-Omicron variant era. While all three were authorized for the treatment of lab confirmed mild to moderate COVID infection, only casirivimab/imdevimab and the bamlanivimab/etesevimab products were approved for post-exposure prophylaxis. All were authorized for patients 12 and older weighing at least 40kg at high risk of progressing to severe infection, hospitalization or death. Bamlanivimab/etesevimab was extended to include pediatrics to neonates without the 40kg weight restriction, but with recommended dosing adjustments. All the mAb options are to be given within 10 days of symptom onset and they are not authorized for patients being hospitalized due to COVID, those who require oxygen therapy due to COVID

or those who are on baseline oxygen therapy for another disease process requiring increased oxygen flow rates. All can be given intravenously with the Regeneron product having a multiple injection subcutaneous route option. None have renal, hepatic, pregnancy or lactation related dosage adjustments and all have a one hour post administration observation period. Adverse reactions included ~1% risk of infusion related reactions including anaphylaxis. A number of other reactions were noted but it was unclear if they were related to COVID progression or the mAb administration. The risk of drug interaction with the three mAbs was considered unlikely.

Based on the current New York State Department of Health guideline regarding prioritization of these treatments, based on the NIH COVID-19 Treatment Guidelines, priority is for treatment of the unvaccinated, incompletely vaccinated and vaccinated individuals who are not expected to mount an adequate immune response. During times of limited resources, this precludes the use of these products for post exposure prophylaxis.

The newest options are the oral viral replication inhibitors which include Paxlovid by Pfizer and Molnupiravir by Merck Sharp & Dohme Corp. In trials (again performed in the pre- Omicron era), Paxlovid had an 88% reduction in hospitalization and death versus Molnupiravir's 30% reduction. These are indicated for treatment, not prophylaxis. Both are for use in adults at high risk of disease progression, however, it is noted that Molnupiravir is for use when the other treatment options described here are not accessible or clinically appropriate. Paxlovid can also be used in the high risk 12-18 year old population over 40kg. A major difference with the oral antivirals and mAb infusion is the treatment window. The oral products are to be started within five days of symptom onset. Again, like mAb therapies, these are for the outpatient setting and the same exclusions apply to not being used in patients hospitalized due to COVID. Neither are authorized for prophylaxis. Paxlovid is prepackaged as nirmatrelvir tablets with ritonavir tablets. It is important to consider and educate patients that ritonavir can reduce the efficacy of contraceptives. Molnupiravir has a number of cautions in terms of family planning. It should not be used in pregnancy due to risk of fetal harm (it was authorized to be used only if benefits outweigh risk on an individual basis with specific documentation requirements). Additionally, females should be instructed to use a reliable contraceptive method for the duration of therapy plus an additional four days and males should use reliable contraceptives through treatment plus an additional three months. An important caution for Paxlovid is in relation to other drugs that induce or are processed via CYP3A as there can be reduced antiviral efficacy and serious and/or life-threatening reactions. Additionally, Paxlovid has renal dosing requirements (which can complicate prescribing as the two drugs

continued on page 32

NEW YORK STATE OF MIND



Theodore J. Gaeta, DO MPH FACEP
Residency Program Director
New York-Presbyterian Brooklyn Methodist Hospital

The Relative Efficacy of Seven Skeletal Muscle Relaxants. An Analysis of Data From Randomized Studies.

Abril L, Zamora C, Cordero M, Williams AR, Friedman BW; Albert Einstein College of Medicine, Montefiore Medical Center, Bronx; J Emerg Med; 2022.

BACKGROUND: Low back pain (LBP) causes 2.6 million visits to U.S. emergency departments (EDs) annually. These patients are often treated with skeletal muscle relaxants (SMRs).

OBJECTIVES: The goal of this study was to determine whether efficacy of SMRs is associated with age, sex, or baseline LBP severity.

METHODS: This was a planned analysis of data from four randomized studies of patients with acute nonradicular LBP. Patients were enrolled during an ED visit and followed-up one week later. The primary outcome was improvement in the Roland-Morris Disability Questionnaire (RMDQ) between ED discharge and the one-week follow-up. We compared the change in RMDQ among eight groups: placebo, baclofen, metaxalone, tizanidine, diazepam, orphenadrine, methocarbamol, and cyclobenzaprine. All patients also received a nonsteroidal anti-inflammatory drug. We performed analysis of variance to determine statistically significant differences between medications and linear regression to determine the association of age, sex, and baseline severity with the primary outcome.

RESULTS: The mean improvement in RMDQ per group was placebo 10.5 (95% confidence interval [CI] 9.5-11.5), baclofen 10.6 (95% CI 8.6-12.7), metaxalone 10.3 (95% CI 8.1-12.4), tizanidine 11.5 (95% CI 9.5-13.4), diazepam 11.1 (95% CI 9-13.2), orphenadrine 9.5 (95% CI 7.4-11.5), methocarbamol 8.1 (95% CI 6.1-10.1), and cyclobenzaprine 10.1 (95% CI 8.3-12). The between-group differences were not statistically significantly different. Results were similar regardless of age, sex, and baseline severity. Higher baseline RMDQ was associated with greater clinical improvement (B coefficient 5.7, $p < 0.01$). Adverse medication effects were more common with cyclobenzaprine than with placebo ($p < 0.01$).

CONCLUSIONS: Among patients in the ED

with acute LBP treated with a nonsteroidal anti-inflammatory drug, SMRs do not improve outcomes more than placebo. Neither age, sex, nor baseline impairment impacts these results.

A Randomized, Placebo-Controlled Study of Intranasal Fentanyl as an Analgesic Adjuvant for Incision and Drainage of Abscess.

Latev A, Baer J, Sharpe S, Gupta C, Feliciano C, Friedman BW; Albert Einstein College of Medicine, Montefiore Medical Center, Bronx; J Emerg Med; 2022 Jan.

BACKGROUND: Incision and drainage (I&D) of abscesses is one of the most painful procedures performed in emergency departments (EDs).

OBJECTIVE: We tested the following hypothesis: The addition of intranasal fentanyl to the standard practice of local infiltration with lidocaine would provide better pain control than lidocaine alone for adult ED patients undergoing I&D.

METHODS: This was a randomized, double-blind study. Participants received 2 µg/kg of intranasal fentanyl or a comparable amount of intranasal water in addition to local lidocaine infiltration. The primary outcome, which we assessed immediately after the I&D was completed, was a summary 0-10 pain score for which we asked study subjects to provide a number depicting their entire experience with the procedure.

RESULTS: During a 19-month enrollment period, we screened 176 patients for eligibility and enrolled 49; 25 received placebo and 24 received fentanyl. Baseline characteristics were comparable. Mean (standard deviation) summary pain scores were as follows: fentanyl 6.2 (3.3) and placebo 7.0 (3.2). The 95% confidence interval for a rounded between-group difference of 0.9 was -1.1 to 2.6.

CONCLUSIONS: In this small study, the addition of intranasal fentanyl did not substantially impact the pain scores of ED patients undergoing I&D.

Emergency Department Patient Navigator Program in Reducing ED Return Visits and Improving Outpatient Follow-Up Adherence.

Jiang LG, Zhang Y, Greca E, Bodnar D, Gogia K, Wang Y, Peretz P, Steel PAD; NYP Weill Cornell Medical Center, New York-Presbyterian Hospital, New York; Am J Emerg Med; 2022 Jan 12;53:173-179.

BACKGROUND: An estimated 56% of emergency department (ED) visits are avoidable. One motivation for return visits is patients' perception of poor access to timely outpatient care. Efforts to facilitate access may help reduce preventable ED visits. We aimed to analyze whether an ED patient navigator (PN) program improved adherence with outpatient appointments and reduced ED return visits.

METHODS: We performed a retrospective analysis of patients evaluated and discharged from two EDs from October 2016 to December 2019. Using propensity score matching, an intervention case group was matched against two control groups - patients similar to the case group who presented either (1) pre-PN intervention or (2) post-PN intervention and did not receive intervention. The four outcomes included 72-h return ED visits, 30-day return ED visits, overall ED utilization, as well as the intervention group's adherence rates to PN-scheduled outpatient appointments. From 482,896 charts, propensity matching led to a total of 14,295 patients in each group.

RESULTS: PN intervention decreased both acute and subacute ED return visits. Compared to both pre-PN and post-PN controls, navigated patients had a decrease in 72-h and 30-day return visits from 2% to 1% and 7% to 4% ($p < 0.001$) respectively. Navigated patients also had outpatient appointment adherence rates of 74-80% compared to the estimated national average of 25-56%. While there was no difference in mean ED utilization between the intervention group and pre-PN control group, mean ED utilization was found to be higher in the intervention group compared to the post-PN control group with 0.62 visits compared to 0.38 mean visits ($p < 0.001$).

CONCLUSIONS: By facilitating access to post-ED care, PNs may reduce avoidable ED utilization and improve outpatient follow-up adherence. While overall ED utilization did not change, this may be due to the overall vulnerability of the navigated group which is the goal PN intervention group.

NEW YORK STATE OF MIND

Patient Views on Emergency Department Screening and Interventions Related to Housing.

Kelly A, Fazio D, Padgett D, Ran Z, Castelblanco DG, Kumar D, Doran KM; NYU School of Medicine, New York; Acad Emerg Med; 2022 Jan 22.

OBJECTIVES: EDs serve as a healthcare “safety net” and may be uniquely suited to screening for and addressing patients’ unmet social needs. We aimed to better understand patient perspectives on ED-based screening and interventions related to housing instability, as a step toward improving future efforts. **METHODS:** We present findings from a qualitative study using in-depth, one-on-one interviews with ED patients who had become homeless in the past six months. Qualitative interviewees were asked their thoughts on ED staff asking about and helping to address homelessness and housing issues. Interviews were professionally transcribed verbatim. Multiple coders identified interview text segments focused on ED-based housing screening and intervention, which were then independently analyzed thematically and discussed to reach consensus. Researchers also categorized each participant’s overall opinion on ED housing screening and interventions as positive, neutral, or negative.

RESULTS: Qualitative interviews were conducted with 31 patients. Four themes related to ED-based housing screening and interventions emerged: 1) patients generally welcome ED staff/providers asking about and assisting with their housing situation, with caveats around privacy and respect; 2) ED conversations about housing have potential benefits beyond addressing unmet housing needs; 3) patients may not consider the ED as a site to obtain help with housing; 4) patients’ experiences navigating existing housing services can inform best approaches for the ED. Most participants expressed overall positive views of ED staff/providers asking patients about their housing situation.

CONCLUSIONS: Study participants generally felt positively about screening and interventions for housing in the ED. Insights from this study can inform future ED-based housing instability screening and interventions.

Bacteremia in Adults Admitted From the Emergency Department With Laboratory-Confirmed Respiratory Syncytial Virus.

Sano E, Chang B, Sieling W, Jay R, Hill-Ricciuti A, Phillips M, Finelli L, Saiman L; Columbia University Irving Medical Center, New York; J Emerg Med; 2022 Jan.

BACKGROUND: Collecting blood cultures from patients admitted from the emergency department (ED) with acute respiratory infection (ARI) is common, but the rate of secondary bacteremia in adult patients admitted from the ED with ARI associated with respiratory syncytial virus (RSV) is unknown. Indiscriminate collection of blood cultures can be associated with contaminated blood cultures and increased inappropriate antimicrobial use and health care costs.

OBJECTIVE: This study sought to determine the rate and etiology of secondary bacteremia, factors associated with secondary bacteremia, and factors associated with collecting blood cultures in the ED, in adults hospitalized with RSV.

METHODS: We performed a retrospective substudy using data from a prospective study of adults admitted with RSV infections during two respiratory seasons (October 2017 to April 2018 and October 2018 to April 2019). Blood cultures were collected at the discretion of ED providers. We compared demographic and clinical characteristics among those with and without secondary bacteremia and among those with and without blood cultures collected using multivariate logistic regression models.

RESULTS: Of the 365 hospitalized RSV-positive patients (mean age 68.8 years), 269 (73.7%) had blood cultures collected in the ED and 18 (6.7%) patients had secondary bacteremia, most commonly from a nonrespiratory source (n = 13). Patients with asthma and chronic obstructive pulmonary disease were significantly less likely to have secondary bacteremia. Patients who were immunocompromised, met systemic inflammatory response syndrome criteria, or had pneumonia described on chest x-ray reports were more likely to have blood cultures collected.

CONCLUSIONS: Overall, 6.7% of adults hospitalized with RSV infections had sec-

ondary bacteremia, more commonly from nonrespiratory sources.

The Impact of COVID-19 on Diabetic Ketoacidosis Patients.

Khan F, Paladino L, Sinert R; Kings County Hospital - New York City Health and Hospitals, Brooklyn; Diabetes Metab Syndr; 2022 Jan.

BACKGROUND AND AIM: Describe the prevalence/outcomes of Diabetic Ketoacidosis (DKA) patients comparing pre- (March-April 2019) and pandemic (March-April 2020) periods.

METHODS: Retrospective cohort of admitted pandemic DKA/COVID-19+ patients comparing prevalence/outcomes to pre-pandemic DKA patients that takes place in 11 hospitals of New York City Health & Hospitals. Our included participants during the pandemic period were admitted COVID-19+ patients (>18 years) and during the pre-pandemic period were admissions (>18 years) selected through the medical record. We excluded transfers during both periods. The intervention was COVID-19+ by PCR testing. The main outcome measured was mortality during the index hospitalization and secondary outcomes were demographics, medical histories and triage vital signs, and laboratory tests. Definition of DKA: Beta-Hydroxybutyrate (BHBA) (>0.4 mmol/L) and bicarbonate (<15 mmol/L) or pH (<7.3).

RESULTS: Demographics and past medical histories were similar during the pre-pandemic (n = 6,938) vs. pandemic (n = 7,962) periods. DKA prevalence was greater during pandemic (3.14%, 2.66-3.68) vs. pre-pandemic period (0.72%, 0.54-0.95) (p > 0.001). DKA/COVID-19+ mortality rates were greater (46.3% (38.4-54.3) vs. pre-pandemic period (18%, 8.6-31.4) (p < 0.001). Surviving vs. non-surviving DKA/COVID-19+ patients had more severe DKA with lower bicarbonates by 2.7 mmol/L (1.0-4.5) (p < 0.001) and higher both Anion Gaps by 3.0 mmol/L (0.2-6.3) and BHBA by 2.1 mmol/L (1.2-3.1) (p < 0.001).

CONCLUSIONS: COVID-19 increased the prevalence of DKA with higher mortality rates secondary to COVID-19 severity, not DKA. We suggest DKA screening all COVID-19+ patients and prioritizing ICU DKA/COVID-19+ with low oxygen saturation,

NEW YORK STATE OF MIND

Quality Initiative To Improve Emergency Department Sepsis Bundle Compliance Through Utilisation of an Electronic Health Record Tool.

Warstadt NM, Caldwell JR, Tang N, Mandola S, Jamin C, Dahn C; New York University Grossman School of Medicine, New York; *BMJ Open Qual*; 2022 Jan.

INTRODUCTION: Sepsis is a common cause of emergency department (ED) presentation and hospital admission, accounting for a disproportionate number of deaths each year relative to its incidence. Sepsis outcomes have improved with increased recognition and treatment standards promoted by the Surviving Sepsis Campaign. Due to delay in recognition and other barriers, sepsis bundle compliance remains low nationally. We hypothesised that a targeted education intervention regarding use of an electronic health record (EHR) tool for identification and management of sepsis would lead to increased EHR tool utilisation and increased sepsis bundle compliance.

METHODS: We created a multidisciplinary quality improvement team to provide training and feedback on EHR tool utilisation within our ED. A prospective evaluation of the rate of EHR tool utilisation was monitored from June through December 2020. Simultaneously, we conducted two retrospective cohort studies comparing overall sepsis bundle compliance for patients when EHR tool was used versus not used. The first cohort was all patients with intention-to-treat for any sepsis severity. The second cohort of patients included adult pa-

tients with time of recognition of sepsis in the ED admitted with a diagnosis of severe sepsis or septic shock.

RESULTS: EHR tool utilisation increased from 23.3% baseline prior to intervention to 87.2% during the study. In the intention-to-treat cohort, there was a statistically significant difference in compliance between EHR tool utilisation versus no utilisation in overall bundle compliance ($p<0.001$) and for several individual components: initial lactate ($p=0.009$), repeat lactate ($p=0.001$), timely antibiotics ($p=0.031$), blood cultures before antibiotics ($p=0.001$), initial fluid bolus ($p<0.001$) and fluid reassessment ($p<0.001$). In the severe sepsis and septic shock cohort, EHR tool use increased from 71.2% pre-intervention to 85.0% post-intervention ($p=0.008$).

CONCLUSION: With training, feedback and EHR optimisation, an EHR tool can be successfully integrated into current workflows and appears to increase sepsis bundle compliance.

Development of a Remote Learning Educational Model for International Emergency Medicine Trainees in the Era of COVID-19.

Ciano JD(1), Acerra J(2), Tang A(2); *NSLIJ Health System: Northwell Health, Queens; Int J Emerg Med*; 2022 Jan 6;15(1):2.

BACKGROUND: The COVID-19 pandemic has pressured post-graduate medical education programs to shift from traditional in-person teaching to remote teaching and learning. Remote learning in medical education has been described in the literature mostly in the context

of local in-country teaching. International remote medical education poses unique challenges for educators, especially in low-middle income countries (LMICs) who need continued Emergency Medicine (EM) specialty development. Our objective is to describe the development and implementation of our remote educational curriculum for EM trainees in West Bengal, India, and to assess trainee satisfaction with our remote learning curriculum.

METHODS: Our curriculum was developed by adapting remote learning techniques used in Western post-graduate medical education, conducting literature searches on remote learning modalities, and through collaboration with local faculty in India. We assessed resident satisfaction in our curriculum with feedback surveys and group discussions.

RESULTS: The remote educational curriculum had overall high trainee satisfaction ratings for weekly livestream video lectures and throughout our monthly educational modules (median ratings 9-10 out of a 10-point Likert scale). Qualitative feedback regarding specific lecture topics and educational modules were also received.

CONCLUSIONS: International remote education in LMICs poses a unique set of challenges to medical educators. Residents in our study reported high satisfaction with the curriculum, but there is a lack of clarity regarding how a remote curriculum may impact academic and clinical performance. Future studies are needed to further evaluate the efficacy and academic and clinical implications of remote medical education in LMICs.



Membership Has Its Benefits!

Free Member CME For New York State Licensure Requirements in Pain Management and Infection Control

2022 New Speaker Forum



New York American College of Emergency Physicians

Wednesday, July 6 - 4:30 pm
The Sagamore Resort

Open to Member Attendings
Deadline: March 11, 2022

ALBANY UPDATE



Reid, McNally & Savage
New York ACEP Legislative
& Regulatory Representatives

New York ACEP Virtual Advocacy Day, Tuesday March 8

The 2022 State Legislative Session kicked off January 5 and is scheduled to end June 2.

New York ACEP will hold a virtual Advocacy Day Tuesday, March 8, 2022. New York ACEP members will meet with legislators and staff on a virtual basis as legislators' offices are closed to the public. The agenda will focus on State Budget and legislative proposals impacting the practice of emergency medicine and patients.

Governor Hochul's 2022-23 State Budget Proposal

On Tuesday, January 18, Governor Hochul released her 2022-23 proposed State Budget totaling \$216 billion-\$4 billion more than the previous year. The plan includes enormous investments in health care, education and the State's infrastructure.

Provided below are provisions that impact physicians and emergency medicine in particular.

Emergency Medical Services (EMS)

A new proposal is included which amends the Public Health Law to:

- Define emergency medical services to mean: "care of a person to, from, at, in or between the person's home, scene of injury, hospitals, health care facilities, public events or other locations by emergency medical services practitioners as a patient care team member for services including but not limited to emergency, non-emergency, specialty, low acuity, preventative and other services.
- Establish an Emergency Medical Services Quality and Sustainability Assurance Program which may include development of clinical standards, quality metrics, safety standards, emergency vehicle operation standards, and clinical standards.
- Provide that EMS services agencies that don't meet standards and requirements may be subject to enforcement actions.
- Require the New York State Department of Health, in consultation with the State Emergency Medical Advisory Council, to develop and maintain a statewide comprehensive EMS system plan to provide for a coordinated system in the State.
- Require each regional EMS advisory committee to develop and maintain a comprehensive regional emergency medical system plan.
- Require each county to develop and maintain a comprehensive county emergency medical system plan.
- Establish an Emergency Medical Systems Training Program.

Modernization of Emergency Departments (EDs) of "Regional Significance"

Up to \$200 million in new funds will be awarded to "modernize emergency departments of regional significance," which are defined as an ED that:

- Serves as a Level 1 Trauma Center with the highest volume in its region;
- Includes the capacity to segregate patients with communicable diseases, trauma or severe behavioral health issues from other patients in the emergency department;
- Provides training in emergency care and trauma care to residents from multiple hospitals in the region; and
- Serves a high proportion of Medicaid patients.

Physician Medical Malpractice Excess Insurance Coverage Program

The proposed budget extends coverage through June 30, 2023. It restructures payments from one per year to two payments over two fiscal years if the funds in the pool are sufficient. The full premium payment is required up front and the Department of Financial Services will reimburse the physician or dentist in two equal installments. The program is funded at \$102.1 million.

Nurse Practitioner (NP) Independent Practice in Primary Care

Removes the requirement for NPs in primary care with over 3,600 hours of experience to maintain a collaborative relationship with a physician.

New York State Department of Health Oversight of Certain Professions

Moves oversight of the health/mental hygiene professions, including physicians, from the New York State Education Department to the New York State Health Department.

Medicaid Rate Increases/Restorations

Increases all Medicaid Fee-for-Service rates by 1% effective April 1, 2022 and restores the 1.5% across the board cut that was enacted in 2021 for a total investment of \$3.7 billion.

State Compliance with Federal "No Surprises Act."

The State Budget aligns New York's consumer protections against surprise bills with federal protections under the Federal No Surprises Act which took effect January 1, 2022. Specific amendments to the Independent Dispute Resolution (IDR) process for Emergency Medical Services include:

- Repeal of provisions to exempt emergency services codes under a certain amount from the IDR process.

ALBANY UPDATE

- Requires disputes submitted to the IDR entity to be resolved within three years of the date the health care plan made the original payment on the claim subject to dispute.
- The law is applicable to all provider types, rather than just physicians and hospitals.
- The in-network median rate recognized by the health care plan must be included as a factor that the IDR entity must consider.
- Requires health care plans to ensure members are held harmless for surprise bill amounts in excess of in-network cost sharing.



New York ACEP 2021-22 Board of Directors

President

Keith E. Grams, MD FACEP
Rochester Regional Health

President-elect

Nicole Berwald, MD FACEP
Staten Island University Hospital

Secretary-Treasurer

Jeffrey S. Rabrich, DO FACEP FAEMS
Montefiore Nyack Hospital

Immediate Past President

Jeremy T. Cushman, MD MS FACEP
University of Rochester Medical Center

Executive Director

JoAnne Tarantelli

Directors

Robert M. Bramante, MD FACEP
Mercy Medical Center

Bernard P. Chang, MD PhD FACEP
Columbia University Irving Medical Center

Arlene S. Chung, MD MACM
Maimonides Medical Center

Mark Curato, DO FACEP
NewYork-Presbyterian-Weill Cornell Medicine

Abbas Husain, MD FACEP
Staten Island University Hospital

Penelope C. Lema, MD FACEP
NewYork-Presbyterian/Columbia University

Robert F. McCormack, MD MBA FACEP
University at Buffalo Jacobs School of Medicine and Biomedical Sciences

Dhaval Mehta, MD (resident representative)
NewYork-Presbyterian Brooklyn Methodist Hospital

Laura D. Melville, MD
NewYork-Presbyterian Brooklyn Methodist Hospital

Joshua B. Moskovitz, MD MBA MPH FACEP
Jacobi/Montefiore Medical Center

Livia M. Santiago-Rosado, MD FACEP
Dutchess County Commissioner of Behavioral and Community Health

Kaushal Shah, MD FACEP
Weill Cornell Medical Center

Jeffrey J. Thompson, MD FACEP
UBMD Emergency Medicine



New York ACEP 2022 Research Forum - Call for Abstracts



The New York American College of Emergency Physicians is now accepting abstracts for review for oral and poster presentation at the 2022 Scientific Assembly, July 6-8, at the Sagamore Resort on Lake George in Bolton Landing, New York.

The **Research Forum**, including both oral and poster presentations, will be held Wednesday, July 6 at 1:30 pm. This forum is designed to feature and foster resident and faculty research. Topics may address the broad range of emergency medicine practice and educational development. Preference will be given to work completed at the time of submission. **Authors and institutions should not be identified in any way on the page containing the abstract.**

Abstract submissions must be in electronic format (Microsoft Word) and must include the following subsections. Title, Objectives, Methods (include design, setting, type of participants), Results and Conclusion. The abstract should be written in complete sentences using grammatically correct English. Spell out all abbreviations on first usage. Abstracts are limited to 3,000 characters (excluding spaces). Accepted abstracts will be published as received; no copy editing will be done. Send abstracts using the online form [here](#).

Illustrations are discouraged; however, if critical, one (1) small table may be included. Figures, tables and photos must be black and white with a resolution of at least 300 dpi. Note: tables, figures and illustrations will be considerably reduced when published causing loss of detail. Please consider this when determining whether to include these.

The following information will be required on the submission form for each abstract:

1. title of the abstract;
2. author(s) and affiliations;
3. IRB approval or exemption;
4. contact person's mailing address, phone/fax numbers and e-mail address;
5. information regarding previous presentations or publication;
6. potential conflicts by author;
7. if accepted, indicate who will present the abstract July 6, 2022 and their role in the project; and
8. state preference for oral or poster presentation (or no preference).
9. identification of resident if s/he will likely be first or second author on manuscript.

Although we are interested in original work, consideration will be given to abstracts presented at other conferences (SAEM, ACEP).

Oral presentations will be allocated 10 minutes followed by 5 minutes of Q&A. Twenty-four poster presentations will be allocated 5 minutes followed by 3 minutes of Q&A. Other poster submissions will be selected for display. All presenters (oral or poster) are expected to have had a significant role in the execution and report preparation of the project being presented.

About the Process: There will be a blind review of all abstracts. Notification letters will be sent April 22, 2022. We regret we cannot give notification information by telephone.

deadline
April 1, 2022
11:59 pm Eastern

2022 Scientific Assembly



July 6-8



at the
Sagamore
Resort



Calendar

February 2022

- 9 Education Committee Conference Call, 2:45 pm
- 9 Professional Development Conference Call, 3:30 pm
- 10 Practice Management Conference Call, 1:00 pm
- 16 Government Affairs Conference Call, 11:00 am
- 16 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 16 Research Committee Conference Call, 3:00 pm
- 17 EMS Committee Conference Call, 2:30 pm
- 25 Board of Directors Meeting, 12:00 pm - 1:30 pm

March 2022

- 8 Virtual Advocacy Day, 8:30-12:30 pm
- 9 Education Committee Conference Call, 2:45 pm
- 9 Professional Development Conference Call, 3:30 pm
- 10 Practice Management Conference Call, 1:00 pm
- 16 Government Affairs Conference Call, 11:00 am
- 16 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 16 Research Committee Conference Call, 3:00 pm
- 17 EMS Committee Conference Call, 2:30 pm

April 2022

- 6 Virtual Medical Student Symposium, 6-9 pm
- 13 Education Committee Conference Call, 2:45 pm
- 13 Professional Development Conference Call, 3:30 pm
- 13 Virtual Professional Development Lecture - Negotiate Effectively - 7 pm
- 14 Practice Management Conference Call, 1:00 pm
- 20 Government Affairs Conference Call, 11:00 am
- 20 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 20 Research Committee Conference Call, 3:00 pm
- 21 EMS Committee Conference Call, 2:30 pm

May 2022

- 2-4 ACEP Leadership & Advocacy Conference, May 2-4, Washington, DC
- 5 New York ACEP Board of Directors Meeting, 1:30-4:30 pm, New York, NY
- 6 ED Director Forum, 8:30-4 pm, New York Academy of Medicine
- 9 Virtual Professional Development Lecture - Communication Skills for the Junior Faculty Member, 7 pm
- 11 Education Committee Conference Call, 2:45 pm
- 11 Professional Development Conference Call, 3:30 pm
- 12 Practice Management Conference Call, 1:00 pm
- 18 Government Affairs Conference Call, 11:00 am
- 18 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 18 Research Committee Conference Call, 3:00 pm
- 19 EMS Committee Conference Call, 2:30 pm

that make up Paxlovid come in prepackaged blister packs). There is also a restriction on Paxlovid in the setting of severe hepatic impairment. Adverse effects were primarily gastrointestinal related. As these are patient administered, there is risk of noncompliance, but no post administration monitoring is needed.

All the outpatient authorized COVID treatments discussed are currently covered by Medicare/Medicaid and private insurers. Availability of all varies by jurisdiction and facility. This variable availability is the largest challenge for patients and prescribers. There is convenience to patients and ease of administration for the oral therapeutics compared to intravenous mAb therapies. Currently, there are multiple venues for receiving mAb therapy which complicates the issue for patients and families. Depending on the health systems and locality, mAb therapy may be administered in emergency departments, observation units, outpatient infusion centers, dedicated infusion areas accessed via direct referral or emergency department screening, private offices and even monitored in-home infusion therapy. Determining what therapies are available, who is eligible (especially with rapidly changing guidelines in the setting of limited resources), where they are available and how to receive the infusions has led to confusion, miscommunication and frustration amongst patients, physicians, families and referring providers. These frustrations have escalated in some places to threats and altercations against medical staff.

The biggest issue faced at this time is the prevalence of the Omicron variant. Many of us witnessed the effectiveness of mAb therapy over the past year. All the currently authorized therapies discussed demonstrated activity against the delta variant. The challenge now is the clinical trials were performed pre-Omicron. Data is pending regarding the oral antiviral efficacy, but it is expected they will maintain efficacy. Sotrovimab targets a different part of the spike protein than the other two mAb therapies, so it is also expected to maintain efficacy against Omicron. While Delta is still present and in the absence of rapid, local reliable variant sequencing, patients can still be offered other mAb therapies as they may have some benefit despite decreased efficacy against Omicron. This can be discussed with the patient during shared decision making. It should be noted as local prevalence changes, other variants develop, further research is done and other therapies become available, this information may change.

Patients should be reminded all these therapies are NOT a substitute for vaccination which has demonstrated both decreased progression to severe disease, decreased hospitalization and decreased COVID mortality.

References

1. <https://www.phe.gov/emergency/events/COVID19/therapeutics/Pages/Side-by-Side-Overview-of-mAbs-Treatment.aspx>
2. https://coronavirus.health.ny.gov/system/files/documents/2021/12/prioritization_of_mabs_during_resource_shortages_20211229.pdf