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INSIDE

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Early Trial Results Suggest Many Acute Appendicitis Patients Could Safely Delay or Avoid Surgery

Acute appendicitis is a common diagnosis in the ED. In the United States, the prescribed treatment is appendectomy. However, intriguing data suggest many of these patients could safely delay surgery or avoid the procedure altogether through a course of antibiotics.

These revelations come from the Comparison of the Outcomes of antibiotic Drugs and Appendectomy (CODA) trial, a large, randomized, controlled study funded by the Patient-Centered Outcomes Research Institute (PCORI).[1] The trial is ongoing, but investigators have reported early results pertaining to 1,552 patients with appendicitis assigned to receive either surgery or antibiotics between May 2016 and February 2020.

The data include participants from 25 sites in 14 states, and they represent outcomes at 90 days. Among the outcomes tracked, investigators report that just three in 10 participants in the antibiotic group returned to undergo an appendectomy within a three-month period. While there are pros and cons to both the surgical and antibiotic treatment routes, it is clear these findings create fresh possibilities for patients and their providers.

> IT IS CLEAR THESE FINDINGS CREATE FRESH POSSIBILITIES FOR PATIENTS AND THEIR PROVIDERS.

David Talan, MD, FACEP, FIDSA, co-principal investigator on the CODA trial and a professor of emergency medicine and infectious disease at UCLA, says the research will better inform patients and their physicians about care options.

"In the past, appendectomy was the only recommended treatment. Prior to the CODA trial, other studies supported the effectiveness of antibiotics as a safe alternative to avoid surgery in most patients. However, in the U.S., antibiotics were uncommonly used," he explains. "Going forward, I believe

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there will be greater consideration of antibiotic treatment. I would expect that emergency physicians will often be the first to initiate these discussions with patients soon after they confirm the diagnosis during the course of their emergency care."

In terms of general health status, Talan says that at 30 days, antibiotic treatment was no worse than appendectomy. Over the course of 90 days, 70% of participants who received antibiotics avoided surgery as well as the general anesthesia and hospitalization that go along with it.

"About one-half of those treated with antibiotics were discharged from the ED straight away, and thus got to be home instead of having to be in the hospital. Patients treated with antibiotics also got back to work sooner than those having appendectomy," Talan notes. "However, the flip side was that almost 30% of those treated with antibiotics had an appendectomy later, mostly for recurrence [of acute appendicitis]."

What should clinicians consider when determining whether a patient with acute appendicitis is a good candidate for antibiotic treatment? More data will shed additional light on this question, but investigators have already gleaned some important information from the early findings.

For example, unlike previous studies of this issue, the CODA trial allowed enrollment of all patients who typically would be offered appendectomy, including those with an appendicolith revealed via imaging.

"Whereas other studies excluded these patients, CODA specifically included them to be analyzed as a separate subgroup, and they accounted for about one-quarter of all patients," Talan says.

Complications occurred more commonly in this subgroup of patients with appendicoliths who received antibiotic treatment than those who received surgery. However, Talan reports that for most patients with no evidence of an appendicolith, complications and serious safety events were rare and similar between the

EXECUTIVE SUMMARY

Data from a large, multicenter, randomized study show 70% of patients with appendicitis who were treated with antibiotics avoided surgery at 90 days. This creates possibilities for patients and providers for a common diagnosis in the ED.

- The early results pertain to 1,552 patients with appendicitis assigned to receive either surgery or antibiotics between May 2016 and February 2020.
- Roughly half treated with antibiotics were discharged from the ED straight away. However, investigators reported 30% of participants in the antibiotic group returned to undergo an appendectomy within three months.
- A subgroup of patients in the antibiotic group experienced appendicolith more often than those in the surgery treatment arm. Nevertheless, investigators reported that in most patients with no evidence of an appendicolith, complications and serious safety events were rare and similar between the antibiotic and surgical treatment groups.

treatment groups. "Based on CODA's findings, patients with appendicolith do not appear to fare as well with antibiotic treatment as those without this finding," he explains. "Future CODA papers will attempt to determine other patient characteristics that might favor one treatment versus the other."

More Research Ahead

David Flum, MD, MPH, another CODA co-principal investigator and chair of surgery at the University of Washington, notes the early results show one size does not necessarily fit all when it comes to treatment for acute appendicitis.

"Antibiotics may be right for many, but probably not all patients," he says. "In the COVID era, it's particularly important to know that nearly half of the patients in the antibiotics arm of the trial did not require hospitalization for their initial treatment. Seven in 10 avoided appendectomy by three months. That may be appealing to many patients."

Flum says the treatment decision on how to proceed should involve both the emergency physician and the surgeon. "Emergency physicians and surgeons are a team caring for patients with appendicitis," he says. "While antibiotic treatment may be initiated by emergency physicians, surgeons should be involved in all aspects of that decision and follow-up care."

The results unveiled so far were revealed after just 90 days of follow-up because of concerns related to the COVID-19 pandemic. Investigators intend to publish additional results after follow-up of one year or more.

"We expect to see some more recurrences in the antibiotic group, although how many is still to be determined," Talan says. "Other analyses will compare outcomes among those who agreed to be in the randomized trial vs. patients who, with their surgeon, chose their treatment. We will also examine the extent to which ED discharge was safe across the range of illness severity."

Flum adds future reports from the trial should help patients "find themselves" in the data with a predictive score to determine their chance of performing well with antibiotics. "We also look forward to reporting longer-term results related to recurrence, complications, and missed neoplasms [tumors]," Flum adds. ■

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Room for Improvement in Frontline Care of Psychogenic Nonepileptic Seizures

Psychogenic nonepileptic seizures (PNES) can be frightening and debilitating. It is not uncommon for patients suffering from PNES to present to the ED for help. However, arriving at an accurate diagnosis in these cases can be tricky. Many patients with PNES are misdiagnosed, leading to frustration, morbidity, and (in many cases) harm related to inappropriate treatment.

Experts say a better understanding of how to differentiate PNES from epileptic or other types of seizures is crucial to progress in this area. They also note there is ample room for improvement in the way frontline providers respond to patients and families who arrive in the ED seeking help for a condition that is not well understood. The

International League Against Epilepsy (ILAE) recognizes PNES as a top neuropsychiatric issue associated with epilepsy. Indeed, the presentation of PNES can appear quite similar to that of epileptic seizures. Both typically present with sudden, time-limited, changes in motor, sensory, autonomic, and/or cognitive signs and symptoms.[1]

However, what sets the two types of seizures apart are the causes, according to the guidelines. While epileptic seizures are attributed to "excessive and hypersynchronous discharges in the brain," the underlying causes of PNES are psychological.

That is why an accurate diagnosis is a crucial first step in the treatment of PNES, according to **W. Curt LaFrance, Jr.**, MD, MPH, FAAN, FANPA, DFAPA, director of neuropsychiatry and behavioral neurology at Rhode Island Hospital (RIH). However, he notes that too often, an accurate diagnosis does not take place.

"Many people are treated for presumed epilepsy inappropriately with anti-seizure medications when the patients actually have PNES," says LaFrance, a professor of psychiatry and neurology at Brown University.

LaFrance adds that anti-seizure medications are not indicated for treating PNES, and the guidelines state that antiepileptic drugs may exacerbate the condition.

"Video EEG is the gold standard for accurate diagnosis and it is underutilized to establish the diagnosis," he adds.

The guidelines indicate that video EEG, in combination with patient history and input from witnesses, is essential in making a differential diagnosis, although experts acknowledge video EEG is unavailable in many locations.

Other factors that may help providers ascertain whether a patient may have PNES come from background information gleaned from research about the condition. For instance, LaFrance and colleagues reported that PNES most often presents in patients in their 20s and 30s, and three-quarters of patients suffering from PNES are women. They also noted that roughly half of patients with PNES report a precipitating or triggering event, and current or previous mental health or psychosocial problems are common in these patients.

Researchers observed that events tend to happen more frequently in patients with PNES than those with epilepsy, and that daily events are suggestive of PNES. Further, when stressful situations trigger events, that is suggestive of PNES, although surgery or physical trauma can set off a PNES disorder.

One complicating but important point researchers made is epilepsy itself is a risk factor for the development of PNES, and that both conditions are present in roughly 10% of patients diagnosed with PNES, according to estimates.

Benjamin Tolchin, MD, MS, an assistant professor of neurology at Yale, stresses that when it comes to identifying PNES no one factor is 100% sensitive or specific.

"For example, semiological characteristics suggestive of psychogenic seizures include asynchronous movements, fluctuating course, eye closure, horizontal movements of the head and torso, and back arching/hip thrusting," he explains.

Additionally, once a suspicion for PNES is established, the ED must calm the situation as much as possible and avoid causing treatment-related harm by inappropriately administering anti-seizure medications, sedatives, or intubation.

Tolchin urges emergency providers to take steps to facilitate a diagnosis in cases for which a definitive diagnosis has not been made.

"This usually involves a referral to neurology, typically leading to epilepsy monitoring unit-admission

EXECUTIVE SUMMARY

Patients with psychogenic nonepileptic seizures (PNES) exhibit symptoms similar to epilepsy, but the underlying causes are different, requiring alternative treatment approaches. Experts note patients with PNES often are misdiagnosed, leading to potential treatment-related harm.

- The first step in treating a patient with PNES is making an accurate diagnosis. A combination of video EEG, patient history, and input from witnesses help.
- Many patients with PNES are inappropriately treated with anti-seizure medications, which can exacerbate PNES.
- Once a suspicion for PNES is established, the key is to calm the situation as much as possible and avoid causing treatment-related harm.
- Some patients with PNES report they have been treated dismissively in the ED. Frontline providers should establish a rapport with patients and families, and avoid using pejorative terms like "pseudo-seizures."

for spell characterization and/or psychiatry ... leading to long-term psychotherapy," Tolchin notes. For cases in which patients have been definitively diagnosed with PNES, the next step is to facilitate psychotherapeutic treatment.

A central area of research for Tolchin has been nonadherence to treatment among patients with PNES, a factor that may be relevant regarding some patients who present to the ED with symptoms of PNES. Tolchin has found that as many as 60% of patients drop out of psychotherapy within 16 weeks, and that roughly 85% drop out within 18 months.

However, Tolchin stresses PNES patients who remain in treatment experience fewer seizures, enjoy a better quality of life, and tend to use the ED less often.

In a study, Tolchin found motivational interviewing (MI) can be useful in improving adherence to medical interventions for PNES, including medication and psychotherapeutic interventions. The technique is essentially used to make treatment initiation or adherence a patient decision rather than the decision of the provider, Tolchin observes. In his study, 60 patients with PNES were referred to psychotherapy, with half also randomized to receive 30 minutes of MI before psychotherapy commenced. At 16 weeks, 65% of patients in the MI group remained in psychotherapy, compared to just 31% of the control group.

PNES PATIENTS WHO REMAIN IN TREATMENT EXPERIENCE FEWER SEIZURES AND USE THE ED LESS OFTEN.

Further, Tolchin reports the group that received MI reported significantly fewer seizures and a better quality of life. He adds that 31% of the MI group was seizure-free vs. just 11% of participants in the control group. Tolchin concludes that training healthcare professionals to use MI could provide significant benefits at a low cost.[2]

It is important for frontline providers to understand that patients suffering from PNES experience real symptoms and face potential morbidity, disability, and negative effects on quality of life. Many also suffer from treatment-related harm because of misdiagnoses. However, when these patients present to the ED, they are not always given the care they deserve.

"Patients from around the country and their family members often tell me of the dismissive treatment they receive in the ED," LaFrance observes. "Establishing rapport with patients and their families by not using pejorative terms like 'pseudo-seizures' may help transition [them] to helpful management." ■

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Try Using Telehealth to Diagnose and Manage Patients with Dizziness

One symptom that emergency providers know well is dizziness. As many as 4 million patients visit the ED every year with this complaint, but pinning down precisely why a patient is suffering from dizziness often is not immediately apparent.

There is a wide range of possible causes, ranging from something as simple as dehydration to a much more serious underlying neurological cause, such as stroke. Experts suggest 15% of patients who present to the ED with dizziness have a serious, underlying issue that requires immediate care. It is critical for frontline providers to recognize these cases and to accelerate care accordingly.

But because of COVID-19, many of these patients with dizziness may be seeking care virtually, both through primary care settings and many EDs that have established telemedicine infrastructure. It has become increasingly important for practitioners to be able to recognize whether there is a serious underlying cause via two-way video hookup.

Appreciating the need for more guidance in this area, an international task force comprised of physician-scientists from 10 countries developed consensus-based guidelines to help frontline providers diagnose and triage patients with dizziness over a telehealth or virtual platform.[1]

Facilitate Expertise

Aasef Shaikh, MD, PhD, a research scientist from the Cleveland Functional Electrical Stimulation Center at the Louis Stokes Cleveland Veterans Administration Medical Center, led this task force.

"There are not many doctors who specialize in dizziness," Shaikh laments. "Emergency physicians are trained in distinguishing one form [of dizziness] from another, but still there are not enough people who are qualified enough to manage dizzy patients."

Shaikh explains there has been a supply-and-demand mismatch. There are few specialists in this area, referred to as neurotologists, yet there is high demand for services.

"This all became worse when COVID-19 came through. We already had very limited space, and then we needed to see patients and prioritize them based on their need to come into the hospital," says Shaikh, chair of brain health at the University Hospitals Neurological Institute in Cleveland.

The pandemic accelerated the specialty's plans to introduce a virtual way of practicing, something that could be used especially for patients who would otherwise have to travel a long distance for care.

"I get patients who see me from Texas, Florida, Georgia, and sometimes from overseas," Shaikh reports. "We noticed firsthand that this was working very well, so then we talked about developing a set of guidelines."

The recommendations are designed to serve two purposes. "One purpose is to help ED physicians or other frontline clinicians to determine who really needs urgent, immediate care — who needs to come into the hospital," Shaikh explains. "The second part of the guidelines is to tell people how to examine [a patient with dizziness], and what to look for virtually."

> "YOU WANT TO KNOW WHAT NOT TO MISS RATHER THAN WHAT TO DIAGNOSE."

Often, when patients with dizziness present to an ED, neurology will be consulted if there is any question about the underlying cause. However, if a neurologist is unavailable, the patient will be transferred to where this type of service is available.

"If you have a virtual way to [access this expertise] ... you will save a lot of expense in patient transportation or in triaging the patient," Shaikh notes.

Look for Tip-Offs

There are general signs frontline providers should watch for when examining a patient with dizziness, either virtually or in person.

"One is how miserable the patient is — miserable in a way that the patient cannot get up from the bed and walk without any assistance," Shaikh says. "[For that] patient, I would definitely suspect that something major is wrong in the brain, and that could potentially be a patient who is [at risk] for a stroke."

A second indication that something serious is going on is what Shaikh describes as perception of motion. This may not just be abnormal movements of the eyes, but rather the patient's own feeling he or she is moving or spinning while seated. "It is vertigo, but frequently we correlate the vertigo with involuntary movement of the eyes," Shaikh says. "If that is present, that is suggestive of certain types of [stroke], or some kind of structural deficit in the brain." Shaikh notes that even if clinicians resolve eye movement issues, a patient still may perceive vertigo.

With practice, emergency providers can become better at assessing dizziness. Shaikh says the key is "you want to know what not to miss rather than what to diagnose."

While virtual examinations are important to ensuring expert care is accessible to all patients, Shaikh says in-person encounters remain important. "If someone calls me 100 miles from my hospital, I am able to address their question in a very effective way using these guidelines that we have published. But that does not mean that everything I do would happen virtually," he says. ■

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Data: Cardiovascular Disease, Other Problems Go Unchecked During COVID-19 Pandemic

Telemedicine has plugged some healthcare gaps during the COVID-19 pandemic, but many fewer Americans have been receiving important assessments of common cardiac risk factors, according to a troubling study from investigators at Johns Hopkins.[1]

Researchers reported that while the use of telemedicine surged from almost nothing to 35% between April and June 2020, the number of in-person primary care consultations dropped by more than 21% when compared with the volume of such encounters during the second quarter from previous years.

The data, gathered from an ongoing audit of outpatient care in the United States, also reveal blood pressure monitoring and cholesterol screenings were way down during this period. The frequency of blood pressure monitoring decreased by half, and cholesterol checks declined by 37%.

Because Americans are shying away from routine screenings, investigators are worried about the pandemic causing even more collateral damage, namely undiagnosed cardiovascular disease and other problems usually detected during routine, in-person primary care visits.

In a statement, the lead author of the study, **Caleb Alexander**, MD, stressed the declines in care reflected in the data are not trivial.[2] Preventing strokes and heart attacks is the bedrock of primary care. When left unchecked, this carries implications for emergency medicine providers. ■

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Investigators Raise Alarm About Prevalence, Impact of Secondary Traumatic Stress in Emergency Nursing

The fast-paced, unpredictable environment of emergency nursing can lead to trouble. Safety is an ongoing concern, considering the increasing incidence of workplace violence and the continuous flow of patients with infectious diseases. But there is another kind of stress emergency nurses may be reluctant to discuss: that which results from exposure to others' trauma.

Emergency nurses are ideally situated to experience this kind of stress, referred to as secondary traumatic stress (STS). If left unaddressed, STS can negatively affect mood, relationships, job satisfaction, and patient care.

"When you think about your average emergency nurse and the number of people who are experiencing trauma that come through the ED, that trauma kind of gets transferred in a way to people

caring for them," explains **Lisa Wolf**, PhD, RN, CEN, FAEN, the director of emergency nursing research for the Emergency Nurses Association (ENA).

Wolf and colleagues explored both the harmful effects of STS on emergency nurses as well as potential remedies that could alleviate these effects.[1] The authors surveyed 125 emergency nurses and conducted in-person focus group discussions with 53 of these. Investigators observed participants demonstrated high levels of STS, and contended this is a problem of considerable concern to the emergency nursing community.

Consider Impact

While prevalence of STS was high among participants, investigators reported emergency nurses react to STS in different ways. The authors used an instrument called the Secondary Traumatic Stress Scale (STSS), a self-report instrument that characterizes the different symptoms of STS under several subheadings, including arousal, intrusion, negative connotations and mood, and avoidance.

"Some people, if they are manifesting avoidance symptoms, they don't want to go to work. They may want to avoid a specific room in the department or a specific area where a traumatic event has happened to them or where they have cared for someone who has suffered through a traumatic event," Wolf explains.

Nurses with symptoms categorized as arousal may feel anxious or jumpy. For instance, Wolf notes many study participants talked about how they were unwilling to let anyone stand between themselves and a door.

Those experiencing symptoms categorized as intrusion typically report they cannot seem to escape thoughts, feelings, or pictures stemming from a traumatic event that is constantly replaying in their heads, Wolf observes. Negative connotation in moods typically refers to feelings of depression related to the traumatic event that a nurse or the nurse's patient has experienced.

How do emergency nurses manage STS? What investigators found seems to align with other published research. "Our participants told us ... that they did a lot of numbing — either with alcohol, sleep ... or disconnecting from not just work, but kind of themselves, which is not super functional," Wolf explains. "People are working so hard to wall off these [traumatic] experiences that they end up being a little too successful. They are unable to re-engage with patients or their families."

Further, Wolf notes the damage caused by STS is cumulative trauma. It often follows people as they move to different, higher-level positions in nursing. "People have these experiences throughout their careers at the bedside. Then, they bring them into management, and they bring them into administration," Wolf says.

When these symptoms of STS are not addressed effectively in nurses who have risen to higher-level positions, they may have little patience for bedside nurses who are struggling with similar STS experiences.

"Part of the cumulative trauma is this idea that I have dealt with [STS], so you will, too," Wolf observes. "It is this [expectation that nurses] toughen up and develop a thick skin that is driving a narrative for a lot of bullying behaviors in EDs."

What investigators drew from the study in terms of potential management-level solutions to the problem of STS in emergency nursing is that "managers and directors really need to do the work of resolving their own trauma before they help their staff," Wolf advises.

Provide Respite

While formalized, critical incident debriefings are not that helpful in addressing STS, Wolf and colleagues reported gathering

EXECUTIVE SUMMARY

Research indicates emergency nurses are particularly vulnerable to secondary traumatic stress (STS), a problem that can negatively affect mood, relationships, quality of life, and patient care. If left unaddressed, STS can drive emergency nurses to leave their profession. While data collection for the study was completed prior to the COVID-19 pandemic, the current health emergency has only heightened these concerns.

- STS results from exposure to others' trauma. Symptoms fall into four categories: arousal, intrusion, negative connotations and mood, and avoidance.
- Investigators advise emergency nursing leaders to take the issue of STS seriously, establish effective programming to address the problem, and encourage staff nurses not to ignore symptoms.

with colleagues on a more informal basis after a traumatic event was beneficial. The participants also indicated taking periods of respite during their shifts also was a helpful way to alleviate STS symptoms.

For example, nurses who have just witnessed a pediatric death need time to process that experience.

"It is not healthy or safe for them to just go into the next room," Wolf observes. "This all comes back to having adequate staffing, adequate experience, and adequate training [on the part] of charge nurses and preceptors to help newer nurses process these types of events."

Wolf adds there are many potential options to address STS once the issue is seen as a real problem.

"Just about everybody has some degree of STS. It is not a weakness in any way. This is a byproduct of the job," Wolf observes. "We really need to destigmatize these very appropriate reactions to traumatic incidents."

For its part, ENA has conducted multiple studies that all point to STS as a critical factor in practice. The idea of trauma processing is becoming part of preceptor programs and other initiatives. "It has got to be really embedded into practice," Wolf says.

Wolf underscores the point that effectively addressing STS is not just about easing the suffering of individual nurses. There also is a clear effect on patient care. "What our participants told us was that [the numbing behaviors they resorted to because of STS] meant that they could not see signs of patient behavioral escalation, which has an impact for violence. They also couldn't see signs of patient decompensation," she says. "They had become so task-oriented that they were not seeing their patients as people."

Support Staff

Wolf says STS represents an opportunity for management to recognize that it is a problem. Administrators can make sure staff nurses understand that leadership is willing and eager to help nurses process any feelings or other symptoms they may experience resulting from a bad patient outcome or other trauma. Wolf adds management should make it clear they will not ask nurses to ignore STS in the service of performing their jobs.

"Programs that are set up on a unit level to help people process these events are going to go a long way toward improving patient care, improving nursing outcomes, and also decreasing bullying behaviors," Wolf says. Another incentive for management to act is the fact that high levels of STS in nurses correlate with an intention to leave the profession.

Wolf and colleagues completed their data collection before the COVID-19 pandemic began. That ongoing health emergency has a shined a strong spotlight on the importance of healthcare worker well-being. Wolf is hopeful the issue of STS in nurses will receive the attention and reformative action it deserves.

"There is a component with COVID-19 of organizational violence that I think has not been as clearly delineated prior to [the pandemic] where we have, from the federal government on down, shifting rules and changing standards," observes Wolf, describing the constant barrage of directives as producing a gaslighting effect on nurses.

"This kind of cumulative trauma will cause a mass exodus if we do not take steps to really revolutionize nursing as a profession, and really hold on to the practice autonomy and authority that nursing should have," Wolf adds. ■

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Tool Helps Emergency Providers Better Stratify COVID-19 Patients

The American College of Emergency Physicians (ACEP) and Brentwood, TN-based EvidenceCare unveiled a severity classification tool designed to help frontline providers quickly determine what kind of care patients with COVID-19 will require. The tool is designed to help clinicians make appropriate evaluation and disposition decisions in accordance with expert guidance on the disease.[1,2]

Called the Emergency Department COVID-19 Severity Classification tool, the instrument consists of seven triage steps. It starts by assessing vital signs. Then, clinicians use patient's nasal cannula flow rate, respiratory rate, and minimum documented pulse oximetry to calculate qCSI. Depending on this score, a patient is classified as mild-low risk, mild-at risk, severe, or critical.

Next, clinicians assess symptoms and note any risk factors. For example, a man older than age 60 years with one or more chronic medical problems puts him at serious risk for contracting COVID-19 and suffering major adverse outcomes.

By the final step, when the clinician considers discharge home criteria, it may be clear a patient can be released safely, which is one of the goals of the tool. "We wanted to create a tool that would help the emergency physician decide right off the bat if this is a person who can go home," says **Sandra Schneider**, MD, FACEP, asssociate executive director for clinical affairs at ACEP. "One of the strengths of this tool is really the concentration on those patients who can go home. Many patients ... don't need tests, they don't need any fancy stuff; they can just go home with appropriate instructions and follow-up."

By facilitating a quick decision on patients who can be discharged safely, EDs will save time and conserve resources. However, Schneider stresses such decisions will be backed up by solid evidence from experts who have been caring for patients with COVID-19 for some time now. Such experts weighed in with considerable input on the tool's design.

> THE TOOL IS DESIGNED TO HELP CLINICIANS MAKE APPROPRIATE EVALUATION AND DISPOSITION DECISIONS IN ACCORDANCE WITH EXPERT GUIDANCE.

"There is a group of patients we can just basically look at, do a few simple things ... and say they can go home," Schneider says. "You don't need a CBC [complete blood count], you don't need bloodwork, and you don't need a chest X-ray."

Stratify Patients

For patients who do not meet the criteria to be discharged quickly, the clinician will move on to the next phase: step five (diagnostic testing) and step six (analyzing imaging and lab results) before moving on to step seven (disposition). The tool offers specific guidance on how to proceed, and delineates patients into different groups.

For instance, some patients may be placed in observation or sent home with telemedicine for several hours so clinicians can keep close tabs on them and respond quickly if their conditions worsen.

Another group of patients may require admission, but there is otherwise not much more care for the emergency clinician to provide while the patient remains in the ED.

"Then, there is the other end of the spectrum. Those are the patients who need critical care or will need critical care," Schneider explains. "There are some hospitals, particularly smaller, rural hospitals, where this tool can be very helpful because it will [tell] them that a patient is going to need critical care."

In such cases, the tool will prompt clinicians to find a facility that can provide appropriate critical care to the patient, and they can start making arrangements for transfer. "You can predict that these patients are going to require [that level of care] rather than waiting until they are so sick, and you are then emergently trying to get them out of the hospital."

Finally, there will be a group of patients for whom it will be clear immediately they will require care in a facility that has advanced care resources, such as ventilators and extracorporeal membrane oxygenation.

Schneider observes the tool is particularly effective at illuminating which patients are at both ends of

the severity spectrum, which can be helpful to emergency clinicians as they make their disposition decisions. Still, she stresses it is up to clinicians to consider the information provided, and then use their clinical judgment. "[The tool] gives you good guidance on whether or not a patient should go home, whether you have to keep a watch on them, or whether they actually need to be in the hospital or an ICU," Schneider says.

Rely on Guidance

How effective is the tool? Schneider notes that in an ideal world, developers would create a tool, and then analyze its performance on a year's worth of patients to see how it is performing before making it available to all providers. Sadly, the world is in the grips of a pandemic now. "This [tool] uses the best evidence we have. We have pretty good evidence right now that this tool works on both sides of the spectrum," Schneider says, noting the tool performs well when it comes to identifying and sorting low-risk and high-risk patients.

Nevertheless, going forward, developers intend to monitor the tool and make any needed adaptations as any new therapies or protocols demonstrate better ways to differentiate and manage COVID-19 patients. Further, as the tool becomes integrated into EMR systems, Schneider notes it should be a relatively easy matter to release any changes or updates to all the providers who are using the tool. They will not have to wait and read about the changes in a journal article.

For the emergency clinician who already has seen 100 COVID-19 patients, the tool probably will not provide any fresh insight, Schneider acknowledges. "However, for the person who is seeing their first patient or their 10th patient, it is very helpful," she says.

Further, Schneider notes the tool can provide reassurance to clinicians that they are doing the right thing for patients who present with this disease. "I encourage people to look at the tool, even if they are not going to use it for every patient ... just to make sure that the way they sort patients in the ED coincides with [the thinking] of the people who are the experts," Schneider adds. ■

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Medical Groups Pool Resources to Promote Behavioral, Mental Health

Eight leading U.S. medical associations have formed the Behavioral Health Integration Collaborative to help physicians include mental and behavioral health services in everyday practice.

The all-encompassing online toolkit provides educational material and best practice information regarding behavioral and mental health services. The collaborative includes everything from how to build telehealth services into primary care to relevant billing and coding practices.

There is growing recognition of the importance of providing these services. Although physicians may be willing and eager to engage, a study released earlier this year revealed cultural, financial, and educational barriers to proper service integration.

As the COVID-19 pandemic drags on, the need for better mental and behavioral healthcare might only intensify. A tracking poll revealed 53% of Americans are feeling negative about their mental health. A CDC investigation indicated young people, ethnic and racial minorities, and essential workers are disproportionately affected. Clinicians might see the need for mental and behavioral health interventions daily, whether in the form of an irate visitor looking for answers about a loved one receiving care or a waiting patient with undiagnosed psychiatric needs slowly spiraling in the waiting room. Read more about all these subjects in a future issue of *ED Management*. ■

COMING IN FUTURE MONTHS

- How emergency providers figure into higher-tech hospital-at-home programs
- Addressing the underlying causes of high ED use rates
- A better handle on patient chest pain before ED arrival
- Leveraging ED resources in service of higher flu vaccination rates

ED MANAGEMENT®

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CME/CE QUESTIONS

1. **In the Comparison of the Outcomes of antibiotic Drugs and Appendectomy (CODA) trial, when compared to the surgery treatment group, complications occurred more commonly in a subgroup of patients in the antibiotic group with:**

   a. a recurrent case of appendicitis.
   b. an appendicolith.
   c. a blood clotting disorder.
   d. coronary artery disease.

2. **Once a suspicion for psychogenic nonepileptic seizure disorder is established, the key in the ED is to:**

   a. administer sedatives.
   b. gather a complete blood workup.
   c. order a brain scan.
   d. avoid causing treatment-related harm.

3. **What percentage of patients who present to the ED with dizziness arrive with a serious, underlying issue that requires immediate care?**

   a. 5%
   b. 10%
   c. 15%
   d. 20%

4. **Nurses suffering from secondary traumatic stress who say they cannot seem to escape thoughts, feelings, or pictures stemming from a traumatic event are experiencing symptoms categorized as:**

   a. intrusion.
   b. arousal.
   c. flashbacks.
   d. locked in.

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.

ED ACCREDITATION UPDATE
COVERING COMPLIANCE WITH JOINT COMMISSION STANDARDS

Advocates Unveil Plan to Accelerate Patient and Workplace Safety Improvements

Ever since the Institute of Medicine released *To Err is Human: Building a Safer Health System* (1999), which shined a harsh spotlight on the issue of errors that occur in the course of delivering healthcare, there has been a continuing focus on patient safety.[1] Since the report was published, dozens of organizations have launched initiatives around this issue, and the topic frequently headlines national meetings of healthcare providers and administrators.

However, experts suggest what has been missing from this movement is a guiding hand leading all these disparate efforts in the same direction, with everyone working synergistically toward improvement in a way that does not waste precious time, effort, and resources.

To address this problem, the National Steering Committee for Patient Safety (NSC) has been working for two years on a framework that its members believe will facilitate the kind of collaboration that so many patient safety experts contend has been lacking. Convened by the Institute for Healthcare Improvement (IHI), the NSC represents 27 patient safety agencies, organizations, and experts that have been working to develop a common roadmap that leaders can use to highlight where their own operations are lacking, and establish improvement plans to address gaps.

Act with Urgency

The result of this work is *Safer Together: A National Action Plan to Advance Patient Safety*, a robust call for transformation that provides evidence-based practices, interventions, specific examples, and expert input to show organizations precisely how they can jump-start their own paths to improvement.[2] When revealing the plan during a media briefing on Sept. 14, **Tejal Gandhi**, MD, MPH, CPPS, the NSC co-chair, IHI senior fellow, and the chief safety and transformation officer at Press Ganey, offered her perspective on precisely why all the efforts toward patient safety to date have not delivered the kind of results many had envisioned.

"There are so many organizations that work on patient safety, which is great — multiple federal agencies, hospitals and health systems, accrediting associations, foundations, and patient advocacy groups — but we don't have to work together in a coordinated and collaborative way," she said. "It often results in the frontline getting recommendations and advice coming at them from many different directions. We believe that if we all work together and are synergistic rather than uncoordinated, we can go further, faster."

IHI released its plan with two accompanying documents, an implementation guide and a self-assessment tool.[2] Gandhi said all these materials focus on what the NSC participants consider to be foundational areas in patient safety:

- Leadership and culture;
- Patient and family engagement;
- Workforce safety;
- The learning system.

"The COVID-19 pandemic has reinforced the urgent need for collaboration and a greater focus on all of these foundational areas to reduce the many kinds of harm that are occurring," Gandhi said. "You see in a pandemic physical and emotional harm to patients and the workforce across the continuum. Inequity is contributing to these harms."

The NSC believes focusing on these four foundational areas will advance the work that patient safety advocates are conducting during the COVID-19 pandemic. "The national action plan, implementation guide,

and self-assessment include recommendations, strategies, and tactics in each of these four foundational areas. We believe these tools will engage all stakeholders, driving urgency to move this work forward," Gandhi said.

Confront Barriers

Jeffrey Brady, MD, MPH, the other NSC co-chair and the director of the Center for Quality Improvement and Patient Safety at the Agency for Health Research and Quality (AHRQ), acknowledged that ensuring patient safety is hardly a simple task.

"It requires robust systems that engineer safety and care. That can help [prevent] pitfalls like medication errors, pressure ulcers, falls, infections, and many other threats that we all know can harm patients," he said.

Brady added that while work on the plan began before the COVID-19 pandemic, the NSC participants have been impressed by how relevant the plan is for addressing many of the challenges that have arisen. He also noted that high-performing organizations understand delivering care is a team effort, and that safety needs to be a shared value.

"When it comes to safety, no one sits on the sidelines. People who work in these organizations trust that their own safety is important to leadership," he said. "Clinicians feel safe, and they work with patients and families to keep them safe."

However, Brady noted many obstacles stand in the way of providing safe care — even the best healthcare organizations in the country struggle with these barriers. He added organizations that have made good progress regarding patient safety can benefit from the IHI plan.

For instance, concerning "leadership and culture," Brady said many organizations use tools that help measure safety culture. In the IHI plan, there is guidance on how leaders can move from measuring to acting, which actually will improve their safety culture and support safer care.

Further, Brady noted it is difficult for anyone to focus on the safety of others when they do not feel safe. "The pandemic has highlighted the need to take care of those who are on the frontlines every day, standing ready to take care of us when we get sick," he said. The IHI plan includes tips on how to effectively partner with patients and families, and keep patients at the center of care.

The action plan also highlights the importance of putting learning systems in place so healthcare workers understand what is happening and why.

"The key here is sharing information about best practices, both within and across organizations, with timely, relevant data and useful information that can guide action and improve safety," Brady shared.

Brady stressed the four foundational areas are interdependent and prerequisites for ensuring patient safety.

"I think of this aspect as a kind of anti-silo effect that we hope the plan will achieve," he said. "This feature also aligns well with systems-based perspectives, and it involves key parts of the system and how they need to fit and work together for safety."

The emphasis on collaboration is highlighted in the plan, and for good reason, according to Brady. "We know that no single person in an organization alone can guarantee patient safety," he noted. "Raising our level of cooperation is a must."

Brady, who has pledged to put the IHI plan to use at AHRQ, cautioned there is a tendency toward the technical in healthcare, which is insufficient.

EXECUTIVE SUMMARY

The Institute for Healthcare Improvement (IHI) has released *Safer Together: A National Action Plan to Advance Patient Safety*, a roadmap for progress that includes tools that organizations across the healthcare continuum can use to assess their own approach to safety, and target areas in need of improvement.

- Experts involved in this effort say what has been missing in previous safety initiatives is collaboration. The IHI plan is designed to address this gap.
- The plan is built on four foundational areas developers contend all must be addressed to advance safety: leadership and culture, patient and family engagement, workforce safety, and the learning system.
- Plan developers note ensuring the well-being and safety of the healthcare workforce is essential in all efforts to improve patient safety.
- The IHI plan was released with two accompanying documents, an implementation guide and a self-assessment tool that organizations across the healthcare continuum can use to find areas in need in improvement within their own groups or systems.

"For example, in medication safety errors ... a provider order entry [system] that is computerized is a known safe practice that works, but it has to exist in a culture that is mindful about safety," he observed.

All the elements have to work together, and that is one of the reasons why safety is so complex. "You can't always focus on just one thing and expect change," Brady added.

Link Patient, Worker Safety

Mary Beth Kingston, PhD, RN, NEA-BC, chief nursing officer at Advocate Aurora Health in Milwaukee, served as the NSC's subcommittee lead for workforce safety, a subject of increasing importance to healthcare workers. She noted the action plan puts that issue front and center.

"Ensuring the well-being and safety of the healthcare workforce is absolutely essential in any and all efforts to improve patient safety," she said during the Sept. 14 press briefing.

Kingston noted healthcare has one of the highest rates of illnesses and work-related injuries among many industries, including those considered to be of high risk (e.g., mining, construction, and agriculture).

Regarding physical harm, Kingston explained musculoskeletal injuries, such as back and shoulder damage, are common, particularly among healthcare workers involved with moving patients. Trips, falls, workplace violence, and exposure to infectious disease also are important concerns related to physical harm that affect healthcare workers. Kingston also stressed psychological and emotional injuries also are prevalent among the healthcare workforce.

"When we have an error that occurs with a patient, obviously our first concern is outcomes with that patient. [But] we also have to think about the trauma that the physician or the nurse, for example, might experience when they make an error that results in that harm," she said. "Another example is the stress that occurs when the healthcare team member ... is somehow constrained from doing what they believe is right. We call that moral distress."

The pandemic has shined a spotlight on both the physical and psychological harms that can affect healthcare workers, but Kingston stressed these types of injuries are not new. As an example, she pointed to the risk of exposure to infectious disease. "We can think back to some high-profile events like HIV, AIDS, and Ebola," she said. "This actually is an issue that we face every day in healthcare. Attention to infection prevention is a cornerstone of safe patient care and a safe workplace; however, this has been tremendously magnified by the COVID-19 experience."

The mental health and well-being of healthcare workers has been an ongoing concern, too. During the COVID-19 pandemic, fatigue, stress, and moral distress have made problems worse. Kingston said it is essential for organizations to create a safety culture that supports psychological safety.

"In organizations that do this well, the healthcare team feels safe and comfortable speaking out and questioning if a decision is made, and [if] something just doesn't feel right to them," she said. "When this culture is lacking, it causes tremendous stress and harm to the healthcare team. There also can be unsafe practices that occur that are really never brought to the forefront."

Kingston acknowledged some progress has been made in the safety arena, but she noted much work remains to ensure workplace safety is embraced as a core value and a responsibility of leaders across every healthcare setting.

"We know that patient safety and workforce safety are linked," she said. "[The IHI plan] highlights that it is possible to achieve sweeping improvement by advancing workforce and patient safety together under the same improvement umbrella."

Heed Lessons

Kedar Mate, MD, president and chief executive officer of IHI, expressed his belief that the publication of the action plan will be a turning point in the pursuit of truly safe care.

"Now is the time to build on two decades of learning and progress, and to move to collective and common action," he said during the Sept. 14 press briefing. "The National Action Plan gives us exactly what we need: An overall direction and specific recommendations that, if enacted broadly, will transform the safety of care for patients and for providers."

In particular is the plan's emphasis on leadership and workforce safety. "Leadership is always crucial in the middle of a crisis, but it is just as important in moving out of a crisis," Mate said. "If we don't heed the countless lessons we have all learned this year, I feel we will waste the extraordinary courage, commitment, and creativity that healthcare has demonstrated during the pandemic."

Mate promised to marshal IHI's energies and resources toward the safety of the healthcare workforce.

"The plan makes clear that workforce safety cannot be an add-on or an afterthought, but is in fact a prerequisite for safe and effective patient care," he stressed. "Working in healthcare has always been fraught with risks to physical and psychological safety. We have to leverage the urgency of this moment to once-and-for-all rid our systems of all types of harm, and give our workforces the safety and supports they need to fulfill their calling as healers."

Work Together

Ana Pujols McKee, MD, executive vice president and chief medical officer of The Joint Commission, did not speak at the media briefing, although she is a member of the NSC and participated in developing the action plan. She tells *ED Management* she was most involved in the development of recommendations on governance, an area where she sees much room for improvement.

"More emphasis needs to be given to the importance of instituting accountable governance practices," she explains. McKee says the IHI plan is in broad alignment with the efforts and goals of her accrediting organization.

"The Joint Commission has been promoting the foundations of becoming a highly reliable organization to our accredited healthcare organizations. Specifically, we focus on developing leadership, safety culture, and robust process improvement," she says. "Joint Commission surveyors have already incorporated these principles while they work with our accredited healthcare organizations. *The National Action Plan to Advance Patient Safety* is confirmation of most of these same principles."

While the Emergency Nurses Association (ENA) was not part of the work team that developed the IHI, its leadership applauds the effort.

"The plan calls out the need to move away from a piecemeal intervention process, which has been the standard approach, to more of a true total-system approach," says **Mike Hastings**, MSN, RN, CEN, president of ENA. "[We] will take a look at the report to see how we can internalize this from an association [standpoint] as well as determine how we should disseminate the information to our members."

Hastings tells *ED Management* he was pleased to see the plan's focus on workplace safety, and how the plan addresses both the physical environment as well as the psychological safety of healthcare providers. "The key throughout the report is that there must be a systematic approach, which is definitely needed when you are talking about workplace safety," he observes. "Everyone must work together to address the root causes of workplace violence, and then figure out systems to mitigate the issues in order to keep the staff safe."

Hastings adds that ENA looks forward to collaborating with other associations and healthcare organizations to help address these needs, similar to the way ENA and the American College of Emergency Physicians partnered in the launch of the No Silence on ED Violence campaign to raise awareness about the prevalence of workplace violence in the ED. ■

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