

January 2023  
Vol. 27 | No. 1

# THE Hospitalist<sup>®</sup>

shm<sup>®</sup>  
the-hospitalist.org

Twitter Facebook LinkedIn Instagram  
@SocietyHospMed

p5

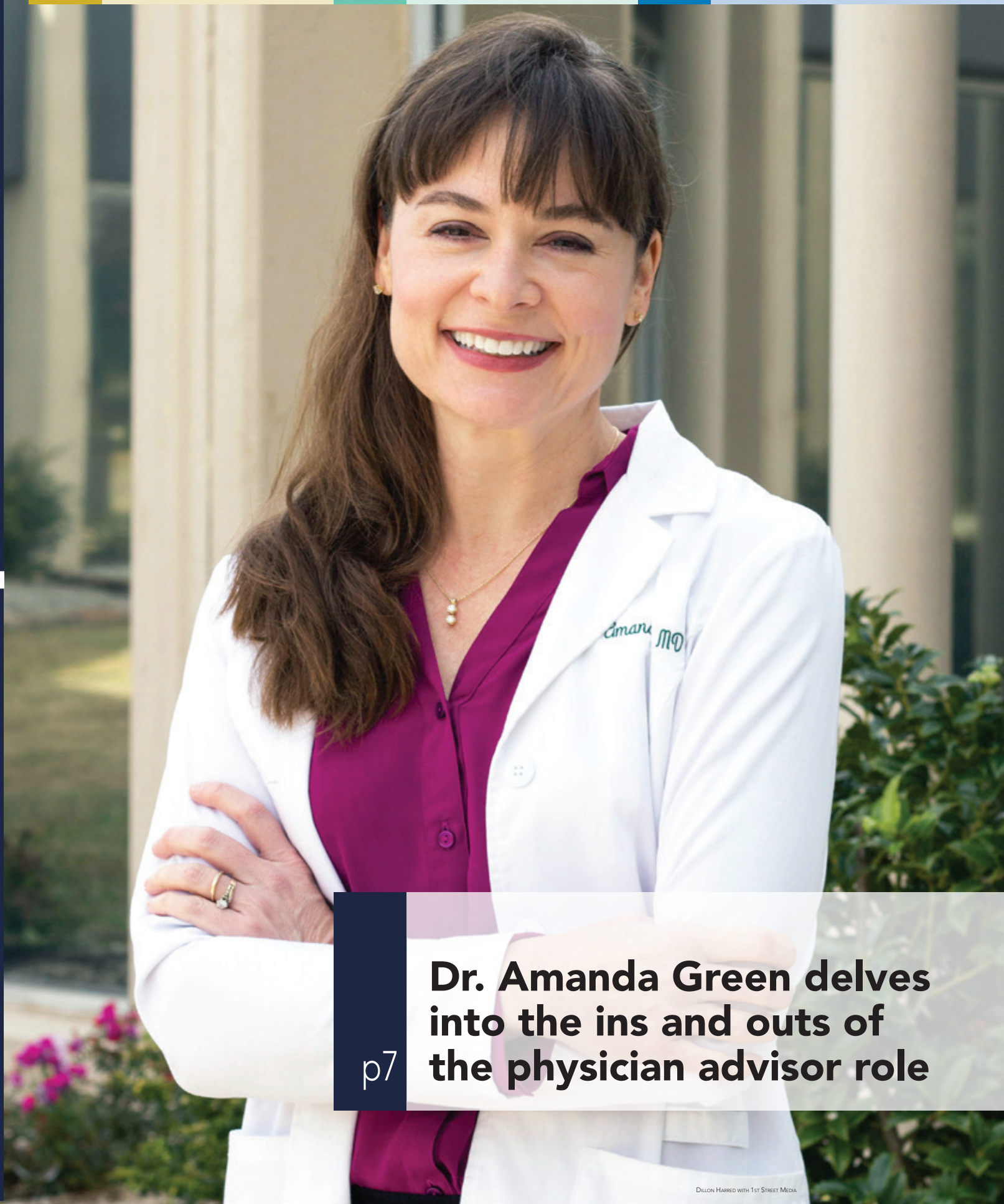
CLINICAL  
Update: Caring for  
COVID-19 patients

p8

QUALITY  
5 change management  
options for QI

p10

PRACTICE  
MANAGEMENT  
2023 coding changes



p7

**Dr. Amanda Green delves  
into the ins and outs of  
the physician advisor role**

DILLON HARRED WITH 1ST STREET MEDIA

IN THE LITERATURE

## University of Virginia, Part 2

p3

Drs. Moulder, Young,  
Crane, Dreicer,  
Kerley, Gomez-  
Sanchez, and Clemo

KEY CLINICAL QUESTION

## Drs. Vasudevan and Feagins

p17

Should you feed  
patients admitted for  
IBD flares?

VISIT US  
ONLINE FOR  
EXCLUSIVE  
CONTENT



IN THE NEXT ISSUE...

**SHM Converge 2023  
preview issue!**

Post Std  
U.S. Postage  
PAID  
Kent OH  
Permit #1151

THE Hospitalist  
WILEY PERIODICALS LLC  
C/O The Sheridan Press  
PO Box 465  
Hanover, PA 17331



# Looking Ahead and Opportunities

By Weijen Chang, MD, FAAP, SFHM, Anika Kumar, MD, FAAP, FHM, and Lisa Casinger

Happy New Year! As we start 2023, it's the perfect time to share our plans for *The Hospitalist* this year and encourage you to get more involved.

As members of the Society of Hospital Medicine, this is your magazine and there are lots of publishing opportunities, whether you're looking to share good news, tackle a clinical conundrum, be a source for a feature, or express yourself creatively.

- A preview of the year to come:
- You'll hear from more SHM members this year as we host guest columnists who'll write about everything from SHM Converge and National Hospitalist Day to diversity, equity, and inclusion, advocacy, and leadership.
  - We'll cover topics based on the news, issues, and trends that affect hospitalists and hospital medicine—workforce challenges, education, hospital economics, public policy, pediatrics, quality, practice management, and more. These topics and the focus for our articles and features are developed with our editorial board, which is a group of member volunteers, with the goal of providing content that's useful and timely.
  - We'll continue to publish the clinical articles you've come to expect from *The Hospitalist*—In the Literature, Key Clinical Questions, and Interpreting Diagnostic Tests.
  - Our Movers and Shakers column will celebrate your promotions, awards, or other recognitions.
  - HM Voices, our exclusively online area of *The Hospitalist*, started last year, is where we showcase non-clinical writing—In Your Words (poetry, essays,



Dr. Chang Dr. Kumar

*Dr. Chang, the physician editor of The Hospitalist, is a pediatric and adult hospitalist at Baystate Medical Center and Baystate Children's Hospital in Springfield, Mass., where he is an associate professor of pediatrics at the University of Massachusetts Chan Medical School Baystate, chief of pediatric hospital medicine, and vice-chair for clinical affairs at Baystate Children's Hospital. Dr. Kumar, the pediatric editor of The Hospitalist, is a pediatric hospitalist at Cleveland Clinic Children's and an assistant professor of pediatrics at Cleveland Clinic Children's Lerner College of Medicine of Case Western Reserve University in Cleveland, Ohio. She is also a member of SHM's Pediatrics SIG's executive committee. Lisa Casinger is the editor of The Hospitalist.*

etc.), or creative visuals—In Your Eyes (photos, art, digital creations). Our hope is to continue to develop this area with the addition of other creative forms of expression.

Scan this QR code to find out more about Publishing Opportunities for SHM members. ■



## Connect with Us

There are myriad ways to access *The Hospitalist's* content—print, website, and newsletter.

There are also myriad ways to connect with us and your fellow SHM members to discuss not only the articles and topics we cover, but also SHM news and information.

You'll find SHM on Twitter, Facebook, LinkedIn, and Instagram at @SocietyHospMed. Join the conversation!

If you have ideas for future articles or feedback you'd like to share email Lisa Casinger at [lcasinger@wiley.com](mailto:lcasinger@wiley.com). ■

### EDITORIAL STAFF

- |  |  |
|--|--|
| <b>Physician Editor</b><br>Weijen W. Chang, MD, FAAP, SFHM<br><a href="mailto:Weijen.ChangMD@baystatehealth.org">Weijen.ChangMD@baystatehealth.org</a> | <b>Coordinating Editors</b><br>Alan Hall, MD<br>The Future Hospitalist |
| <b>Pediatric Editor</b><br>Anika Kumar, MD, FAAP, FHM<br><a href="mailto:KumarA4@ccf.org">KumarA4@ccf.org</a>  | Keri Holmes-Maybank, MD, FHM<br>Interpreting Diagnostic Tests          |
| <b>Editor</b><br>Lisa Casinger<br><a href="mailto:lcasinger@wiley.com">lcasinger@wiley.com</a>   | <b>Art Director</b><br>Chris Whissen                                   |
|  | <b>Copy Editor</b><br>Peri Dwyer Worrell                               |

### EDITORIAL ADVISORY BOARD

- |   |  |
|---|--|
| Ramesh Adhikari, MD, SFHM, MS<br>Khaalisha Ajala, MD, FHM<br>Kathryn Bakum, MD<br>Weijen W. Chang, MD, FAAP, SFHM<br>Harry Cho, MD<br>Ilaria Gadalla, DMSc, PA-C<br>Amanda Green, MD, FACP, HMDC, CPPS, FHM<br>James Kim, MD<br>Anika Kumar, MD, FAAP, FHM<br>Ponon Dileep Kumar, MD, MBA, FACP, FAAPL, CPE<br>Kunjam Modha, MD, FACP, SFHM | Anna Nelson, DO<br>Shyam Odeti, MD, MS, FAAPF, FHM<br>Venkataraman Palabindala, MD, FHM<br>Aditi Puri, MD, MS<br>Isha Puri, MD, MPH, FHM<br>Tanveer Singh, MD, MBBS<br>Kranthi Sitammagari, MD<br>Amith Skandhan, MD, FHM<br>Lonika Sood, MD, FACP, FHM<br>Amit Vashist, MD, MBA, CPE, FACP, FAPA, FACHE, SFHM |
|---|--|

### PUBLISHING STAFF

- |   |   |
|---|---|
| <b>Publishing Director</b><br>Lisa Dionne Lento<br><a href="mailto:ldionnelen@wiley.com">ldionnelen@wiley.com</a> | <b>Associate Director, Advertising Sales</b><br>Tracey Davies<br><a href="mailto:tdavies@wiley.com">tdavies@wiley.com</a> |
|---|---|

### ADVERTISING STAFF

- |  |  |
|--|--|
| <b>Display Advertising</b><br>Senior Account Managers<br>Stephen Donohue<br><a href="mailto:sdonohue@wiley.com">sdonohue@wiley.com</a><br>MJ Drown<br><a href="mailto:mdrown@wiley.com">mdrown@wiley.com</a> | <b>Classified Advertising</b><br>Associate Director of Sales<br>Allister Crowley<br><a href="mailto:acrowley@wiley.com">acrowley@wiley.com</a> |
|--|--|

### THE SOCIETY OF HOSPITAL MEDICINE

- |   |   |
|---|---|
| Phone: 800-843-3360<br>Fax: 267-702-2690<br>Website: <a href="http://www.hospitalmedicine.org">www.hospitalmedicine.org</a> | <b>Director of Communications</b><br>Brett Radler<br><a href="mailto:bradler@hospitalmedicine.org">bradler@hospitalmedicine.org</a>           |
| <b>Chief Executive Officer</b><br>Eric E. Howell, MD, MHM   | <b>Social Media &amp; Content Specialist</b><br>Kristen Munoz<br><a href="mailto:kmunoz@hospitalmedicine.org">kmunoz@hospitalmedicine.org</a> |

### SHM BOARD OF DIRECTORS

- |  |  |
|--|--|
| <b>President</b> Rachel Thompson, MD, MPH, SFHM<br><b>President-Elect</b> Kris Rehm, MD, SFHM<br><b>Treasurer</b> Flora Kisuule, MD, MPH, SFHM<br><b>Secretary</b> Robert P. Zipper, MD, MMM, SFHM<br><b>Immediate Past President</b> Jerome C. Siy, MD, MHA, SFHM | <b>Board of Directors</b><br>Bryce Gartland, MD, SFHM<br>Kierstin Kennedy, MD, MSHA, FACP, SFHM<br>Efren C. Manjarrez, MD, SFHM<br>D. Ruby Sahoo, DO, MBA, FACP, SFHM<br>Mark W. Shen, MD, SFHM<br>Darlene Tad-y, MD, SFHM<br>Chad T. Whelan, MD, MHSA, SFHM |
|--|--|

### SHM'S DIVERSITY AND INCLUSION STATEMENT

Hospitalists are charged with treating individuals at their most vulnerable moments, when being respected as a whole person is crucial to advancing patients' healing and wellness. Within our workforce, diversity is a strength in all its forms, which helps us learn about the human experience, grow as leaders, and ultimately create a respectful environment for all regardless of age, race, religion, national origin, gender identity, sexual orientation, socioeconomic status, appearance, or ability. To this end, the Society of Hospital Medicine will work to eliminate health disparities for our patients and foster inclusive and equitable cultures across our care teams and institutions with the goal of moving medicine and humanity forward.

### INFORMATION FOR SUBSCRIBERS

Print subscriptions are free for members of the Society of Hospital Medicine. Free access is also available online at [www.the-hospitalist.org](http://www.the-hospitalist.org). If you are an SHM member and have a subscription inquiry, contact 800-843-3360 or email [customerservice@hospitalmedicine.org](mailto:customerservice@hospitalmedicine.org). If you are not an SHM member and receive *The Hospitalist*, contact Wiley Periodicals LLC at 800-835-6770 (U.S. only) or email at [cs-journals@wiley.com](mailto:cs-journals@wiley.com).

*The Hospitalist* is the official newspaper of the Society of Hospital Medicine, reporting on issues and trends in hospital medicine. The *Hospitalist* reaches more than 35,000 hospitalists, physician assistants, nurse practitioners, medical residents, and health care administrators interested in the practice and business of hospital medicine.

*The Hospitalist* (ISSN 1553-085X) is published monthly on behalf of the Society of Hospital Medicine by Wiley Periodicals LLC, 111 River Street, Hoboken, NJ 07030-5774. Postmaster: Send all address changes to The Hospitalist Wiley Periodicals LLC, c/o The Sheridan Press, PO Box 465, Hanover, PA, 17331. Printed in the United States by Sheridan of Ohio, Brimfield, OH.

Copyright ©2023 Society of Hospital Medicine. All rights reserved. No part of this publication may be reproduced, stored, or transmitted in any form or by any means and without the prior permission in writing from the copyright holder.

All materials published, including but not limited to





# University of Virginia School of Medicine Research Reviews

By Glenn Moulder, MD, Gregory Young, MD, Ian Crane, MD, Jessica J. Dreicer, MD, Joseph Kerley, MD, Miriam Gomez-Sanchez, MD, and Rebecca Clemo, MD

University of Virginia School of Medicine, Charlottesville, Va.

## IN THIS ISSUE

1. Aggressive intravenous fluids added to rectal NSAIDs do not prevent post-ERCP pancreatitis
2. Syncopal event does not necessarily mean driving restriction
3. Legionella risk model guides appropriate testing
4. Issues related to testing are the most common source of diagnostic errors in primary care
5. Initiation of empagliflozin in hospitalized patients with acute decompensated heart failure improves clinical and symptomatic outcomes at 90 days
6. Rivaroxaban monotherapy is preferable to combination therapy with antiplatelets with regards to total cardiovascular and bleeding events in patients with atrial fibrillation and stable coronary artery disease

By Glenn Moulder, MD

### 1 Aggressive intravenous fluids plus rectal NSAIDs do not prevent post-ERCP pancreatitis

**CLINICAL QUESTION:** Does the addition of aggressive intravenous hydration to rectal nonsteroidal anti-inflammatory drugs (NSAIDs) help prevent post-endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis?



Dr. Moulder

**BACKGROUND:** Pancreatitis is a common complication of ERCP. The use of prophylactic rectal NSAIDs reduces the development of post-ERCP pancreatitis. Evidence has emerged that aggressive periprocedural hydration using lactated Ringer's solution reduces the risk of post-ERCP pancreatitis, though this was not studied in combination with rectal NSAIDs.

This trial aimed to evaluate the value of aggressive hydration in combination with prophylactic NSAIDs to prevent post-ERCP pancreatitis.

**STUDY DESIGN:** The Fluid Hydration to Prevent Post-ERCP Pancreatitis In Average- To High-Risk Patients Receiving Prophylactic Rectal NSAIDs Trial (FLUYT) was a multicenter, open-label, randomized, controlled trial.

**SETTING:** The trial was conducted by the Dutch Pancreatitis Study group comprising four university medical centers and 18 teaching hospitals in the Netherlands between June 2015 and June 2019.

**SYNOPSIS:** In this trial, 826 patients undergoing ERCP, aged 18 to 85, with moderate to high risk of post-ERCP pancreatitis, were randomized to receive aggressive periprocedural hydration (20 mL/kg intravenous lactated Ringer's within 60 minutes of the start of ERCP, followed by 3 mL/kg/hour for 8 hours) in addition to rectal NSAIDs (100 mg of diclofenac or indomethacin). The primary endpoint analyzed on a modified intention-to-treat basis was post-ERCP pancreatitis and secondary endpoints were severity of post-ERCP pancreatitis, ERCP-related complica-

tions, hydration-related complications, pancreatic insufficiency, and duration of hospital stay. Post-ERCP pancreatitis occurred in 30 (8%) patients in the aggressive hydration group and 39 (9%) patients in the control group.

There were no differences in serious adverse events including hydration-related complications, intensive care unit admission, and 30-day mortality. These results reassure us that there is no reduction in the incidence of post-ERCP pancreatitis when aggressive hydration is added to prophylactic NSAIDs.

**BOTTOM LINE:** Combination therapy of aggressive periprocedural hydration with lactated Ringer's in addition to rectal NSAIDs was not superior to rectal NSAIDs alone in reducing the incidence of post-ERCP pancreatitis in patients at moderate risk of developing this complication.

**CITATION:** Sperna Weiland CJ, et al. Aggressive fluid hydration plus non-steroidal anti-inflammatory drugs versus non-steroidal anti-inflammatory drugs alone for post-endoscopic retrograde cholangiopancreatography pancreatitis (FLUYT): a multicentre, open-label, randomised, controlled trial. *Lancet Gastroenterol Hepatol.* 2021;6(5):350-8.

Dr. Moulder is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

By Gregory Young, MD

### 2 Syncopal event does not necessarily mean driving restriction

**CLINICAL QUESTION:** Do patients with first syncopal events suffer more motor vehicle collisions (MVCs) than patients without syncope?

**BACKGROUND:** Recommendations for driving restrictions after an initial episode of syncope depend on the suspected cause of syncope and local guidelines. Given the relative incidence of syncope, this study examines whether we should continue to affect patients through these restrictions.



Dr. Young

**STUDY DESIGN:** Retrospective, observational, cohort study

**SETTING:** Six emergency departments (EDs) in British Columbia (BC), Canada

**SYNOPSIS:** The use of universal health insurance records and a singular car insurance provider in BC allowed authors to review a population of 43,589 patients and compare MVC incidence between patients with first episodes of syncope and matched controls in the ED.

The primary outcome of MVC was less likely in patients with all causes of likely or definite syncope (HR 0.89; 95% CI, 0.81-0.98). Most of the likely or definite syncopal events were deemed vasovagal in nature (74.3%), which does not always necessitate driving limitations. However, subgroup analysis did not demonstrate that cardiogenic syncope (6.3%) conveyed increased risk.

Of note, the non-syncopal controls had a baseline higher utilization of benzodiazepine and opiate prescriptions (9.1 versus 6%, and 14.6 versus 8.1%, respectively) as well as an increased number of prior citations and MVCs (30.9 versus 26.9% and 27 versus 25.4%, respectively).

**BOTTOM LINE:** Patients diagnosed with likely first episode of syncope may not need driving restrictions, but further study focusing on cardiogenic syncope may be indicated.

**CITATION:** Staples JA, et al. Syncope and the risk of subsequent motor vehicle crash: a population-based retrospective cohort study. *JAMA Intern Med.* 2022;182(9):934-42.

Dr. Young is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

By Ian Crane, MD

### 3 Legionella risk model guides appropriate testing

**CLINICAL QUESTION:** Can select patient demographic data and risk factors help predict *Legionella* infection better than clinical gestalt or current Infectious Diseases Society of America (IDSA)/American Thoracic Society (ATS) testing guidelines?



Dr. Crane

**BACKGROUND:** *Legionella* occupies a small fraction of the identified causes of community-acquired pneumonia (around 2%) and is commonly diagnosed via urine antigen testing (UAT) or polymerase chain reaction (PCR) performed on respiratory tract specimens. IDSA/ATS 2019 guidelines suggest testing only patients with severe pneumonia, recent travel, or during local outbreaks.

**STUDY DESIGN:** Retrospective cohort study

**SETTING:** 177 U.S. hospitals belonging to Pre-



miere Healthcare Database and 12 Cleveland Clinic Health System hospitals

**SYNOPSIS:** Between 2010 and 2015, 43,070 of 166,689 patients were included, with ICD-9/10 codes for community-acquired pneumonia. Inclusion required patients to have received three days of antibiotics, have an infiltrate on chest X-ray, and have been tested for *Legionella*. A logistics regression model identified 30-day proximity to *Legionella* outbreak (OR 3.4), June–October admission (OR 3.4), hyponatremia (OR 3.3), smoking (OR 2.4), and diarrhea (OR 2.0) as positive predictors, while an admission within the prior six-months (OR 0.27) and chronic pulmonary disease (OR 0.49) were negative predictors. Qualifying as severe pneumonia did not correlate with test positivity or negativity. Simulating a model of testing patients with the highest predicted probabilities yielded a 3.73% positivity rate, which was 33.5% above the guidelines based strategy and 150% higher than actual physician testing. This study may overestimate *Legionella* cases by including only patients that underwent *Legionella* testing. Furthermore, the practicality of this model is limited by requiring clinicians to know about recent *Legionella* outbreaks at their institution. The author’s *Legionella* risk calculator can be accessed at <https://riskcalc.org/Legionella>.

**BOTTOM LINE:** A logistic regression model-based risk calculator likely outperforms clinical gestalt and IDSA/ATS guidelines in predicting *Legionella* infection; though an appropriate threshold for testing remains undetermined and the practicality of this model is limited by requiring clinicians to know about recent *Legionella* outbreaks at their institution.

**CITATION:** Rothberg MB, et al. A risk model to identify *Legionella* among patients admitted with community-acquired pneumonia: A retrospective cohort study. *J Hosp Med*. 2022;17(8):624-32.

Dr. Crane is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

By Jessica J. Dreicer, MD

4 Issues related to testing are the most common source of diagnostic errors in primary care

**CLINICAL QUESTION:** How can we categorize diagnostic pitfalls leading to diagnostic errors in primary care?

**BACKGROUND:** Diagnostic errors are a leading cause of malpractice claims and are difficult to mitigate with system-level changes, as they are often multifactorial. The term “diagnostic pitfalls” to describe the circumstances leading to a diagnostic error is at least a century old but the authors offered a new definition of “clinical situations and scenarios that are vulnerable to errors that may lead to missed, delayed, or wrong diagnoses.”

**STUDY DESIGN:** Retrospective analysis of varied sources of diagnostic error reports in primary care settings

**SETTING:** Ambulatory practices and academic medical centers in Massachusetts

**SYNOPSIS:** 4,352 patient safety incident reports, 403 closed malpractice claims, 24 ambulatory morbidity and mortality rounds, and 355 responses from focus groups of six specialties



Dr. Dreicer

SHORT TAKES

Acetazolamide + loop diuretic = more effective and expedient diuresis

By Miriam Gomez-Sanchez, MD

Randomized trial demonstrating more successful decongestion at day three and shorter length of stay in patients with acute decompensated heart failure with volume overload with the addition of acetazolamide to stan-

Dr. Gomez-Sanchez

Standardized loop-diuretic therapy as compared to standardized loop-diuretic therapy and placebo.

CITATION: Mullens W, et al. Acetazolamide in acute decompensated heart failure with volume overload. *N Engl J Med*. 2022;387(13):1185-95.

Dr. Gomez-Sanchez is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

who were asked about diagnostic errors and delays they had seen “upstream” in the course of the patient’s primary care. Using two taxonomies, the authors categorized the diagnostic errors and found that errors related to testing were the most commonly reported. Specific issues included failing to order appropriate testing, failing to follow up on abnormal test results, or misinterpreting test results. Awareness that diagnostic errors were most frequently related to issues regarding testing could lead to targeted interventions to decrease these errors.

A limitation of this review was that it was a convenience sample, and therefore is not a holistic representation of diagnostic errors.

**BOTTOM LINE:** Diagnostic errors reported in the primary care setting were most commonly related to issues of performing initial testing, interpreting test results, or following up on abnormal test results.

**CITATION:** Schiff GD, et al. Characteristics of disease-specific and generic diagnostic pitfalls: a qualitative study. *JAMA Netw Open*. 2022;5(1):e2144531. doi:10.1001/jamanetworkopen.2021.44531.

Dr. Dreicer is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

By Joseph Kerley, MD

5 Initiation of empagliflozin in hospitalized patients with acute decompensated heart failure improves clinical and symptomatic outcomes at 90 days

**CLINICAL QUESTION:** Does initiation of empagliflozin in hospitalized patients with acute decompensated heart failure improve clinical outcomes and symptom burden?

**BACKGROUND:** Studies have outlined the clinical benefit of empagliflozin and sodium-glucose cotransporter-2 inhibitors in the ambulatory setting. However, little is known about initiation in hospitalized patients with acute decompensated heart failure and its impact on both clinical and symptomatic outcomes.

**STUDY DESIGN:** Randomized, double-blinded, placebo-controlled trial

**SETTING:** 118 centers across 15 countries

**SYNOPSIS:** 530 hospitalized patients were randomized to empagliflozin 10 mg versus placebo. Kansas City Cardiomyopathy Questionnaire with Total Symptom Score (KCCQ-TSS) was obtained at baseline and on days 15, 30, and 90. The primary clinical benefit endpoint was defined as the hi-



Dr. Kerley

erarchical composite of all-cause death, heart failure events, and a five-point or greater KCCQ-TSS change from baseline to 90 days. In a post-hoc analysis, patients were then assigned to tertiles based upon baseline KCCQ-TSS ranging from (1) <27.1, (2) ≥27.1 to <52.1, and (3) ≥52.1 points.

Independent of baseline symptom burden, patients treated with empagliflozin experienced an improvement in KCCQ-TSS, quality of life, clinical summary, and overall summary. Symptomatic improvement by KCCQ-TSS was seen as early as 15 days in the empagliflozin-treated group (placebo-adjusted mean difference, 5.35 [95% CI, 1.51–9.19] points; *P*<0.01).

Primary results of the empagliflozin in patients hospitalized with acute heart failure who have been stabilized (EMPULSE) trial, performed by win-ratio analysis, showed clinical benefit in empagliflozin-treated patients at 53.9% versus 39.7% in the placebo group (*P*=0.0054).

**BOTTOM LINE:** Initiation of empagliflozin in patients hospitalized with acute decompensated heart failure shows both clinical and symptomatic benefit at 90 days regardless of baseline symptom burden.

**CITATION:** Kosiborod MN, et al. Effects of empagliflozin on symptoms, physical limitations, and quality of life in patients hospitalized for acute heart failure: Results from the EMPULSE trial. *Circulation*. 2022;146(4):279-88.

Dr. Kerley is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va.

By Rebecca Clemo, MD

6 Rivaroxaban monotherapy is preferable to combination therapy with antiplatelets with regards to total cardiovascular and bleeding events in patients with atrial fibrillation and stable coronary artery disease

**CLINICAL QUESTION:** Is there a difference in total thrombotic and/or bleeding events in patients with atrial fibrillation (AF) and stable coronary artery disease (CAD) on rivaroxaban monotherapy versus a combination of rivaroxaban and antiplatelet agent?

**BACKGROUND:** The Atrial Fibrillation and Ischemic Events with Rivaroxaban in Patients with Stable Coronary Artery Disease (AFIRE) trial showed that in patients with AF and CAD, rivaroxaban monotherapy had lower rates of first-time cardiovascular and bleeding events than rivaroxaban in combination with an antiplatelet agent. However, the initial evaluation of this trial did not account for subsequent thrombotic or bleeding events, raising concern for potential underestimation of the long-term risk associ-



Dr. Clemo



ated with rivaroxaban monotherapy versus combination therapy.

**STUDY DESIGN:** Post-hoc secondary analysis of an open-label, randomized, clinical trial

**SETTING:** Multicenter, Japan

**SYNOPSIS:** In this study conducted across 294 centers, 2,215 patients were randomly assigned to rivaroxaban monotherapy, or therapy with rivaroxaban in combination with aspirin or a P2Y<sub>12</sub> inhibitor. All patients were diagnosed with AF with a CHADS<sub>2</sub> score greater than one, as well as confirmed CAD without percutaneous coronary intervention (PCI) or coronary artery bypass grafting within 12 months. Primary endpoints were the total number of first and subsequent bleeding and thrombotic events over a 24-month follow-up period. Thrombotic events included ischemic stroke, systemic embolism, myocardial infarction, and unstable angina requiring PCI. The total event rate was 12.2% and 19.2% for the monotherapy and combination therapy groups, respectively. Rivaroxaban monotherapy had a 31% reduction in first events and a 54% reduction in subse-

quent events. The rivaroxaban and combination-therapy groups had mortality rates of 3.7% and 6.6%, respectively. The mortality rate of bleeding events was higher than that of thrombotic events, regardless of the treatment group. Limitations include open-label study design and minimal patient diversity. The 24-month follow-up period may not fully capture the lifetime risk of events.

**BOTTOM LINE:** Rivaroxaban monotherapy as compared to rivaroxaban in combination with an antiplatelet agent for patients with AF and stable CAD is associated with a reduction in both first-time and total number of thrombotic and bleeding events.

**CITATION:** Naito R, et al. AFIRE Investigators. Rivaroxaban monotherapy vs combination therapy with antiplatelets on total thrombotic and bleeding events in atrial fibrillation with stable coronary artery disease: A post hoc secondary analysis of the AFIRE trial. *JAMA Cardiol.* 2022;7(8):787-94.

*Dr. Clemo is an assistant professor of medicine at the University of Virginia School of Medicine, Charlottesville, Va. ■*

# Update: Caring for COVID-19 Patients in the Hospital

Sharing best medical practice as the feeling of crisis fades

By Larry Beresford

Severe cases of COVID-19 infections continue to necessitate hospitalization more than two and a half years after the pandemic first hit.

A total of 26,996 patients were hospitalized with COVID-19 in the U.S. as of Nov. 30, 2022, according to the Centers for Disease Control and Prevention's COVID-19 Tracker,<sup>1</sup> with a seven-day average of new deaths at 317 as of Nov. 16, 2022. This is down 5.3% from the previous seven-day average.

But in contrast to the panic, emergency response, and mobilization for the pandemic's early stages and steepest surges, managing COVID-19 in the hospital today has become relatively straightforward, even routine, with a handful of recognized treatments that can be used by hospitalists. Questions and controversies more often are non-medical, reflecting politics, polarizing attitudes, and ongoing vaccination controversies.

Jennifer Babik, MD, PhD, professor of medicine in the division of infectious diseases at the University of California San Francisco, offered a straightforward review of the basic treatment strategies in her presentation, "Update on Inpatient Management of COVID-19," at the Management of the Hospitalized Patient conference Oct. 13 in San Francisco.

COVID-19 management has become less complicated than it was a year or two ago, she said. "It used to be when a week went by, I'd have to change all my slides." Now, Dr. Babik's PowerPoint for her presentations on how to manage COVID-19 in the hospital can go unchanged for weeks or even months.

Some hospitalists make a distinction between patients hospitalized for COVID-19 or admitted with COVID-19, but Dr. Babik said these prepositions can be confusing. She prefers to say patients admitted for non-COVID-19 diagnoses but who are also COVID-19-positive. Their incidental COVID-19 infection might be mild enough that they otherwise

could have received outpatient treatment for it, including oral medications. For such patients, the hospitalist might choose to view their inpatient management as providing typical outpatient COVID-19 therapies as if they were outpatients while they receive inpatient treatments for their admitting diagnosis.

Nirmatrelvir/ritonavir (Paxlovid), an oral antiviral granted emergency use authorization from the U.S. Food and Drug Administration in December 2021, consists of two generic medications, nirmatrelvir, a protease inhibitor, and ritonavir, an antiviral medication for HIV. It's used for outpatient treatment of mild to moderate COVID-19 in adults and children aged 12 and up.

Remdesivir, a direct-acting nucleotide prodrug inhibitor approved by the Food and Drug Administration for patients at high risk of severe COVID-19 in October 2020, is the antiviral most typically used in the hospital for COVID-19.

The first week of the illness is the viral phase, treated with antiviral therapies, Dr. Babik said. The second is the immune or inflammatory phase, treated with immunomodulators. But there is a lot of overlap between these categories. She recommends the National Institutes of Health's Guidelines on Therapeutic Management of Hospitalized Adults with COVID-19.<sup>2</sup>

Two immunomodulators, tocilizumab, an immunosuppressive drug used for rheumatoid arthritis, and baricitinib, a JAK inhibitor, given intravenously and orally, respectively, are recommended only for patients on oxygen who are rapidly worsening or who are on high-flow nasal cannula, noninvasive mechanical ventilation, or mechanical ventilation.

"We usually mostly do standard tests," Dr. Babik said, sometimes including a CRP (C-reactive protein) test to identify the level of inflammation caused by severe infection. All COVID-19 patients should have a baseline chest X-ray, but a chest CT is not needed routinely unless there is concern for an additional process. She also recommends checking for drug-drug interactions and whether anti-coagulation is indicated if using a drug like Paxlovid, and watching out for long COVID-19.



Dr. Babik



## Attend The Prez Room

Connect, Grow, Learn

Take part in The Prez Room, a series of monthly panel discussions surrounding hot topics and issues affecting SHM members like you! Connect with your peers and SHM leaders to impact change on a local and national level.

Join us at the next one. Check your inbox for details.

**shm.**  
Society of Hospital Medicine



## Endemic, almost routine

"Things have changed a lot over the last two years from the dark early days of the pandemic, when you were seeing so many patients dying in front of you,"



Dr. Tirupathi

Raghavendra Tirupathi, MD, FACP, FRCP, FIDSA, medical director of Keystone Infectious Diseases in Chambersburg, Penn., and chair of infection prevention at Wellspan Chambersburg and Waynesboro hospitals, said.

"Now the disease is more of an outpatient phenomenon, with more patients treated within the first five days of symptoms with oral medications, and with decreasing numbers of hospitalizations. That has brought back some normalcy for some of us, so that hospitalists can focus on other clinical conditions. We are cautiously optimistic but need to stay prepared for what comes next," he said.

What hospitalists worry about most is another surge that could once again stretch hospital capacity. There are still substantial numbers of patients hospitalized for COVID-19, predominantly the unvaccinated, very elderly, or immune-compromised. People are still dying of COVID-19 every day, Dr. Tirupathi said. Hospitalists need to be aware of the treatment options, not only for severe COVID-19, but for management of mild-to-moderate cases and the risk for progression to severe COVID-19.

He also emphasized the opportunity for hospitalists to have informed discussions with hospitalized patients about the COVID-19 vaccine. "Know the reasons for their reluctance and offer to start a vaccine series in the hospital. Sometimes you can start a conversation that leads to action down the road," he said. "We want to take every opportunity for it."

Aziz Ansari, DO, FAAHPM, FACP, SFHM, associate chief medical officer at Loyola University Medical Center in Maywood, Ill., said his



Dr. Ansari

hospital is seeing fewer cases of COVID-19 respiratory failure. "So yes, COVID-19 is changing. I still oversee COVID-19 clinical operations, but I've stopped reviewing every COVID-19 case that comes through here. We used to have COVID-19-specific multidisciplinary rounds, and we don't do that anymore," he said.



COVID-19 has become endemic, almost routine. "It's not going away, and we're living with it. But I don't see masks coming off clinicians in our hospital anytime soon—if ever." It is still standard practice to test every new admission for the virus, and those who are positive still need to be isolated. But COVID-19 cases aren't localized at a designated part of the hospital anymore, he said. "They could be in any part of the hospital except the bone marrow unit."

For Swati Mehta, MD, CPXP, FACP, SFHM, the national director of quality and patient experience for Vituity, a physician-led health care innovation company based in Emeryville, Calif., and a practicing hospitalist at Dignity Sequoia Hospital in Redwood City, Calif., the pandemic's impact is far from over.



Dr. Mehta

"Because many patients with other chronic conditions resisted seeking medical care during the pandemic, many of them are now presenting with worsening symptoms. When they seek care, it raises acuity levels in our hospitals. We are often at full capacity, with scarce real estate, and a higher acuity than before the pandemic. We struggle to see such high patient volumes, and it's harder to transition patients with COVID-19 to skilled nursing facilities," she said.

Hospitalists are also doing vent management and other ICU-level care and are asked to do tele-critical care, tele-evaluations, and tele-admissions, she said. In the post-COVID-19 era, they will need to be agile for these new and different roles. "It has reached the point where the emergency department and hospital medicine are virtually the same team. We need to be close collaborators."

All these demands mean increased stress and burnout for clinicians, she said. "If another surge comes, we won't have rested because of the continuing high census. We never got a respite. But we've learned, and we're better prepared."

## Are hospitalists following the guidelines?

Alan Kubey, MD, FACP, is the corresponding author of a study published in April in JAMA Open Network,<sup>3</sup> based on a December 2020, survey of hospitalists



Dr. Kubey

at more than 50 major academic medical centers asking if their institutional policies or protocols were aligned with accepted best clinical practice guidelines or research findings for COVID-19 treatment. It concluded that at that time, most were doing an impressive job of translating best available evidence and pivotal controlled trials into clinical guidelines.

But the survey did not address whether these recommendations were reaching the bedsides of hospitalized patients, or how frontline clinicians such as hospitalists were actually practicing them. Dr. Kubey, a hospitalist at Thomas Jefferson University Hospital in Philadelphia, Penn., and at Mayo Clinic in Rochester, Minn., is a member of the HOMERuN (Hospital Medicine Reengineering Network) COVID-19 Collaborative Group, which conducted the survey. He wonders how effectively today's routine best practices and recommendations from NIH and others are shaping clinicians' practice.

Doctors are burned out and tired of the COVID-19 crisis, he said. "A lot of us have gotten numb, because the fire alarm has gone on for so long." Plus, doctors are trained to appraise evidence and expert recommendations critically and skeptically. And the drugs and vaccines used today were most rigorously studied for earlier variants of the SARS-CoV-2 virus.

"We haven't seen the same level of compelling new evidence on vaccines or immunity since the Delta variant. What works in theory may not work in trials. We still should be doing ongoing, real-world trials, but there's fatigue for COVID-19 clinical trials, as well," Dr. Kubey said.

"I believe there are doctors out there who are thinking, 'Hey, you're basing the recommendations on old data, and the newest

data is real-world but not RCT [randomized controlled trial], so I have some questions. I need to see more nuanced recommendations.'" And the best physicians know that guidelines are not mandates. Care must be tailored to the individual right in front of them. "This is all further complicated by members of the medical community thinking or hoping that the pandemic is over. Does such a lack of focus lead to rationalizing under- or over-treatment at the bedside of COVID-19 patients?"

For most patients, the guidelines offer the best available evidence and best strategy, he said. "How do we get those guidelines to the bedside, with helpful support tools, just-in-time knowledge, and clarity of messaging, to ensure that the recommended treatment strategies are reaching COVID-19 patients? How do we make it easier for frontline clinicians to choose what's best?" Dr. Kubey posed.

"I truly hope this winter will be considerably better than the last two. But I worry that many in our community are going into the winter with our heads in the sand." Every time the virus has been underestimated in the past, he said, there was a steep price to pay. ■

*Larry Beresford is an Oakland, Calif.-based freelance medical journalist specializing in hospice and palliative care, and long-time contributor to The Hospitalist.*

## References

- Centers for Disease Control and Prevention. COVID Data Tracker. CDC website. <https://COVID-19.cdc.gov/COVID-19-data-tracker/#new-hospital-admissions>. Accessed November 30, 2022.
- National Institute of Health. Therapeutic management of hospitalized adults with COVID-19. National Institute of Health website. <https://www.covid19treatmentguidelines.nih.gov/management/clinical-management-of-adults/hospitalized-adults-therapeutic-management/>. Published August 8, 2022. Accessed December 1, 2022.
- Berger AC, et al. Implementation of clinical practice guidelines for hospitalized patients with COVID-19 in academic medical centers. *JAMA Netw Open*. 2022;5(4):e225657.



# One of a Hospitalist's Many Potential Hats: Physician Advisor

By Amanda Green, MD, FACP, HMDC, CPPS, FHM

While the role of physician advisor in a hospital can be as varied as that of the chief medical officer, depending on the needs of the hospital, there are some universal tasks that leaders in this position perform.

Hospital utilization management (UM) plans are fairly common, as much of their language is set by the Centers for Medicare & Medicaid Services and insurers. These UM plans define the basic roles of a physician advisor. Hospitalists are well-versed in all the areas where physician advisors work in depth.

## What do they do?

Completing chart reviews for observation, inpatient status, or medical necessity, working with utilization review (UR) committee physicians to intervene in cases of inefficient resource use, assisting in regulatory compliance, helping with care transitions, managing denials, and aiding clinical documentation teams are some of the more common physician advisor responsibilities. All these roles are easily fulfilled by hospitalists.

Most hospitalists interact daily with a case manager, clinical documentation integrity (CDI) specialist, or physician advisor to answer queries about diagnoses, if the diagnosis was present on admission, if avoidable days are contributing to a length of stay, or if the status could be changed from observation to inpatient (or vice versa).

These close relationships with the clinical documentation specialists, medical records department, and case manager department are important in this role.

Chart reviews are often needed in real time to correct issues such as incorrect status, or if a discharge or lack of discharge requires intervention with the attending.

While coding questions may arise, it's usually of the query type for the physician advisor (For example: Was this present on admission?), not specific questions on how to code.

Positive relationships with the medical staff are important to the success of this role.

The physician advisor knows that the attending's focus is patient care, and they attempt to mitigate the administrative interruption to the clinician's day while making sure that regulatory



Dr. Green

*Dr. Green is the chief medical officer at Paris Regional Medical Center in Paris, Texas.*

and documentation requirements are met. The physician advisor role often overlaps with that of the ethics committee as well, as referrals to the ethics committee may involve conflict with patients or families about discharges or utilization of resources.

It's difficult to describe a day in the life of a physician advisor, as it will differ quite a bit based on the size of the institution.

Those who are administrative full-time equivalents will carve out time daily for chart reviews of extended lengths of stay, attendance at interdisciplinary team rounds, review of second-level referrals from case managers, evaluation and dictation of appeal letters, peer-to-peer reviews with insurance companies, phone calls, and discussions with physicians.

This work can extend into building order sets and helping with note templates to help meet quality and utilization metrics and working with harms committees to ensure documentation and billing are appropriate.

## Becoming a physician advisor

The best first step for hospitalists interested in becoming physician advisors is serving on the UR committee at their institution.

UR committee members are partners with the physician advisor, and showing an interest in this work creates a natural succession to an advisor role. Some hospitals have the UR committee chair serve as the physician advisor. While the UR committee chair position could be a volunteer position, physician advisor typically is a paid role.

For a physician also working as a hospitalist, the physician advisor role often is paid at an hourly rate (same as the hospitalist rate) up to

a maximum number of hours per month.

Depending on the size of the institution, the physician advisor might also be considered the medical director of clinical documentation. At larger institutions, the physician advisor is a salaried full- or half-time role, while at a smaller hospital, it's more likely to be a stipend role added to the physician's other clinical roles.

While being a physician advisor requires no specific training or certification, there are certifications and trainings available through some professional organizations.

Historically, most physician-advisor education comes from experience on a UR committee, and the queries the physician has been answering for years as a hospitalist.

Most internal-medicine residency training programs have their residents answer queries and perform peer-to-peer calls at times, so even graduating residents have a base for this type of work. Most practicing physician advisors have been developed through mentorship with other physician advisors and with case management and CDI teams.

## Challenges of the role

One of the biggest challenges that family medicine or internal medicine hospitalists serving as physician advisors might encounter is that they are called to help make decisions on surgical, pediatric, and obstetrics/gynecology charts, not just medical charts.

This often requires more research on the diagnosis and coding differences in these patient cases to be able to speak to specialist colleagues about utilization recommendations.

While many of these cases are specific, some issues, such as certain surgical procedures becoming outpatient-only (i.e., knee replacements), can be anticipated, with utilization and communication protocols developed to address common queries or denials.

Of course, larger institutions likely will have specific service line physician advisors.

The other main challenge most physician advisors find is the escalating demand for peer-to-peer calls.

While the attending of record may be asked to make these calls, having a physician advisor make these calls offloads this intrusive work from the primary clinician, and allows for some consistency in the approach to the peer-to-peer call.

Having one clinician make these calls also allows for the collection of data learned about insurer practice from these calls, which can lead to tips on improved documentation.

If you're interested in cultivating some of the skills necessary to become a physician advisor, SHM has a learning portal for UM and CDI developed for hospitalists which may be useful for new physician advisors. (<https://www.hospitalmedicine.org/practice-management/shms-utilization-management-and-clinical-documentation/>).

There's also an SHM Special Interest Group for physician advisors. Recent discussion threads included interest in becoming a physician advisor and guidance on that process, as well as more in-depth discussion about specific physician-advisor tasks like peer-to-peer reviews and Office of Inspector General updates. ■



# Five Approaches to Change Management in Quality Improvement and Operational Initiatives

By Thomas McIlraith, MD, SFHM, CLHM, and Aziz Ansari, DO, FAAHPM, FACP, SFHM

“Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win.” Sun Tzu, *The Art of War*

The U.S. has the world’s largest economy and devotes a larger share of its gross domestic product to medical services than any other developed nation. Historic market “disruptors” such as Amazon have identified the health care market as an area to expand their footprint and are actively working to infiltrate and overhaul sectors of the U.S. health care market.<sup>1</sup>

Threats like these to existing health care markets are real and growing and require hospital medicine leaders not only to look for new ways to provide high-quality care at lower cost, but also to develop the infrastructure to drive change effectively. Hospital medicine leaders must drive operational efficiencies to reduce waste and inefficiency but also lead quality initiatives to improve patient safety and reduce complications of hospitalization, such as hospital-acquired pressure ulcers and catheter-associated urinary tract infections. Fortunately, if you become good at change management, and develop the effective infrastructure for leading change management in your hospital medicine group (HMG), you will be able to drive both quality and operational changes effectively.

The five approaches to quality initiatives are a framework we developed to think about how quality or operational initiatives get started. We will weigh the pros and cons of each type. These are not stand-alone approaches and can be synergistic.

## Chain of command

Most of us have been a quality improvement (QI) or operational “victim” at one point or another, and there are strategies to avoid being “the victim.” The Chain of Command QI initiative comes from the outside and is often developed without an understanding of the local circumstance. The Chain of Command approach is used, for example, in military operations, where plans are developed at a central location by top leaders, such as the Pentagon. They are then handed down through the chain of command to subordinates who are expected to follow them.

This process works in highly disciplined organizations, such as the various branches of the military, where the duty to follow orders is ingrained in their training and culture. This occurs in health care, especially in large hospital systems. In some situations, the approach is necessary, such as developing a COVID-19 response center in the early days of the pandemic.

The approach generally doesn’t work well with hospitalist physicians, however, because they are independent-minded, highly educated, and trained to take initiative. Hospitalist physicians are often put off and alienated by this top-down approach to quality and operation initiatives. The best strategy for avoiding a Chain of Command QI or operational project is to get out ahead of it before you are told what to do and lead a project that has mutual vested interest from all parties resulting in mutual gain (you, your group, and the facility).

## My way (or the highway)

This is a heavy-handed approach that leaders often rely on, but it often doesn’t work well with hospitalist physicians who, again, are independent-minded, highly educated, and trained to take initiative. Heavy-handed tactics are often met with resistance and even rebellion. However, at times this approach may be necessary if a group is sufficiently dysfunctional that a heavy-handed approach is required to bring structure and order to a chaotic and disorganized group.

We have experience using this approach in small hospitalist groups where there is the opportunity to spend a lot of time interacting with everyone on the team. In small groups, it is possible to get team members’ opinions firsthand so that when changes are made the group is sufficiently close to facilitate dialogue on the changes. A senior leader who has a long track record of success, and is held in high regard, has a better chance of getting away with this approach.

However, there is a serious downside for any leader using this approach, particularly early-career physician leaders. If the My Way approach is used by an early-career physician leader who does not have an established track record of accomplishments, resistance, and even rebellion often follow. This can be career-ending for a young leader. The hospitalist leader who takes this approach will have to spend a lot of time proving themselves and anticipate that

there will be significant challenges to their authority. However, once a department grows large and is at multiple different facilities, the intimacy of the smaller group that makes the My Way approach feasible breaks down.

Also, as a group matures and stabilizes, there is no need for this type of heavy-handed approach. As a group grows and becomes more geographically dispersed, having the leader “call the shots” becomes more like The Chain of Command approach. Hospital medicine was “...the fastest-growing specialty in medical history” for the first 20 years of the 21st century.<sup>2</sup>

With the meteoric growth of our profession, the techniques for leading a small group of hospitalists have rapidly become outdated, and new approaches must be developed and implemented to govern large and diverse hospitalist groups. The Chain of Command and the My Way are very similar, except with the former the orders come from outside the organization, and with the latter, the orders come from within the organization.

## The burning platform

This type of QI or operational initiative relies on convincing your team that they cannot possibly stay where we are right now because “the platform is on fire.” The burning platform can be an effective approach to motivating teams and is relevant to driving change in almost any QI or operational initiative. As a pure strategy, however, it has downsides.

Negative energy, once created, can be hard to control, difficult to channel, and can have unintended consequences. And eventually, the platform will stop burning and the energy created will dissipate, making this method unsustainable for the long term since the motivation to initiate the project was on an emergent basis. This is why the benefits of the Burning Platform approach can be short-lived because the energy needed to create momentum on an initiative can be difficult to sustain.

## Form over function

This approach essentially takes the independent operator out of the equation, leaving the outcome inherent to the redesigned QI or operational initiative. The Form Over Function approach does not apply to every initiative but is very effective when it can be implemented.

Typically, it works best when



Dr. McIlraith Dr. Ansari

Dr. McIlraith is the chairman of medicine at Mercy General Hospital and was the founding chairman of hospital medicine at Mercy Medical Group in Sacramento, Calif. He serves on the SHM Awards Committee and in the signature Leadership Academies. Dr. Ansari is the associate chief medical officer for clinical optimization and revenue integrity and a professor of medicine at Loyola University Medical Center in Maywood, Ill.

there’s a task that physicians are doing that can be performed by non-licensed staff. It can be difficult, however, because even though physicians need to focus on caring for patients, opinionated physicians often say, “How can someone who is not a physician tell me what to do?”

We had great success taking the task of patient distribution out of the hands of physicians and having dedicated clerical support perform patient distribution. This allowed the physicians to be much more efficient, as well as to meet the demands of different health plans that had specific expectations for how our group would care for their patients. We even improved emergency department responsiveness in the process. Lean Six Sigma is probably the best-known example of this approach. Analyzing workflows, identifying variability, and eliminating elements of the process that don’t add value creates higher efficiency and less variability.

## Organizational development (OD)

This is the best approach, in our opinion. With the extraordinary growth of the field of hospital medicine, the “top-down” approaches outlined above are often ineffective at governing a large HMG that has doubled in size many times over. Further, as the size of the group grows, the complexity of the group grows even faster.

The upsides of the OD approach are numerous, including leveraging available talent, physician engagement, and buy-in for the initiative.<sup>3</sup> Some of the key objec-



tives of OD are encouraging employees to solve problems rather than avoid them and encouraging every member to participate in the process of planning, which leaves them invested in the successful outcome of the plan.

Critical to the success of an OD initiative is the “change agent.” The change agent focuses on internal processes such as intergroup relations, communication, and decision making. A change agent can be internal or external. The change agent has three key roles:

1. Consulting by providing team members with data about the organization so they can find solutions through data analysis
2. Training, by helping team members learn how to use data to effect change
3. Research, by training members of the team on the skills needed for valid evaluation of the effectiveness of action plans that have been implemented<sup>4</sup>

One problem when OD is successful is that the team becomes so empowered through their successes that they want to take on issues outside their scope, such as HR matters and quality oversight. We found OD to be the best means for facilitating a QI or operational initiative, but we had to be mind-



ful of keeping the team within its scope.

Consultants are often brought into an organization to facilitate change management and may use the methods outlined above. Consultant jobs are more of a “gig economy” phenomenon. The advantage is that consultants can bring a fresh perspective to improving processes and efficiencies. Since they are not invested in the retaining organization—only in the consult—they are free to make more controversial suggestions, without being bound by the social constraints of long-term relationships or historical biases.

The downsides are many including costs, short-lived impact, and

the potential to stifle an organization's own talent, creativity, and engagement. QI and operational initiatives require a long-term commitment and ongoing maintenance to be successful. These are qualities that consultants lack. Also, while consultants can bring in a fresh perspective, they can often be ignorant of cultural norms and other constraints on the local level that will cause the organization to revert to its natural state once the consult concludes. This is why hospitalists need to develop the skills to lead change management, avoid the use of consultants and develop talent from within.

The five approaches are nuanced, each with benefits and conse-

quences; however, our experience has been that the OD approach is the most effective and sustainable. Hospital medicine has changed dramatically in the last 25 years, and hospitalists have never been more important or central to the process of driving change in their hospitals. In fact, hospitalists are arguably the best members of the medical staff to drive changes in QI and operational initiatives due to their unique perspective and broad impact on hospital operations. An astute change management leader will adapt and know when to pivot from one approach to another depending on the circumstances and needs of their hospital and their HMG. ■

References

1. Wainer, David. Dr. Amazon will see you now. *Wall Street Journal*. Available at: <https://www.wsj.com/articles/dr-amazon-will-see-you-now-11662715810>. Published September 9, 2022. Accessed November 26, 2022.
2. Wachter, RM. The hospitalist field turns 15: New opportunities and challenges. *J Hosp Med*. 2011;6(4):E1-4.
3. Weisbord, Marvin. *Productive Workplace: Organizing and managing for dignity, meaning and community*. San Francisco: Jossey-Bass Publishers; 1987
4. Lunenburg, Fred. Managing change: The role of the change agent. *International Journal of Management, Business, and Administration*. 2010;13:1.

# Your Group's Input is Invaluable

## 2023 State of Hospital Medicine (SoHM) Survey Opens January 9, 2023.

Group leaders: Be a part of the first data collection survey in our field since 2019. This survey ensures your group is represented in the only comprehensive snapshot of the hospital medicine movement and gives you access to the report once it is released. Don't wait.

Survey closes February 10, 2023.  
[hospitalmedicine.org/2023survey](https://hospitalmedicine.org/2023survey)







“We participate during every iteration of the State of Hospital Medicine Survey.”

Brian Schroeder, MHA, FACHE, FHM





# E/M Coding Changes for 2023

By Richard Quinn

**T**he last time evaluation and management (E/M) coding guidelines were significantly overhauled was in 1995 and 1997.

To put that timeframe in context? The term hospitalist was coined in a 1996 *New England Journal of Medicine* article.

Well, change came to current procedural terminology (CPT) codes on January 1—and with not nearly as much fanfare as some coding experts and policymakers would like.

Among the largest changes:

- The observation CPT codes are collapsing into the inpatient codes, so hospitalists will bill the same code for patients regardless of whether they are inpatient or observation.
- There will no longer be an option to bill by history and physical exam. Code leveling will be based on medical decision making and time, not history and physical, which will match the previous documentation update for ambulatory services made in 2021.
- Clinicians don't need to document a certain number of systems, past medical and family history, etc., anymore. Instead, a "medically appropriate history and physical" is required but does not play a role in code selection.
- The Medical Decision Making table is shifting to align with the office/outpatient table.

"A big part of the driver of all of these changes was a desire to reduce documentation burden and streamline billing and coding rules," said Joshua Lapps, director of policy and practice management for SHM. "And, along with that, update the values of the codes."



Mr. Lapps

Complaints about coding date back as far as most physicians' careers, as hospitalists have long lamented the lack of hospital medicine-specific CPT codes. Still, many physicians now believe the new coding changes going into effect in January are an opportunity for hospitalists to be more detailed about the work they do.

"Honestly, this is not a bad upgrade to E and M coding," said Heather Miles, MHA, CPC, the practice administrator for the department of hospital medicine at St. Dominic Hospital in Jackson, Miss.

"We're moving away from unnecessary documentation 'note bloat' and moving towards the pertinent values of medical management, medical decision making, and time spent doing it. So, having one primary set of CPT codes on the observation/inpatient side will be extremely helpful for hospitalists."



Ms. Miles

Ms. Miles notes that as of January 1, evaluation and management CPT codes will look the same for both observation and inpatient admission unless patients are released within the first 24 hours. Then the "in and out" CPT codes 99234-99236 remain in effect.

Ms. Miles, who provides onboarding and provider education at St. Dominic Hospital, adds that the impact of changes in 2023 has almost all medical societies, billing and coding groups,



and provider educators planning to bring providers quickly up to speed. To that end, SHM is committed to developing more resources and education in 2023 like its Fact Sheet and webinar released last month. And most, if not all, large hospitalist practices are setting up training modules, webinars, and other educational materials for frontline practitioners.

"These changes will impact every facet of billing, coding, and reimbursement, so getting it right the first time is critical to financial stability and sustainability for hospitals and practices seeing patients in the hospital setting," Ms. Miles said.

Kathryn Raney, RN, MBA, FHM, says training is key to making the transition into the new codes successful—especially as no one goes to medical school to learn CPT coding.

"Physicians, in general, are not trained on this," said Ms. Raney, a member of SHM's Public Policy Committee and supervisor of hospitalist operations and utilization review at Hannibal Regional Hospital in Hannibal, Mo. "It's imperative physicians understand this and realize, 'If I bill this or that, it can significantly impact my payment structure.'"

"Organizations and hospitalists are really going to have to step up and make sure to audit their providers and provide that education and feedback. And if providers are not getting it, they need to go to their coders and say, 'How am I doing? Where am I at?' Get that continual feedback to make sure that they're hitting the mark."

One of the potential changes many hospital medicine leaders hope to see from the coding transition is cutting down on that so-called "note bloat."

"It's not unusual to see a progress note that's over five pages long, and the relevant portion might be as little as one page," said SHM Board member Robert Zipper, MD, MMM, SFHM. "I've seen five-page problem lists in EMRs that included things like antibiotics given 15 years earlier for a week."

Dr. Zipper, who served as SHM's liaison to the American Medical Association's Relative Value Scale Update Committee (RUC) during the coding transition talks, adds he's hopeful that a greater focus on medical decision making when selecting bill-



Dr. Zipper

ing codes will encourage hospitalists to do less "copy/paste" of past problems and more detailed documentation of what they did in each and every encounter.

"Documentation should answer the question: What did I do for this patient today?" Dr. Zipper said. "Most documentation today does not do that."

While there are concerns about how the new codes might impact compensation, Dr. Zipper notes that AMA did not implement coding changes to impact what providers earn. That said, payors, Medicare contractors, and others will likely be auditing bills closely over the coming months and years, so that makes the accuracy of coding and billing even more important.

"This can affect multiple budget years," said Dr. Zipper, chief medical officer for physician advisory and health policy for Sound Physicians in Bend, Ore. "I don't know that every hospitalist in the U.S. has access to a compliance resource that can give them feedback on their documentation, but for any hospitalists who do, whether it's their employer or a third party, it's imperative to be engaging them now."

At Sound, Dr. Zipper says they've created education and training guides to help physicians find the balance of how much they need to know.

"People could take hours and hours of compliance training to get comfortable with this," he said. "I don't think that's necessary for most clinicians. But I think it's necessary to spend at least one to three hours learning these materials. And it's necessary to have direct feedback."

Mr. Lapps says SHM recognizes there will be a learning curve this year, particularly as billing under the new rules begins to get audited. He says the Society will work to provide as much support as possible.

"It's like how younger generations don't know a world without a cell phone," he said. "Given the relative youth of the specialty, most hospitalists don't know a world where codes were ever any different. Now, all of a sudden there's a shift happening...hospitalists are going to have to learn the new rules and train themselves and their groups to be as successful as they were in 2022." ■

*Richard Quinn is a freelance writer in New Jersey.*



# What Is AI's Promise and Potential for the Hospitalist?

By Larry Beresford

Imagine entering the front door of your hospital to start your busy workday as a hospitalist. The smart hospital, with its smart technology, recognizes you by “reading” your name badge via radio frequency identification.

Your smartphone sends you a real-time list of the patients who were admitted overnight—prioritizing those who are sickest, most urgent, and located closest to where you are now, with directions for how to get to their rooms. You don't need to stop at a computer screen, because your phone offers to help you review essential data in the prioritized patient's chart.

When you walk into the patient's room, the system again recognizes you, flashing your name, picture, job title, and role on the “foot wall”, a 75-inch screen mounted on the wall at the foot of the patient's bed. This is the same smart TV screen used to show the patient high-resolution test results such as X-rays, as well as offering them email, television, video games, and room environmental controls.

Are any of your patients trending toward sepsis or a CPR code? Have automated triggers identified those whose blood sugar levels are trending unsafely? Who is most at risk for placement in intensive care, or for readmission? Which patients in the emergency department are most likely to be admitted for a worsening COVID-19 infection? Subtle changes, which can be picked up by the machines faster than any doctor, could help to prioritize your interventions.

For Subha Airan-Javia, MD, FAMIA, a hospitalist with the Penn Health System in Philadelphia, these kinds of connections are not far in the future—at least in terms of the technology, much of which already exists. She is also the founder and CEO of CareAlign, a company that is helping to build the technological infrastructure to facilitate interactions between hospital clinicians and their smart technology.



Dr. Airan-Javia

There's a lot of excitement for what artificial intelligence (AI) can do to transform health care, improving outcomes and patient experience. “But a lot of legwork needs to come before AI can reach its promise,” Dr. Airan-Javia said. How soon—and how—will these transformations trickle down to hospitalists on the floor?

## What is AI?

AI in medical settings is commonly defined in terms of applications of cognitive technologies processed by a computer that can mimic human cognition, learning, and decision making—the ability to learn and reason in ways that resemble humans. AI is not one technology but a collection of technologies, and some of its medical targets include virtual assistants, decision support, imaging interpretation, remote monitoring, and predictive analysis.

Often people blur the distinctions between AI, machine learning—which refers to algorithms that can learn without being explicitly programmed—and pattern recognition, Dr. Airan-Javia said. “A lot of what we see now is really more machine learning and pattern recognition, less AI. To me, AI refers to actual computer intelligence, where it takes large amounts of inputs



and turns them into new insights beyond what it was programmed to do.” She added that such distinctions may not be important to the working hospitalist.

Meanwhile, virtually every hospitalist in the country still carries a piece of paper on the job with a list of patients and tasks for the day, she said. “It's funny, we want AI to come in and do all these different things. But we're still analog in the ways we do much of our work.”

A key to overcoming the hospitalist's disconnect from the computerized patient record is to digitize and integrate work that is now done largely on paper. Natural language processing can turn charting notes and other texts into data that could be combined with other data in the medical record, she said.

“But that's just the beginning. What about electronic and paper sticky notes, faxes, emails, text messages, in-basket messages, Excel files—all the different ways clinicians try to keep track of what they're doing, things that are not part of the medical record, and none of them are integrated?” Dr. Airan-Javia said. How can structured data be created out of these unstructured data, with the clinician only having to type it once—or not at all?

“Then let's broaden our scope to think about all the ways this data can reach the clinician beyond the scope of the electronic health record (EHR)—all the ways we can bring that information and knowledge to the clinician's workflow in real time.” Hospitalists now go to a desk with a computer screen to interface with the EHR, but what about technology like the Google Glass brand of smart glasses, virtual reality devices, the Apple Watch, or the frequent advances in iPhones?

“Not that I see doctors walking around the hospital with virtual reality headsets anytime soon, but I think we'll see innovations in the ways we interface with the various technologies,” she said. “We shouldn't have to stop at the computer station for this information.”

Dr. Airan-Javia's company, CareAlign, is focused on how to design technology to make these interfaces work better and correct inefficient workflows. It's not technically AI, she said, but a step in that direction. The product includes a collaborative team task-management

platform, letting everyone on the team know what needs to get done for the patient, and by whom, and tools focused on clinical workflow, including data visualization.

Penn Medicine already has AI-based innovation in its new 504-bed, 17-story pavilion, a “hospital of the future” with the latest current technology, which opened in November 2021 after six years of intensive planning. It includes the interactive, foot-wall TV screen and care system mounted in patient rooms, along with other advanced technologies such as hybrid operating rooms equipped with MRIs and extensive use of health care robots.

## Leveraging information

Sara Murray, MD, MAS, associate professor of clinical medicine in the division of hospital medicine at the University of California San Francisco and associate chief medical information officer for inpatient care and data science at UCSF Health, said hospitalists may not even see or realize all the ways AI influences their work.



Dr. Murray

“A lot of effort at UCSF is now going into optimizing clinical operations, leveraging AI to improve patient flow through the hospital, optimize room turnover, and the like,” she said. The goal is to improve the experience for patients and reduce the burden on providers. In an ideal world, doctors can focus on what they do best, which is to understand the complex nuances specific to the individual patient and communicate that with the patient to achieve shared decision-making. The technology is meant to augment humans, not make decisions for them, she said.

UCSF, like many health care organizations, is setting up a command center to bring together all the staff involved in transfer management, bed control, patient flow, capacity management, length of stay, and throughput, she said. Members of this team will all be in the same place, working from the same AI-embedded information, including predictions for when beds might be opening up.



Many health systems have algorithms to predict the clinical deterioration of hospitalized patients, Dr. Murray said. A lot of those algorithms aren't particularly sensitive or specific. The problem is when the system flags numerous patients who aren't deteriorating and misses some who are. "We have to be smart about who we are alerting, what we are asking them to do with that information, and whether the algorithm is going to identify enough patients correctly while avoiding too many false positives."

How a particular clinician delivers care—how they interact with their patients—can provide the basis for new tools like intelligent scribes. These scribes capture the doctor-patient conversation in natural language and know which part of the conversation belongs to the clinical note versus the part that's just about connecting with the patient, said Nasim Afsar, MD, MBA, MHM, chief health officer at Oracle Health in Los Angeles. "As AI becomes more sophisticated, it learns how you work, rather than asking you to learn to speak the computer's language."

Machine learning can augment the clinician's diagnosis by looking at tens of thousands of other patients and millions of data points, Dr. Afsar said. She believes the EHR and AI will be seamlessly combined in the future. "Machine learning will unlock the potential of big data and make it work for us and be more predictive."

Dr. Murray agreed that AI has the potential to assist workflow—streamlining chart review so physicians can more quickly have the most important information in front of them. "But I'm never going to give up my single piece of paper. I just think there's something nice about rounding with a pen in hand."

The clinician's participation

For Jonathan Chen, MD, PhD, hospitalist, and physician data scientist at Stanford Health Care in Stanford, Calif., AI has great potential to assist human cognition while reducing the demands on human diagnosticians—although current AI tools have not yet realized this potential. "AI can be beneficial when treating 20 hospitalized patients. Who needs my attention the most? What if that prioritizing were more objective?" Dr. Chen co-authored a recent *Journal of the American Medical Association* article about how AI-trained systems learning from experience can become more important tools in diagnosing patients' health problems.<sup>1</sup>

Too often today, he said, the EHR casts the physician as the highest-paid data entry clerk in the health system, spending hours entering—and re-entering—information into the record. If frontline clinicians don't want to get beaten up by the new applications of AI, as many feel they were by the rollout of the EHR, they will want to get involved in planning for its implementation.

His colleague Ron Li, MD, a clinical assistant professor of hospital medicine and medical informatics director for digital health at Stanford, described using AI to employ collaborative team workflows for improving



Dr. Chen



Dr. Li

advance care planning and for decreasing unplanned care escalations in a 2022 *New England Journal of Medicine Catalyst* article.<sup>2</sup> Who, in the next 6 to 18 hours, is most likely to go to the ICU? If AI concludes that the patient is at risk, then the system nudges the patient's nurse and physician to talk to each other. "We've aligned the system to send the alert to the doctor and the nurse at the same time."

Dr. Li, who cofounded and directs the Stanford Emerging Applications Lab, said he works alongside more technologically minded people, trying to represent the clinician's voice in the design of technology products—not just for AI but for digital health more broadly.

EHR systems too often were developed without clinician participation, and without enough attention to the clinician's functionality needs, he said. "That is a risk for AI, too, although it has the capability to become ever more useful. I want to turn the table on this process so that the clinicians are driving the technology, rather than the other way around. How can we elevate the clinician's voice so AI becomes their tool?" ■

Larry Beresford is an Oakland, Calif.-based freelance medical journalist, specializing in hospice and palliative care, and a long-time contributor to *The Hospitalist*.

References

1. Chen JH, et al. Decoding artificial intelligence to achieve diagnostic excellence: Learning from experts, examples, and experience. *JAMA*. 2022;328(8):709-10.  
2. Li RC, et al. Using AI to empower collaborative team workflows: Two implementations for advance care planning and care escalation. *NEJM Catalyst*. 2022; 3(4). DOI:https://doi.org/10.1056/CAT.21.0457 Published online March 16, 2022. Accessed December 2, 2022.

Vice Chair, Quality Hospital Medicine

Vice Chair, Quality Hospital Medicine at Penn State Health Milton S. Hershey Medical Center located in Hershey, Pennsylvania. This faculty position with our Department of Medicine offers protected time for the Vice Chair role as well as clinical Hospitalist hours on the team. This is an excellent opportunity for physicians who wish to enjoy a high-quality of life while providing care within an academic hospital setting employed by the Penn State Health system.

What the Area Offers:

Penn State Health Milton S. Hershey Medical Center is a 551-bed Magnet-recognized academic and level I trauma center and one of the leading teaching and research hospitals in the country. Throughout our health system, we are committed to providing patient- and family-centered care to people from all walks of life—and skillfully handle needs at every level of complexity utilizing our shared governance model of care. The campus is conveniently located in Hershey, PA with close proximity to New York City, Washington, DC, Philadelphia and Baltimore, MD.

FOR MORE INFORMATION PLEASE CONTACT:

Heather J. Peffley, PHR, SHRM-CP, CPRP  
Penn State Health Lead Physician Recruiter  
hpeffley@pennstatehealth.psu.edu

www.pennstatehealth.org/careers



What we're offering:

- Protected admin time plus clinical Hospitalist shifts
- Competitive salary and Sign-On bonus
- Generous benefits and retirement package
- Relocation assistance and CME funds
- Scenic and safe neighborhoods to balance your personal and professional interests
- Interaction with dynamic clinicians in a collaborative environment

What we're seeking:

- M.D., D.O., or foreign equivalent
- Completion of 3-year ACGME-approved Internal Medicine residency
- BC/BE in internal medicine
- Ability to acquire a license to practice in the Commonwealth of Pennsylvania



PennState Health

Penn State Health is fundamentally committed to the diversity of our faculty and staff. We believe diversity is unapologetically expressing itself through every person's perspectives and lived experiences. We are an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to age, color, disability, gender identity or expression, marital status, national or ethnic origin, political affiliation, race, religion, sex (including pregnancy), sexual orientation, veteran status, and family medical or genetic information.



# Should I Stay or Should I Go?

By Lisa Casinger

When Elon Musk bought Twitter in October it was anybody's guess how things might change on the platform. Not even two months later the company has lost almost 67% of its 7,500 employees,<sup>1</sup> verified account status changes daily it seems, and it's no longer enforcing the COVID-19 misleading-information policy.<sup>2</sup>

With more than 875,000 users having deactivated their Twitter accounts,<sup>3</sup> and advertisers and celebrities leaving or threatening to leave, hospitalists may be wondering about the future of #MedTwitter.

During the COVID-19 pandemic, hospitalists found a sense of community on social media—Twitter specifically. They used it to share research and protocols that seemed to change by the hour, provide accurate, evidence-based information, and help dispel misinformation.

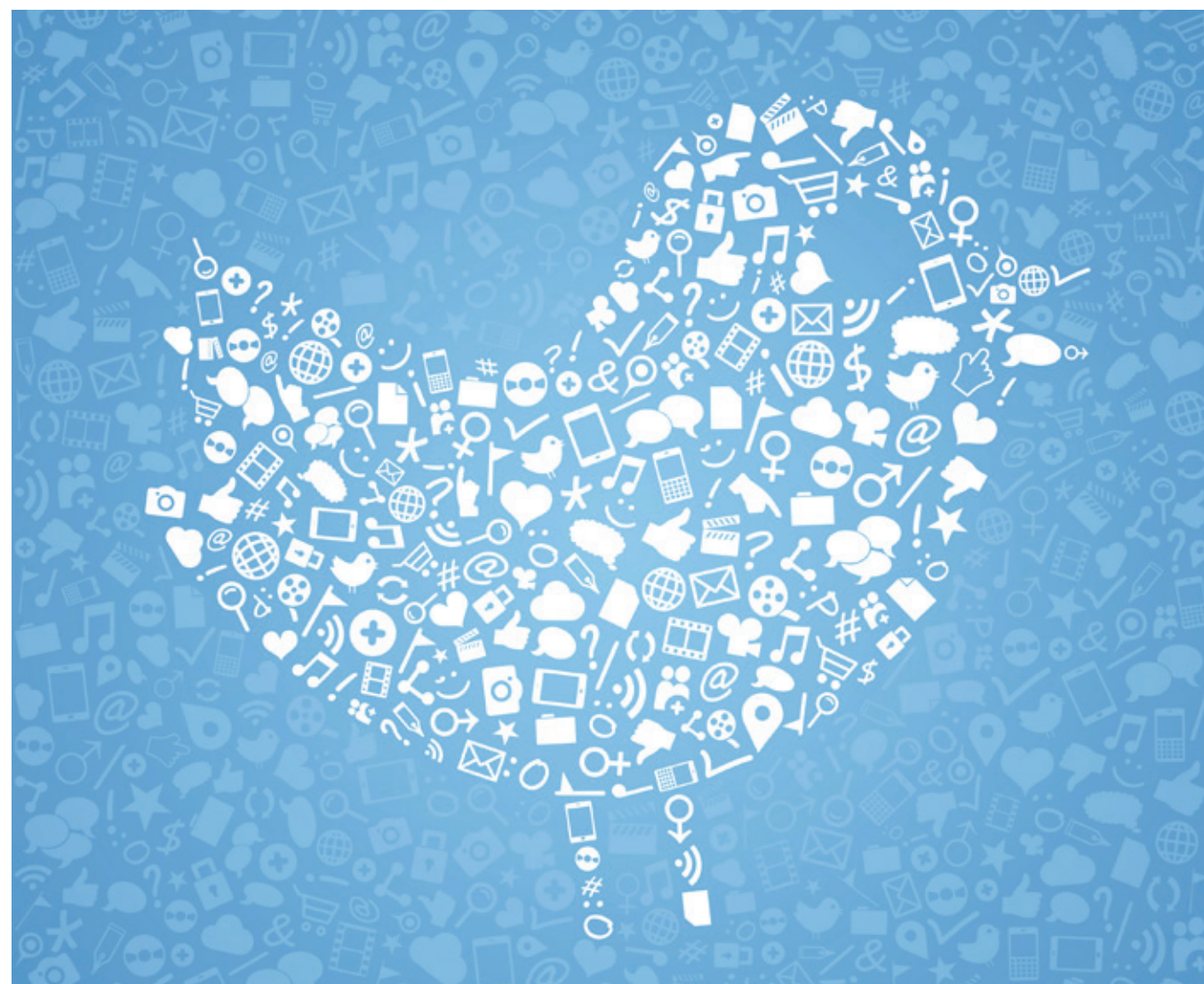
For those who turned to Twitter and have stayed, there's a sense of purpose to being on the platform.

"I can't say it any better than Rebecca Jaffe, MD, who wrote in a Tweet on 3/22/2020 (about a month after the start of the pandemic)—'Especially in recent weeks, I can't say enough about the power of social media to educate at scale.'" Hospitalists represent an important part of the #MedTwitter community. "My personal Twitter origin story involves connecting with other hospitalists at in-person conferences and ultimately collaborating with many of them afterwards," said Michelle Brooks, MD, FACP, FHM, deputy associate chief of staff for education at the South Texas Veterans Health Care System in San Antonio, Texas.



Dr. Brooks

Dr. Brooks (@michellebrooks) is also an adjunct associate professor at the University of Texas Health Science Center at San Antonio and an award-winning clinician-educator with expertise on incorporating handheld technology and social media in medical education for residents and students. She has a background in quality improvement and patient safety and has created workshops and teaching techniques to introduce quality and safety concepts broadly to residents, students, faculty, and nursing staff. She's also a past digital media fellow for the *Journal*



of *Hospital Medicine*, so it's safe to say she knows what she's talking about.

"Like nature, Twitter abhors a vacuum," she said. "Hospitalists have been at the forefront of what I consider to be core missions of professional social media use: community building, education, advocacy, and dissemination of research/scholarship." She worries that if hospitalists leave Twitter en masse for another platform, Twitter may become even more filled with disinformation and/or a less friendly space for those who remain.

Mark Shapiro, MD, (@ETSshow) a hospitalist at Providence Medical Group-Northern California in Santa Rosa, and the founder and host of "Explore the Space" podcast, which examines the interface between health care and society, says he sees three options for Twitter.



Dr. Shapiro

"First, Twitter stabilizes and evolves and keeps going," he said. "Second, it shuts down completely. Third, it becomes so overrun with content that's distasteful, wrong, or filled with misinformation, misogyny, racism, antisemitism, homophobia, and hate that people leave."

Dr. Shapiro thinks the trajectory

is toward the third scenario but he's confident hospitalists will eventually "reaggregate in the right space."

Vineet Arora, MD, MAPP, (@FutureDocs and futuredocs@med-mastodon.com) dean for medical education at The University of Chicago's Pritzker School of Medicine in Chicago doesn't see hospitalists leaving Twitter entirely, but she says it could theoretically create a more decentralized structure with hospitalists on different platforms.



Dr. Arora

On this point, Drs. Brooks, Shapiro, and Arora agree—if Twitter shuts down, hospitalists aren't likely to pivot from it to one platform; rather they'll disperse among the other platforms.

"I've been involved with social media enough to see the rise and fall of several platforms (MySpace, anyone?), so I would not be surprised if Twitter became another wayside social media platform," Dr. Brooks said.

Dr. Shapiro isn't betting on Mastodon—an independent platform some Twitter users are migrating to. "I think it's naïve to think Mastodon will replace Twitter," he said. "Something totally new may be the option. Super smart people, people who want to make money,

are likely working on alternative platforms with more effective ways of moderating content."

There are a lot of pros to the platform for the #MedTwitter community. For one, it enables live chats (#JHMChat for example) and conversations. It's a space where hospitalists can engage and grow their career and interact with the larger medical physician community.

And while that medical physician community could exist on another platform, "the unique benefit for Twitter currently is that it also allows for the intersection of hospitalists with the public, policymakers, the broader academic community, and other industries and disciplines," Dr. Brooks said. "By siloing ourselves on a Med-Mastodon platform, hospitalists may miss out on opportunities for intersectional and diverse knowledge leading to disruptive innovation, the so-called Medici Effect."

She also cites research collaborations, virtual networking, more agreed-upon "alternative metrics" to show engagement/impact of work, and apps that interact with Twitter to ease metrics and scheduling posts as Twitter's benefits. "Right now, I think it would be difficult to do an interactive online journal club on another platform in the same way (like #JHMChat)," Dr. Brooks said.

Twitter is also familiar and easy to use.



“Certainly, the other platforms are bigger and have more users,” Dr. Shapiro said. “And there’s a style that’s effective on each platform. Twitter is a lot easier to use—you don’t have to use videos, photos, etc., but you can. Hospitalists are intelligent people and of course we’ll get good at something else (another platform) if we need to.”

For Dr. Brooks it’s a comfort issue. “It takes time/space to re-create yourself and learn how to interact on another social media platform, and each individual has to decide if it’s worth it to invest in that effort. Med-Mastodon seems pretty similar to Twitter, but there are some nuances to getting used to “tooting” rather than “tweeting.”

The cons seem obvious.

The algorithm is different—and good luck figuring it out. You’re served tweets and accounts liked or followed by people you follow; accounts or tweets you may find offensive.

“The number of objectionable voices has definitely increased,” said Dr. Shapiro. “Look, Twitter had problems before, but now it’s like the Wild West. There’s more openly racist and threatening content and there’s no content moderation.”

Dr. Shapiro acknowledges that

as a white man his experience on social media is very, very different from others. “For me, I’m rarely challenged in the way I know a lot of my friends are challenged on social media,” he said. “For me to beat my chest and say don’t leave is irresponsible and I won’t say that. We don’t want people to be harassed or suffer emotional distress. Everyone has to be empowered to make their own choice. It’s social media, it’s not the highest of all priorities. It’s an individual decision. Everyone uses it differently. It’s too heterogeneous for me to say, ‘do x and expect x to happen.’ A lot of these people are my friends and I want them to thrive in their careers, not just on social media.”

Drs. Arora and Brooks agree—people should use the platforms where they’re most comfortable.

“The pro of migrating may be that you find a platform that is better suited to you,” Dr. Arora said. “One platform may not be the best fit for everyone, and we already see a new generation of physicians using Instagram and Tik Tok much more than Twitter. Hospitalists should go if they aren’t willing to deal with the ups and downs of the platform. I do find it exhausting to open Twitter these days and seeing good people

getting attacked.”

Dr. Brooks supports people using their right to vote with their feet, “Twitter is a business, and if you need to walk away due to a conflict of values with the way new leadership is conducting that business, I think that’s a totally valid choice.”

Regardless of what happens next, all agree that it has been and will be important for hospitalists to be on social media, and Twitter has so far been the best platform to promote that engagement.

“Twitter has brought a concentration of people into one place, and it’s set up that we can have real conversations in real time, it’s been really effective,” Dr. Shapiro said. “This has been the platform where we’ve learned, grown a community, networked, and debated. Even before the ownership change it had its problems. But it demonstrated its use—grown careers for hospitalists.”

As the originator of the @Jhosp-medicine account and #JHMChat, Dr. Arora says she’s biased, but thinks Twitter has been “a vital vehicle to build community and share knowledge. Whatever we settle into, I am confident we will figure out a way to retain the community aspect of our social media

engagement.”

“For a generation, physicians were told not to be on social media, that it was unprofessional,” Dr. Shapiro said. “That vacuum caused problems. Misinformation went unchallenged. We’re the largest providers of hospital-based care in the U.S.—our voice needs to be where the public is going. It’s critically important for hospitalists to be out there. It’s important for hospital medicine, as an entity, to be represented.” ■

*Lisa Casinger is the editor of The Hospitalist.*

References

1. Olinga L. Elon Musk’s Twitter makes a big U-Turn: It’s hiring. MSN TheStreet. <https://www.msn.com/en-us/autos/news/elon-musks-twitter-makes-a-big-u-turn-its-hiring/ar-AA14EfZ1>. Published Nov. 28, 2022. Accessed Dec. 4, 2022.

2. Twitter. COVID-19 misinformation. <https://transparency.twitter.com/en/reports/covid19.html#item0:2021-jul-dec>. Published July 28, 2022. Updated Nov. 23, 2022. Accessed Dec. 4, 2022.

3. Stokel-Walker C. Twitter may have lost more than a million users since Elon Musk took over. MIT Technology Review. <https://www.technologyreview.com/2022/11/03/1062752/twitter-may-have-lost-more-than-a-million-users-since-elon-musk-took-over/>. Published Nov. 3, 2022. Accessed Dec. 4, 2022.

# Becoming a Hospitalist—“Something”

Using ikigai to find that “something”

By Sanjay A. Patel, MD, FACP, SFHM, Jilian Sansbury, MD, FACP, Rashmi P. Ganith, MD, FACP, FHM, and Ryan Nelson, MD

We enter the profession of medicine in the name of patient care. Our desire to better the health of our patients and communities is the tie that binds us together. But in today’s world of medicine, hospitalists are not limited to clinical care alone. We are at the forefront of scientific research, administration, policy, advocacy, quality and safety, medical education, informatics, technology and more. As Dr. Mark Shapiro, a fellow hospitalist and host of Explore The Space podcast says, we are “pluripotent.” How, then, do we find that “something” in our careers that complements our clinical practice and aligns with our mission? What is our raison d’être and how do we find it? Enter ikigai—a Japanese concept meaning “reason for being.” By asking ourselves and reflecting on four key questions, we can use our answers to find the joy, meaning, purpose, and fulfillment we seek.

**What do you love?**

**Dr. Patel**

I often think about why I love medicine. For me, that answer is innovation and curiosity. Curiosity may have killed the cat, but it fuels and motivates me every day. I love asking questions, finding answers, and learning how to integrate those answers into solutions. I enjoy asking, “Why?” and seeing what I can do with the answer(s). What better place to be curious than in medical education? I get to learn every day from my patients, my colleagues, and my learners. I get to take that knowledge and reflect on it, disseminate it, and help learners, programs, and systems grow to become the best versions of themselves.

I have used that curiosity to explore curriculum development, global health opportunities, point-of-care ultrasound teaching, and clinical informatics. In all those opportunities, medical education has



Dr. Patel

always been the common thread as a place to foster that inquisitiveness. For me, rather than focusing on a single tangible thing I love, I focus on the concept of curiosity as what I love. That guiding principle helps me decide what areas of interest I choose to explore when opportunities arise. If there is an opportunity for internal learning while allowing me to add external value, I am likely to incorporate it into my non-clinical “something.” As you navigate your journey as a hospitalist, ask yourself what you love to do and how that can be generalized to your non-clinical time.

**What are you good at?**

**Dr. Sansbury**

An important principle in the pursuit of career satisfaction is to identify and cultivate what you are good at. Author James Clear, the habit guru, wrote



Dr. Sansbury

“What looks like talent is often careful preparation. What looks like skill is often persistent revision.” Many of us have found our careers in hospital medicine after careful identification of what we are good at early on in life—excelling in the classroom, identifying with and relating to others, recognizing problems, solving problems, and sharing stories with learners and patients. These skills, though, have taken years of deliberate practice to hone and perfect.

As an early-career hospitalist, relying on what I already knew I was good at was not enough to ensure I had fulfillment in my day-to-day work. This is where I found academic medicine and all the joys it has brought to my daily routine. I found a deep passion in teaching others, relating to learner-dependent issues, and developing this skill each day to become a better clinician and educator. This opened doors to teaching in our hospital’s simulation and ultrasound lab, which has afforded me additional administrative time and the excitement of learning new skills and sharing them with others.

Start with your skills and



strengths. Develop those in a way that gives you joy. If you can identify what you are good at, generalize that to other arenas and practice deliberately—you can ultimately pursue your ikigai.

### What does the world need?

Dr. Ganith

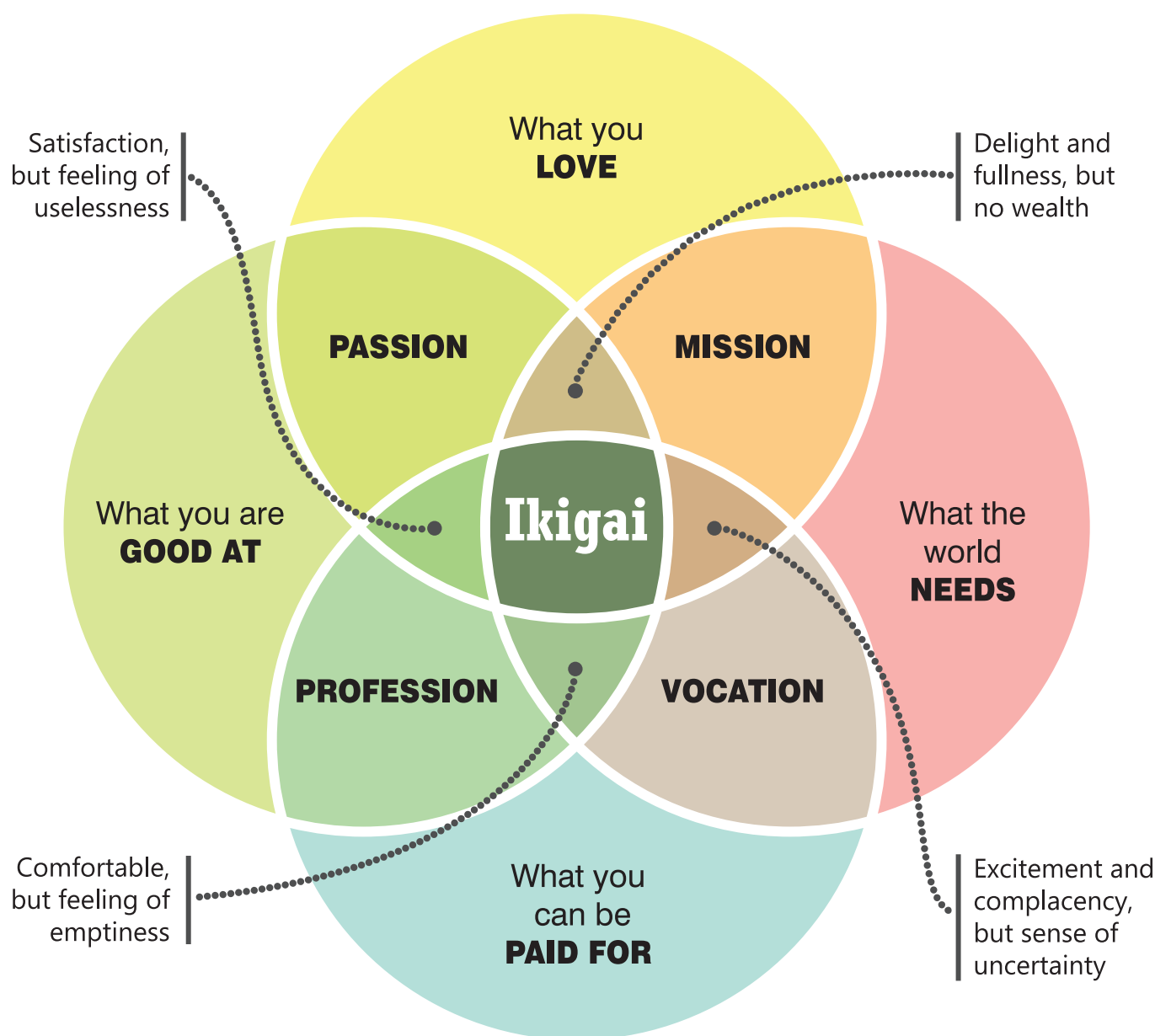
As a physician I always thought my role was to help my patients understand their disease, alleviate pain, end suffering, and extend life. Over the past 10 years, I acquired the sense that my obligation extends further.



Dr. Ganith

One day, I entered the room of my patient with advanced cancer and immediately noticed telescopes of multiple sizes lined alongside his windowsill. My immediate duty was to alleviate his pain and discuss prognosis. I simultaneously listened to stories about his telescopes. He spoke of each constellation and planet he had seen in his lifetime and how each telescope gave him a different view of our solar system. His words and thoughts spilled out continuously, and in that moment, I knew I had another purpose. We spoke of his prognosis, and I helped him navigate his next steps while engaging him in our conversations by intertwining his intergalactic interests. To him, watching the stars from his hospital room window brought him joy in a sea of sadness. I developed a deeper compassion for his will to live and remained a listening ear, as he had no one else to share with. We prayed together with the chaplain, listened to music with the music therapist, and looked at the planets when I was on call one night. He needed more than just a medical doctor; he needed a human connection.

After those seven days, I imagined another path, one separate from clinical medicine, by which I would continue to serve my patients. I would be a listener and an emotional support. Delivering bad news is never easy, but connecting with each patient's passion reinvigorated my joy and wellness. I connect patients with resources; I listen when they advocate; I educate; I combat medical misinformation. I am dynamically supporting patients and ensuring they have a feeling of contentment when they are discharged from the hospital. In my pursuit of ikigai, I prioritize their wellness, so that I may prioritize my own.



### What can you be compensated for?

Dr. Nelson

Perhaps the most challenging part of ikigai is being compensated for your efforts. As a hospitalist, compensation can take many forms—salary, funding, protected time, and/or additional clinical and administrative resources.



Dr. Nelson

Demonstrating the value and importance of your pursuits, your worth, may be challenging to define. Developing your mission and purpose early in your career and integrating with your profession and vocation may allow visualization of future payoffs. Proactively seek and apply for opportunities to obtain short-term and eventually long-term compensation.

My ikigai is to educate and to mentor. Specifically, I love to teach at the whiteboard and to mentor medical students planning careers in internal medicine and residents planning careers in hospital medicine. In my first two years

as an academic hospitalist, I built my whiteboard-teaching skillset by arranging clinical coverage to attend SHM's Academic Hospitalist Academy, and then by creating a novel chalk talk for each week as an attending. At the same time, I applied and was accepted for a position on SHM's Physicians in Training Committee.

These early efforts helped build my reputation as a medical educator and mentor and culminated in a teaching award. In my third year, I applied to and was accepted into the Student Teaching Attending program. This provided me with a stipend to teach medical students in the afternoons—my first compensation. During off weeks, and after hours, I continued to pursue faculty development opportunities to demonstrate my commitment to medical education and trainee mentorship.

In my fourth year, I applied to and was accepted into a medical education fellowship, based on a proposal to implement a whiteboard teaching faculty development curriculum at my institution. This opportunity provided me with 20% full-time equivalent compensation, in the form of both funding and protected time.

Putting in the hard work to develop your mission and passion

and to demonstrate its value to key stakeholders at your institution will pave the way for eventual compensation and synthesis of profession and vocation, the remaining cornerstones of ikigai. ■

Dr. Patel (@buckeye\_sanjay) is the associate program director and clerkship site director of internal medicine at Riverside Methodist Hospital in Columbus, Ohio. Dr. Sansbury is the transitional year program director, associate program director of internal medicine, and medical director of the Grand Strand Health Education and Simulation Center at Grand Strand Health, Myrtle Beach, S.C. Dr. Ganith (@RashmiGMD) is an assistant professor of clinical medicine, assistant director of wellness of hospital medicine, and preliminary clinical track director at the Ohio State University Wexner Medical Center in Columbus, Ohio. Dr. Nelson (@RyanENelsonMD) is an instructor of medicine and the associate site director for Core-I Medicine Clerkship at Harvard Medical School/Beth Israel Deaconess Medical Center, Boston.

This content is sponsored by the SHM Physicians in Training Committee, which submits content to The Hospitalist on topics relevant to trainees and early-career hospitalists.



# Telemedicine to the Rescue

One group's approach to the critical pediatric bed shortage

By **Andrea Hadley, MD, Jeri Kessenich, MD, Chris Arnos, MD, Eric Kort, MD, Martina Inclan, MD, and Dave Synhorst, MD**

Children's hospitals across the nation have been overwhelmed by the current surge of patients with acute respiratory illnesses.<sup>1</sup> The unprecedented demand for acute care has caused critical inpatient bed and staffing shortages. The closing of inpatient pediatric units in community, rural, and critical-access hospitals across the country over recent years has further worsened the shortages by decreasing overall pediatric bed availability and straining emergency transport systems with increased transfers.<sup>2</sup> Given the urgency of the current surge, hospitals have been left scrambling to develop strategies to increase capacity and to focus resources on those most in need.

Helen DeVos Children's Hospital (HDVCH), a 234-bed quaternary referral center that is part of Corewell Health (formerly known as Spectrum Health), is affiliated with 13 regional and critical-access hospitals across West Michigan, most of which have closed their pediatric inpatient units over the last several years. As the pediatric surge across the state of Michigan ramped up, these regional hospitals were unprepared to admit pediatric patients as they no longer employed pediatricians or pediatric nurses. As cases of viral illnesses climbed, so did the number of requests for transfer to HDVCH. We rapidly increased our capacity by doubling up many patient rooms, shifting to team-based models of nursing care, and adding an additional hospitalist team. Despite these efforts, it became evident we could not continue to accept all transfer requests due to our own staffing and bed shortages. We have never had to close our doors to outside transfers, and we grappled with how to best care for the growing number of sick children in the community. It was clear that, to decrease the demand for transfers, we needed to find a way to treat children locally by supporting the teams in community hospitals and emergency departments (EDs).

To meet this need, our pediatric hospitalists began a virtual hospitalist outreach program to facilitate local management of select patients in our affiliated regional hospitals' EDs using a telemedicine approach in place of transfer to the children's hospital. We collaborated with ED leadership to expand upon their already



Dr. Hadley



Dr. Kessenich



Dr. Arnos



Dr. Kort



Dr. Inclan



Dr. Synhorst

*Dr. Hadley (@AndreaHadleyMD) is an internal medicine and pediatric hospitalist at Corewell Health in Grand Rapids, Mich., chief of pediatric hospital medicine at Helen DeVos Children's Hospital (HDVCH), and assistant professor of internal medicine and pediatrics at Michigan State University College of Human Medicine. Dr. Kessenich is a pediatric hospitalist at Corewell Health in Grand Rapids, Mich., associate program director of the Pediatric Hospital Medicine Fellowship at HDVCH, and associate professor of pediatrics at Michigan State University College of Human Medicine. Dr. Arnos is a pediatric hospitalist and physician informaticist at HDVCH in Grand Rapids, Mich., and an assistant professor of pediatrics at Michigan State University College of Human Medicine. Dr. Kort is a pediatric hospitalist at Corewell Health in Grand Rapids, Mich., and assistant professor of pediatrics at Michigan State University College of Human Medicine. Dr. Inclan is a pediatric hospitalist at Corewell Health in Grand Rapids, Mich., and an assistant professor of pediatrics at Michigan State University College of Human Medicine. Dr. Synhorst (@dsyn08) is a pediatric hospitalist at HDVCH in Grand Rapids, Mich. His previous work focused on the financial stability of children's hospitals and the impact of observation-status stays.*

established pediatric ED observation programs by providing the ED teams 24/7 access to our virtual pediatric hospitalists for consultation and rounding support during the surge. We offered both phone and video visits when capacity limitations made transfer to HDVCH impossible. Patients were kept in the ED, and video visits were conducted using the Cisco Jabber application interface with telemedicine carts located in each of the hospitals. We provided recommendations for the management of feeds and hydration, management and weaning of supplemental oxygen and high flow nasal cannulas, selection and dosing of antibiotics, management of chronic medical problems, and other common inpatient pediatric issues. These visits were performed with the goal of providing support to those on the front lines in community spaces during a time of crisis, and therefore no billing was submitted. With further development, these visits could be billable encounters if the hospitalist gets privileges at each of these regional hospitals where patients are located.

With implementation of this program, we have been successful in managing lower acuity inpa-

tients in regional EDs through their illnesses (and many to discharge), allowing us to use beds at our children's hospital for the patients of highest acuity and those with medical complexity. The video component to the consults increased our triage accuracy, giving a clearer picture of which patients needed transfer to the children's hospital general-care floor versus intensive care, and which patients could remain in place locally. We were able to establish rapport with the patients' caregivers early on as well as communicate directly to the nurses and respiratory therapists managing the patient in the ED setting. The ED teams have been outstanding collaborators and stepped outside their normal workflows to help manage these patients successfully.

Telemedicine use increased significantly during the COVID-19 pandemic. Previously, the benefit has been described for use in adult hospital medicine, especially across rural and smaller hospitals.<sup>3</sup> Telemedicine has also been described as beneficial during the transfer request process in pediatrics,<sup>4,5</sup> but little is known about its use for managing patients remotely in the field of pediatric hospital

medicine. More research is needed to determine the effects on patient safety, clinical outcomes, and patient experience. However, our experience suggests that virtual visits can be an impactful tool for triage, patient management, and capacity planning during times of extraordinary need. ■

## References

1. Bean, M. 'It's the perfect storm': Capacity issues intensify at children's hospitals amid RSV surge. Becker's Hospital Review website. <https://www.beckershospitalreview.com/care-coordination/it-s-the-perfect-storm-capacity-issues-intensify-at-children-s-hospitals-amid-rsv-surge.html>. Published October 20, 2022. Accessed December 9, 2022.
2. Baumgaertner, E. As Hospitals Close Children's Units, Where does that Leave Lachlan? The New York Times website. <https://www.nytimes.com/2022/10/11/health/pediatric-closures-hospitals.html>. Published October 11, 2022. Accessed December 9, 2022.
3. Gutierrez J, et al. A systematic review of telehealth applications in hospital medicine. *J Hosp Med*. 2022;17(4):291-302.
4. Rosenthal JL, et al. Testing Pediatric Emergency Telemedicine Implementation Strategies Using Quality Improvement Methods. *Telemed J E Health*. 2021;27(4):459-463.
5. Curfman A, et al. Implementation of Telemedicine in Pediatric and Neonatal Transport. *Air Med J*. 2020;39(4):271-5.



# Should I Feed My Patients Admitted for Inflammatory Bowel Disease Flares?

By Jaya Vasudevan, MD, and Linda A. Feagins, MD

**Case:** A 26-year-old woman with a history of poorly controlled Crohn's Disease (CD) presents to the emergency department (ED) with complaints of progressively worsening diarrhea for the past two weeks, having 11 to 14 episodes of bloody stools per day. Due to fears that eating would make her diarrhea worse, she reports little oral intake over the last six days. On admission, her body mass index (BMI) is 17.

Brief overview of the issue

Patients with severely active inflammatory bowel disease (IBD) are commonly admitted to the hospital for disease management. Common symptoms of CD and ulcerative colitis (UC) include diarrhea, abdominal pain, nausea, and vomiting, which can lead to reduced appetite, difficulty eating, and increased risk for malnutrition. Malnutrition is seen with a greater frequency in CD than UC, presumably due to CD's involvement of the small bowel. Estimates of malnutrition vary based on study design, reporting prevalence rates ranging between 10 and 35% in IBD patients.<sup>1</sup> Further, a study using national administrative data to evaluate the prevalence of protein energy malnutrition (PEM) found that patients with IBD were more likely to have PEM compared to patients admitted with other diagnoses.<sup>2</sup>

The mechanisms underlying development of malnutrition in IBD are multifactorial and include symptoms limiting oral intake (i.e., nausea, vomiting, or diarrhea), enteral loss of protein and electrolytes, interference of absorption of nutrients by certain drugs, sequelae of gut resections, increased metabolic demands from active inflammation, and self-imposed diet restrictions by patients.<sup>3</sup>

Importantly, malnutrition in the IBD population affects overall patient morbidity as well as inpatient outcomes. Underlying malnutrition in hospitalized IBD patients is associated with increased lengths of stay, increased need for non-elective surgery, increased risk for venous thromboembolism, higher readmission rates post discharge, and increased mortality.<sup>4</sup> Thus, hospitalizations for active IBD flares may serve as valuable opportunities to mitigate these complications through

early identification and treatment of nutritional deficiencies, especially as laboratory investigation and nutritional team support is readily available in the inpatient setting.<sup>5</sup>

Overview of data

Screen for malnutrition

Given significant risk of nutritional compromise, all patients hospitalized for acute IBD flares should be screened for malnutrition on admission. Several screening tools, including the Nutrition Risk Screening 2002 (NRS-2002) or Malnutrition Universal Screening Tool (MUST), are short questionnaires easily used in the inpatient setting that assess three to four risk factors to stratify the patient's risk for malnutrition (See Table 1).<sup>6</sup> These screening tools are readily available online and can be completed by the hospitalist or care team. All patients, regardless of BMI, should undergo screening, as patients without low BMIs may also be malnourished.<sup>5</sup> For patients identified as medium or high risk for malnutrition, inpatient dietitian support team consultation should be sought for formal nutritional assessment and recommendations.

Albumin not a reliable marker of nutritional status

Of note, when identifying patients at risk of malnutrition, albumin



Dr. Vasudevan



Dr. Feagins

Dr. Vasudevan is a hospitalist for the division of hospital medicine and a research associate for the division of gastroenterology and hepatology for the department of internal medicine at the University of Texas at Austin's Dell Medical School in Austin, Texas. Dr. Feagins is an associate professor in the department of internal medicine at the University of Texas at Austin's Dell Medical School, a board-certified gastroenterologist, and director of the Center of Inflammatory Bowel Disease at Digestive Health, a clinical partnership between Dell Med and Ascension Seton in Austin, Texas.

and prealbumin are often used as markers for nutritional status; however, both markers are decreased in acute inflammatory states and thus can be misleading.<sup>7</sup> More reliable markers include insufficient energy intake, weight loss, loss of subcutaneous fat, muscle loss, fluid accumulation, and reduced functional status as measured by grip strength (See Table 2).<sup>8</sup>

Key Points

- Given the high prevalence of malnutrition in IBD patients, all patients hospitalized with an IBD flare should be screened for malnutrition.
- For patients with medium to high risk of malnutrition, nutritional support team consultation is recommended to assist with addressing macro- and micronutrient deficiencies.
- Minimize iatrogenic factors, such as NPO orders and liquid-only diets, that can contribute to malnutrition, unless contraindications to feeding are present. Active disease is NOT a contraindication. Oral diets are preferred over enteral feeding, if safe and feasible.
- If the patient is unable to tolerate a diet despite pharmacologic treatments for an IBD flare, the clinician should consider contributory organic causes, in which case further workup may be warranted.

Table 1: Malnutrition Universal Screening Tool (MUST)<sup>12</sup>

	SCORING	RISK
BMI	≥20	0
	18.5-20	1
	≤18.5	2
Unintentional weight loss in the past 3-6 months	≤5%	0
	5-10%	1
	≥10%	2
Acute illness with reduced or no food intake estimated for ≥5 days	Yes	1
	No	0

Key: 0=low risk (routine clinical care); 1=medium risk (observe dietary intake closely; consider nutritional support team consultation for formal nutritional assessment; ≥2=high risk (refer to nutritional support team for formal nutritional assessment and recommendations)



Most IBD patients should be given a diet

During hospitalization, malnutrition states can be worsened with iatrogenic nil per os (NPO) orders that may further impact undernourished patients. In a retrospective cohort study of 187 patients admitted for acute UC flares, 252 NPO or clear fluid dietary orders were encountered among 142 admissions (75.9%). Among these orders, 112 orders (44%) were not justified or did not offer alternative nutrition sources, such as enteral nutrition (EN) or parenteral nutrition (PN).<sup>9</sup> Current guidelines recommend initiating a regular diet as the patient can tolerate, if no contraindications are present, with oral routes of feeding being preferred over EN. Contraindications to initiating a diet include uncontrolled sepsis, patients requiring urgent or emergent surgery (such as small bowel obstruction or abscesses), patients with obstructive symptoms, or fistulas with high output (>500 cc/day). Although there are no current recommendations for use of a specific IBD diet during active flares, the European Society of Clinical Nutrition and Metabolism (ESPEN) recommend increasing protein intake to 1.2 to 1.5 mg/kg/day in adults in patients with

Quiz:

**In which of the following presentations would you consider trialing a diet on admission?**

- a. Fistula with more than 500 cc/day output
- b. Active ulcerative colitis with 12 watery bowel movements per day
- c. Uncontrolled sepsis
- d. Small bowel obstruction

**Answer:** B. Patients with both active ulcerative colitis and those with inflammatory Crohn’s Disease can and should be given an oral diet. Patients should be allowed to choose from a variety of foods to pick foods they feel they tolerate best. Bowel rest has not been shown to improve active inflammation and can contribute to increased risk of malnutrition. In a retrospective study of 157 patients admitted with inflammatory bowel disease flares, there was no significant difference in disease reduction between patients who were made NPO on admission versus those who were started on a diet.<sup>11</sup>

active disease, and oral nutritional supplements may be considered for this purpose.<sup>4</sup> For patients with symptomatic strictures, low fiber diets or post-stenosis EN can be considered, though evidence to support these diets is weak.

Consider other causes for difficulty eating

If the patient is unable to tolerate a diet despite pharmacologic treatment for an acute IBD flare, the clinician should consider possible contributory organic causes that

may be limiting oral intake, which may warrant further evaluation and treatment.<sup>10</sup> For example, patients with CD with continued nausea and vomiting despite steroids and antiemetic therapy may require esophagogastroduodenoscopy or abdominal imaging, if not already performed, to evaluate for upper gastrointestinal tract involvement, gastroesophageal reflux disease, or presence of strictures, as well as a careful review of current medications that could be contributing to their symptoms.

Application of data to our case

Using the MUST screening tool, the patient is deemed high risk for malnutrition, and the inpatient dietitian is consulted. On nutritional assessment, she is found to have moderate protein energy malnutrition based on findings of 5% body weight loss in the last month, evidence of muscle loss, and ongoing symptoms of frequent diarrhea. She is initiated on regular diet with high calorie/high protein supplements with every meal and close monitoring of her oral intake. Antiemetics are given before meals to reduce nausea and increase ability to eat. Her diarrhea slowly improves with intravenous corticosteroid treatment and plans are made for starting a new biologic as an outpatient. It was noted that the patient was anemic with Hb <10 g/dL and low iron saturation and ferritin. Intravenous iron supplementation was initiated due to concerns for intolerance to oral iron supplements (as well as concerns of malabsorption with active disease.) She was recommended followup with a registered dietitian as a part of her discharge planning to ensure ongoing nutritional support during her treatment.

Table 2: AND/ASPEN recommended characteristics for the diagnosis of adult malnutrition<sup>8</sup>

	MALNUTRITION IN THE CONTEXT OF ACUTE ILLNESS OR INJURY (INFECTION, BURNS, TRAUMA)		CHRONIC DISEASE RELATED MALNUTRITION (ORGAN FAILURE, IBD, PANCREATIC CANCER, RA, SARCOPENIC OBESITY)		STARVATION-RELATED MALNUTRITION (ANOREXIA NERVOSA, PURE CHRONIC STARVATION)	
CLINICAL CHARACTERISTICS	MODERATE MALNUTRITION	SEVERE MALNUTRITION	MODERATE MALNUTRITION	SEVERE MALNUTRITION	MODERATE MALNUTRITION	SEVERE MALNUTRITION
Energy Intake	<75% of estimated energy requirement for 7 days	≤50% of estimated energy requirement for ≥5 days	<75% of estimated energy requirements for ≥1 month	<75% of estimated energy requirements for ≥1 month	<75% of estimated energy requirements for ≥3 months	≤50% of estimated energy requirement for ≥1 month
Interpretation of weight loss (% over time)	1-2% in 1 week 5% in 1 month 7.5% in 3 months	>2% in 1 week >5% in 1 month >7.5% in 3 months	5% in 1 month 7.5% in 3 months 10% in 6 months 20% in 1 year	>5% in 1 month >7.5% in 3 months >10% in 6 months >20% in 1 year	5% in 1 month 7.5% in 3 months 10% in 6 months 20% in 1 year	>5% in 1 month >7.5% in 3 months >10% in 6 months >20% in 1 year
Loss of subcutaneous fat (e.g., orbital, triceps, fat overlying the ribs)	Mid	Moderate	Mild	Severe	Mild	Severe
Muscle loss (e.g., wasting of the temples, clavicles, pectorals, deltoids, interosseous muscles, trapezius muscles, quadriceps, gastrocnemius muscles)	Mild	Moderate	Mild	Severe	Mild	Severe
Fluid accumulation (extremities, vulvar/scrotal edema, ascites)	Mild	Moderate to severe	Mild	Severe	Mild	Severe
Reduced grip strength	N/A	Measurably reduced	N/A	Measurably reduced	N/A	Measurably Reduced



## Bottom line

Data supports screening for malnutrition in all patients hospitalized with IBD and that bowel rest should be avoided in most patients. ■

## References

1. Liu J, et al. Prevalence of malnutrition, its risk factors, and the use of nutrition support in patients with inflammatory bowel disease. *Inflamm Bowel Dis*. 2022;28(Suppl 2):S59-S66.
2. Nguyen GC, et al. Nationwide prevalence and prognostic significance of clinically diagnosable protein-calorie malnutrition in hospitalized inflammatory bowel disease patients. *Inflamm Bowel Dis*. 2008;14(8):1105-11.
3. Chiu E, et al. Optimizing inpatient nutrition care of adult patients with inflammatory bowel disease in the 21st century. *Nutrients*. 2021;13(5):1581.
4. Forbes A, et al. ESPEN guideline: Clinical nutrition in inflammatory bowel disease. *Clin Nutr*. 2017;36(2):321-47.
5. Palchaudhuri S, et al. Diet recommendations for hospitalized patients with inflammatory bowel disease: better options than nil per os. *Crohns Colitis 360*. 2020;2(4):otaa059. doi: 10.1093/crocol/otaa059.
6. Lin A, Micic D. Nutrition considerations in inflammatory bowel disease. *Nutr Clin Pract*. 2021;36(2):298-311.
7. Vasudevan J, et al. Optimizing nutrition to enhance the treatment of patients with inflammatory bowel disease. *Gastroenterol Hepatol (N Y)*. 2022;18(2):95-103.
8. White JV, et al. Consensus statement of the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition: characteristics recommended for the identification and documentation of adult malnutrition (undernutrition). *J Acad Nutr Diet*. 2012;112(5):730-8.
9. Gallinger Z, et al. A315 Frequency and predictors of fasting orders in inpatients with ulcerative colitis: the audit of diet orders - ulcerative colitis (ADORE-UC) study. *Journal of the Canadian Association of Gastroenterology*. 2018;1(Suppl 1):547-8.
10. Hwang C, et al. Development and pilot testing of the inflammatory bowel disease nutrition care pathway. *Clin Gastroenterol Hepatol*. 2020;18(12):2645-9.
11. Park YE, et al. Is fasting beneficial for hospitalized patients with inflammatory bowel diseases? *Intest Res*. 2020;18(1):85-95.
12. Anthony PS. Nutrition screening tools for hospitalized patients. *Nutr Clin Pract*. 2008;23(4):373-82.

## Additional Reading

1. Palchaudhuri S, et al. Diet recommendations for hospitalized patients with inflammatory bowel disease: better options than nil per os. *Crohns Colitis 360*. 2020;2(4):otaa059. doi: 10.1093/crocol/otaa059.
2. Russell LA, et al. The complexities of approaching nutrition in inflammatory bowel disease: current recommendations and future directions. *Nutr Rev*. 2022;80(2):215-29.
3. Chiu E, et al. Optimizing inpatient nutrition care of adult patients with inflammatory bowel disease in the 21st century. *Nutrients*. 2021;13(5):1581.

## Have We Gotten Too Casual?

By Ashley Trotter, MD

Before the COVID-19 pandemic, I remember physicians standing out not only for their presence and composure, but for their professional appearance. In suits, dress pants, blouses, and sharp jackets, I remember my former attendings and colleagues making an entrance. There was no question who the doctor was, or who was in charge of the patient's care. Out of necessity, with an unknown deadly virus decimating our ranks, those snappy outfits were replaced by surgical scrubs, designed to withstand the high heat and daily washing that we all hoped would give our families a chance to avoid the same exposures we had to endure.

Over time, those scrubs became trendier. More colorful. Softer. They became daily wear for most, and a fashion statement in and of themselves. Colleagues would compare their collections, proudly displaying the new limited-edition colors they had just snapped up. Comparing brands and styles became the water-cooler talk (if there was still a shared water cooler). Brands would rise and fall as scandals and missteps arose, but the scrub trend did not seem to slow down. Suddenly, scrubs were the new norm for daily rounds, even outside of COVID-19 units, and when the fleeting discussion about the appropriateness of such dress would come up, more often than not the subject would quickly change, or the glances would be anywhere but on the one bringing that topic to a head. The convenience was desirable. Bodily fluids were less of a concern. Dressing



Dr. Trotter

*Dr. Trotter is an academic hospitalist at NorthShore University HealthSystem in Evanston, Ill. As the teaching chief for hospital medicine, she manages continuing medical education for the division, primarily through her faculty education series. Additionally, she is an associate program director for the University of Chicago NorthShore internal medicine residency program.*

in the morning was quicker and simpler.

However, perhaps it is time we rethink the casual workspace? As we physicians strive to distinguish ourselves from other health care professionals, we should not forget how much presentation matters. As many of us women physicians fight the stereotypes placed on female practitioners of, "Oh my nurse is here!", and as we fight to be seen for who we are, it raises the question: Have we gotten too casual? ■

## Heels, White Coats, Formal Wear, and Scrubs

A brief history of fashion and health care attire

By James Kim, MD

The evolution of what is considered appropriate attire within a society often comes about via cultural exchanges or major historical events. For example, high-heeled shoes were invented in Persia in the 10th century. They were originally worn by noblemen to make them appear taller and for convenience when riding horseback (the heels clicked into the stirrups). In the 17th century, Persian royalty visited the French court, and the style quickly spread among men in European high society.<sup>1</sup>

Around the same time, women often adopted "masculine" elements in their fashion to achieve some of the social benefits they accrued.<sup>1</sup> So as high heels propagated in men's fashion, they soon spread to women as well. Men later largely abandoned high heels,<sup>2</sup> but the style persisted in women and so, at this time, high heels are considered to be primarily women's fashion.

As far as medical attire is concerned, physicians primarily wore black clothes like members of the clergy until the late 1800s. In the U.S., a more widespread association of white coats with physicians started around 1889 with Joseph Eakins's painting "The Agnew Clinic." In it, Dr. Agnew and his assistants are depicted wearing white coats while performing surgery. One could surmise that the white coat invoked a feeling of precision



Dr. Kim

*Dr. Kim is an associate professor of medicine at Emory University School of Medicine, and a hospitalist at Emory University Hospital, Atlanta.*

and cleanliness in contrast to the "snake oil" and quackery that was often seen during the Victorian era. For this and various other reasons, white coats continued to spread as part of the "standard uniform" for physicians throughout the 20th century.<sup>3</sup>

Like the evolution of high heels, however, the demographics of those who wear white coats have shifted. Many health care professionals besides physicians wear white coats, which is a change from what I remember during my training in medical school (2000-2004). In my institution, I have seen advanced practice provid-





ers, respiratory therapists, social workers, physical therapists, and occupational therapists (to name a few) wear white coats regularly. To borrow a linguistics term, the white coat (signifier) no longer correlates with an individual being a physician (signified).

Further, it is no exaggeration to say that the COVID-19 pandemic was a significant event in world history that has affected commerce (e.g., increased automation, online purchasing platforms), social mores (e.g., social distancing, mask-wearing), education, and countless other areas of society. Many tendencies and trends that were noted before the pandemic accelerated tremendously as a response to the new reality, and health care attire is no exception.

Even before the pandemic, there was an ongoing debate about whether to change the “standard” white coat with formal attire garb for a “bare below the elbows” (BBE) dress code. While there are multiple studies showing contamination of scrubs, white coats, and ties, “no clinical studies have shown cross-transmission from a health care provider to a patient via apparel” and there is no definitive evidence that BBE attire on inpatient providers improved nosocomial infection outcomes.<sup>4-5</sup>

Despite the lack of great evidence, guidelines suggest that facilities should consider BBE dress for inpa-

tient care as an infection prevention adjunct based on biological plausibility and low likelihood of harm.<sup>4</sup> I agree that anything that lowers barriers to proper hand hygiene is a good thing. For men’s formal wear, appropriate handwashing is possible in long-sleeved dress shirts, but getting the cuffs wet if you’re not careful with the water is a minor but real disincentive to thoroughly clean. Short-sleeve dress shirts are available, but I find them aesthetically unappealing. My feeling is that the pandemic was the nudge that pushed providers to wear scrubs regularly, and there is no going back for many.

As Dr. Trotter mentioned, women physicians, unfortunately, face an uphill battle with being acknowledged as physicians even when they’re in the same level of formal dress as men. One study noted that male and female models in white coats with business innerwear were most frequently perceived as physicians, but the male model was more likely to be identified as a physician than the female (88.3 versus 71.7%). When shown models wearing scrubs, participants most frequently identified them as surgeons, but male models were more likely than females to be identified as a surgeon (49.5% versus 40.7%,  $P=0.01$ ); females in scrubs were more often perceived as a nurse than the male (33.1% versus 27.3%  $P=0.05$ ).<sup>6</sup>

I have female colleagues in my group who wear more formal attire specifically so that they are more likely to be recognized by patients as the doctor. But for the most part in hospital medicine, we do not choose our patients, and our patients do not specifically choose us. We still have to care for patients in a professional manner even when they have prejudices and biases about us based on our gender, age, race, attire, and a variety of other parameters.

In the end, I feel that in the absence of definitive data, one cannot make an absolute prescription about what all doctors “should” wear. “Although patients frequently express preferences for certain types of attire, including white coats, they were willing to change their preferences when informed of potential risks associated with HCP [health care practitioner] attire. Patient comfort, satisfaction, trust, and confidence in their physicians is unlikely to be affected by practitioners’ attire choice, except for name tags, which they viewed as essential.”<sup>4</sup>

While I note my preferences for scrubs in this article, the next pandemic, natural disaster, or other major world events may change my preferences again. Though I have abandoned my white coat and formal attire for inpatient care, who’s to say that I may not take them up again with a short-sleeved dress shirt and heels? However, I do know

that regardless of what comes next, during initial patient encounters, I will wear a name tag, attempt to shake the patients’ hands, and introduce myself as the doctor.

## References

1. Segrán E. The long history of heels: from a symbol of men’s power to women’s burden. Fast Company website. <https://www.fastcompany.com/90775177/the-long-history-of-heels-from-a-symbol-of-mens-power-to-womens-burden>. Published August 4, 2022. Accessed November 15, 2022.
2. Did you know men were the first to wear high-heel shoes? News 18 website. <https://www.news18.com/news/lifestyle/did-you-know-men-were-the-first-to-wear-high-heel-shoes-2881163.html>. Published Sept. 16, 2020. Updated Sept. 16, 2020. Accessed November 15, 2022.
3. Harrah S. The white coat ceremony - A rich tradition for medical students. University of Medicine and Health Sciences website. <https://www.umhs-sk.org/blog/white-coat-ceremony>. Published February 17, 2021. Accessed November 15, 2022.
4. Palmer T, Bearman G. Guide to infection control in the healthcare setting: Healthcare personnel attire in non-operating room settings. International Society for Infectious Diseases website. <https://isid.org/guide/infectionprevention/health-care-personnel-attire/>. Last updated April 2018. Accessed November 15, 2022.
5. Mahoney, Sarah. The white coat: Symbol of professionalism or hierarchical elitism? AAMC News website. <https://www.aamc.org/news-insights/white-coat-symbol-professionalism-or-hierarchical-elitism>. Published July 21, 2018. Accessed November 15, 2022.
6. Xun H, Chen J, Sun A. Public perceptions of physician attire and professionalism in the US. *JAMA Netw Open*. 2021;4(7):e2117779. doi:10.1001/jamanetworkopen.2021.17779.





## SIG Spotlight: Rural Hospitalists

By Richard Quinn

Lisa Kaufmann, MD, moved to the Blue Ridge Mountains of North Carolina in 2014.

She knew of the region from her undergraduate and medical-school years at Duke University in Durham, N.C., but most of her career had been spent in large academic medical centers at the University of Arizona in Tucson, Ariz., and the State University of New York in Syracuse.

After her “retirement,” though, she moved to Boone, N.C., a town closer to the eastern border of Kentucky and Knoxville, Tenn., than the Tar Heel State’s Atlantic Ocean beaches.

Within three years, she got involved in the SHM Special Interest Group (SIG) on Rural Hospitalists, in part motivated by what she heard at a forum about rural hospitalists at an SHM annual meeting.

Now she’s chair of the SIG, which has 339 members.

“I went to a national meeting because, having come out of the heavily inhabited fishbowl of an academic medicine department,” rural medicine was different, says



Dr. Kaufmann

Dr. Kaufmann, medical director of the adult inpatient and emergency department service line at Appalachian Regional Healthcare System in Asheville, N.C., and medical director of its hospitalist program. “The small size of our group, and the fact that we didn’t have as many people to bounce ideas off of, made me feel it was much more important to be able to connect with other people.”

SHM has 27 SIGs that are intended to “create communities of hospitalists around topics of interest, practice areas and/or care models.”

Perhaps none need to focus on connecting practitioners as much as the ones set up for those who work in the most unconnected settings.

For some, that can be rural counties with one hospital serving as a hub for pediatrics, psychiatry, emergency medicine, and admissions. And those buildings can sometimes serve multiple counties with tens of thousands of community members having nowhere else to seek treatment.

“Rural hospitalists tend to be extremely busy,” Dr. Kaufmann said. “They often don’t have any time where someone else can cover them to go to a meeting, because a lot of times they are it. They may have to drop out of calls suddenly to go take care of an emergency. It’s challenging for them.”

Dr. Kaufmann says it’s important for the SIG to give members a way

to interact with other members, particularly after the COVID-19 pandemic that made it harder for hospitalists in rural areas to find time for anything other than practice.

Now, she’s working with SHM membership engagement manager Kevin Vuernick and SIG vice chair Ken Simone, MD, SFHM, a hospitalist in Brewer, Maine, to boost SIG membership and reinvigorate the group.

“People were just so busy during the pandemic that they didn’t think they could spend time with it,” she said. “I feel like we’re just starting on our journey.”

That’s not to say that progress isn’t being made. At SHM annual meetings, there is always a special-topic forum dedicated to rural hospitalists.

“One of the important topics we covered at the special interest forum at the national meeting (last year) was talking about how to effectively negotiate with hospital administration for the things that the hospitalists need to be effective at their job,” Dr. Kaufmann said. “How do you prove what your staffing level needs are? How do you negotiate for pay equity? We ended up spending a fair amount of that particular forum on these topics.”

Dr. Kaufmann says an online session about just those types of negotiations was held in December 2022. Other forums are at different

stages of the planning process. In terms of timing, Dr. Kaufman says the SIG could host quarterly discussions on a topic selected by members. Those events could include a question-and-answer session held afterward.

“For people who work in even smaller places,” she said, “I feel it’s really important to have resources of colleagues you can brainstorm with about challenging situations and cases.”

Dr. Kaufmann says that her experience working in large academic centers may make her more comfortable reaching out to practitioners at other institutions.

But it’s a feeling she wants to instill in other rural hospitalists.

“I really like bouncing things off of other people, I’ve always been that way,” she said. “I think a lot of people are not used to that luxury, and they may not be as aggressive about seeking it out. I’ll call people at other institutions or email them to ask their thoughts about things, and I think a lot of people might be a little reserved about that.”

“I’ve found that a lot of people don’t mind being asked for help, especially if you say, ‘Just tell me if you don’t have time to answer this.’ I think, by and large, people who go into health care, they do it because they want to help people, and they are usually happy to answer a quick question.” ■

*Richard Quinn is a freelance writer in New Jersey.*





## Chapter Spotlight: Pacific Northwest

By Richard Quinn

**T**he use of technology to connect people is a great idea, if you ask Thérèse Franco, MD, SFHM, president of SHM's Pacific Northwest chapter.

But not if it's technology for technology's sake.

So the chapter she runs makes it a point to ask its 406 members (as of October) how best to take advantage of social media, Zoom calls, and the rest of the digital diaspora—and not just by scheduling online social hours or lectures that flit too quickly from a Beach Boys cover band to molecular biology.

"I do not think we should be using technology to re-create our live events," said Dr. Franco, associate regional medical director of Virginia Mason Franciscan Health's Franciscan inpatient team based in Tacoma, Wash. "I think we need a paradigm shift about how we connect with each other using technology, and how it looks when it's live. They are naturally different, and I think we should respect that and figure that out."

The Pacific Northwest chapter covers most of Washington State, except for the state's southwest corner, which is more geographically aligned with metropoli-

tan Portland, Ore. Covering the country's 18th-largest state means the chapter needs to, "meet them where they're at," Dr. Franco says.

"The biggest challenge for our chapter is that there is a major mountain pass right down the middle of the state, so getting people together for events, particularly in the winter months, is a real challenge."

And that's where technology truly can help.

"We're really looking to leverage technology for meaningful connections and community building, particularly across the mountains, but even all over the Puget Sound," Dr. Franco said. "A lot of our membership is, obviously, in Seattle and the Seattle area, but Seattle has gotten so busy and crowded that even coming from the suburbs into downtown for an evening event can be burdensome."

"We're looking to meet the needs of all of our members," she said. "Just before the pandemic we were doing pretty well trying at making a foray into hybrid forums."

The future of chapter engagement—like that of office workers, in many ways—is likely to be found in that hybrid setup.

In the pre-COVID-19 world, the chapter would host live speakers in Seattle and then stream to hospitalists in satellite locations. The chapter had also set up "operational leads" throughout the state, particularly in regions with a concentration of hospitalists. Some-

times, that allowed the chapter to run hybrid panels, with speakers in different locations, promoting simultaneous active participation across the state.

Put another way: The Pacific Northwest was already experimenting with ways to optimize remote meetings when the pandemic hit. So while some chapters were learning how, hospitalists in Washington State were just upping their game.

"We felt comfortable and well positioned to launch webinars because we had already been working on leveraging technology to connect with people," Dr. Franco said. "I felt really proud of the chapter for being engaged and doing that, particularly at the height of the pandemic."

The chapter even hosted a book club where it provided gift cards for folks to buy "The Digital Doctor", authored by Bob Wachter, MD, MHM, and then did a Zoom panel with Dr. Wachter and other popular speakers, including CT Lin, MD, FAMIA, most well known as a proponent of Open Notes.

The other speakers included local hospitalist informaticist celebrities, Dr. Franco says, noting that the Seattle region has multiple respected large and/or academic health systems where speakers can be found.

"What's worked best for us is to ask people who are really doing the work, like operational leaders who actually do the work, to speak to certain topics. And we've done that, and we've tried to pull

them from different health care systems, and then we get the good cross-section of our membership that are coming from all different areas."

Another frontier where technology has proven both useful and popular is the arena of continuing medical education (CME), Dr. Franco says.

Members, "... want more CME opportunities, because then you're connecting with colleagues, but also getting those licensure requirements taken care of and participating in some professional development," she adds.

Aside from technology, Dr. Franco says another big push for the Pacific Northwest chapter is, "building a leadership opportunity pipeline."

That means focusing on the entire spectrum of hospital medicine early-career, academic, and community hospitalists. It also means a voice for all subspecialties.

"How do we get more diverse representation?" said Dr. Franco. "There are different disciplines within hospital medicine. There is perioperative medicine. There are pediatric hospitalists, adult hospitalists, and surgical hospitalists. And any time we have a member who comes for one of those disciplines, we try to engage them in leadership and reach out to them to try to bring a diversity of disciplines to the table." ■

*Richard Quinn is a freelance writer in New Jersey.*



Dr. Franco



## The Division of Hospital Medicine at Cooper University Hospital is offering the 2023-2024 Advanced Hospital Medicine Fellowship

July 1, 2023 to June 30, 2024

Cooper University Hospital is one of South Jersey's largest teaching hospitals affiliated with the Cooper Medical School of Rowan University.

The Advanced Hospital Medicine Fellowship (AHMF) is a one-year program which strives to train the future generation of leadership in clinical education programs, clinical operations, quality improvement, and patient safety. The AHMF is ideal for graduating Residents or early career Hospitalists who anticipate careers as clinician-educators and administrators in an academic tertiary care setting.

### Choose Your Track

Hospital Administration • Medical Education • Medical Informatics • Clinical Research

### Program Eligibility

Eligibility for the Advanced Hospital Medicine Fellowship Program requires a minimum of three years of ACGME accredited training in Internal Medicine or Family Medicine. Individuals accepted for a position in the Fellowship Program must be U.S. citizen, classified as a resident alien, or hold a J-1 visa.

### Contact Information

Program Director: **Dorrie-Susan Barrington, MD**  
Program Contact: **Amy Welde, Sr. Practice Manager**  
Phone: **856-342.3150**  
E-mail: [welde-amy@cooperhealth.edu](mailto:welde-amy@cooperhealth.edu)  
Website: [cooperhealth.edu/hospitalmedicine](http://cooperhealth.edu/hospitalmedicine)

### How to Apply

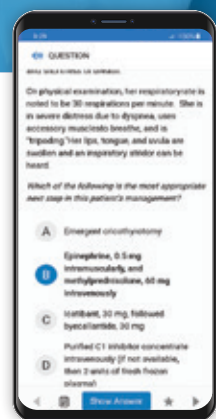
Please submit the following information to Amy Welde (contact information below) before **March 31st, 2023** for application to the position:

- Current Curriculum Vitae
- Three (3) letters of recommendation (one of which must be from your current or most recent Training Director)
- Personal Statement describing your training goals and future career plans
- Complete Transcript
- ECFMG Certification (IMG only)
- USLME Reports (1, 2 and 3)



Coming Spring 2023, Spark Edition 3 has new opportunities to earn CME and MOC, and will give on-the-go hospitalists like you access to educational resources in your pocket.

Join the Waitlist at [hospitalmedicine.org/spark](http://hospitalmedicine.org/spark)



### Internal Medicine Hospitalist Opportunity

The University of Iowa Department of Internal Medicine is recruiting part-time and full-time BC/BE physicians for clinical faculty positions that offer a dynamic mix of activities within the Division of General Internal Medicine. We are looking for hospitalists who are interested in working in a stimulating environment and have a strong interest in professional development. We support faculty participation in medical education, quality improvement, and leadership/management hospitalist tracks. Hospitalists have many clinical opportunities, including resident teaching teams, attending-only teams, transition-of-care follow-up clinic, and a virtual hospitalist service. Hospitalist work at both the University of Iowa Hospitals and Clinics (UIHC) and the Iowa City VA Medical Center (VAMC). At UIHC, hospitalists can also lead Advanced Practice Provider (APP) inpatient teams, staff the APP run observation unit, or staff residents in the surgical co-management services. We recently opened the University of Iowa Health Network Rehabilitation Hospital, where our hospitalists co-manage patients with Physical Medicine and Rehabilitation staff. Additionally, general medicine hospitalists can rotate on a subspecialty cardiology service where they collaborate with cardiologists in taking care of post procedure patients, left ventricular assist devices, and a range of other cardiovascular conditions.

Candidates must have a M.D. degree or equivalent. Applications will be accepted for positions at the rank of Clinical Instructor, no track, Clinical Assistant Professor, Clinical Associate Professor, or Clinical Professor, commensurate with experience and training. Position requires completion of an ACGME-accredited Residency Program.

Primary practice sites are the University of Iowa Hospitals and Clinics (UIHC), which is consistently recognized as one of the top health care employers by *Forbes* and has consistently ranked as one of the top 15 medical centers in the U.S. by *US News and World Report*, and Iowa City VA Medical Center, and the University of Iowa Health Network Rehabilitation Hospital. Iowa City is a diverse and family-friendly community located in the heart of the Midwest. As the site of the University of Iowa, it combines access to many of the cultural amenities of a larger city with the ease of living in a smaller town.

For further information, contact Kristin Goedken at [kristin-goedken@uiowa.edu](mailto:kristin-goedken@uiowa.edu).

Interested candidates are invited to search the Jobs@UIOWA site: <https://jobs.uiowa.edu/content/faculty/> and search for requisition #74556

The University of Iowa is an equal opportunity/affirmative action employer. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran. The University also affirms its commitment to providing equal opportunities and equal access to University facilities. Women and Minorities are encouraged to apply for all employment vacancies.





MAR

**26-29 | 2023**



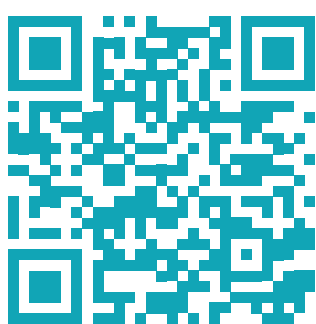
**AUSTIN,  
TEXAS**



## **Excellent Care Begins with Premium Education**

SHM Converge offers a robust curriculum for all members of the hospital medicine team with over 15 educational tracks.

Throughout the conference's world-class educational sessions, enjoy our live music scene and endless networking opportunities with your peers in hospital medicine.



**Don't miss the networking, learning, and fun!**  
Register before January 18, 2023,  
to save on early-bird rates.

**[shmconverge.org](https://shmconverge.org)**