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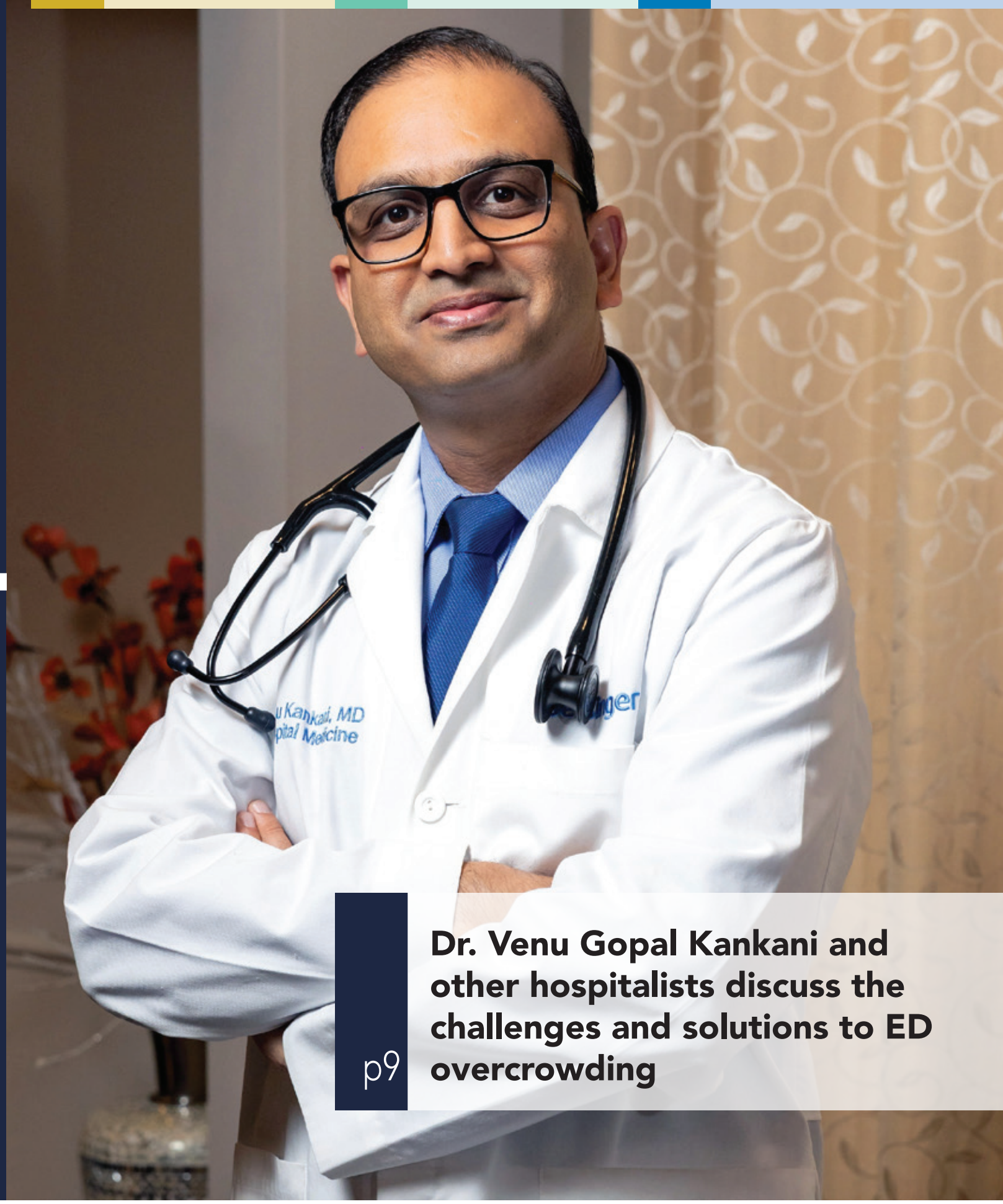

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IN THE NEXT ISSUE...
What do hospitalists want from AI?

Social Prescriptions for Hospitalists in Tough Times

Finding calm, connection, and meaning

By Leif Hass, MD

Dr. Hass

Dr. Hass is a hospitalist at Sutter East Bay Medical Group in Oakland, Calif., where he is faculty in the resident training program. He is also an adviser on health and healthcare at the Greater Good Science Center at University of California, Berkeley, in Berkeley, Calif.

We knew hospital medicine was challenging when we signed up for the job: the most vulnerable members of our communities facing acute health crises; competing economic interests; continuous time pressures; and the emotional labor of attending to illness and the resultant suffering. It's easy to feel overwhelmed in the best of times. Now it feels that someone is pulling the rug out from underneath us as institutions that support our work, such as the National Institutes of Health and the Centers for Disease Control and Prevention, are under attack and funding sources for Medicare and Medicaid are threatened. Colleagues have been asking me, as a well-being leader with Sutter Health, for tips on how to cope in these tough times.

In much the same way that I address the well-being of my patients, I have come up with a social prescription cocktail that science has shown will help us find calm, connection, and meaning as we lead our wonderfully intense and unpredictable lives as hospitalists. With the right mindset, many of the challenges of our work can provide the pathway to meeting the times with greater wisdom and a sense of conviction about the value of the work we do. So, with humility, I offer a set of prescriptions to all my beautiful, dedicated hospitalist colleagues:

From: Leif Hass, MD

To: My Hardworking SHM Colleagues

Recognize you lead a life of purpose. It is so obvious, but somehow, we lose track of this. We bring years of training, our blood, sweat, and tears to the care of the sickest and neediest members of our community. We work our tails off. We care. That's how we roll. Yes, work can be frustrating, which can obscure that sense of purpose. So dive into the parts that engage you, that move you, and savor them. Then shout it to the sky, "I live a life of purpose!" Or at least remind yourself of it regularly. You will feel stronger and more invigorated.

Take a moment to acknowledge your patients' suffering and then feel the compassion. Compassion is innate, and it seems we are often up to our armpits in suffering. So why are we not overflowing with compassion? We often feel too busy to acknowledge our patients' suffering. We go straight to problem-solving and saying "It will be ok." Take a second to look...a human in pain, short of breath, body failing, challenging social situations. Let them know you see it: "Wow, your life is hard." Then, notice how the compassion rises up in your body, and at the end of the encounter, notice how awesome this work can feel.

Recognize that your caring and concern can be enough. One scary part of witnessing suffering is that, at times, there is little we can do to relieve it, and that makes us uncomfortable. We trained to cure, not console. Years of caring for people approaching the end of life have taught me this: Acknowledge the suffering, then hold a hand and say, "Our team is with you on this. You are not alone." It can be enough; enough to ease the patient to a degree and for us to feel value in our role as healers, no matter the outcome.

Life is better with a little touch. Our patients need reassurance; they need to know we care. Touch may be the fastest and least appreciated way to do so. Three seconds of fingers gently rubbing a shoulder, and you will be able to see a deeper, more trusting relationship developing by the look in the patient's eyes. Who knows, if that works for you, you may end up like me, giving hugs to most of my patients at discharge.

Take a moment to listen to a story. It shouldn't be just the zebras or the sepsis saves that keep us engaged with work. It should be the stories, too. The beauty that can emerge from a voice inside a blue hospital gown can be a source of wonder and deepen our appre-

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Volume 30 | No. 1

ciation of what it means to be a human being. Stories of rural life long gone, immigration and sacrifice, love enduring great hardship, grace in the face of death and loss. This is moral beauty, perhaps the most common and least appreciated source of awe. Once a day, sit down and ask a question like, "Tell me about your childhood?" or, "Your life is hard; how are you coping?" You will be surprised at how often what you hear will give you goosebumps.

Be the culture you want to be a part of. Everything we do at work creates interactions that then determine what our medical center colleagues come to expect. These expectations and how we react to them are culture. When I came to see every conversation with nursing, patients, and teammates as an opportunity to develop the culture I wanted to be a part of, my attitude changed, and my experience of work improved dramatically. Make a conscious effort to bring kindness, humility, respect, and a little love to your interactions, and we will have an even better workplace.

You always have the breath. Sick patients, the constant time crunch, and tough decisions to be made are endless. The pressure in my nervous system seems to continuously build throughout the day, and with it, the tension in my body. So, between encounters, take a couple of big, slow breaths and notice how the tension fades. Listen to hear if your inner voices saying "faster" or "poor me" or "it's a s***show" start to quiet. With practice, we can recognize the stress building up sooner, breathe it out, and save our energy for what's really needed. Feeling overwhelmed? Remember, a deep breath is always waiting for you.

15 minutes a day on friends and family. All our night and weekend work takes a serious toll on our social lives, and the data show it is a driver of burnout. We can make up for the time missed with friends by using the prescription suggested by our former Surgeon General. Spend 15 minutes a day on friends: text, cold call, start a group text with old pals, put talking to a friend on your "to-do list." The quality of our life is determined by the quality of our relationships. Fifteen minutes a day can lead to a real increase in quality of life.

Spread the love. Food, water, air … what else do human beings need? Love! And the data on this is strong: Love makes people live longer. Love was not part of my training curriculum, and for some of us, thinking about it at work pushes our boundaries, but I believe if something can add years to our patients' lives, it should be part of our practice. We can be professional, efficient, and still bring a little love to the bedside …and to our nursing and physician colleagues. Do so with tone of voice, body language, and a little touch. Do so, and the love will come back to you, and you will live a richer, more connected life.

When things go wrong, ask for peer support. When people are sick, stuff happens. Not only is that true, but people make mistakes—every one of us. We will all have cases go bad; it is inevitable, and it feels awful. I have seen it upend careers. Many of us have the tendency to keep these situations to ourselves, yet there is great data to say that talking to a peer-support colleague can ease this suffering. Over the 10 years I've done peer support, I have seen shame transformed into connection and a stronger institutional culture through peer support.

Research suggests that sharing these types of ideas will make it more likely that we actually do them ourselves, and getting people to talk about these ideas will almost certainly strengthen your workplace culture. So please share this with your leaders and colleagues. I would love to hear your feedback or your own ideas on coping with our challenging work in these crazy times.

With Great Respect,

Leif ■

Editor's Note

Hospitalists' North Star

By Weijen Chang, MD, FAAP, SFHM

As we sail beyond the borders of 2025 and begin our journey into 2026, many of us find ourselves eyeing the seas with uncertainty. Whether it be the confusion among federal healthcare agencies, the financial turmoil of healthcare institutions, or the flux of our careers and personal lives, there exists a fog of uncertainty about what lies ahead.

Uncertainty in medicine is nothing new, and addressing it is a burgeoning field of scholarship and literature.[1] But addressing uncertainty in our healthcare systems and in our own careers is an area less examined. [2] What guidelines do I follow when once-respected "sources of truth" diverge from evidence-based foundations, and are at odds with professional societies or newly formed coalitions?[3] Are U.S. medical institutions able to honor their commitment to patients and communities with difficult financial realities?[4] Will physicians educated or trained overseas find a career in the U.S. to be possible or even desirable?[5]

On a personal level, I've also considered a career change, and I am now transitioning to a new position for reasons both personal and professional. On a recent apartment-hunting trip, I had the pleasure of connecting with the newly-minted SHM Central Florida chapter, thanks to the hospitality of chapter president Eddy Maharam, MD. What struck me about those gathered for the inaugural chapter meeting in Orlando was not just the wide range of experience—from medical students to a recently retired hospitalist—but the ongoing dedication to clinical excellence, patient experience, and community connections.

This dedication wasn't unique to Central Florida. No matter where I went in my unexpectedly wide-ranging travels while interviewing at various institutions, hospitalists and healthcare providers were facing uncertainty and adversity, but what was certain was their dedication to the field and to their patients.

PHOTO CREDIT: DR. WEIJEN CHANG

Connecting with fellow SHM members at a meeting of the newly-minted Central Florida chapter.

And there lies the North Star guiding us through choppy seas—the certainty of purpose. Not certainty about outcomes, policies, or institutional directions, but certainty in our commitment to patients and communities. This is the counterbalance to uncertainty—when we don't know what's coming, we can still know who we serve and why we show up. ■

Dr. Chang is a pediatric and adult hospitalist and the editor of The Hospitalist. He will be starting a new position as chief of pediatric hospital medicine at Nemours Children's Hospital, Florida, in Orlando, Fla., beginning in March 2026.

References

View references online.

In the Literature

Nationwide Children's Hospital

By Matthew G. Lammers, MD, Christian "Tyler" Earl, MD, Meghan Fennell, MD, Kelsey Jackson, MD, Sarah Sprauer, MD, Caitlin Grace, MD, Emily Graham, MD, Lauren McIntosh, MD, Charu Gupta, MD, Margaret Binder, MD, Monica Hoff, MD, Matthew Wysong, DO, Emily Kramer, DO, Karen Allen, MD, Olivia Max, MD, Megan Coe, MD, Ashleigh Slemmer, DO, MBA, Mary Stone, MD, Maria Widmann, MD, Michael Dienstbach, MD, Elena Dingle, MD, PhD, and Schauna Schord, MD

Nationwide Children's Hospital, Columbus, Ohio

IN THIS ISSUE

By Matthew G. Lammers, MD, and Christian "Tyler" Earl, MD

1 Comparing Screening Tools for Predicting Sepsis Among Children

CLINICAL QUESTION: Which screening tool performs best for early prediction of sepsis and septic shock in children per the Phoenix criteria?

BACKGROUND: Early recognition of sepsis remains challenging given heterogeneity in presentation. Existing screening tools have not yet been validated as defined by the recently developed Phoenix sepsis criteria.

STUDY DESIGN: Retrospective cohort study

SETTING: Single-center pediatric emergency department

SYNOPSIS: Among more than 47,000 patients with suspected infection, performance characteristics of qPS4, LqSOFA, and CHOP sepsis screening tools were compared for identifying patients meeting Phoenix criteria for sepsis or septic shock within 24 hours. Overall, qPS4 yielded the highest sensitivity, particularly in older age groups in which sepsis prevalence was higher. Moreover, qPS4 predicted sepsis (with or without shock) soonest with a median, early-warning, lead time of 1.9 hours prior to fulfillment of Phoenix sepsis diagnostic criteria. However, qPS4 had slightly lower specificity, and all three tools demonstrated poor positive predictive value. Screening showed similar patterns in predicting septic shock, but with higher sensitivity and longer early warning lead-time.

BOTTOM LINE: qPS4 demonstrates superiority for predicting Phoenix sepsis and septic shock, although results were suboptimal in younger infants. Low positive predictive value highlights the importance of a "diagnostic pause" in situations of ambiguity and still obliges shrewd clinical judgment.

CITATION: Georgette N, et al. Comparing screening tools for predicting Phoenix criteria sepsis and septic shock among children. *Pediatrics*. 2025;155(5):e2025071155. doi: 10.1542/peds.2025-071155.

Dr. Lammers is a pediatric infectious disease and pediatric hospital medicine fellow at Nationwide Children's Hospital in Columbus, Ohio. Dr. Earl is an internal medicine and pediatric hospitalist at The Ohio State University Wexner Medical Center and Nationwide Children's Hospital and an assistant professor of internal medicine and pediatrics at The Ohio State University College of Medicine, all in Columbus, Ohio

By Meghan Fennell, MD, and Kelsey Jackson, MD

2 Significant Pathology in Young Infants Presenting with Hypothermia: A Multicenter Study

CLINICAL QUESTION: Among infants aged 90 days or younger who present to the emergency department (ED) or hospital with hypothermia, what is the prevalence of significant pathology, and what pathology is seen?

BACKGROUND: Hypothermia is a common reason for presentation in young infants. In contrast to neonatal fever, there is limited guidance on the management and expected outcomes of neonatal hypothermia. To guide evaluation and treatment, further study of the prevalence of significant pathology in hypothermic infants is needed.

STUDY DESIGN: Multicenter, retrospective, cohort study

SETTING: ED or hospital at nine academic children's hospitals across the U.S.

SYNOPSIS: A total of 14,278 charts were reviewed. Ultimately, 998 previously healthy infants aged 90 days or younger who presented with a temperature of 36.0˚C or lower were included.

Infants were grouped into three outcome categories: 1) Serious bacterial infection (SBI) or herpes simplex virus (HSV), 2) "Other significant pathology," defined as a discharge diagnosis that required hospitalization, and 3) no significant pathology. While SBI and HSV were relatively uncommon in hypothermic infants (4%), a wide variety of other significant pathologies (28%) presented with hypothermia. The most common other significant pathologies were respiratory disease (39%) and endocrine, metabolic, and nutritional diseases (28%). Rare pathologies such as botulism and neurological infarction were also described.

Infants who were more than 28 days old at presentation, were ill-appearing, had multiple episodes of hypothermia within 24 hours, or had an abnormal white blood cell count had increased odds of having SBI/HSV or other significant pathology.

Limitations include missing laboratory results

for some infants, possibly introducing bias, and a lack of generalizability to populations other than previously healthy infants presenting to academic children's hospitals.

BOTTOM LINE: In infants aged 90 days or younger presenting with hypothermia of 36.0°C or lower, about one-third had significant pathology. While 4% of the cohort had SBI or HSV, 28% had other pathologies across a variety of organ systems.

CITATION: Wood JK, et al. Significant pathology in young infants presenting with hypothermia: a multicenter study. *Hosp Pediatr*. 2025;15(10):804-813. doi: 10.1542/hpeds.2025-008387.

Dr. Fennell and Dr. Jackson are pediatric hospitalists at Nationwide Children's Hospital and assistant professors of pediatrics at The Ohio State University College of Medicine, both in Columbus, Ohio.

By Sarah Sprauer, MD, and Caitlin Grace, MD

3 Pediatric Nurses Provide Unique Perspectives on PFC Rounds

CLINICAL QUESTION: What are the benefits and barriers to participating in patient-and-family-centered (PFC) rounds from a pediatric nursing perspective?

BACKGROUND: Interprofessional PFC rounding models, such as I-PASS (illness severity, patient summary, action list, situational awareness, and synthesis by the receiver), have been shown to improve team communication and reduce medical errors and adverse events. Nurse involvement is an essential component of PFC I-PASS rounds. However, the benefits, barriers, and facilitators to nursing engagement have been under-studied.

STUDY DESIGN: Qualitative descriptive study

SETTING: Focus groups in 21 U.S., community and tertiary, pediatric, teaching hospitals

SYNOPSIS: This study evaluated the results of four focus groups on the implementation of PFC I-PASS rounds, comprised of 29 bedside nurses from 14 pediatric, tertiary and community, teaching hospitals. Three themes emerged: benefits, barriers, and facilitators. Benefits included improved communication, advocacy for patients or families, efficiency, and identifying nurses as important team members. Barriers included nurses' workload demands, a lack of consistency among medical teams performing PFC I-PASS rounds, uncertainty about whether nurses are part of the medical team, and families' availability during rounds. Finally, facilitators included a clearly defined role for nurses on rounds, strategies to increase nursing presence on rounds, predictable rounding times, attending physicians who modeled an inclusive whole-team environment, and expectations set with families about participation during rounds. Limitations of this study are a lack of description of participant demographics and career experience, and that not all sites in the original PFC I-PASS study are represented. While patients' or families' and physicians' perspectives of PFC I-PASS rounds have been described, this study focuses on perspectives of nurses who have a clearly identified role in PFC I-PASS rounds.

BOTTOM LINE: Nurses report benefits, barriers, and facilitators to the implementation of PFC I-PASS rounds; however, their perspective on the uncertainty of the importance of their role in PFC rounds and how to eliminate barriers should be explored.

CITATION: Baird J, et al. Pediatric nurse perspectives on patient- and family-centered rounds: a qualitative study. *J Hosp Med*. 2025;20(11):1166-1173. doi: 10.1002/jhm.70071.

Dr. Grace is a med-peds hospitalist in the departments of internal medicine and pediatrics at The Ohio State University Wexner Medical Center and Nationwide Children's Hospital and an assistant professor of medicine at The Ohio State University College of Medicine, all in Columbus, Ohio. Dr. Sprauer is a med-peds-trained pediatric hospital medicine fellow at Nationwide Children's Hospital in Columbus, Ohio.

By Emily Graham, MD, Lauren McIntosh, MD

4 BRUE Prediction Rules Outperform the AAP Higher-Risk Criteria in Estimating Risk for Serious Underlying Diagnosis

CLINICAL QUESTION: Do the recently derived clinical prediction rules for brief resolved unexplained events (BRUE) perform better than the American Academy of Pediatrics (AAP) higher-risk criteria in estimating risk for serious underlying diagnosis?

BACKGROUND: Current AAP criteria for higher-risk BRUE have low positive predictive value and over-classify most infants as higher risk. A new prediction tool from a U.S. cohort showed improved discrimination in identifying serious underlying diagnoses and predicting event recurrence. The objective of this study was to externally validate these new BRUE prediction rules and compare their performance with the AAP higher-risk criteria in an independent cohort.

STUDY DESIGN: Retrospective multicenter cohort study

SETTING: 11 Canadian hospitals

SYNOPSIS: The study included 1,042 Canadian infants under 1 year of age who presented with a BRUE between 2017 and 2021 and compared the performance of the BRUE prediction rules against the AAP higher-risk criteria for the identification of a serious underlying diagnosis and event recurrence within 90 days. A serious underlying diagnosis was detected in 7.6% of patients, and event recurrence occurred in 15.6% of patients. The AAP higher-risk criteria demonstrated poor discrimination for serious underlying diagnosis (Area under the curve [AUC], 0.53) and event recurrence (AUC, 0.53). The BRUE prediction rules showed significantly improved discrimination for serious underlying diagnosis (AUC, 0.71 after model revision) and event recurrence (AUC, 0.67). A key limitation of this study is that the discrimination of the BRUE prediction rules, while superior, was still only fair. The BRUE prediction rules represent the best available evidence for risk prediction, however, allowing clinicians to provide individualized risk assessments to inform shared decision making regarding the management strategy. A calculator has been developed on MDCalc to facilitate the use of the new prediction rules.

BOTTOM LINE: The now externally validated BRUE prediction rules provide a superior method for assessing risk of serious underlying diagnoses and event recurrence compared to the AAP higher-risk criteria.

CITATION: Nama N, et al. External validation of brief resolved unexplained events prediction rules for serious underlying diagnosis. *JAMA Pediatr*. 2025;179(2):188-196. doi: 10.1001/jamapediatrics.2024.4399.

Dr. Graham is a med-peds hospitalist in the departments of internal medicine and pediatrics at The Ohio State University Wexner Medical Center and Nationwide Children's Hospital and an assistant professor of medicine at The Ohio State University College of Medicine, all in Columbus, Ohio. Dr. McIntosh is a med-peds hospitalist in the departments of internal medicine and pediatrics at The Ohio State University Wexner Medical Center and Nationwide Children's Hospital and an assistant professor of medicine at The Ohio State University College of Medicine, all in Columbus, Ohio.

SHORT TAKES

New Prediction Rules Help Identify Low-Risk Febrile Infants Aged 61–90 Days

By Elena Dingle, MD, PhD

A Pediatric Emergency Care Applied Research Network study developed two rules to identify low-risk febrile infants aged 61 to 90 days: one using negative urinalysis and temperature at or below 38.9°C (86% sensitivity, 59% specificity), and a second using procalcitonin 0.24 ng/mL or lower, plus absolute neutrophil count 10,710 cells/mm^3 or lower (100% sensitivity, 66% specificity).

CITATION: Aronson PL, et al. Prediction rule to identify febrile infants 61-90 days at low risk for invasive bacterial infections. *Pediatrics*. 2025;156(3):e2025071666. doi: 10.1542/peds.2025-071666.

Characteristics of Children Aged 0 to 23 Months Hospitalized with RSV

A surveillance study of respiratory syncytial virus (RSV) hospitalizations found that children aged 12 to 23 months had higher rates of underlying medical conditions than younger infants, and prolonged intensive-care stays in this group were associated with airway abnormalities, cardiovascular disease, Down syndrome, and feeding tube dependence.

CITATION: Wang D, et al. Characteristics of children aged 0 to 23 months hospitalized with respiratory syncytial virus. *Pediatrics*. 2025;156(2):e2024069719. doi: 10.1542/peds.2024-069719. ■

Dr. Dingle is a pediatric hospitalist in the department of hospital medicine at Nationwide Children's Hospital and an assistant professor of medicine at The Ohio State University College of Medicine, both in Columbus, Ohio.

By Charu Gupta, MD, and Margaret Binder, MD

5 Dexamethasone Non-Inferior to Prednisone or Prednisolone for Treatment of Pediatric Asthma Exacerbations

CLINICAL QUESTION: How does dexamethasone compare to prednisone or prednisolone when used to treat pediatric asthma exacerbations?

BACKGROUND: Historically, the standard of care steroid choice for treating pediatric asthma exacerbations has been prednisone or prednisolone. However, systematic reviews, meta-analyses, and clinical practice have shown that dexamethasone and prednisone or prednisolone have a comparable effect in asthma exacerbation management. This study aimed to serve as an updated and more scientifically rigorous meta-analysis comparing the efficacy of these two types of glucocorticoids in pediatric asthma exacerbations.

STUDY DESIGN: Systematic review and meta-analysis

SETTING: A meta-analysis of 16 randomized controlled trials done globally before March 2025

SYNOPSIS: This meta-analysis included 16 studies with a total of 2,917 individuals (1,481 individuals treated with dexamethasone and 1,436 individuals treated with prednisone or prednisolone) that showed no significant difference in risk of hospitalization (relative risk [RR], 0.96; 95% confidence interval [CI], 0.79 to 1.17), intensive care admission (RR, 0.64; 95% CI, 0.08 to 4.88), relapse of symptoms (RR, 0.99; 95% CI, 0.71 to 1.38), hospital readmission (RR, 0.90; 95% CI, 0.34 to 2.35), pediatric respiratory assessment measure scores (RR, -0.24; 95% CI, -0.54 to 0.06), length of hospital stay (RR, -2.96; 95% CI, -6.91 to 1.53), and risk of noncompliance (RR, 0.47; 95% CI, 0.07 to 3.01) when using dexamethasone compared to prednisone or prednisolone in treatment of pediatric asthma exacerbations. Individuals treated with dexamethasone were at a significantly lower risk of vomiting (RR, 0.39; 95% CI, 0.25 to 0.59).

Some studies used in this meta-analysis did not include all the reported outcomes, were at risk for high bias, and were methodologically different. The average age of patients in the studies ranged from 3 to 7.5 years old, so results may not apply to younger patients.

BOTTOM LINE: Dexamethasone is an effective alternative to prednisone or prednisolone for treatment of pediatric asthma exacerbations.

CITATION: Wang H, et al. The efficacy of dexamethasone compared to prednisone/prednisolone for the management of pediatric patients with acute exacerbation of asthma: a systematic review and meta-analysis. *J Asthma*. 2025;62(11):1831-1842. doi: 10.1080/02770903.2025.2526376.

Dr. Gupta is a pediatric hospital medicine fellow at Nationwide Children's Hospital in Columbus, Ohio. Dr. Binder is a pediatric hospitalist in the department of hospital medicine at Nationwide Children's Hospital and an assistant professor of medicine at The Ohio State University College of Medicine, both in Columbus, Ohio.

By Monica Hoff, MD, and Matthew Wysong, DO

6 Pediatric Catatonia's Medical Turn: Increasing Incidence and Intensifying Treatment

CLINICAL QUESTION: Has the incidence, etiology, evaluation, and management of pediatric catatonia changed over time, especially following the COVID-19 pandemic?

BACKGROUND: Pediatric catatonia is a neuropsychiatric syndrome marked by disturbances in movement, speech, affect, volition, and autonomic regulation. First-line treatments include benzodiazepines and electroconvulsive therapy (ECT). Low prevalence and variation in diagnostic criteria contribute to inconsistent recognition, which worsens outcomes. Existing data on pediatric catatonia in hospital settings is limited, particularly regarding trends in incidence, etiology, and treatment practices.

STUDY DESIGN: Retrospective chart review

SETTING: Academic, quaternary care, children's hospital in New England

SYNOPSIS: 52 pediatric patients (under 19 years old) diagnosed with catatonia between 2018 and 2023 were identified across emergency and inpatient units. Catatonia incidence more than doubled in the latter half of the study period. Though most cases (75%) had psychiatric causes, there was a significant rise in cases with medical etiologies, most notably autoimmune encephalitis. Patients with both medical and psychiatric etiologies often had neurodevelopmental disorders. Diagnostic testing was generally consistent (electroencephalogram, brain MRI, Bush-Francis Catatonia Rating Scale), though abnormal electroencephalograms were significantly more common in medical etiologies. Treatment differed by etiology, with similar initial lorazepam doses but higher maximum daily doses in medical cases, especially anti-N-methyl-D-aspartate-receptor encephalitis, which may reflect lower responsiveness to benzodiazepines. Black patients were disproportionately represented in cases without neurodevelopmental disorders, echoing prior findings and raising questions about systemic factors and diagnostic disparities. Limitations include small sample size and institutional factors (e.g., psychosis pathway, neuroimmunology access). Findings support the need for etiology-informed treatment, prospective studies, and clinical guideline development.

BOTTOM LINE: This study reveals a post–COVID-19 surge in pediatric catatonia, especially in medically associated cases requiring higher benzodiazepine doses—emphasizing the need for urgent, etiology-informed clinical guidelines to improve recognition and management of this potentially life-threatening condition.

CITATION: Lichtor SA, et al. Rising incidence of pediatric catatonia and medical etiology: multiyear trends. *Hosp Pediatr*. 2025;15(9):711-720. doi: 10.1542/hpeds.2025-008373.

Dr. Hoff is a pediatric hospitalist in the division of hospital medicine at Nationwide Children's Hospital and an assistant professor of pediatrics at The Ohio State University College of Medicine, both in Columbus, Ohio. Dr. Wysong is a pediatric hospital medicine fellow in the division of hospital medicine at Nationwide Children's Hospital and a clinical instructor of pediatrics at The Ohio State University College of Medicine, both in Columbus, Ohio.

By Emily Kramer, DO, and Karen Allen, MD

7 Nirsevimab Effectively Reduces RSV Infection and Hospitalizations

CLINICAL QUESTION: How effective is nirsevimab at preventing respiratory syncytial virus (RSV) lower respiratory tract disease (LRTD), hospitalizations related to RSV, and any RSV infection?

BACKGROUND: RSV is the most common cause of lower respiratory tract infection in children, with severe infections often requiring hospitalization. Prior studies have shown that nirsevimab, a long-acting monoclonal antibody, prevents hospitalizations related to RSV lower respiratory tract infections. Less is known about the effectiveness of nirsevimab to prevent mild disease or illness altogether.

STUDY DESIGN: Retrospective cohort study

SETTING: Kaiser Permanente Northern California (integrated healthcare delivery system)

SYNOPSIS: This study aimed to compare the risk of RSV LRTD among infants who received nirsevimab versus those who did not, adjusting for sex, race, and/or ethnicity. Of the 31,900 term infants included, almost half (15,647) received nirsevimab. Nirsevimab was 87.2% effective against RSV with LRTD, 98% against hospitalized RSV LRTD, and 71% effective against PCR-confirmed RSV infection. Nirsevimab-immunized infants with RSV LRTD had fewer encounters and lower odds of hospitalization than non-immunized infants.

As this was an observational study, confounders that could increase a child's risk of RSV, such as daycare attendance or having siblings, could not be taken into consideration. Additionally, this study did not include premature infants or those with high-risk conditions, limiting generalizability.

BOTTOM LINE: Nirsevimab is highly effective at preventing both mild and severe RSV-related illness in term infants.

CITATION: Hsiao A, et al. Effectiveness of nirsevimab against RSV and RSV-related events in infants. *Pediatrics*. 2025;156(2):e2024069510. doi: 10.1542/peds.2024-069510.

Drs. Kramer and Allen are hospitalists at Nationwide Children's Hospital and assistant professors of pediatrics at The Ohio State University College of Medicine, both in Columbus, Ohio.

By Olivia Max, MD, and Megan Coe, MD

8 Limited Diagnostic Yield from Specialty Consultation and Testing Following BRUE

CLINICAL QUESTION: Among infants who experience brief resolved unexplained events (BRUE) (irrespective of their American Academy of Pediatrics [AAP] risk stratification), how often do specialty consultations and diagnostic tests identify an underlying cause?

BACKGROUND: While the AAP offers specific recommendations for the subset of BRUE patients who meet lower-risk criteria, there is no guidance for the management of higher-risk patients. In these cases, clinicians must decide whether to conduct testing or involve subspecialists, a choice that may lead to increased hospitalizations or unnecessary testing. Prior, small, cohort studies indicated that almost all higher-risk patients who presented with BRUE underwent evaluation by subspecialists. Despite this common practice, no studies have assessed the impact of these consultations.

STUDY DESIGN: A retrospective cohort study

SETTING: Multisite, across 11 Canadian sites

SYNOPSIS: Investigators reviewed records from 1,042 infants under 1 year old who presented with a BRUE, excluding those with prematurity less than 28 weeks, comorbidities, preceding symptoms, or abnormal findings inconsistent with BRUE. Index visits and encounters within 90 days were examined for diagnostic testing, subspecialty consultations, and confirmed or probable explanatory diagnoses.

Most infants (82%) underwent diagnostic testing, and 42% received subspecialty consulta-

tion. Testing identified an explanatory diagnosis in only 8.4% and a serious diagnosis in 5.4%, while incidental or nonsignificant findings were common (65%). Common tests (complete blood counts, electrolytes, blood gases, ECGs) had low diagnostic accuracy, with several showing false-positive rates over 50% and often prompting further unnecessary testing or consultation. Electroencephalograms had the highest sensitivity among frequently used studies. Consultations identified diagnoses in 27.7% of those evaluated, most often neurology for seizure detection. Results among infants meeting higher-risk criteria were similar to the overall cohort.

Overall, broad diagnostic testing and consultations for BRUE rarely identified clinically meaningful conditions, supporting more selective evaluation strategies.

BOTTOM LINE: In the evaluation of patients presenting with BRUE, routine diagnostic tests and subspecialty consultations provide limited benefit, reinforcing previous recommendations to limit low-yield testing and focus on careful history, examination, and risk stratification while exploring more targeted testing approaches in future research.

CITATION: Nama N, et al. Specialty consultations and diagnostic testing accuracy after brief resolved unexplained events: a multicenter observational study. *Hosp Pediatr*. 2025;15(7):563-572. doi: 10.1542/hpeds.2024-008305.

Dr. Max is a pediatric hospital medicine fellow at Nationwide Children's Hospital in Columbus, Ohio. Dr. Coe is a pediatric hospitalist at Nationwide Children's Hospital in Columbus, Ohio.

By Ashleigh Slemmer, DO, MBA, and Mary Stone, MD

9 Less May Be More: Rethinking Antibiotic Use in Tracheostomized Children

CLINICAL QUESTION: Among hospitalized children with tracheostomies who develop respiratory symptoms (tracheobronchitis and nonspecific respiratory episodes), what is the pattern of antibiotic use, what factors influence treatment decisions, and what are the associated outcomes?

BACKGROUND: Children with tracheostomies are frequently admitted for respiratory symptoms, yet differentiating viral from bacterial illness and distinguishing true infection from colonization remains challenging. Despite the absence of a consensus definition for what constitutes a likely bacterial infection in this population with high rates of airway colonization, antibiotics are often started empirically, and few studies have systematically evaluated antibiotic use and outcomes in this group.

STUDY DESIGN: Retrospective cohort study

SETTING: Single tertiary children's hospital in Spain (from 2010 to 2021)

SYNOPSIS: In this small study of 83 children with tracheostomies, with 164 symptomatic episodes, the authors found that those diagnosed with tracheobronchitis (as defined by the authors' proposed definition) received antibiotics about 75% of the time, compared to 29% to 40% for those with nonspecific respiratory episodes. Children with pneumonia were excluded. Two children died during their illness episode; both received antibiotics. Children with fever were significantly more likely to receive antibiotics compared to those without. 25% of those with tracheobronchitis and more than 60% of those with nonspecific respiratory episodes improved without antibiotics. Among children who received antibiotics that were resistant to the organism eventually isolated, over 50% (10 out of 18) improved without a change to a susceptible antibiotic. Given the small size and retrospective nature of this study, as well as the inclusion of multiple episodes in the same patient, more studies are needed to support development of guidelines for the management of respiratory infections in this population, with particular attention to when antibiotics are necessary to treat true bacterial infection.

BOTTOM LINE: Children with tracheostomies are frequently treated with antibiotics for respiratory infections despite high rates of bacterial colonization and lack of clear mechanisms to identify those with true bacterial infection; further prospective research is needed to correctly categorize and treat these patients.

CITATION: García-Boyano M, et al. Antibiotic choice and outcomes for respiratory infections in children with tracheostomies. *Hosp Pediatr*. 2025;15(1):17-27. doi: 10.1542/hpeds.2024-007973.

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By Maria Widmann, MD, and Michael Dienstbach, MD

10 A Quality Improvement Initiative Significantly Improves Critical-Care Billing on a Pediatric Hospital Medicine Service

CLINICAL QUESTION: How can pediatric hospitalists improve critical-care billing and documentation for hospitalized pediatric patients?

BACKGROUND: Appropriate billing significantly impacts hospital reimbursement and can influence resources, staffing, and quality of care. Several studies have previously shown the importance of optimizing critical-care billing in adult patients and in emergency medicine settings, but to date, no studies have demonstrated how to implement and improve critical-care billing for hospitalized pediatric patients.

STUDY DESIGN: Quality improvement initiative

SETTING: A single tertiary care children's hospital

SYNOPSIS: A quality improvement initiative was implemented to improve critical-care billing for hospitalized pediatric patients. Eligible patients were on at least 5L high flow nasal cannula or continuous albuterol. Interventions included education sessions for physicians, adding critical-care billing to the electronic health record (EHR) "Charge Capture Quick List," EHR templates to assist in critical-care documentation, EHR secure messaging reminders, emails to specific physicians identifying missed critical-care billing opportunities, and visual reminder cards in physician workspaces. Over six months, the mean percentage of critical-care codes billed in eligible patients increased from 21% to 74%, and the mean percentage of charts containing documentation to support critical-care billing increased from 31% to 70%. Over a period of 12 months, critical-care billing in eligible patients led to a three-fold increase in relative value units and a four-fold increase in estimated total reimbursement compared with standard billing practices. This quality improvement initiative was conducted at a single, academic, children's hospital with robust implementation support, which many institutions may not have, which may limit its generalizability.

BOTTOM LINE: Implementation of a quality improvement initiative to improve critical-care billing in hospitalized pediatric patients significantly improves critical-care billing, documentation, relative value units, and reimbursement.

CITATION: Ramazani SN, et al. Implementing critical care billing on a pediatric hospital medicine service. *Hosp Pediatr*. 2025;15(6):449-456. doi: 10.1542/hpeds.2024-008183.

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SHORT TAKES

IVIG Alone is Non-Inferior for Coronary Artery Lesions in KD

By Schauna Schord, MD

A non-inferiority study of 143 patients with Kawasaki Disease demonstrated that the addition of high dose aspirin to intravenous immunoglobulin (IVIG) did not meaningfully reduce the occurrence of coronary artery lesions.

CITATION: Kuo H, et al. Intravenous immunoglobulin alone for coronary artery lesion treatment of Kawasaki Disease: a randomized clinical trial. *JAMA Netw Open*. 2025;8(4):e253063. doi:10.1001/jamanetworkopen.2025.3063

Ultrasound Guidance Increases First-Attempt Success in PIVs

Ultrasound-guided peripheral intravenous catheter placement increased first-attempt success rate compared to standard insertion in a randomized controlled trial of 164 pediatric patients.

CITATION: Kleidon TM, et al. First-attempt success in ultrasound-guided vs standard peripheral intravenous catheter insertion: the EPIC superiority randomized clinical trial. *JAMA Pediatr*. 2025;179(3):255–263. doi:10.1001/jamapediatrics.2024.5581. ■

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Being a Hospitalist in Your 60s and 70s

Navigating a dynamic field as it matures

By Arunab Mehta, MD, Med, FHM

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Dr. Mehta

Dr. Mehta is a hospitalist, medical director, and assistant professor of medicine at the University of Cincinnati Medical Center in Cincinnati, Ohio, and associate editor of The Hospitalist.

Hospital medicine is still a relatively young field. Coined as a formal term in 1998, it has since become a cornerstone of inpatient care in the U.S. The 2010s marked a significant turning point, as a large portion of internal medicine graduates gravitated toward this dynamic and evolving specialty. The appeal was clear—hospitalists can work shifts, focus on acute care, and engage in hands-on, high-intensity patient management. It is a field that offers a fast-paced environment, but is this sustainable over the long run, particularly as those early pioneers of hospital medicine begin to reach their 60s and 70s?

For many hospitalists, this question has grown increasingly relevant. Hospitalists typically manage up to 25 patients per day, work 12-hour shifts, and cover a significant number of weekends and nights. The intensity of this schedule—rotating between days, nights, and weekends— has long been a selling point for early-career hospitalists. However, as hospitalists age, the physical and emotional demands of this rigorous schedule can become more challenging. For those now entering the later stages of their careers, it is important to consider whether the practice of hospital medicine can and should evolve to accommodate hospitalists at every stage of life.

The Challenge of Maintaining the Status Quo

Senior hospitalists today face a unique set of challenges. Unlike many other fields of medicine, where physicians gradually taper off demanding duties such as night shifts, hospital medicine requires sustained physical and cognitive stamina to manage the acute needs of patients. Many hospitalists in their 50s, 60s, and beyond have found it increasingly difficult to work overnight, stating that it takes longer to recover from night shifts and that the physical toll becomes harder to ignore. Even so, many institutions continue to rely on a one-size-fits-all approach to hospitalist scheduling, with little flexibility offered to accommodate aging physicians.

The field needs to ask an important question: Can hospital medicine adapt to better support senior hospitalists? Is there a path forward where hospitalists in their later careers can continue to contribute without being subjected to the same demands as their younger colleagues? These questions are not just about personal preference—they are about sustainability and the overall retention of senior talent in the workforce.

Finding Flexibility in Scheduling

One potential solution is to modify shift structures to better support hospitalists as they age. For example, rather than requiring all hospitalists to maintain 12-hour shifts, senior physicians could be offered the opportunity to work 8-hour shifts or to reduce the number of patients they see per day. While this might result in lower remuneration, many senior hospitalists would gladly accept this trade-off if it meant they could continue practicing medicine in a way that fits their evolving lifestyle. In fact, this flexibility could enhance their performance, allowing them to focus on quality patient care and efficient documentation without being weighed down by physical exhaustion.

Another approach could involve reducing or eliminating night shifts for hospitalists who have been in the field for a longer period. Many senior physicians express a desire to reduce their involvement in night work, as they find it harder to recover from these shifts. Transitioning to daytime-only work would enable these hospitalists to remain in the field and continue to contribute their skills and experience while avoiding the more taxing aspects of the job.

The Value of Senior Hospitalists

It is crucial to recognize the immense value that senior hospitalists bring to the table. The idea that hospitalists lose value as they age is a misconception. On the contrary, hospitalists with decades of experience often have superior skills in communication, documentation, and interdisciplinary collaboration. They excel at navigating hospital systems, coordinating care with various teams, and avoiding unnecessary errors in the complex landscape of inpatient care. Their understanding of hospital dynamics, patient management, and system-based practice is invaluable.

These hospitalists have mastered the intricacies of coding and billing, enabling their departments to maximize reimbursement while ensuring accurate patient records. Their ability to foster strong relationships with patients, nurses, and fellow physicians is unmatched. They are often the calm, steady presence in crises, helping to guide younger colleagues through the storm.

This experience and knowledge shouldn't be discarded simply because the current model of hospitalist practice is inflexible. Rather than pushing senior hospitalists out of the field, we should seek ways to harness their strengths while making the work more adaptable for them. This might involve more administrative roles, mentorship of junior hospitalists, or even involvement in quality improvement projects and strategic planning, areas where their insights could lead to meaningful changes.

Making Hospital Medicine Sustainable for All Ages

It is essential that we do not lose sight of the long-term sustainability of the hospitalist workforce. Currently, many hospitalists view transitioning into a new field as the only option once they reach a certain age. The demands of the job simply don't seem compatible with their long-term career goals. However, by reevaluating how we structure hospitalist practice, we can create a system that allows hospitalists to thrive in their 60s and beyond.

This includes being proactive in creating flexible scheduling models, offering tailored patient loads, and giving senior hospitalists a chance to continue practicing in ways that suit their needs and skills. Most importantly, we need to build a culture that values the contributions of hospitalists at every stage of their careers, ensuring that their expertise and wisdom are passed down to the next generation.

Looking Ahead

The evolution of hospital medicine is far from complete. As a relatively young specialty, we can shape it into a field that supports physicians throughout their entire career, from their first day on the job to their last. As senior hospitalists continue to demonstrate their value, we must advocate for flexible practice models that allow them to continue contributing their expertise in ways that are sustainable and fulfilling.

By creating a system that recognizes the unique challenges and strengths of hospitalists as they age, we can ensure that the field remains vibrant, inclusive, and supportive for generations to come. Hospitalists of all ages should have a place in the future of hospital medicine—one that adapts to their needs and allows them to thrive at every stage of their careers. ■

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ED Boarding Practices: The Good, the Bad, and the Bright Spots

Hospitalists discuss challenges and solutions to ED overcrowding

By Karen Appold

Boarding patients in the emergency department (ED) has become commonplace at many hospitals, which can cause bottlenecks and negatively affect patients. Fortunately, hospitalists have found some ways to successfully manage these patients' continuity of care, and they've implemented strategies to reduce overcrowding.

Many factors contribute to ED overcrowding. Since the onset of the COVID-19 pandemic, the University of New Mexico Hospital, an academic hospital with 535 beds in Albuquerque, N.M., has had to board admitted patients in the ED. "This would have been unthinkable before the pandemic," said Alex Rankin, MD, MBA, associate chief medical officer in the department of family medicine, who noted that some patients remain there for days.

Dr. Rankin

Dr. Rankin attributes the ongoing surge to the state of New Mexico not having enough inpatient beds for its population, and the hospital being the state's only acute Level I trauma and referral center.

According to Christopher Migliore, MD, MS, FACP, FHM, an assistant professor of medicine at Columbia University College of Physicians and Surgeons, and director of general medicine consult and perioperative services and a medicine attending at Columbia University Medical Center, both in New York, a shift has occurred from episodic boarding crises to sustained high boarding levels. "In the past, boarding was tied to flu surges or isolated staffing shortages; now it reflects a chronic strain in discharge throughput, intensive care unit capacity, and post-acute bed availability," he said.

Dr. Migliore

When his hospital, an urban, academic, medical center and tertiary-care facility with 1,500 inpatient beds, has spikes in ED boarding, a lack of access is a contributing factor, said Will Cushing, MHA, MMSc, PA-C, SFHM, executive director of Yale New Haven Hospital's hospitalist service, and an assistant clinical professor at Yale University School of Medicine, both in New Haven, Conn.

Dr. Cushing

"Patients with conditions that could have been treated by a primary care physician or specialist, who didn't seek care early on now need treatment in the emergency department because their conditions worsened," he said.

According to Venu Gopal Kankani, MD, FACP, FHM, internal medicine hospitalist, attending physician, and medical officer of the day at Geisinger Community Medical Center (GCMC), a community medical center with 297 beds, and assistant professor of medicine at Geisinger Commonwealth School of Medicine, both in Scranton, Pa., ED volumes have increased in recent years due to reduced inpatient bed capacity at neighboring hospitals, delays in post-acute care placement (often driven by insurance limitations or social barriers), and lack of available skilled-nursing-facility and rehabilitation beds.

Dr. Kankani

Post-holiday surges are a recurring challenge, often driven by medication non-compliance, dietary indiscretion, or missed dialysis sessions, Dr. Kankani said. Additionally, a growing number of ED boarders have complex social needs, behavioral health conditions, and substance use disorders, or are elderly individuals requiring placement in long-term care facilities. These trends have become more pronounced in the post-pandemic era.

Staffing shortages also significantly contribute to ED boarding. Deficits extend beyond nursing and include environmental services, patient transport, and ancillary departments, all of which play critical roles in maintaining throughput. Late or delayed discharges—due to pending consults, incomplete test results, or discharge orders written late—reduce early bed availability and slow overall patient flow. Administrative policies governing prior authorizations, insurance approvals, or post-acute placement can also delay discharge.

Impact on Workflow

ED boarding results in bottlenecks, which create additional complexity for consults and transfers because delays in movement from the ED reverberate throughout a hospital's capacity, Dr. Migliore said.

As a result, hospitalists must see patients in the ED in non-ideal conditions—limited space, less continuity with the primary team, and logistical barriers for interdisciplinary rounds. Each of these, if not handled carefully, can increase length of stay.

Hospitalists need to straddle the fence and manage competing priorities on medicine floors as well as in the ED, Mr. Cushing said. The emergency department does the same thing by trying to manage some boarding patients while also handling incoming volume. "It's a difficult balance to strike because we don't stop the influx of patients, unlike some hospitals," he said.

Morning rounds often begin in the emergency department at GCMC. Here, hospitalists track newly admitted patients who remain boarded while awaiting inpatient bed placement. "This

fragmentation disrupts the natural flow of multidisciplinary rounds and delays the timely initiation of care plans," Dr. Kankani said.

Prolonged boarding creates a cascading effect throughout the department: stretchers remain occupied, which reduces capacity for incoming patients; triage-to-provider times increase; and delays occur in initiating care for acutely ill patients.

Effects on Patients

ED boarding negatively impacts patients' care and safety, as well as hospital reimbursement and operational efficiency, while increasing health care costs, said Goutham Talari, MD, FACP, SFHM, a hospitalist in the department of internal medicine at AdventHealth, a community hospital in DeLand, Fla., and assistant professor at Florida State University College of Medicine in Daytona Beach, Fla. Research shows that patients with higher acuity illnesses and prolonged ED boarding are vulnerable to medical errors.[1-4] These patients often experience worse outcomes, and hospitals may see lower performance metrics primarily due to delays in care, prolonged length of stay, and increased patient discomfort.[2,4-7]


Dr. Talari

For example, limited access to private bathrooms, delayed meals, anxiety, disrupted sleep, and restricted family visits can all impact the patient experience. The most frequent question from ED boarders, "When will I get a room?" reflects their anticipation and hope for comfort, rest, and continuity of care.

Boarding also delays the initiation of essential inpatient protocols, such as early mobilization, delirium prevention strategies, and chronic disease optimization, Dr. Kankani added. These missed opportunities can affect recovery trajectories and extend hospital stays.

"It's disheartening to witness patients waiting for prolonged periods in the emergency department, knowing that their outcomes and comfort could improve more rapidly with a timely transfer to an inpatient setting supported by the full multidisciplinary team," Dr. Kankani said.

Vulnerable Patient Populations

Some patient populations are more affected by boarding delays in the ED. Geriatric patients are at increased risk for delirium, functional decline, falls, and pressure injuries, Dr. Kankani said.

Behavioral health and psychiatric patients frequently experience the longest boarding times—sometimes days or weeks—due to limited inpatient psychiatric beds. Risk of self-harm, agitation, or behavioral escalation increases when they're boarded in non-psychiatric ED spaces.

Patients requiring intensive-care-unit-level care or specialized units (e.g., step-down, cardiac, or isolation beds) are often the most delayed in placement, Dr. Kankani continued. Boarding in the ED without advanced monitoring or respiratory support increases morbidity and mortality risk.

Patients with chronic conditions and multiple comorbidities require multidisciplinary inpatient management. Delays in treatment can lead to clinical deterioration and extended hospitalization.

Homeless, uninsured, or underinsured patients often face longer discharge or transfer delays due to placement challenges, Dr. Kankani said.

In general, patients who don't have anyone to advocate for them at the bedside are more likely to have longer lengths of stay because they may not be aggressively managed during their ED stay, Mr. Cushing said. These may include patients with cognitive decline or language barriers and elderly patients.

Managing Continuity of Care

To ensure continuity of care and reduce variability, a best practice is to have a single clinician from a hospital medicine group designated to oversee boarded patients, said Kevin M. Donohue, DO, FACP, FHM, a practicing hospitalist based in Lexington, Ky., and regional medical director for Team Health, which supports both emergency department and hospital medicine programs. "This approach promotes communication between nursing staff and clinicians, streamlines decision making, and reduces the chaos that can accompany undifferentiated or critically ill patients arriving from outside facilities," he said.


Dr. Donohue

Dr. Donohue also recommended floating inpatient nurses to the emergency department to care specifically for boarded patients. These nurses are familiar with inpatient workflows and hospitalist-driven management, which differs significantly from the emergency medicine model.

A hospital medicine team should prioritize medication reconciliation, timely communication with subspecialists, and prompt evaluation of patients upon arrival to ensure continuity of care from the beginning of their hospitalization, Dr. Donohue said.

For hospitalists at GCMC, the work of caring for ED-boarded patients begins long before those patients ever reach an inpatient bed. "We often start by reviewing charts, placing orders, and initiating treatment plans directly from the emergency department, ensuring that essential therapies aren't delayed simply because a room isn't available," Dr. Kankani said.

Collaboration with case management and social work begins early, so discharge planning can start even before transfer to a floor occurs. "This early coordination not only prevents bottlenecks, but also helps to keep hospital flow moving," Dr. Kankani said.

As the medical officer of the day, Dr. Kankani works closely with nursing supervisors and the bed-management team to identify prolonged boarders and prioritize their transfers.

University of New Mexico Hospital's hospitalists admit patients onto their teams when they're in the emergency department and they remain on that team when they're moved to a room, which preserves continuity. For teams with learners, such as students and residents, this continuity allows them to care for the same patient from admission to discharge, Dr. Rankin said.

Coordination in Real Time

Modern technologies allow hospitalists to communicate and track patients' care in real time, which also contributes to continuity of care.

In 2025, Yale New Haven Hospital went live with a mobile application within Epic called Secure Chat. HIPAA compliant, it's a reliable directory of each patient and their care team members and allows them to send one-on-one or group messages. Physicians and advanced practice providers use Epic's Haiku app on their work smartphones, which allows them to access and manage patient information in the electronic health record securely.

Nurses use Epic's Rover app to perform tasks, such as medication administration, specimen collection, and charting, on a mobile device. They can scan patient and medication barcodes for positive identification. "Being on one platform has made a big difference in the ease of communication and transparency of each patient's care team members in a timely manner," Mr. Cushing said.

According to Dr. Kankani, secure messaging systems, such as TigerConnect, help to keep everyone aligned in real time, ensuring that no patient is ever "out of sight, out of mind," even when they're waiting in the emergency department.

Working as a Team

Hospitalists naturally play a central role in throughput and capacity planning, as they sit at the intersection of patient admission, inpatient management, and discharge processes, Dr. Donohue said.

Prioritizing early discharges helps decompress the emergency department and reduces boarding during high-volume times, Dr. Donohue said. His institution's hospital medicine program aims for 50% of discharges to be entered by 11 a.m., a metric that it continually meets.

By collaborating with ED physicians, consultants, nursing, case management, and ancillary teams, hospitalists help design strategies to optimize admissions, streamline discharges, and reduce lengths of stay while maintaining high-quality care, patient outcomes, and patient experience, Dr. Talari said. Their leadership fosters proactive problem-solving, improved communication across departments, and a culture of continuous improvement.

It's essential for hospitalists to be actively involved in hospital committees and leadership roles, as their positions at the center of patient flow, combined with their broad clinical perspective and frontline experience, make them invaluable contributors to organizational success.

Strategies to Reduce ED Boarding

GCMC has found a variety of ways to decrease ED boarding. For example, information from interdisciplinary rounds and updates from attending physicians on current and anticipated discharges in the electronic bed management system help to identify potential patient flow bottlenecks proactively.

Daily 2 p.m. follow-up rounds involving the attending physician, nurse leader, and care-management team focus on reviewing patient status, plan of care, and anticipated discharge. Identifying early discharges for the next day allows coordination of transport and family communication ahead of time, streamlining the discharge process and reducing avoidable delays, Dr. Kankani said.

During high census, every effort is made to minimize the number of blocked semi-private beds by assigning compatible patients as roommates, Dr. Kankani said. Isolation precautions, related to gastrointestinal or respiratory illnesses, are reviewed and discontinued when clinically appropriate to optimize bed use.

A pharmacy program called Med2Beds ensures that patients who are discharged from the emergency department or inpatient beds get all newly prescribed medications delivered to their bedside to ensure safe and timely discharges.

Virtual discharge nurses guide patients and families through the entire discharge process, supporting and offloading inpatient nursing staff, Dr. Kankani continued. This approach expedites discharges, enhances patient safety, and facilitates timely bed availability for incoming admissions.

Patients being discharged home are encouraged to be moved to the discharge lounge when appropriate, which is staffed with nurses when they're awaiting rides. This initiative facilitates earlier bed turnover and increases inpatient bed availability.

The University of New Mexico Hospital addresses ED overcrowding by providing extra resources when needed. For example, it opens floor unit hall beds to help decompress the emergency department.

Ideas for Improvements

Yale New Haven Hospital's administration, hospitalist team, and ED staff are actively working to get incremental full-time equivalents or staffing to develop an ED boarding team in an effort to improve patients' care and experience. This medicine unit would live within the emergency department's footprint.

Dr. Talari recommends strategic, system-level changes that would enhance flexibility, capacity, and coordination hospital-wide. For example, creating observation units for short-term stays or for patients under observation could significantly reduce ED congestion. These units would provide a safe and efficient setting for patients who require brief monitoring or diagnostic clarification, freeing ED beds for acute cases.

Prioritizing consultations, radiology, and other ancillary services for potential discharge patients, particularly those boarding in the emergency department or under observation, would significantly improve care transitions and enhance overall patient flow.

Providing ongoing opportunities for nurses to gain experience in multiple hospital areas, such as the emergency department, medical floors, and progressive care (stepdown) units, could help to build a versatile workforce. This cross-training would allow staff to be deployed efficiently during periods of high demand, promoting teamwork and ensuring consistent care standards.

Designing modified units that can flex between regular medical beds, telemetry beds, and progressive care (stepdown) beds would provide adaptability during surges, Dr. Talari said. This model would enable hospitals to respond dynamically to changes in census and patient acuity, ensuring that resources are used efficiently.

Dr. Talari also recommends developing different rounding models that prioritize or start rounds on ED boarding patients. This would facilitate early downgrading of ED boarders, enabling them to be transferred to bed-available units. This would also expedite early discharges, allowing those beds to be allotted to patients waiting in the emergency department.

Turning Challenges into Opportunities

Another drawback of ED boarding is that it contributes to hospitalists' burnout by eroding efficiency and forcing them to work in less controlled environments. "What sustains me is the ability to improve systems, mentor trainees navigating these challenges, and see the direct impact of smoother throughput on patient care," Dr. Migliore said.

Dr. Kankani is motivated by his colleagues' unwavering commitment to patient care. "Witnessing nurses, physicians, case managers, and ancillary staff come together under pressure—often with limited resources—reinforces the shared purpose that drives our work beyond logistical hurdles," he said. "The gratitude expressed by patients and families, even in less-than-ideal circumstances, is a powerful reminder of why our work matters."

Ultimately, hospitalists stand at the forefront of transforming the challenges of ED boarding into opportunities for growth, innovation, and excellence, Dr. Talari concluded. Their leadership, adaptability, and unwavering dedication to patient-centered care drives meaningful change across the hospital system.

"Hospitalists embody the best of modern medicine, turning every challenge into an opportunity for progress and leading the way toward a safer, more efficient, and more compassionate health care system," Dr. Talari said. ■

Karen Appold is an award-winning journalist based in Lehigh Valley, Pa.

References

1. Kolikof J, et al. Emergency department boarding, crowding, and error. *J Am Coll Emerg Physicians Open*. 2025;6(4):100169. doi: 10.1016/j.acepjo.2025.100169.
2. Agency for Healthcare Research and Quality. AHRQ summit to address emergency department boarding. AHRQ website. https://www.ahrq.gov/sites/default/files/wysiwyg/topics/ed-boarding-summit-report.pdf. Published March 2025. Accessed December 7, 2025.
3. Blank JA, et al. Characteristics, clinical care, and outcomes of sepsis among patients boarding in the emergency department. *J Hosp Med*. 2025;20(4):368-373. doi: 10.1002/jhm.13536.
4. Joseph JW, et al. Boarding in the emergency department: specific harms to older adults and strategies for risk mitigation. *Emerg Med Clin North Am*. 2025;43(2):345-359. doi: 10.1016/j.emc.2024.08.013.
5. Nyce A, et al. Association of emergency department waiting times with patient experience in admitted and discharged patients. *J Patient Exp*. 2021;8:23743735211011404. doi: 10.1177/23743735211011404.
6. Iozzo P, et al. The experience of frail older patients in the boarding area in the emergency department: a qualitative systematic review. *J Clin Med*. 2025;14(10):3556. doi: 10.3390/jcm14103556.
7. Laam LA, et al. Quantifying the impact of patient boarding on emergency department length of stay: All admitted patients are negatively affected by boarding. *J Am Coll Emerg Physicians Open*. 2021;2(2):e12401. doi: 10.1002/emp2.12401.

Career

Launching Your Academic Hospitalist Career

Reflections from the Academic Hospitalist Academy

By Naveed Choudry, MD, FACP

In September 2025, I attended the Academic Hospitalist Academy: Launching Your Career, a four-day program designed for hospitalists who are interested in building or expanding their role in academic medicine. I had first heard about the program from my program director, an alumnus of the Academy, who recommended it as a valuable step for early-career academic hospitalists. The experience was one of the most fulfilling and practical learning experiences I have had in recent years, and I feel it would be a great course for others early in their academic journey.

The program, developed by SHM and the Society of General Internal Medicine, brought together early-career hospitalists from around the country who share a passion for teaching, mentorship, and professional growth. The goal was not to teach clinical medicine, but rather to equip and reinforce essential skills to be a more effective teacher and contributor to academics. The sessions focused on real-world topics that matter to all of us who balance patient care with education.

There were several sessions each day, and topics included tips on how to teach effectively on busy inpatient services, giving feedback that resonates, making bedside rounds more engaging for learners, understanding the basics of funding and business drivers of academic medical centers, and learning the basics of quality improvement and patient safety. There was also a strong emphasis on developing scholarship from our day-to-day work and understanding the process of academic promotions.

Participants included hospitalists from a wide range of institutions, large academic medical centers, community hospitals, and hybrid systems, all seeking to become more effective educators and mentors while balancing busy clinical roles. The faculty were experienced academic hospitalists who not only shared strategies and guidance, but also discussed frankly the challenges they faced on their own journeys. The result was a program that felt both practical and deeply personal, and the atmosphere throughout the week was collegial and laid back.

Dr. Choudry

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SHM/AHA

The September 2025 Academic Hospitalist Academy: Launching Your Career

Lessons for Daily Teaching

The Academy emphasized teaching skills that could be applied to our learners immediately, and the faculty modeled ways to make teaching on rounds efficient and engaging, even during busy days. There were also breakout sessions where participants practiced giving six-minute lectures and received feedback from faculty and fellow participants.

Sessions also covered how to deliver effective feedback, including how to frame constructive comments in ways that learners could act upon. Attendees practiced techniques through role play and shared examples from their own experiences. The environment was supportive and collaborative, which allowed participants to exchange honest reflections on what has worked for them and what hasn't.

Turning Clinical Work into Scholarship

One of the Academy's central themes was that scholarship can emerge from the work we already do every day. Sessions focused on how to identify scholarly opportunities in quality-improvement projects, clinical innovations, and educational initiatives.

The faculty walked through the steps of developing an idea into a publication and selecting appropriate journals. They discussed the peer-review process and common pitfalls for early authors. The tone was realistic but encouraging, and scholarship was presented as achievable for anyone committed to sharing their work. The faculty also offered to remain in communication with participants to assist with or collaborate on scholarly work.

Understanding Promotion and Academic Growth

For many participants, the topic of academic promotion was one of the most difficult to navigate. At the Academy, the faculty reviewed common academic promotion pathways and strategies for how to approach promotion committees. They emphasized how teaching, mentorship, and service could all contribute meaningfully to academic advancement when properly documented.

Discussions covered how to align one's personal goals with institutional expectations and how to communicate the value of our work to department leaders. The sessions also explored the importance of mentorship in navigating career advancement and maintaining professional satisfaction.

Mentorship and Professional Identity

Mentorship emerged as a recurring theme throughout the week. Faculty and participants discussed both sides of the relationship, how to find good mentors, and how to become one. The Academy also prompted reflection on professional identity and purpose. Through small-group discussions, we shared our personal reasons for pursuing academic work, whether it was a love of teaching, an interest in education research, or a desire to influence institutional culture. There were excellent sessions covering leadership practices, identifying and dealing with imposter syndrome in our learners and ourselves, and finding joy in our practice.

Leadership, Advocacy, and the Business of Hospital Medicine

In addition to teaching and scholarship, the Academy addressed the operational realities of hospital medicine. The faculty explained the economics of hospital medicine, the role of hospitalists in advancing institutional goals, and strategies for aligning academic and administrative priorities. This focus on the "business side" of academic hospital medicine added an important layer of realism to the program and underscored that academic success requires not only passion, but also self-advocacy and planning.

A Culture of Connection

What I appreciated most was how approachable the faculty were and the collaborative environment it created amongst the participants. Faculty spoke openly about their own paths and made an effort to learn our names and get to know our stories. The small group sessions allowed participants to have honest conversations about the struggles we face in our individual practices and to share ideas for addressing them as we return to our respective organizations. I met hospitalists from around the country who were at similar stages in their careers, and being able to share our struggles and goals helped us create strong connections in a short amount of time.

Bringing It Home

After returning to my home institution, I felt the Academy gave me practical tools I could immediately apply to teaching residents and students, as well as a long-term framework for academic growth. I left with a clearer vision of what kind of educator and mentor I want to become, and how to get there. If you're wondering whether it would be worth your time or investment, I can honestly say this conference was one of the best I have ever attended.

For hospitalists nationwide who enjoy teaching or want to explore the academic side of hospital medicine, I would strongly encourage looking into this program. It is a wonderful opportunity to connect with like-minded colleagues, learn from national leaders, and walk away with a plan to build the career you want.

I am deeply grateful to my program director, Dr. Amanda Magee, an alumna of the Academy, for recommending the program and for her ongoing guidance and support. I would like to extend my sincere thanks to the faculty of the Academic Hospitalist Academy: Launching Your Career for their time, guidance, and generosity in sharing their experience. Special thanks to Drs. Neera Ahuja, Keri Holmes-Maybank, Christopher Bruti, Andrew Dunn, Christopher Jackson, Alyssa Stephany, and Brian Kwan for their outstanding teaching and mentorship throughout the week. ■

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Essential, Yet Unsettled: H-1B Hospitalists

Visa issues affect physicians, patients, and health systems

By Thomas R. Collins

Maheswara Reddy Koppula, MD, who was born in India and now works as a physician in the U.S., had fulfilled the requirements of his J-1 visa, which required him to work in a medically underserved area of the U.S. After holding positions in Tennessee, Ohio, and New York, Dr. Koppula, one of the thousands of foreign-born and foreign-trained hospitalists helping to ease a shortfall of physicians in the U.S., now held an H-1B visa and wanted to find a job in which he could have a teaching role.

"I just wanted to contribute to future physicians," Dr. Koppula said. He got his wish when he landed a teaching job at Crozer-Chester Medical Center in Upland, Pa., southwest of Philadelphia.

But only about two years later, in May of 2025, the hospital closed, leaving its employees rattled and saddened.

For Dr. Koppula, it was more than a lost job and painful departure from his colleagues. On the H-1B, living in the country legally required him to be working as a physician. Without a job as a doctor, he worried he might have to leave the country.

"It was a very stressful time," he said. "Even a few days out of the status of the H-1, I don't know how it's going to affect my stay in the U.S."

To his relief, his former employer helped him find a position working in post-acute care at a nursing home. He is now working at the Wright Center for Graduate Medical Education, again as a teaching physician. It was as though he had been pulled back to safety from the edge of a cliff.

Dr. Koppula's experience illustrates the profound uncertainty that shadows the lives of tens of thousands of foreign-born physicians who work in the U.S., many as hospitalists. It is a shaky existence that has recently come into the spotlight as the current administration considered imposing a $100,000 fee on H-1B visas, a fee that would be impossible for many would-be physicians to pay.

Even if physicians end up being exempt from this fee, foreign-born doctors already working in the U.S. say their lives would continue in limbo. The reason is, primarily, that the number of green cards per year available to any given country is capped at 7% of total green cards, no matter how big the country or how many people apply. And physicians fall under this cap, which also applies to workers in other professions, such as the tech industry. This results in wait times that can last decades for physicians from countries like India that produce a large number of well-trained physicians. The wait times bring complications and a lack of permanence in the professional and personal lives of the physicians, often with a near-existential degree of worry.

Filling a Crucial Need

It is an unfortunate irony, these physicians and SHM leaders say, that such significant life hurdles should be in place for highly trained doctors without whom, in many parts of the country, the physician shortage would be even more severe than it already is.

According to a letter signed by SHM and all the other major U.S. medical associations, in response to the proposal of the $100,000 fee for physician H-1B visas, the U.S. is projected to have a shortfall of 86,000 physicians by 2036. In 2024, 23% of the licensed physicians in the U.S. were foreign-trained, and, in 2021, about 64% of foreign-trained physicians were practicing in areas that are considered underserved.[1]

Between 2001 and 2024, almost 23,000 physicians on H-1B visas worked in underserved communities. And almost 21 million Americans live in areas where foreign-trained physicians account for half of all physicians.

Estimates of how many U.S. physicians are foreign-trained hover around 25%, with higher estimates for the number working in internal medicine and as hospitalists.[2]

"There is no way under the current structure that we're going to train enough [physicians], so the need is only going to grow," said Josh Boswell, JD, chief legal officer for SHM. "In an ideal world, we could get a special H-1B-like visa that's for physicians that has a pathway to citizenship or green card connected to it."

Jennifer Cowart, MD, a hospitalist and chair of SHM's public policy committee, said the medical field in the U.S. needs to boost medical training efforts of U.S. citizens, while at the same time easing the process for the foreign-born physicians who are so vital.


Dr. Cowart

"Even if we built a new medical school tomorrow,

that newly minted doctor who starts medical school and goes all the way through med school, then residency, and then enters the workforce—we're like seven, eight years down the road before they ever hit the workforce," she said. "We have system-wide shortages now."

Providing Good Care

Data suggest that physicians trained abroad provide care that is similar in quality to those trained in the U.S. A 2017 study in the *British Medical Journal* examined the outcomes of hospitalized patients in the U.S., primarily using Medicare data.[3]

The researchers found that 44.3% of general internists in the U.S. were international medical graduates (IMG), that they were 46.1 years old compared to 47.9 years old for U.S.-trained physicians, and were more likely to work in medium-sized, non-teaching, for-profit hospitals, and at hospitals without intensive care units.

More of the patients treated by IMG physicians were non-white. They had lower median household income, were more likely to have Medicaid coverage, and had more comorbid conditions.

The 30-day mortality rate was 11.0% for patients of internationally trained physicians compared to 11.9% for U.S. graduates. This finding was essentially unchanged after accounting for other physician characteristics and for hospital-specific effects.

The 30-day readmission rate for internationally trained physicians was 16.0%, and 15.4% for U.S.-trained physicians, but when adjusted for hospital effects, these rates no longer differed, suggesting that the difference was driven by the hospital in which the physicians worked, the researchers found.

The data showed that the cost of care was slightly higher for international graduates than U.S. graduates—$1,145 compared to $1,098.

Despite filling a crucial need in the U.S. healthcare system and providing good care, physicians working in the U.S. on an H-1B visa face many obstacles that other physicians do not. They describe complications that pose challenges not only for their own professional and personal lives, but also for the employers who rely on them.

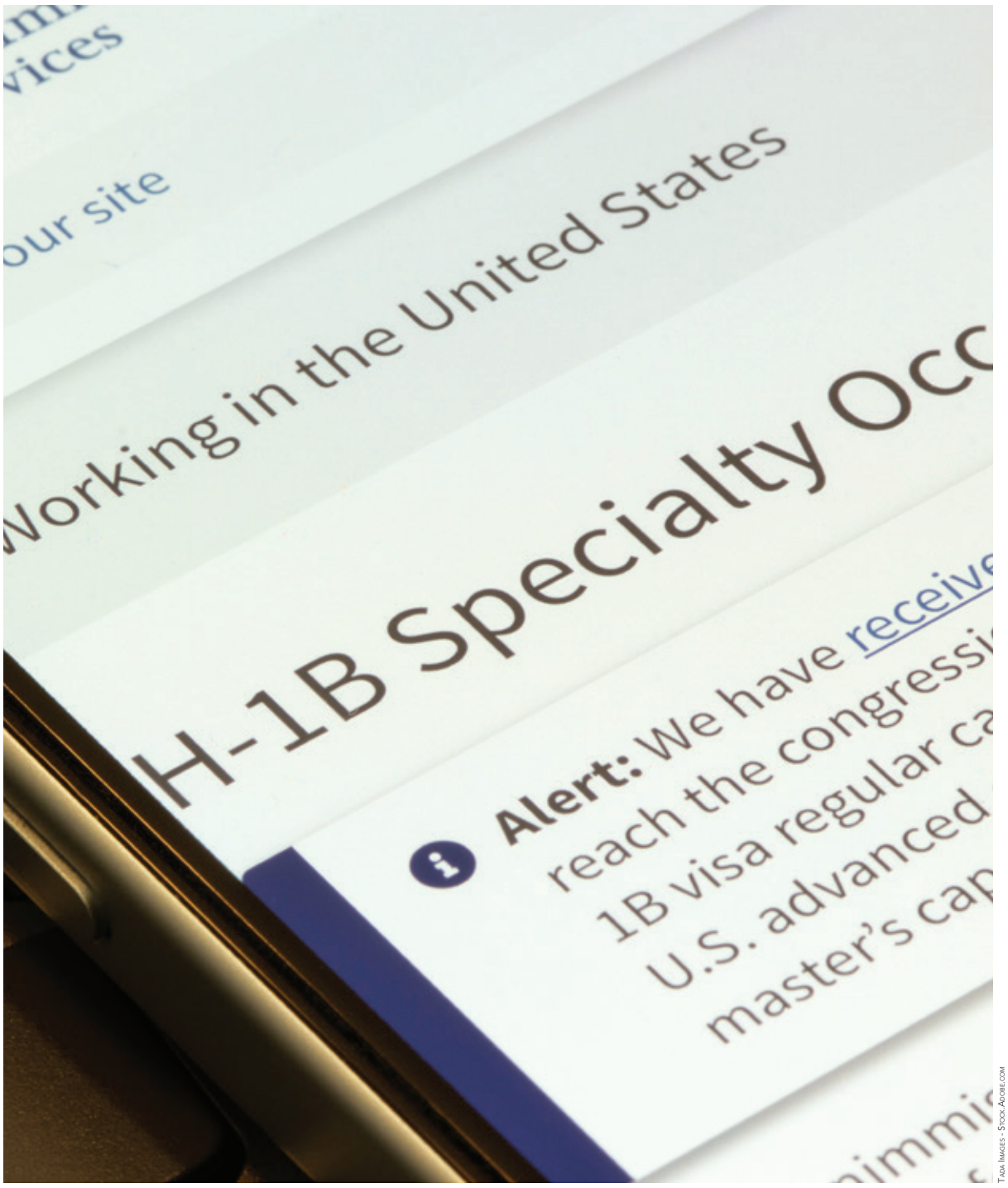
Facing Obstacles and Restrictions

Naveen Yellappa, MD, who recently moved to a job as medical director with Sound Physicians in Florida, after nine years working with the Geisinger Health System in Wilkes-Barre, Pa., said he visited India in the early part of 2020. When visiting, he needs to have his visa stamped as a requirement of his H-1B visa. Historically, this has been a process that takes about two weeks. But this time, it was delayed. It took more than six weeks. By the time his visa was stamped, the COVID-19 pandemic had started to become a serious global concern. Just before his passport could be returned to him, India went into lockdown, the consulate closed, and there was no mail.


Dr. Yellappa

"I couldn't come back because I didn't have my passport, and the flights stopped," Dr. Yellappa said.

He was stuck—and began to worry that he might lose his job and his residency status in the U.S.



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Geisinger, his employer at the time, paid him throughout March, April, and May, he said. In June, he learned, this payment was going to stop, but he was able to return to the U.S. before this happened. Once he got back to his job, he worked extra time to make up for the pay that was provided while he was gone, he said.

Dr. Yellappa applied for his green card in 2016 and does not know when he will receive it. He is trying to take on more leadership roles to bolster his CV, in the hopes that it might boost his chances for getting EB-1A status, reserved for those with extraordinary ability, which substantially cuts down on the wait time for a green card.

In the meantime, he sometimes muses with friends about the possibility of a business venture, but since only passive income—and no active income—can come from a source other than his visa-sponsoring employer, he is too apprehensive to become involved in such a project.

"The green card would give you the freedom of making a decision, whatever the decision may be," he said. "I just don't have the freedom, so I don't dare to think about it."

Despite spending more than a decade in the U.S., everything he does here seems to be influenced by his visa status. He also said he is now limited in his growth in leadership roles, because jobs that are higher-ranking than his current position are typically not visa-sponsored positions.

"The world's your oyster in the U.S., you can really do what you want to do, you have the freedom to do that—unless you're on a visa," he said.

Mihir H. Patel, MD, MPH, MBA, CLHM, SFHM, a hospitalist and digital-health–focused physician informatics leader at Ballad Health in Johnson City, Tenn., applied for a green card in 2011 and finally received it in 2022, earlier than he otherwise would have because the COVID-19 pandemic halted the processing of visas involving U.S. embassies overseas, so employment-based cases like his moved up in line.


Dr. Patel

But when he was a visa holder, his grandmother in India passed away just after he had started a job on a J-1 waiver, which allows foreign-born medical graduates who are on an exchange visitor visa to remain in the U.S. if they work in an underserved area for three years. If Dr. Patel had traveled to India, he would have needed a new visa stamp from the U.S. embassy to re-enter the country, even though he already had legal visa status. The process—applying, scheduling the interview, and awaiting approval—can take months and carries the risk of delay or denial.

"She took care of me for almost my whole childhood," he said. "She was very near and dear to me. But I could not go because of all this uncertainty."

Dr. Patel said that under the H-1B visa, he could work only for his sponsoring employer, which constrained how he managed his finances and prevented him from exploring

any other active or entrepreneurial income opportunities. Viable business ideas were conceived—including a venture to provide telemedicine care in remote areas—but never acted upon.

He said that much of the vigor needed for ventures outside someone's primary employment is lost as you get older, and by the time you get a green card, if that day ever comes, H-1B holders might no longer have the inclination to do it.

"When there is a time to do it, you don't have the luxury to do it," he said. "And when you have the luxury, you probably don't have enough energy to do it."

He said U.S. immigration laws should better reflect the nation's healthcare needs by treating physicians differently from other employment-based visa categories.

"If there's a true need for physicians," he said, "then the policy should be aligned with that reality."

Mr. Boswell said the hurdles presented by visa status were on full display during the COVID-19 crisis, when hospitals that were hardest hit desperately needed physicians. Many H-1B-holding physicians in areas with less severe outbreaks wanted to travel to these hospitals to help, but were unable to go due to visa restrictions.

"That was the truth of it," he said. "They could not go help in a national emergency as a physician, just because of their visa status."

Such scenarios show how this decade-or-longer temporary H-1B status affects more than just individual physicians—it affects hospitals and health systems. Dr. Cowart said that when a resident, for example, has a visa complication arise while abroad, it's also a problem for their hospital back in the U.S.

"Residency programs are already scheduled out for the whole year," she said. "And so if a trainee doesn't arrive for six months due to no fault of their own, the training program is scrambling, they're having everybody else having to work extra, they're having to call in backup—it puts kind of a burden on everybody."

Dr. Koppula said he would like the policy of the U.S. to embrace the idea that physicians are not just "skilled workers" in the same way that, say, a software engineer is. Physicians are directly responsible for the health and lives of people in their community.

"We are not only skilled workers. We are beyond skilled workers. So that's the distinction that they have to make." ■

Tom Collins is a medical writer based in South Florida.

References

1. SHM joins letter requesting physician exemption from new H-1B filing fees. September 26, 2025. SHM website. https://www.hospitalmedicine.org/letters/shm-joins-letter-requesting-physician-exemption-from-new-h-1b-filing-fees/. Published September 26, 2025. Accessed December 8, 2025.
2. Olazagasti C, Florez N. Going back home: understanding physician migration to the United States. *JCO Glob Oncol*. 2023;9. doi: 10.1200/GO.23.00332.
3. Tsugawa Y, et al. Quality of care delivered by general internists in US hospitals who graduated from foreign versus US medical schools: observational study. *BMJ*. 2017;356:j273. doi: 10.1136/bmj.j273.

Introducing the Literature Lounge

As readers of *The Hospitalist* know, our In the Literature column is quite popular, with hospitalist groups lined up to contribute.

This popularity inspired the creation of Literature Lounge—an online-only column that features literature reviews with a twist—a video review. To learn more about this new column, scan the QR code or email Lisa Casinger at lcasinger@wiley.com.

Get Published!

If you're an SHM member interested in contributing to *The Hospitalist*, there are lots of opportunities.

We publish articles about the news, trends, and issues that affect hospital medicine. Topics include everything from clinical and practice management to quality, career, leadership, pediatrics, and more.

And, if you want to express yourself creatively, there's HM Voices, our online area showcasing poetry, creative writing, or creative visuals.

Scan the QR code for more information about clinical options (In the Literature, Key Clinical Questions, Interpreting Diagnostic Tests), and HM Voices.

Taking QI Out of Our Heads and Into Rounds

By Cassie Shaw, MD, FACP, Charles Pizanis, MD, FHM, Sam Porter, MD, and Jessica Zimmerberg-Helms, MD

Quality initiatives (QI) are often thought of as longitudinal projects that require large system lifts and complex multidisciplinary teams. These sorts of projects can be intimidating and time-consuming for attending physicians and learners to consider taking on. Participating in a project is not the only way to learn quality and patient safety, however.

Clinician educators often forget that we are performing quality work in our heads every day, whether it be simple checklists, recognizing and assessing error, or even reconsidering our diagnostic choices. We people in the quality field can come off as constantly telling people things they should do, but a lot of the time, they are already doing these things; we just don't recognize it as QI work. While the first step is recognition, the next step is how to teach this type of daily QI to learners. Here are our tips on how clinicians can take this internal-dialogue type of QI work out of our heads and into rounds.

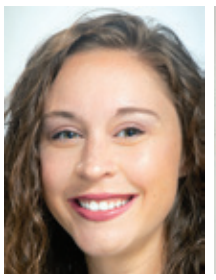
Working Through Error Using a QI Lens

Inevitably, errors will happen on clinical service. Errors are an opportunity to perform and model good health care system stewardship with learners by performing a root cause analysis. Root cause analysis is a quality-improvement tool wherein an event is meticulously scrutinized to illuminate the system's problems that led to harm. Who doesn't go back and think about how or why it happened? By externalizing this practice to the learners on the team, you take something we already do and turn it into a QI teaching session.

This conversation is the easiest way to turn your internal dialogue into a teaching point. But, to take your QI teaching a step further, you can model the systematic application of tools for root cause analysis, including cause-and-effect diagrams and the "Five Whys."

A cause-and-effect diagram ensures your root cause analysis is comprehensive by outlining a set of causal categories that the adverse event might fall into. The categories you pick are up to your discretion, but recommended categories for analyzing patient safety errors include care environment, personnel, policies and procedures, cognitive bias, equipment and supplies, and communication. You can lead your team in a chalk-talk-style teaching session where you evaluate an error or adverse event you encountered together by drawing a fishbone diagram. This will not only model good systems-improvement techniques but will also improve the end result of your root cause analysis by leveraging the collective intelligence of your teaching team.

A second tool to use when teaching QI through error analysis is the "Five Whys," which is a heuristic construct based on the assumption that the most apparent cause of a patient-safety event is never the root cause, and that finding deeper and more systemic causes requires asking "Why?" five times. While it doesn't always take exactly five inquiries to find a root cause, the spirit of the Five Whys is that one must ask "Why?" many times before underlying causes are found. To put this into practice, when readmitting a patient who has "bounced back," use the Five Whys to encourage them to dig deeper into why the patient's treatment plan failed.


Dr. Shaw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Using QI Tools to Teach Clinical Reasoning and Avoid Cognitive Bias

Recognize the importance of turning self-reflection into quality education. We often think we are practicing the most current, evidence-based care, serving as pure conduits of scientific knowledge. But medicine is also an art. Quality work lives in this space, too, as diagnostic accuracy is a central QI goal. Two ways to bring this type of inner work to the bedside are clinical reasoning and cognitive bias.

Clinical reasoning skills can be fostered by encouraging learners to practice the QI tool, reflection-in-action. Reflection-in-ac-

tion can be taught by modeling your own reasoning aloud. For instance, while on rounds, instead of simply asking learners to justify their thinking, try walking them through your approach to a complex diagnosis or management plan. Additionally, if a learner is struggling to reach a diagnosis, invite them to verbalize their diagnostic reasoning. This can help them identify where they may be getting stuck. Structured frameworks like illness scripts or SNAPPS (summarize, narrow, analyze, probe, plan, select) can be especially helpful in guiding these discussions.

Even when clinical reasoning is sound, common cognitive biases can impede our learners' successes in both diagnostic stewardship and clinical reasoning. Several strategies can help reduce the influence of cognitive bias while on rounds, including a diagnostic timeout, which is particularly useful when there is diagnostic uncertainty within the team or when a team member appears anchored on a diagnosis that doesn't fully fit the clinical picture. To put this into practice, pause rounds for the timeout and ask everyone to offer a differential diagnosis while the rest of the team offers supporting and refuting evidence. Some great times to use this are altered mental status not improving or a persistent leukocytosis.

Rethinking the Standard Work a Teaching Team is Doing as QI Education

Even if we are achieving accurate diagnoses, the work we do on rounds with our team is extremely complicated work where data, observation, medical decision making, and communication interplay, and care of our patients can suffer if a team isn't utilizing the system well. When your team isn't working right, this can be a great time to identify functions that could be improved.

At the start of a week of service, ask your team to identify one process they can improve upon. Good targets include medication reconciliation, catheter and line assessment, telemetry discontinuation, or contacting families. Decide with your team how you'll measure and monitor your progress. At the conclusion of the week, review the experience and share any measurements you have. This mini exercise is a QI project in and of itself and is a great way to galvanize your team around a process.

Another aspect of internal work we all do as hospitalists is checklists. Checklists are a central tool to standardize processes and reduce unintended omissions. Where this topic can be fun and engaging with your team is in identifying processes that do not have checklists that might benefit from them. Some faculty in our hospital medicine group recognized the likelihood for error within the discharge process as one on which we could improve and designed our own discharge checklist. To facilitate its use, we adopted the acronym DDEMAP—Destination (where is patient going: home, skilled nursing facility, long-term acute care facility), Diagnoses (encountered during hospital stay), Equipment (any durable medical equipment patient should be discharged with), Medications (listing out all the home medications as well as any changes), Appointments (all follow-up appointments), and Pending (any tests still pending at discharge that will require followup). Use of the tool almost invariably results in some change or clarification, and when we studied it, a change occurred in 79% of timeouts, half of which were medication changes.

Your health system likely has a process (or five) that could use some shoring up. Also consider brainstorming a novel checklist with your team. Try it out with your team and see if it sticks!

A lot of what we are promoting is good teaching practices, and teaching QI at the bedside is not far off from just being a good teacher. It's not surprising, then, that in order to put any of these tools into practice, a baseline of a safe learning climate is required. Tools aren't everything, though. More important than using any tool is modeling humility, openness, and self-reflection in the face of an adverse event.

By using these tools in a safe setting for learners, academic hospitalists can make QI applicable to our daily work and more easily consumable for learners. Thinking about QI outside of the usual lecture setting, which most of us experienced in our own education, is unique. Further, these activities can help learners understand that the system is here to help us, empower them by demonstrating participatory agency in the system, and even lead to those intimidating, bigger projects and quality work. As an educator, taking your QI work to rounds will leave an impression on your learners. We hope this work will help people you'll never meet and positively impact systems you'll never work in. ■

A Secure Chat-Based Pairing Model Doubled Paracentesis Certifications in Four Months

By Joseph Abraham, MD, Vasundhara Singh, MD, FACP, SFHM, and Lance Maresky, MD

At 2 p.m. on a crowded admitting day, our cirrhotic patient still waited for a paracentesis—because no one on call felt confident with a needle.

Problem Statement

As procedural certification is no longer a mandated part of internal medicine residency training, many hospitalists lack experience in bedside procedures like paracentesis. The imperative to perform diagnostic paracentesis as proximal to admission as possible has been firmly established, but a simple, cost-effective, and consistently reliable solution to ensure timely performance has proven elusive to date.[1,2]

Previously studied strategies to reduce delays include admission order sets, education, electronic health record (EHR) alerts, and dedicated procedure services—especially resident-run models, which outperform others.[3-7] Reviews show these services boost volume, confidence, and success rates, and may reduce length of stay (LOS), but require heavy oversight.[8,9] Before our intervention, the process of ensuring expedient paracenteses at our hospital was often haphazard and protracted.

Solution Overview

The intervention involved establishing a secure chat group on our EHR (Epic) through our department of information technology (IT). This group consisted of members either previously certified or seeking certification in performing paracenteses among the 252 internal medicine residents and 40 hospitalists across our two hospital sites. The secure group was moderated by one attending and one resident member to ensure strict protocols were followed. Initially, awareness of the group was promoted within the residency program and hospitalist group via only word of mouth and digital communication platforms.

When a patient needs paracentesis, the admitting team posts the patient information, location, and clinical indication in the chat, facilitating speedy identification of a trained physician to perform the procedure, as well as providing opportunities for trainees to gain experience and move toward certification. Trainees are routinely reminded to use the comprehensive training modules provided by our department of critical care medicine to help ensure proper technique.

A comprehensive protocol was drafted before implementation of the pilot, determining the scope, purview, eligibility, chain of command, procedural precedence, documentation, training and competency standards, and guidance for safety and in the event of complications. Finally, individual procedures and ultimately certifications were tracked via our program's New Innovations platform.

Key Points

- Instant activation: Epic chat to Mount Sinai Morningside/West Paracentesis Group starts right at admission.
- Rapid Pairing: Learners are instantly matched with supervisors for timely procedures.
- Skill-Building Loop: More trainee procedures means more certified supervisors, leading to faster, better care for patients.

Implementation Process

The implementation process included five steps:

- **Identify program champions:** We ensured oversight from both faculty and house staff members to help maintain balance and communication with all relevant stakeholders in the initiative.
- **Contact IT:** This step is required to establish a dedicated secure chat group for the paracentesis team.
- **Create buy-in from the program:** Information about the existence and purpose of the group was disseminated to all relevant stakeholders, including attending physicians and house staff. This may be accomplished, for example, via departmental email, a brief presentation during didactic sessions, or printed materials hung in workrooms. Both certified proceduralists and those seeking certification were added to the group. Alternatively, depending on institution policy, an opt-out method may be used wherein all members of the department are added and then given the option to leave the procedure group.
- **Clarify billing protocols:** A discussion was held between the hospital billing department and department administration regarding appropriate billing procedures (e.g., who should bill for the procedure when an attending other than the primary attending of record is performing or supervising the procedure).
- **Clarify procedure and certification protocols:** Educational materials were made freely available to trainees to ensure proper knowledge of the requisite technique. Depending on hospital policy, a decision must also be reached regarding requests placed by other specialties within the hospital seeking assistance from the procedure group. In our case, we determined that requests must be routed through the internal medicine consultation service, and if approved, may then be directed to our group. Additionally, program leadership should decide on a reasonable number of supervised procedures required before a trainee may become independently certified (our program requires five).

The timeline for implementation of our program required no more than a few days. Importantly, it does not require any financial resource allocation, requires minimal administrative oversight, and is inherently structured in a positive feedback cycle by proliferating new training opportunities and creating more certified supervisors to facilitate further training.

Dr. Abraham

Dr. Singh

Dr. Maresky

Dr. Abraham is an internal medicine resident physician at Mount Sinai Morningside/West in New York. Dr. Singh is an associate professor of medicine and medical education and associate program director for the internal medicine residency program at Mount Sinai Morningside/West in New York. Dr. Maresky is an assistant professor of medicine at Mount Sinai West in New York.

Outcomes and Impact

In the first 111 days after implementation of this pilot, an average of 4.5 chats were started each week, with a mean time of 1.4 minutes to identify a certified proceduralist and trainee dyad. Notably, the number of certified proceduralists more than doubled in the program during this time, from 16 to 34.

Residents were enthusiastic: "Getting a paracentesis was incredibly difficult during my intern year, and it made it a barrier for me to even attempt one. As a PGY-2, I was only able to log my first paracentesis due to the para team chat! It makes it a much more approachable and equitable approach to getting procedural experience and guidance, which can be difficult in our busy academic setting."

"This group has expedited patient care since its initiation. I no longer have to wait for paracentesis to be done during a busy day on service. Residents on my team who are not certified in paracentesis or lack the knowledge on how to perform bedside POCUS to assess for a pocket now have the ability to learn in real time."

Lessons Learned

Our decentralized certification model demonstrated that procedural training can be expanded efficiently using existing resources and with minimal administrative burden. Several key lessons emerged:

- Use existing infrastructure: Leveraging Epic's secure chat functionality enabled rapid implementation without requiring new platforms or significant financial investment.
- Shared oversight drives success: Appointing both a faculty and resident moderator promoted accountability and sustained engagement. This structure ensured the initiative was both well-managed and responsive to trainee needs.
- Real-time access improves learning and care: The group chat allowed clinicians to connect rapidly with certified proceduralists, reducing delays in care and increasing real-time teaching opportunities.
- Culture matters: Trainees appreciated the transparency, accessibility, and equity the system offered. Making procedural experience feel more approachable helped foster a stronger learning culture.
- Minimal resources, maximum scalability: The program required no added personnel or funding, making it highly replicable in

other institutions with similar infrastructure.

Recommendations

- Institutionalize the model by incorporating it into onboarding, education, and clinical workflows.
- Maintain oversight through rotating leadership to ensure continuity and shared ownership.
- Track and celebrate progress using tools like New Innovations to monitor certifications and identify training gaps.
- Clarify billing protocols and define cross-department procedures early with administrative leadership.
- Expand gradually to other procedures or departments with clear protocols in place.

Using system-level changes, structured education, and EHR integration, we created a decentralized, low-resource, and high-impact model. Epic's secure chat connects learners to certified supervisors in real-time, while a certification program ensures skill development and documentation. This streamlines workflow, enables timely paracentesis, and supports resident growth—without ongoing coordination, and without contributing any resource burden.

Future Directions

As we build on the success of our decentralized certification model, our next phase will focus on evaluating its clinical impact—particularly whether it reduces time to paracentesis, a key quality metric linked to improved outcomes. We also plan to track broader indicators such as length of stay, in-hospital mortality, complications, and duration of antibiotic use.

To further increase participation, we are considering transitioning the Epic chat group from opt-in to opt-out, automatically enrolling all relevant residents and hospitalists to streamline communication and broaden access. We will also formally introduce the program during resident didactics to boost awareness and engagement among trainees.

Expanding the number of attending physicians certified in paracentesis is another priority. A larger pool of certified attendings will enhance procedural continuity, improve supervision availability, and support more consistent training across teams and shifts.

These efforts aim to deepen the program's educational value while rigorously assessing its effect on patient care, with the ultimate goal of creating a sustainable, scalable model for procedural training and timely intervention. ■

References

1. Beran A, et al. Early diagnostic paracentesis improves outcomes of hospitalized patients with cirrhosis and ascites: a systematic review and meta-analysis. *Am J Gastroenterol*. 2024;119(11):2259-2266. doi: 10.14309/ajg.0000000000002906.
2. Ge PS, et al. Treatment of patients with cirrhosis. *N Engl J Med*. 2016;375(8):767-77. doi: 10.1056/NEJMra1504367.
3. Bhavsar-Burke I, et al. Use of a cirrhosis admission order set improves adherence to quality metrics and may decrease hospital length of stay. *Am J Gastroenterol*. 2023;118(1):114-120. doi: 10.14309/ajg.0000000000001930.
4. Lim N, et al. Impact on 30-d readmissions for cirrhotic patients with ascites after an educational intervention: A pilot study. *World J Hepatol*. 2019;11(10):701-709. doi: 10.4254/wjh.v11.i10.701.
5. Leibowitz RM, et al. Sa1109 using QR code technology to improve guideline-directed care for admitted patients with decompensated cirrhosis. *Gastroenterology*. 2024;166(5):S-342. doi.org/10.1016/S0016-5085(24)01261-7.
6. Sherman Z, et al. Integration of cirrhosis best practices into electronic medical record documentation associated with reduction in 30-day mortality following hospitalization. *J Clin Gastroenterol*. 2023;57(9):951-955. doi: 10.1097/MCG.0000000000001787.
7. Ritter E, et al. Impact of a hospitalist-run procedure service on time to paracentesis and length of stay. *J Hosp Med*. 2021;16(8):476-479. doi: 10.12788/jhm.3582.
8. Nandan A, et al. Characteristics and impact of bedside procedure services in the United States: a systematic review. *J Hosp Med*. 2022;17(8):644-652. doi: 10.1002/jhm.12848.
9. Berger, M, et al. Improving resident paracentesis certification rates by using an innovative resident driven procedure service: 980. *American Journal of Gastroenterology*. 2018;113:S552.

SHM Members attended SHM's annual Hill Day this fall to advocate for hospitalists and their patients

Jennifer Caputo-Seidler

Advocacy

SHM Hill Day 2025

Advocacy doesn't stop for a shutdown

By Jennifer Caputo-Seidler, MD

It was standing room only at the morning debrief as members of SHM's Public Policy Committee (PPC) and SHM Chapters gathered in Washington, D.C. to participate in SHM's annual Hill Day. Hospitalists from across the country came prepared to champion increased access to skilled nursing facilities (SNFs) for Medicare patients, streamlining prior authorization within the Medicare Advantage (MA) program, and bolstering the physician workforce through immigrant visas.

Representing the Tampa Bay chapter, this was my first Hill Day experience. My long-standing interest in health policy has led me to various advocacy activities, such as calling representatives, writing letters to the editor, and registering voters. However, I had never directly engaged with a lawmaker or their staff about the real-world impact of policy issues on patients.

Advocacy always felt like a natural extension of my role as a hospitalist. We consistently advocate for patients, whether it's with specialists to obtain an inpatient procedure or with insurance companies to secure post-discharge rehabilitation coverage. Yet, for a long time, speaking directly to health policy felt beyond my expertise. I viewed health policy as a "black box," a domain reserved for lawyers, economists, and public-health experts.

That perception changed when I realized a crucial truth: no one is more qualified to speak about the

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impact of policy on patients than those of us who care for them every day. Once I embraced this perspective, meeting with lawmakers and sharing patient stories became much less daunting.

SHM ensured that participants, especially newcomers like me, felt prepared and at ease for Hill Day. They sent out materials in advance via email, detailing talking points for the three bills we would advocate for. On the day of the event, SHM provided a comprehensive packet that included paper copies of the talking points, a personalized meeting schedule, and a map of Capitol Hill. We'd been well warned to wear comfortable shoes.

Staff and consultants offered a thorough walk-through of the day's expectations, covering everything from security procedures to business card etiquette. To further reduce anxiety, SHM staff even conducted a role-play of a typical meeting for those of us who lacked prior experience.

After the morning brief, we were off to the Hill to advocate for issues important to hospitalists.

Jennifer Caputo-Seidler

Dr. Caputo-Seidler met with her representative, Congressman John H. Rutherford (R, FL-05). After the Hill Day visit, Rep. Rutherford signed on to H.R. 3514, the Improving Seniors' Timely Access to Care Act.

Observation Reform

SHM continues to support the Improving Access to Medicare Coverage Act (H.R. 5138/S. 4137). This bill would count days spent in observation towards Medicare's three-day inpatient stay requirement for skilled nursing facility (SNF) coverage.

This was one of the issues hospitalists advocated for during Hill Days for years. As with many advocacy issues, it takes multiple legislative cycles to gain traction and make progress. Observation reform remains a significant issue for hospitalists, who disproportionately face the burden of navigating the rules surrounding inpatient admissions and outpatient observation care. From the hospitalist perspective, patients admitted into observation are generally receiving identical care to those in inpatient status.

Historically, opposition to this reform has focused on concerns that it would lead to a significant increase in SNF utilization for Medicare patients, thereby incurring substantial cost expenditures. However, data from the COVID-19 public health emergency showed that expanding access to SNFs, regardless of the number of inpatient days during hospitalization, did not dramatically increase Medicare spending or utilization.[1] This legislation would be narrower than the public-health-emergency waiver, allowing only patients who have a three-day stay (observation or inpatient) to get access to SNF coverage.

Allowing all in-hospital time to count towards SNF coverage eligibility, regardless of observation or inpatient status, will help ensure patients receive the medically necessary care they need in the appropriate setting and without facing unexpected and excessive out-of-pocket costs.

Prior Authorization Reform

SHM also continues to support the Improving Seniors' Timely Access to Care Act (H.R. 3514/S. 1816). This bill would help reduce prior-authorization delays under Medicare Advantage by streamlining the prior-authorization process and encouraging plans to align their prior-authorization decisions with evidence-based guidelines.

The current state of prior authorization creates real patient harm. Hospitalists witness firsthand how patients remain in the hospital longer than necessary, which increases costs and carries the risk for hospital-acquired infections. Patients experience delayed or denied rehabilitation services, medications, and other necessary care. Delayed discharges exacerbate existing inpatient bed shortages and contribute to emergency department boarding.

The aim of this reform is to prioritize patients' clinical needs over administrative burdens that create unnecessary barriers to physician-recommended care within the Medicare Advantage program.

Recapturing Unused Visas for Physicians

SHM supports the Healthcare Workforce Resilience Act (H.R. 5283/S. 2759). This bill would recapture green cards that were previously authorized by Congress but went unused. It would allot up to 25,000 unused visas for nurses and 15,000 unused visas for physicians. Since these visas have already been authorized by Congress, they would not require additional funding. The bill also has built-in protections to ensure immigrant physicians pass background checks, meet medical licensing requirements, and prevent the displacement of American-born workers. According to the Association of American Medical Colleges, the U.S. is expected to face a physician shortage of approximately 86,000 by 2036.[2] Hospital medicine is already experiencing the effects of this physician shortage. SHM estimates that two-thirds of hospital medicine groups have unfilled positions. These staffing challenges directly impact patient care, including the number of available staffed hospital beds. Immigrant hospitalists are essential members of the workforce and are particularly vital in rural and underserved areas where it is most difficult to recruit physicians.

Opening SHM's Hill Day to Chapter members has allowed many hospitalists, including myself, to participate in advocacy on the Hill for the first time. Including Chapter members expands SHM's reach. As the sole participant from Florida this year, for example, I was able to meet with staff from the offices of Representatives Rutherford and Castor, as well as Senators Scott and Moody. These meetings were made possible by my participation as a constituent in their district.

Even with the government shutdown, Congressman Rutherford (FL-5) made time to meet with me personally. He had already committed his support to the Improving Seniors' Timely Access to Care Act. After hearing my accounts of the difficulty in securing skilled nursing placement for patients in observation, he also voiced his support for the Improving Access to Medicare Coverage Act. It felt like a big win for my first Hill Day meeting!

Throughout the day, staffers impressed me with their diligence, taking detailed notes and asking clarifying questions to fully understand the impact of these policy issues on patient care. Their appreciation for doctors traveling to D.C. to discuss these important issues was genuinely felt.

By sharing real-world stories of prior authorization delays, the SNF three-day rule, and physician shortages, I witnessed firsthand how the voice of the practicing hospitalist can inform congressional staff and lawmakers. Ultimately, no report or statistic can replace the power of a physician-led patient story. Our perspective is essential to policymaking.

SHM members can follow the active policy issues important to hospital medicine and visit the Legislative Action Center to send messages to their representatives. Members can also talk to their local chapter about sponsoring them to attend a future Hill Day. ■

References

1. Song A, et al. SNF 3-day waiver use during the COVID-19 pandemic. Avalere website. https://avalere.com/insights/snf-3-day-waiver-use-during-the-covid-19-pandemic. Published September 28, 2023. Accessed December 6, 2025.

2. GlobalData Plc. *The complexities of physician supply and demand: projections from 2021-2036.* New York: Association of American Medical Colleges; 2024. https://www.aamc.org/media/75236/download?attachment. Accessed December 6, 2025.

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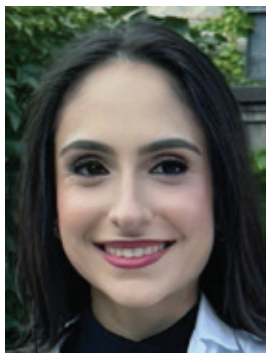
Treating Cannabinoid Hyperemesis Syndrome in the Era of Cannabis Legalization

By Lea Chamoun, Christopher Kovaleski, MD, Judith K. Eckerle, MD, FAAP, Thejaswi Poonacha, MD, MBA, SFHM



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Cannabinoid hyperemesis syndrome (CHS) is a condition in which patients experience abdominal pain, nausea, and persistent vomiting following prolonged and heavy cannabis use. With the recent legalization of medical and recreational marijuana in many regions, CHS has become increasingly recognized worldwide, and its diagnosis has increased. In a study conducted in Colorado, researchers found that emergency department (ED) visits related to vomiting increased following the legalization of recreational marijuana.[1] This increase was amplified in counties with additional dispensaries. While CHS is not exclusive to legalized areas, health systems in legalized regions throughout the world have reported more frequent encounters with persistent vomiting that ultimately are diagnosed as CHS. These findings have been reflected in many regions of the world where recreational marijuana is legalized. The question remains, however, as to how hospitalists should anticipate, monitor, and respond to this uptick in CHS. This article examines the demographic and clinical patterns of CHS, discusses potential pathophysiological mechanisms, and explores how hospitalists can more effectively identify and treat CHS.

Clinical Features of CHS

CHS affects those with chronic, high-dose cannabis use. Earlier studies reported a higher incidence in male patients; however, studies have shown that visits by female patients have increased significantly following cannabis legalization.[2] Additionally, the age-profile of these patients tends to be their late teens and twenties, with a history of approximately 1.5 grams of cannabis a day for approximately 10 years.[3] Often these are individuals who have developed a tolerance and dependency on cannabis, sometimes using extremely potent forms or concentrates.

Notably, comorbid psychiatric conditions and substance use disorders are common in CHS patients. In a study conducted by Myran et al., approximately 24% to 25% had a documented ED visit or hospitalization for a mental health condition or other substance use in the two years before their CHS episode.[2] The presence of psychiatric comorbidities can complicate management, as these patients may be using cannabis both recreationally and as an attempt to alleviate anxiety or nausea, creating a vicious cycle in CHS.

CHS often follows a stereotypical clinical course with three phases: a prodromal phase, a hyperemetic phase, and a recovery phase. During the prodromal phase, patients develop mild nausea, especially in the mornings, and may increase their cannabis use in attempts to settle their stomach.[4] This phase may last for weeks or months and is insidious. Once CHS progresses to the hyperemetic phase, patients experience the hallmark symptoms of CHS. These symptoms include profuse, repetitive vomiting, often up to five times an hour, severe retching, and diffuse abdominal pain. Patients in this phase often report compulsive hot bathing or showering to relieve symptoms, a learned behavior. Taking frequent hot showers for symptom relief is considered pathognomonic for CHS, and almost two-thirds of patients find that the remedy significantly eases their nausea and abdominal pain.[5] The duration of the vomiting episodes can range from about 24 to 48 hours, and five to seven days in more severe cases. Initially, CHS episodes might remit within a day or two with supportive care, especially if cannabis

use is halted. If cannabis use continues between episodes, however, the intervals often shorten, and the hyperemetic episodes can intensify over time, further dysregulating the physiology of the gut-brain axis.

Patients experiencing CHS often initially use cannabis to self-treat their nausea. At low doses, THC can be antiemetic, but at high chronic doses, it becomes proemetic.[6] Many CHS sufferers describe that when the nausea first starts, they smoke marijuana or use edibles to try to suppress it. While this attempt might give brief relief due to THC's short-term anti-nausea effect, the vomiting worsens as the CHS pathophysiology progresses. This self-medicating behavior delays recognition of CHS and often brings patients into the hospital only after they reach a point where no amount of cannabis stops the vomiting.

Clinically, CHS can be distinguished from other vomiting syndromes by a combination of history and exam findings, including a history of heavy cannabis use, normal GI investigations, relief with hot showers, and failure to improve with standard antiemetics. Patients are often tachycardic and volume-depleted from fluid losses. They may have epigastric or periumbilical abdominal tenderness from forceful retching. There are typically no peritoneal signs and no clear triggers like food poisoning. CHS closely resembles cyclic vomiting syndrome (CVS), but CVS occurs in non-cannabis-users and often has migraine-like or stress triggers.[7] Importantly, CVS patients respond to conventional anti-nausea medications, whereas CHS patients do not.

Pathophysiology of CHS

The exact pathophysiological mechanism of CHS is not fully elucidated, but several interrelated hypotheses exist. The leading theory is that chronic overstimulation of the endocannabinoid system, particularly CB1 receptors, disrupts the body's normal emetic/antiemetic balance.[8] THC, the primary psychoactive cannabinoid, acts on CB1 receptors, which are abundant in the central nervous system and the enteric nervous system of the gut. Acute cannabis exposure usually activates pathways that suppress nausea. With heavy, prolonged exposure, however, it is thought that CB1 receptor signaling becomes dysregulated or desensitized. Essentially, the threshold for nausea and vomiting becomes reset due to chronic THC saturation.

Another contributing factor to the pathophysiology is the transient receptor potential vanilloid 1 (TRPV1) receptor system. TRPV1 receptors are involved in pain and thermoregulation and can influence nausea pathways. They are activated by heat and capsaicin. Although it's not clear how exactly TRPV1 is implicated in CHS, one hypothesis is that chronic cannabis use leads to desensitization or alteration of TRPV1 function, and the act of applying heat restores some balance by releasing substance P.[8] Substance P is a key mediator of emesis in the brainstem, and overstimulating TRPV1 may deplete substance P, thereby reducing vomiting. In summary, there are several hypotheses explaining how CHS arises, including a combination of chronic cannabinoid receptor overstimulation and derangement of TRPV1.

Management and Treatment Strategies

CHS requires a multifaceted treatment approach that addresses both the physical causes of vomiting and any underlying anxiety or stress responses that may exacerbate symptoms. In addition to relief from hot showers, many patients benefit from anti-anxiety medications, suggesting an anxiety-related component to the syndrome. Key acute treatments for CHS include haloperidol, benzodiazepines, hot showers, and topical capsaicin.

Haloperidol is a dopamine D2-receptor antagonist and can be an effective acute treatment for CHS, outperforming standard antiemetics like ondansetron in clinical trials. One study found that IV haloperidol was shown to provide greater relief of nausea, vomiting, and abdominal pain at two hours than ondansetron 8 mg, with patients on haloperidol requiring fewer rescue antiemetics and leaving the emergency department sooner on average.[3] These findings align with multiple case reports and clinical experiences in which haloperidol aborted CHS symptoms even when ondansetron failed. Other antipsychotics with dopamine-blocking activity, such as droperidol or olanzapine, have also been reported to alleviate CHS, presumably via similar blockade of the brain's chemoreceptor trigger zone.

From an anxiety perspective, while haloperidol's primary benefit in CHS comes from blocking dopamine, thereby suppressing the emetic pathway, it also has sedative and tranquilizing properties. CHS patients in a hyperemesis episode are typically distressed or agitated and exhibit a surge in sympathetic activity, including tachycardia, hypertension, and sweating.[6] EDs now use IV haloperidol as a first-line agent in CHS protocols, reflecting its efficacy.

Benzodiazepines such as lorazepam are also frequently cited as useful in CHS, especially in cases where anxiety is amplifying the emetic reflex. Benzodiazepines are among the most consistently effective acute therapies. Lorazepam or similar benzodiazepines can break the cycle of anxiety and vomiting by relaxing the patient and dampening the hyperemetic response by exerting antiemetic effects through the central GABA system.[6]

In addition to hot baths, some clinicians have used a topical capsaicin cream applied to the abdomen. A pilot study demonstrated that capsaicin cream notably reduces nausea within 60 minutes and shortens hospital stays for CHS patients.[9] While large multi-center trials are lacking, the existing evidence and low risk profile of capsaicin make it a recommended adjunct in many CHS protocols.[5]

While antiemetics and anti-anxiety measures are pursued, clinicians must pay close attention to electrolyte abnormalities, fluid status, and cardiac rhythm, including QT intervals, and treat appropriately.

Pediatric Perspective

While most evidence for cannabinoid hyperemesis syndrome comes from adult data, CHS is an increasingly recognized disease entity in pediatric populations. Multiple studies have demonstrated an increasing incidence among adolescents, especially with recreational cannabis legalization and commercialization.[10,11] Clinical presentation in adolescents and teens seems to closely parallel adult presentations, with nausea followed by recurrent vomiting, abdominal pain, and relief with hot showers.[12,13] In addition, standard antiemetic therapies (ondansetron and metoclopramide) likewise have been largely ineffective. While robust pediatric data are lacking, some case series have demonstrated promising results with dopamine antagonists, benzodiazepines, and topical capsaicin. Sustained cessation of cannabinoid products remains the only intervention that has demonstrated longitudinal efficacy.[14] These findings reinforce the applicability of adult CHS principles but concurrently demonstrate the need for pediatric-specific research into CHS in this population.

Conclusion

CHS has emerged as an important and increasingly common diagnosis in the era of cannabis legalization. The pathophysiology involves a paradoxical effect of long-term cannabinoid use on the emesis pathways, possibly mediated by CB1 receptor desensitization and TRPV1 receptor activation. Hospitalists should be aware that CHS patients often have coexisting psychiatric needs and may initially deny cannabis as a cause, given their prior reliance on it for symptom relief.

While conventional antiemetics alone are usually insufficient for CHS, growing clinical experience has identified more effective treatments for acute episodes, including dopamine antagonists, benzodiazepines, and topical capsaicin. Adopting protocols that include these agents can significantly improve patient comfort and shorten hospital stays. However, the ultimate treatment is patient education and cessation of cannabis use, which may require compassionate counseling and addiction support.

Ongoing research and surveillance are needed to fully understand this syndrome's mechanisms and to develop more targeted treatments. In the meantime, heightened awareness and recognition of CHS by hospitalists can lead to appropriate therapy, reduced healthcare utilization, and better outcomes for these patients. ■

References

1. Wang GS, et al. Changes in emergency department encounters for vomiting after cannabis legalization in Colorado. *JAMA Network Open*. 2021;4(9):e2125063. doi:10.1001/jamanetworkopen.2021.25063.

2. Myran DT, et al. Changes in emergency department visits for cannabis hyperemesis syndrome following recreational cannabis legalization and subsequent commercialization in Ontario, Canada. *JAMA Netw Open*. 2022;5(9):e2231937. doi: 10.1001/jamanetworkopen.2022.31937.

3. Ruberto AJ, et al. Intravenous haloperidol versus ondansetron for cannabis hyperemesis syndrome (HaVOC): a randomized, controlled trial. *Ann Emerg Med*. 2021;77(6):613-619. doi: 10.1016/j.annemergmed.2020.08.021.

4. Fleming JE, Lockwood S. Cannabinoid hyperemesis syndrome. *Fed Pract*. 2017;34(10):33-36. PMID:30766236.

5. Richards JR, et al. Pharmacologic treatment of cannabinoid hyperemesis syndrome: a systematic review. *Pharmacotherapy*. 2017;37(6):725-734. doi: 10.1002/phar.1931.

6. Loganathan P, et al. A comprehensive review and update on cannabis hyperemesis syndrome. *Pharmaceuticals* (Basel). 2024;17(11):1549. doi: 10.3390/ph17111549.

7. Blumentrath CG, et al. Cannabinoid hyperemesis and the cyclic vomiting syndrome in adults: recognition, diagnosis, acute and long-term treatment. *Ger Med Sci*. 2017;15:Doc06. doi: 10.3205/000247.

8. Cue L, et al. Cannabinoid hyperemesis syndrome. 2023. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan. PMID: 31751105.

9. Dean DJ, et al. A pilot trial of topical capsaicin cream for treatment of cannabinoid hyperemesis syndrome. *Acad Emerg Med*. 2020;27(11):1166-1172. doi: 10.1111/acem.14062.

10. Toce MS, et al. Emergency department visits for cannabis hyperemesis syndrome among adolescents. *JAMA Netw Open*. 2025;8(7):e2520492. doi: 10.1001/jamanetworkopen.2025.20492.

11. Dosani K, et al. Cannabinoid hyperemesis syndrome in pediatrics: an emerging problem. *Pediatr Rev*. 2021;42(9):500-506. doi: 10.1542/pir.2019-0097.

12. Zhu JW, et al. Diagnosis and acute management of adolescent cannabinoid hyperemesis syndrome: a systematic review. *J Adolesc Health*. 2021;68(2):246-254. doi: 10.1016/j.jadohealth.2020.07.035.

13. Geraci E, et al. Comparison of antiemetics in the management of pediatric cannabinoid hyperemesis syndrome. *J Pediatr Pharmacol Ther*. 2023;28(3):222-227. doi: 10.5863/1551-6776-28.3.222.

14. Reinert JP, et al. Management of pediatric cannabinoid hyperemesis syndrome: a review. *J Pediatr Pharmacol Ther*. 2021;26(4):339-345. doi: 10.5863/1551-6776-26.4.339.

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