ED MANAGEMENT®

BEST PRACTICES, PATIENT FLOW, FEDERAL REGULATIONS, COST SAVINGS, ACCREDITATION

AUGUST 2020 Vol. 32, No. 8; p. 85-96

INSIDE

RELIAS MEDIA

Clinical Leaders Urge Patients to Seek Care for Critical, Time-Sensitive Conditions

With COVID-19 still a major problem, healthcare providers have observed a concerning byproduct: people with urgent or emergency care needs are reluctant to seek care, sometimes delaying a visit to the emergency department (ED) — to the point where adverse consequences that could have been prevented already are evident.

After a few weeks of sheltering in place, some normally bustling EDs in many U.S. regions started reporting empty waiting rooms. In late April, Morning Consult and the American College of Emergency Physicians (ACEP) released the results of a poll that revealed the specific reasons behind the dramatic decreases in volume.

Among 2,201 adults surveyed, 29% reported they had delayed or avoided medical care because they were worried about contracting the coronavirus. Seventy-three percent noted concerns about overstressing the healthcare system. More than half (59%) worried they would be unable to receive treatment if they needed care. *(View the full results of this poll online at this link: https://bit.ly/3hWP2IF.)*

While such reticence to seek care is understandable, the concern is people with strokes, heart attacks, and other time-sensitive conditions are failing to act promptly. ACEP President **William Jaquis**, MD, FACEP, even made a direct appeal to patients not to delay care.

"Emergency physicians are expertly trained for these situations and have protocols in place to keep their patients protected even in the midst of a pandemic," he said in a statement. *(https://bit.ly/3hYks1u)*

There has been some state-level action around the issue, too. By late May, EDs in Washington state were reporting that while patient volume was down, they were seeing increases in patients arriving in much worse shape because they had delayed seeking appropriate care.

"We had noticed, too, a drop-off in people coming to the hospital for stroke and heart attack," explains **Beth Zborowski**, senior vice president for member engagement and communications at the Washington State Hospital Association (WSHA). "It was just remarkable that those

Financial Disclosure: Physician Editor **Robert Bitterman**, MD, JD, FACEP, Nurse Planner **Nicole Huff**, MBA, MSN, RN, CEN, Author **Dorothy Brooks**, Editor **Jonathan Springston**, Editor **Jill Drachenberg**, Editorial Group Manager **Leslie Coplin**, and Accreditations Director **Amy M. Johnson**, MSN, RN, CPN, report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

ED MANAGEMENT®

ED Management (ISSN 1044-9167) is published monthly by Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468. Periodicals postage paid at Morrisville, NC, and additional mailing offices. POSTMASTER: Send address changes to *ED Management*, Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468.

GST Registration Number: R128870672.

SUBSCRIBER INFORMATION
(800) 688-2421
customerservice@reliasmedia.com
ReliasMedia.com

ACCREDITATION
Relias LLC is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Relias LLC designates this enduring material for a maximum of 1.25 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Relias LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Contact hours [1.25] will be awarded to participants who meet the criteria for successful completion. California Board of Registered Nursing, Provider CEP#13791.

This activity is intended for emergency physicians, ED nurses, and other clinicians. It is in effect for 36 months from the date of the publication.

Opinions expressed are not necessarily those of this publication, the editors, or the editorial board. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought in specific situations.

AUTHOR: Dorothy Brooks
EDITOR: Jonathan Springston
EDITOR: Jill Drachenberg
EDITORIAL GROUP MANAGER: Leslie Coplin
ACCREDITATIONS DIRECTOR:
Amy M. Johnson, MSN, RN, CPN

[diagnoses] seemed to have disappeared with the arrival of COVID-19." A decrease in certain types of cases was expected considering most people were not venturing far beyond their homes when the pandemic was at its peak. Car accidents and other types of trauma were less likely to occur, observes Zborowski, but the drop-off in strokes and heart attacks was worrying.

At first, WSHA heard from just a few hospitals about volume declines. However, reports started multiplying, along with unfortunate anecdotes about patients who had delayed seeking care — mirroring the feedback gathered in the Morning Consult/ACEP poll.

"One example involved a critical access hospital in southeastern Washington, a fairly small place that normally has between zero and two Life Flights out of their facility per month," Zborowski shares. "They had, in one four-week period, [a total of] seven Life Flights because people were coming in for care for things that [the hospital] might have been able to treat [on site] had they come in earlier."

The most common reason patients gave for not accessing care earlier was they were scared they might contract the coronavirus if they visited a hospital or even a clinic, but that was not the only concern.

"They were also worried that the healthcare system did not have space for them," she says. "[They felt their] healthcare concerns were not as important or wouldn't be paid attention to in the same way that [patients with] COVID-19 were being given attention and priority."

Clearly, some of the state's early messaging (i.e., urging people not to go to the hospital unless it was an emergency) was producing a sustained reluctance to seek care, even when it was warranted. "I think people were not understanding what was an emergency," Zborowski offers.

To counteract such impressions, WSHA began working with its 112 member hospitals to determine what steps they could take collectively to encourage patients to seek the care they needed, and to provide reassurance patients would be safe. The result of these discussions was a campaign aimed at communicating to patients when they should definitely seek care, and what healthcare services were available under the state's phased reopening plan.

Further, and most important to hospitals and EDs, the campaign stipulated a series of steps every hospital in the state was taking to keep patients safe. These include:

- screening everyone who arrives, often before they enter the hospital or ED;
- distancing people from one another, and putting protective barriers in some areas;
- limiting visitors;
- increasing the use of masks for staff and visitors;
- changing the waiting room or, in some cases, eliminating the use of waiting rooms;
- stepping up sanitation practices, particularly with respect to high-touch items in common areas.

Zborowski acknowledges there is variation in how some steps are carried out based on community and institutional needs, but the steps are general enough to allow for such differences. For instance, while some EDs and clinics have eliminated their waiting rooms, other sites have taken steps to ensure there is enough distance between people

seated in waiting areas. "There are some hospitals and clinics where you will get a text or a phone call when it is time for your appointment ... and then you go straight back into a room," she explains. "There is consistency in the screening [practices] to make sure that anyone with respiratory symptoms is not sitting next to someone who does not have a respiratory symptom."

Knowing clinicians are the trusted voices in this pandemic, WSHA kicked off the campaign with a virtual press conference on May 14, during which several of Washington state's leading physicians answered questions and relayed how their hospitals are responding to the pandemic.

Francis Riedo, MD, an epidemiologist at EvergreenHealth in Kirkland, noted everyone coming to his hospital is screened at the entrance with a temperature and symptom check. All are asked to wear a mask.

"Once [patients] come into our clinic, [they] will notice there are spacers in place asking people to remain six feet apart, Plexiglas shields [are being used], and there is a much more vigorous cleaning process," he explained. "All of these measures are an attempt to decrease random contact with other patients. While [people] are in a provider's presence, everyone is wearing a mask: medical assistants and the front office staff, as well as the provider."

Elizabeth Wako, MD, the chief medical officer of the Swedish First Hill medical campus in Seattle, said one benefit that has emerged from the COVID-19 crisis is the huge emphasis on telehealth. "This is a space where we have seen a lot of success. At Swedish, we see this as something that is likely to continue ... even after COVID-19 is no longer prevalent in our community," she shared.

However, Wako stressed there are times when it is important to access care in person. "Unfortunately, across the U.S., we are seeing close to a 20% drop in those calling with symptoms of stroke. This is significant," she said. "There are real consequences to delaying care. Ultimately, it is the difference between recovery and disability."

Wako recalled the recent case of an elderly woman who was afraid to come to the ED when she first started experiencing symptoms.

"By the time she came in, it was pretty apparent that she had had a stroke in her home. Unfortunately, by the time she arrived, she was outside of the window for treatment," Wako lamented.

The state's "stay home, stay healthy" order issued early in the outbreak was a major factor in limiting the spread of the virus, acknowledged **Sam Hsieh**, MD, a general surgeon and the chief of staff for Couley Medical Center, a 25-bed critical access hospital and level four trauma center in Grand Couley. However, he stressed the order was never meant to keep patients from receiving vital care.

"We have heard that there is a belief that the healthcare system is so overwhelmed with taking care of COVID-19 patients that we simply don't have the time to attend to others ... and I want to really bust that myth, and say it just isn't true," he said. "We have seen some patients who have waited too long to seek care for life-threatening and debilitating conditions."

Hsieh pointed to specific examples, such as patients with high blood pressures leading to strokes and patients with diabetes that is uncontrolled, leading to ulcers, wounds, and (potentially) vision loss.

"I personally have seen [patients] with ruptured appendixes because

EXECUTIVE SUMMARY

While COVID-19 continues surging in many regions, emergency departments across the country are confronting another significant problem: plummeting patient volumes. Many people with time-sensitive conditions such as stroke and heart attack are delaying or avoiding care, a reality that is leading to tragic results. To counteract this phenomenon, the Washington State Hospital Association (WSHA) is working with member hospitals to address patient fears, and help people understand when they should seek immediate care.

- An April survey of U.S. adults revealed nearly one-third of respondents had delayed or avoided medical care because they were worried about contracting COVID-19. Nearly three-quarters reported concerns about overstressing the healthcare system. More than half worried they would be unable to receive treatment if they needed care.
- The WSHA is addressing the problem with a statewide education campaign. Member hospitals are screening all patients, often before they enter a hospital or clinic, implementing physical distancing protocols, requiring masks, and boosting sanitation practices.
- The campaign is leveraging physicians to spread the word about these safety measures, the availability of healthcare resources, and the importance of accessing needed care.

they thought they would tough it out at home," he related. "We have also seen delays in the diagnosis of cancers."

The concern about care delays is particularly significant in rural settings because such delays can lead to even worse outcomes, Hsieh explained.

"Many rural hospitals have infrastructures that can maybe stabilize a patient, but they then [often] need to transfer the patient to a larger facility to receive therapeutic treatments," he said. "That further delays their overall care."

Noting there is a yearning for accurate information, Hsieh stressed providers are well-positioned to help patients "sort through all the extra noise that is out there."

Ruth McDonald, MD, interim chief medical officer of Seattle Children's Hospital, said her organization has heard directly from families about how fearful they are about seeking care during this pandemic. That is evident in the hospital's data.

"We have seen a drop-off in admissions, we have seen a drop-off in visits to our urgent care [centers] and to our ED," she observed. "We have families in our ED express that they were just waiting it out at home, hoping that their child's symptoms would resolve on their own rather than coming in to the ED."

However, there are times when "waiting it out" leads to more severe consequences that could have been avoided if care had not been delayed, McDonald said.

"One example of this is new-onset diabetes," she explained. "There are potentially times when had the children been seen sooner, when their symptoms were milder, they might not have needed hospitalization."

To ease fears of contracting COVID-19, McDonald's facility has adopted a universal masking policy. Also, everyone is screened at all entryways for fever and respiratory symptoms.

"If a patient is seen and screens positive for symptoms, [he or she] is immediately taken back to an exam room rather placed in the waiting areas," McDonald shared. She also noted physical distancing measures have been enacted to ensure patients and families remain safe.

Beyond WSHA's coordinated efforts, each hospital is trying to spread the word about what their health system is doing to keep people safe when they arrive for care, according to Zborowski.

"We are still early in the pandemic recovery, and we have many counties that are still in the first phase of pandemic control with strict social distancing guidance," she explains.

Zborowski's advice to other EDs dealing with depressed volumes is to be totally up front with the community about what services people can expect and what symptoms require seeking immediate care. "Our [effort] is not a feel-good, warm-and-fuzzy campaign. We do have some messages that, on their face, might seem negative. But what we knew was people had these concerns ... and we wanted to confront them head-on," Zborowski says. "We wanted to address where people were, and provide the facts and reassurance."

While effects of the campaign remain unclear, Zborowski is hopeful people with urgent or emergency needs will seek the care they need promptly.

"Even if we have half a dozen people who go in [to the hospital], and their lives are saved, I think that is worth it," she says. ■

Address Patients' COVID-19 Fears Through Thoughtful Design Changes, Clear Messaging

While some state hospital associations are leveraging their collective power to reassure patients that accessing needed care is important and safe, there are steps individual hospitals and emergency departments (EDs) can take, too.

For instance, the ED at Lodi Memorial Hospital (LMH), a 150-bed community hospital in Lodi, CA, has addressed the issue of declining volume with a multifaceted approach that uses data regarding specific patient concerns, health outcomes, and human-centered design (HCD) techniques.

Laura Wong, MD, PhD, a resident physician in the department of surgery at the University of California, San Francisco (UCSF), became a part of this initiative from her work with The Better Lab, an HCD concern at UCSF that works to solve a variety a of healthcare problems.

"When the COVID-19 pandemic began, my PI [principal investigator] and a number of other healthcare designers in the community, academia, and industry all came

together to create what we called the Emergency Design Collective," she explains. "It was [established] to be a national group of designers that could quickly solve problems that we saw developing."

First, the group focused on other pandemic-related issues. For instance, Wong became interested in looking at what specialists could do to help offload emergency medicine personnel who were anticipating a surge in COVID-19 cases. However, circumstances shifted quickly.

"The discussion in February was about how to prepare for a surge. Come March, we were talking about how to prevent layoffs because volume had gotten so low," Wong says.

Suddenly, there was a financial crisis and a healthcare crisis. The group worked to nail down specifically what was preventing patients from visiting the 36-bed ED at LMH, and what the overall impact of this phenomenon was in terms of health outcomes. Immediately, it was clear cardiac emergencies still were happening, even though many of those cases were not making it to the ED.

"Data from our EMS medical director [showed] that they had seen more codes in the field than ever before, that almost all of those patients were declared dead in the field, and were COVID-19-negative when they tested them," Wong reports.

Specifically, EMS reported they responded to 45% more cardiac arrests in March than in February, data that strongly suggested people were waiting too long to access care. Further, all stroke patients who arrived at the ED in March arrived too late to receive thrombolytic therapy.

This was counter to previous data showing the hospital typically delivers thrombolytic drugs to three to eight stroke patients per month.

MANY PEOPLE PERCEIVED HOSPITALS AS "INFECTIOUS RESERVOIRS," AND BELIEVED THEY WOULD BE AT HIGH RISK FOR VIRUS INFECTION.

What was clear from these data was patients in the community were reluctant to come to the ED, even in cases where they were experiencing significant health problems. "We really felt like this was a public health issue that was only beginning to be covered in the news," Wong shares.

The HCD workgroup partnered with LMH to address the problem, starting with a series of patient interviews regarding their experiences with healthcare both before and after the start of the pandemic. What was evident from these discussions was that fear of contracting COVID-19 was the overarching concern. Notably, other subthemes emerged, too, which Wong and colleagues published to help other EDs dealing with the same depressed-volume concerns.[1]

During patient interviews, the authors learned many people perceived hospitals as "infectious reservoirs," and believed they would be at high risk for virus exposure. Further, patients were largely unaware of what mitigation tactics were in place to protect patients from exposure. They needed guidance from healthcare providers about when a trip to the ED was appropriate.

The interviews also revealed patient perceptions often developed by watching national news coverage of coronavirus hotspots, leading them to believe local conditions were more severe than was the case.

To address patient fears of contracting COVID-19, the HCD team worked with healthcare leaders to essentially divide the ED in two: a respiratory pod and a non-respiratory pod. After screening at the main entrance, patients would be sent to one pod depending on

whether they exhibited respiratory symptoms. However, there were some challenges with this approach.

"A big problem was that we were using our fast-track area as the non-respiratory area. That was not designed for high-acuity patients," Wong says. "One thing we noticed was that the two spaces can be closed off from each other, but there was a whole string of rooms that were in the main ED [or respiratory pod], but basically had back doors into the low-acuity area [as well]."

Consequently, these rooms were designated as "high acuity" rooms for the non-respiratory pod, a place where providers would feel comfortable performing tasks such as administering thrombolytic medicine, Wong notes.

Each pod required separate staff, an issue that was settled fairly easily, according to Wong, as there were providers who already preferred the fast-track area. Those employees stayed where they were once the space was transformed into the non-respiratory pod. However, overnight, when there is only one provider working, that provider would have to cover patients in both pods, although there are still separate support staff stationed in each area.

Reorganizing the ED and patient flows in this way required significant changes, but the transition went smoothly. "One of our biggest champions was the nurse manager, who just really got things done," Wong says.

Also, Wong believes ensuring all staff members and providers were consulted about the proposed changes made a difference. It is a small ED that sees about 60,000 patients a year. Gathering everyone's input was not difficult. "Involving [staff] in the decisions just kind of helped them get over some of the barriers to change," Wong says. "A lot of the nurses said they felt more comfortable with the division, even though it made some of their staffing workflows a little bit more difficult."

There was some finessing of the new approach as it became clear some changes would be helpful. For instance, when the HCD group members completed their first prototype for dividing the ED, they had not devised a way for moving patients if they went to the non-respiratory side and then developed COVID-19 symptoms, Wong relates.

"The first day, we started putting [those] patients on strict precautions on the non-respiratory side," she recalls. "[Both] patients and staff felt that was a problem, and that we needed to prioritize moving those patients to the other side ... even though we had to deep-clean two rooms, that was better overall for people's comfort."

As an added layer of protection for both patients and clinicians, provisions were made so anyone entering the hospital was equipped with a mask, hand sanitizer, and wipes for any items they brought with them.

Once all changes were implemented, the HCD group and the hospital mounted a communications campaign aimed at educating patients about the significant precautions and why they were in place.

To spread this message, the hospital sent a short email to everyone in the health system's database, informing them the hospital was open and able to provide needed care. The email also made it clear the hospital had appropriate personal protective equipment available, and that procedures were in place to keep patients safe.

In addition, the hospital attracted some local media coverage about its work. Wong and colleagues stated that in mid-April, the medical and nursing directors contacted the local newspaper to provide information about the ED. The authors said it was important this information came directly from the hospital and respected clinicians, trusted sources of information.

Further, the hospital leveraged social media to provide guidance on what types of symptoms are indicative of an emergency, and should trigger a visit to the hospital. The HCD group also developed a relatively simple social media-type

post depicting the steps the hospital has taken to keep patients safe. It is hard to say for sure what impact the redesigned ED and the messaging campaign have made in terms of making people feel more comfortable about seeking needed care. Within a few weeks of implementation, volume to the ED had recovered from about 50% of normal at its most depressed state to about 80% of normal, Wong observes.

"We have been trying to ask people what changed for them, and what made them feel like they could come in now," Wong says. "A lot of people have said that word of mouth in the community has started to get around ... that the ED is safe." She also notes patients have reported they feel more comfortable with the divided ED space.

Wong is unsure what platform (newspaper, social media, or email messaging) has delivered the biggest return, but one lesson regarding healthcare messaging was immediately apparent: simple is better.

"People wanted to know about cleaning and things like that, but they didn't want to be flooded with information," she explains. "That was something we heard over and over again. When we went into a lot of detail about cleaning, people felt like it was too much."

What is important is relaying trusted information to consumers so they understand the situation clearly and accurately. "We heard a lot from people that the news had very much skewed their views of what was happening in the community," Wong shares.

Now that the changes in the ED have been in place for several weeks, will they become permanent? "Everyone keeps saying we have a new normal, and I think some of these changes will persist," Wong observes.

However, there likely will be additional finessing, particularly considering a more recent requirement that every patient undergo testing for COVID-19 before admission, a task that slows patient flow for that group. While patients who are disposed to go home are moving through the ED at about same pace as before the changes, the admitted patients are definitely taking longer, Wong reports. ■

REFERENCE

1. Wong L, Hawkins J, Langness S, et al. Where are all the patients? Addressing Covid-19 fear to encourage sick patients to seek emergency care. *NEJM Catalyst.* May 14, 2020. https://bit.ly/2BB8ZnM

Advocacy Groups Call for Removing Barriers to Mental Healthcare for Clinicians

Considering the unprecedented strain clinicians face while working on the COVID-19 frontline, the American College of Emergency Physicians (ACEP), the Emergency Nurses Association (ENA), and other leading U.S. medical associations have signed a joint statement outlining a series of steps intended to ensure that physicians, nurses, and other workers can access care for mental or other healthcare issues. *(Read the statement at: https://bit.ly/2CxzgDT.)*

The joint statement urges the removal of any barriers that might hinder healthcare workers seeking to obtain mental health services, and urges credentialing agencies to ensure clinicians are not discouraged from seeking professional help or from joining peer support groups. To the contrary, the statement calls on credentialing agencies to both support and expand access to treatment programs.

"A physician's choice to address his or her mental health should be encouraged, not penalized," ACEP President **William Jaquis**, MD, FACEP, said in a news release accompanying the statement. "Efforts to preserve and protect the mental health of emergency care teams should be prioritized now and in the aftermath of this pandemic."

According to the statement, clinicians often have legitimate fears that seeking treatment for mental health concerns may lead to the loss of licensure, income, or other career harms. Such fears could deter clinicians from seeking the help they require. However, the statement emphasizes the wellness of the healthcare workforce is needed to ensure patient care.

"As important as providing personal protective equipment is the need to ensure the mental health of our frontline clinicians is attended to during the COVID-19 pandemic," **Jeffrey Geller**, MD, MPH, president of the American Psychiatric Association, said in a news release accompanying the statement. "Each healthcare professional should seek help if needed without hesitation, and should be helped to do so by a colleague if such assistance is necessary." ■

Chicago ED Accelerates Care, Improves Behavioral Health Prescribing Practices

For a long time, **Meghan Stahulak**, DO, medical director of emergency services at St. Joseph Hospital in Chicago, believed there was something amiss in the way behavioral health patients were managed in emergency departments (EDs).

"They are overprocessed, they are overmedicated, and they end up waiting a long time," she says.

Consequently, when Stahulak's ED took the opportunity to implement a new screening process for behavioral health patients, she was fully onboard.

"The key for us is that 10% of our volume is psychiatric patients. We just wanted to try and streamline the way that we were risk-stratifying them, and then also provide them with better, less-sedating medications when they were agitated," she explains.

Beginning in January 2019, the new approach was put into place at St. Joseph as part of a six-month pilot project, producing positive results. This included shorter lengths of stay in the ED among behavioral health patients deemed low risk and better prescribing practices with respect to a targeted group of psychiatric medications.

Today, the system is firmly ingrained into the way the ED operates, even as more improvements are in development.

Clinicians use a matrix to stratify behavioral health patients into low-, moderate-, and high-risk categories based on their diagnosis. The basic idea is that not every behavioral health patient needs to be treated the same. Risk-stratification puts each patient on a pathway that is most appropriate for his or her needs.

For instance, if a patient suffering from anxiety presents to the ED because he has run out of his medicine and cannot see his therapist, it is unlikely that patient requires an extensive workup, Stahulak explains.

"If the patient doesn't feel like harming himself, he doesn't feel that his life is out of control, and his anxiety is not impairing his day-to-day living, he is low risk," she says. "[Low-risk] patients don't need blood work, and they don't need to be medically cleared because they are not going to be admitted to the hospital."

A moderate-risk case might involve a patient who is depressed, perhaps because he lost his job or is grieving the loss of a loved one.

"There might be a situational component to the patient's depression, and it might be remedied by making an appointment for him to see a therapist the next day," Stahulak offers. "This patient requires a little bit more intensive evaluation than a low-risk patient."

Then there is the case of a patient who is thinking about ending her life. "Automatically, that puts [someone] into a high-risk category," Stahulak notes. Such patients will require the most attention and resources, and they may need to be admitted.

While a triage nurse will identify that a patient has presented with a behavioral health issue, it is the medical provider who will evaluate the patient and determine the risk category accordingly, Stahulak explains.

In most cases, a low-risk patient will not require any added resources beyond the physician intervention. However, a crisis worker, usually a master's-level social worker or licensed clinical counselor, may speak with both moderate- and high-risk patients. "The intake worker acts as a liaison for us [with] our psychiatric floor, as well as the

EXECUTIVE SUMMARY

The ED at St. Joseph Hospital in Chicago has implemented a two-pronged approach aimed at improving the way behavioral health patients are managed. This includes a new risk-stratification process that categorizes patients as low-, moderate-, or high-risk based on their diagnosis, and also promotes using newer-generation antipsychotic drugs.

- The provider determines the risk level designation, driving what resources are brought to bear for the patient going forward.
- Typically, low-risk patients only require a physician intervention, while moderate-risk and high-risk patients require a crisis worker intervention.
- The newer-generation medications can be taken orally, and are less sedating than first-generation drugs, enabling providers to perform patient assessments faster.
- These tactics have shortened ED lengths of stays for low-risk patients. Also, administrators have documented a dramatic increase in the use of newer-generation antipsychotic drugs.

psychiatrist to help with service planning, whether this involves follow-up the next day or admission to the hospital," Stahulak observes.

Notably, the intake workers are available in the ED 24/7, and they already were on staff before the new system was implemented. No new staff members were required.

"We just used what resources we already had in the department," Stahulak adds.

Nurses have played a strong role, too, working alongside the providers when they perform their assessments, and following through on patients who will be discharged, observes **Steve Meier**, MS, RN-BC, manager of nursing operations in the ED at St. Joseph Hospital.

"We make sure there is a safe discharge plan from a nursing perspective," he explains.

While working on risk-stratification, St. Joseph staff also shifted prescribing practices toward newer-generation psychiatric medications that do not just put people to sleep.

"When you just knock people out for a couple of hours, you can't really assess them in a timely fashion," Stahulak observes.

Consequently, to bring clinicians up to speed on the benefits of new medications, Stahulak and colleagues disseminated articles and research on the issue. "We had some input from pharmacy and from ED physicians who were more familiar with using the newer drugs to answer any of the questions the physicians may have," Stahulak explains. "Any time you are asking people to change their practice habits, there are going to be questions. It is great to have that dialogue."

Meier agrees, adding this is where nurses can be particularly helpful in ensuring physicians have all the information they need to guide their assessment and prescribing.

"Nurses are spending a lot more time at the bedside than the physician is during the initial assessment. [Nurses] are able to hone in on those very subtle cues that a patient might be agitating," he explains. In some cases, the early identification of such signs can lead to prompt use of gentler oral medications as opposed to heavy sedative injections.

EARLY DATA SHOW IMPROVEMENTS IN PATIENT FLOW, TOO, PARTICULARLY REGARDING THE TIME LOW-RISK CASES SPEND IN THE ED.

"Once a patient has reached 100% velocity, it is hard to offer them an oral medication," Meier continues. "The nurse ... will assess the patient on an ongoing basis as well as reassess to make sure that any medications have impacted the patient appropriately."

Following some initial education and open dialog about the new drugs, ED staff tracked the usage of both the older and newer medicines, comparing usage patterns from before the initiative was implemented to patterns in place following implementation.

"We saw a big change [following the implementation]," Stahulak reports. "We saw that 93% of the time, the second-generation antipsychotics were being used, which was a huge improvement. Before the implementation, [the newer drugs] were being used only 18% to 20% of the time."

Stahulak acknowledges that as a small ED that sees only about 20,000 patients per year, St. Joseph physicians and nurses form a close-knit group that generally is open to fresh ideas. Thus, implementation went smoothly, although compliance was not 100% at first.

Stahulak notes there were one or two people who lagged behind other clinicians in dispensing the updated medicines. However, leaders continuously monitored the data so they could intervene in those cases. "If we saw trends like that, we would go and talk to those physicians, and ask if they had any additional questions," Stahulak explains.

Early data show the initiative is making a difference on patient flow, too, particularly regarding the time low-risk people spend in the ED.

"Before we did the project, they were in the ED around 114 minutes ... but after [implementation], we got the in-and-out time for the low-risk patients down to about 73 minutes," Stahulak says.

Among the patients categorized as moderate-risk, there was about a 50/50 split in patients who were admitted vs. those who were discharged, Stahulak observes. For those who were discharged, the updated process shaved about 10 minutes off the time they spent in the ED.

"A lot of the moderate-risk patients end up requiring blood work, which adds to their length of stay," Stahulak notes.

To accelerate the time-to-treatment for behavioral health patients who require admission, Amita Health, the system that

operates St. Joseph and more than a dozen other hospitals in the Chicago region, is developing an online hub to make it easier for facilities to locate an open behavioral health bed within the system.

"All the psychiatric units are ... sharing what beds they have available. If our psychiatric unit is full, or if you are in a different ED that doesn't have a psychiatric floor in your hospital, you can figure out where in the system you can send a patient for a psychiatric admission," Stahulak shares.

This hub will be phased in with the gradual participation of additional hospitals and enhanced capabilities.

"As we get rolled into this whole process, it has helped us in getting beds and in moving patients out of our ED and into the right place for them," Stahulak says.

For those struggling with similar problems, Stahulak recommends gathering key stakeholders and mapping an action plan for change. The more staff who can engage in the project, the better the solution will be.

"Getting nurse champions and a physician lead other than myself [involved], and getting the psychiatric folks on board and aware that we are changing some processes in the ED, was really huge for us," Stahulak says. "That just helps you lay the groundwork for having a good, cohesive team to deal with any issues that are inevitably going to come up any time you make a process change."

Meier echoes these sentiments, stressing the importance of a supportive culture.

"All the players need to be on board. You can't have any bad apples or sour grapes heading into a new process," he stresses. "You need to have everyone on the same page supporting the process. That includes everyone from the housekeeper who works in the ED to the ED physicians. Everyone is integral to making sure the ED is a safe environment." ■

Emergency Providers Identify Pulmonary Embolism in COVID-19 Patients

A new study highlights the critical role emergency providers play in identifying the incidence of pulmonary embolisms (PE) in patients who present with COVID-19.

Researchers have delineated some factors that either heighten or decrease the risk that a patient has or may develop a PE so that treatment can be optimized at an early stage.[1]

In the retrospective study, investigators from the Henry Ford Health System in Detroit analyzed the cases of 328 COVID-19-positive patients who underwent pulmonary CT angiography after presenting to health system hospitals between mid-March and mid-April. They found 22% of these patients had a PE.

Further, the researchers identified the risk of suffering a PE was nearly three times higher in patients with a body mass index (BMI) of 30 kg/m^2 or above, a level considerably higher than what is considered an ideal BMI for adults (between 18.5 kg/m^2 and 24.9 kg/m^2).

Investigators also discovered elevated levels of D-dimer and C-reactive proteins, in conjunction with rising oxygen requirements, also may be indications that a PE is present. They noted this is the case even in patients who are on preventive blood thinners already.

Thomas Song, MD, senior author of the study and a radiologist at Henry Ford Hospital in Detroit, says these findings suggest the standard of care emergency providers practice in terms of their clinical assessment of patients who present with COVID-19 is fine. Still, this information identifies additional risk factors on which to concentrate. "It is a combination of things that people are already doing, but [also] really focusing on those lab values and oxygenation levels, along with obesity as an additional risk factor that we had not thought of before," he says.

Song adds these data show patients who were on statins before presenting to the hospital were less likely to develop a PE. "That is protective," he says of the statins. "We are bringing in other factors for the emergency clinicians [to consider] in deciding how to manage these patients, and to determine who is at high risk for PE."

For instance, one decision clinicians need to make is which COVID-19 patients should undergo further evaluation to look for a potential PE. Investigators stress the appropriate test for this purpose is CT angiography. "A non-contrast chest CT won't find [PE]," Song notes. "Even when you do a routine chest CT where you give contrast, that [test] may not find all the clots." On the other hand, CT angiography is optimized to look at the

pulmonary arteries themselves, and it is readily available, Song stresses. "It is a widely used test in most EDs," he adds.

Closing in on a diagnosis of PE early likely provides benefits, Song suggests. With a delayed diagnosis, "the patient could deteriorate clinically from a cardiopulmonary standpoint, and then be at risk for an ICU [intensive care unit] admission and [require] ventilator support," he explains.

In fact, Song observes the patients in the study all tended to end up in the same place, regardless of whether they were found to have a PE. "There was no difference in ICU-level care, ventilation requirements, or length of stay," he shares. "You wonder if that is because we did find things early on. The patients [with PE] were treated, and their outcome was no different than [the patients] who did not have a PE." While investigators did not look at this issue specifically, Song suggests early treatment of PE may have enabled the study participants to avoid complications that could have led to more deaths, longer lengths of stay, extra ICU admissions, and/or other adverse outcomes.

Song adds it is positive so many cases involving PE are identified in the emergency department (ED). Indeed, more than half of the PE diagnoses made as part of this study happened while patients still were in the ED. Seventy-two percent of these patients with PEs did not require ICU-level care.

It is a different situation in Europe, where research has shown most diagnoses of PE are made in the ICU, often after patients have been placed on ventilators for several days. "Here in the U.S., I think we are seeing it in the ICU, we are seeing it in the ED, and we are seeing it on the regular inpatient floors. But we are glad that the ED physicians are first line and will find out who is at risk for PE," Song stresses.

In most cases, treatment for PE will involve anticoagulation or blood thinners, explains Song. However, he notes that in a tiny subset of massive PEs, clinicians will use thrombectomy, a surgical procedure used to remove blood clots from arteries or veins. Realizing there is an elevated risk of clotting in patients diagnosed with COVID-19, many clinicians are prescribing low doses of blood thinners to these patients to prevent the development of blood clots, including PEs. "It is something that should be considered," Song suggests. ■

REFERENCE

1. Poyiadji N, Cormier P, Patel PY, et al. Acute pulmonary embolism and COVID-19. *Radiology* 2020 May 14;201955. doi: 10.1148/radiol.2020201955. [Online ahead of print].

ED MANAGEMENT

PHYSICIAN EDITOR
Robert A. Bitterman, MD, JD, FACEP
President
Bitterman Health Law Consulting Group

NURSE PLANNER
Nicole Huff, MBA, MSN, RN, CEN
Clinical Manager
Santa Ynez Cottage Hospital
Emergency Department
Solvang, CA

EDITORIAL ADVISORY BOARD
Nancy Auer, MD, FACEP
Vice President for Medical Affairs
Swedish Health Services, Seattle

Kay Ball, PhD, RN, CNOR, CMLSO, FAAN
Consultant/Educator
Adjunct Professor, Nursing
Otterbein University
Westerville, OH

Larry Bedard, MD, FACEP
Senior Partner
California Emergency Physicians
President, Bedard and Associates
Sausalito, CA

Richard Bukata, MD
Medical Director, ED, San Gabriel (CA) Valley Medical Center; Clinical Professor of Emergency Medicine, Keck School of Medicine, University of Southern California
Los Angeles

Diana S. Contino, RN, MBA, FAEN
Executive Director, Accountable Care Organization
Memorial Care Health System
Fountain Valley, CA

Caral Edelberg, CPC, CPMA, CAC, CCS-P, CHC
President, Edelberg Compliance Associates
Baton Rouge, LA

Gregory L. Henry, MD, FACEP
Clinical Professor, Department of Emergency Medicine
University of Michigan Medical School
Risk Management Consultant
Emergency Physicians Medical Group
Chief Executive Officer
Medical Practice Risk Assessment Inc.
Ann Arbor, MI

Marty Karpiel, MPA, FACHE, FHFMA
Emergency Services Consultant
Karpiel Consulting Group Inc.
Long Beach, CA

Thom A. Mayer, MD, FACEP
Chairman, Department of Emergency Medicine
Fairfax Hospital, Falls Church, VA

Larry B. Mellick, MD, MS, FAAP, FACEP
Vice Chairman, Academic Affairs
Interim Section Chief, Pediatric Emergency Medicine
Assistant Residency Director
Professor, Emergency Medicine
University of South Alabama
Mobile, AL

Robert B. Takla, MD, FACEP
Medical Director and Chair
Department of Emergency Medicine
St. John Hospital and Medical Center, Detroit

Michael J. Williams, MPA/HSA
President, The Abaris Group
Walnut Creek, CA

Interested in reprints or posting an article to your company's site? There are numerous opportunities for you to leverage editorial recognition for the benefit of your brand. Call us at (800) 688-2421 or email us at reprints@reliasmedia.com.

Discounts are available for group subscriptions, multiple copies, site licenses, or electronic distribution. For pricing information, please contact our Group Account Managers at reliasmedia1@gmail.com or (866) 213-0844.

CME/CE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.
2. Log on to **ReliasMedia.com** and click on My Account. First-time users must register on the site. Tests are taken after each issue.
3. Pass the online test with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the test, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be emailed to you.

CME/CE QUESTIONS

1. **While a triage nurse will identify that a patient has presented to the emergency department (ED) with a behavioral health issue, who is responsible for determining whether he or she falls into a low-, moderate-, or high-level risk category?**

   a. Intake worker
   b. Psychiatrist
   c. Bedside nurse
   d. Medical provider

2. **In a retrospective study of COVID-19-positive patients who underwent pulmonary CT angiography, investigators found the risk of experiencing a pulmonary embolism was nearly three times higher in patients:**

   a. with a body mass index 30 kg/m^2 or above.
   b. who were on statin drugs.
   c. who were on ventilators.
   d. who were older than age 65 years.

3. **In a recent poll, what percentage of respondents reported they had delayed or avoided medical care because they were worried about contracting COVID-19?**

   a. 12%
   b. 15%
   c. 22%
   d. 29%

4. **Data from emergency medical services show that all the stroke patients who arrived at the ED at Lodi Memorial Hospital in March arrived too late:**

   a. to be saved.
   b. to avoid surgery.
   c. to receive thrombolytic therapy.
   d. to be able to converse with clinicians.

CME/CE OBJECTIVES

After completing this activity, participants will be able to:

1. Apply new information about various approaches to ED management;
2. Discuss how developments in the regulatory arena apply to the ED setting;
3. Implement managerial procedures suggested by your peers in the publication.