June 2026
Vol. 30 | No. 6

The Hospitalist

shm
the-hospitalist.org
@SocietyHospMed

IN THE LITERATURE

UNC Chapel Hill

CLINICAL GUIDELINES

Drs. Choudry, Barnett, and Suojanen

VISIT US ONLINE FOR EXCLUSIVE CONTENT

IN THE NEXT ISSUE...

ICYMI Converge session recaps

Prsrt 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

SHM's 2026 Hospital Medicine Scholarship Fund Winner

In support of SHM's commitment to nurturing the hospitalist workforce, SHM is proud to present the Hospital Medicine Scholarship Fund, made possible by its Keystone Sponsor, Vituity.

SHM's objective in developing this scholarship fund is to support the growth of the hospital medicine workforce by identifying medical students who are from economically disadvantaged backgrounds. SHM seeks students who have demonstrated a commitment to health equity and improving care for underserved communities.

SHM awarded Sean Williams with SHM's Hospital Medicine Scholarship Fund at Converge 2026 in Nashville. Sean's scholarship is made possible by Keystone Sponsor, Vituity.


Mr. Williams

Sean is an incoming fourth-year medical student from Detroit with an interest in internal medicine, particularly in the management of complex physiology and diagnostic uncertainty in the inpatient setting.

His academic interests include cardiac rehabilitation and exercise physiology, where he holds a CSCS certification through the National Strength and Conditioning Association.

Throughout medical school, Sean has remained committed to teaching and community engagement, serving as a science instructor and as a liaison to a community-based wellness initiative in his hometown.

During Sean's clinical training, he earned honors in both internal medicine and surgery and was selected as the recipient of the Black Medical Association Endowed Student Award as well as Gold-Level PEARLS Professionalism Recognition.

Sean cites his interest in internal medicine because of its intellectual rigor, breadth, and emphasis on systems-based, patient-centered care. ■

SHM's 2026 Global and Rural Health Foundation Grant Recipients

In 2024, SHM launched the SHM Global & Rural Health Foundation in service of its mission to promote high-value care and optimal outcomes for acutely ill patients.

U.S.- and hospital-based clinicians and practice administrators can apply for either a travel or equipment grants to support these efforts, both in rural community hospitals in underserved regions of the U.S. and in missions serving remote villages around the world.

SHM recognized this year's grant recipients at Converge 2026. The Travel Grant Awardees include:

- **Malika Madhava, MD, MSc, DTMG, CTROPMED—**Academic Model Providing Access to Healthcare (AMPATH) Ghana
- **Jessica Chambers, MD, MPH, FACP, FHM—**AMPATH Global Health elective in Eldoret, Kenya
- **Philip Angelides, MD, MSc, CTROPMED—**CU-Coatepeque partnership in Guatemala
- **Joshua Black, MD—**Central Ohio Jamaica Medical Outreach in Falmouth, Jamaica
- **Max Fraden, MD—**Somalilander American Health Association in Somaliland
- **Philicia Duncan, MD—**Central Ohio Jamaica Medical Outreach in Falmouth, Jamaica
- **Liliya Klimkiv, MD—**UC Davis Health in Gambia

The Equipment Grant Awardees, along with the equipment they will be purchasing with this year's grant, include:

- **Angeline Sawaya, MD—**Point of care ultrasound (POCUS) units, Guatemala
- **Zena Salim, MD, MSc—**POCUS and procedure simulators, Rwanda
- **Andrea Matho, MD—**POCUS components, Uganda
- **Simbiat Olayiwola, MD—**POCUS units, McLeod Health critical access project in rural South Carolina
- **Sara Schwanke Khilji, MD, MPH, FACP—**POCUS units, Botswana ■

THE Hospitalist®

June 2026
Volume 30 | No. 6

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.

From Trust to Action: Closing Gaps in Hospital Care

By Arunab Mehta, MD, MEd, FHM

In this issue of *The Hospitalist*, two articles, one exploring the broader landscape of LGBTQIA+ health and another focusing on human immunodeficiency virus (HIV) prevention through pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), highlight a shared truth: hospitalists are uniquely positioned to influence both the experience and outcomes of a historically marginalized patient population.

Progress in these areas has been meaningful over time, particularly in research, education, and clinical practice. At the same time, variability in training and awareness continues to create uneven patient experiences. Advances in research and growing educational efforts have helped move the field forward. Yet, as the feature on LGBTQIA+ health reminds us, progress is neither uniform nor guaranteed. The path forward begins not at the system level, but at the bedside.

Caring for LGBTQIA+ patients, especially transgender individuals, requires more than protocols or checklists. It requires a deliberate effort to understand patients as human beings: how they identify, what they have experienced within the healthcare system, and what they need to feel safe and respected. Trust is not an abstract goal. It is built through small, consistent actions by using the correct name and pronouns, avoiding assumptions, and creating space for honest discussions. These individual interactions form the foundation upon which broader system-level improvements can and should be built.

At the same time, the article on PrEP and PEP challenges us to rethink the boundaries of hospitalist practice. Many of us were trained in environments where HIV prevention conversations were firmly situated in the outpatient setting. As a result, hospitalization has rarely been viewed as an opportunity to initiate discussions around PrEP or PEP. Reflecting on this myself, I have wondered about the opportunities I may have missed.

Hospitalization is often a sentinel event: a moment when patients are more engaged with the healthcare system than they may be at any other time. For patients at increased risk of HIV, including those with substance use or limited access to outpatient care, this setting offers a critical window to introduce prevention strategies. Even if initiation does not occur inpatient, starting the conversation can have a lasting impact. As highlighted in this issue, "planting the seed" may ultimately be life-changing.

Moving forward, hospitalists should consider developing frameworks within their practice to identify patients who may benefit from HIV prevention discussions and to integrate these conversations into routine care. This does not require perfection or subspecialty expertise; rather, it requires intentionality and awareness.

Education and research must evolve in parallel. Training programs should incorporate LGBTQIA+ health as a longitudinal component of medical education, not just as an elective topic. Similarly, continued research is essential to better refine clinical tools and ensure that care is evidence-based and inclusive of all patient populations.

Ultimately, these two articles underscore a shared responsibility. Whether through building trust with a transgender patient, initiating a conversation about PrEP, or advocating for inclusive systems of care, hospitalists have the ability to shape both individual experiences and broader health outcomes.

Ultimately, the role of the hospitalist continues to evolve. We should feel privileged to add these tools to our broader toolkit. ■

Dr. Mehta

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

A Response to Getting an Advanced Degree—Why Bother?

By Len Scarpinato, DO, MS, SFHM, FAAPL, and Mario Scarpinato, MD, MHA


SEANZHENG - STOCK.ADOBE.COM


Dr. L. Scarpinato


Dr. M. Scarpinato

Dr. Len Scarpinato's 40-year medical career includes 30+ years in physician executive positions. He was an original member of the National Association of Inpatient Physicians (a precursor to SHM), started one of the first hospitalist programs in Wisconsin, and has been an associate chief medical officer at a major hospital and chief medical officer at the largest privately held hospitalist company and a major national primary care physician group specializing in managed care of elderly Medicare HMO patients. Dr. Mark Scarpinato is a principal in the Healthcare and Life Sciences practice at Publicis Sapient in Denver, where he leads large-scale digital transformations for payers and providers. His prior experience includes strategy consulting at Boston Consulting Group and Deloitte and an internal medicine residency at the University of Colorado in Anschutz, Colo. He completed his MD at the Medical College of Wisconsin in Milwaukee and his MHA at the University of Pittsburgh in Pittsburgh.

We read with interest "Getting an Advanced Degree—Why Bother?" in the April issue of *The Hospitalist* (https://tinyurl.com/487kp9kr). We appreciate the discussion given LS's background in hospital medicine and now 31+ years of administrative medicine, as well as MS's unique perspective. We are father and son. Several points were not made:

1. Timing of the master's in a clinical career. Many of the hospitalists mentioned in the article pursued the degree early in their career. LS presented a peer-reviewed poster at the April 2012 American College of Physician Executives (now American Association for Physician Leadership) annual meeting in San Francisco titled "Master's vs Non-Master's, What Is a Physician Executive to Do?" The data, drawn from the ACPE annual compensation committee on which LS served, showed that the most advantageous time to acquire a master's was after five years of clinical experience upon completion of residency. This timing of getting a master's with an administrative focus resulted in a promotion (in-house or elsewhere) within two years of completion, along with an average salary increase of 17%. The type of administrative master's degree acquired did not make a difference. For a clinical or administrative career, completing a master's degree early (with the MD or DO), or late (end of career), did not produce a similar advantage.

2. Timing of master's in a non-clinical pathway. If you're not entering a clinical career, acquiring a master's degree, along with, before, or soon after the MD or DO, appears to be the best option (MS). Careers in pharmaceuticals, consulting, and venture capital frequently treat the advanced degree as an entry-level requirement, rather than a differentiator. The early-career physician moving into these spaces is competing against masters' in business administration (MBAs) from top programs, and the MD alone, however clinically prestigious, does not signal the business fluency these employers screen for. Firms like Boston Consulting Group and McKinsey hire MD candidates into structured consulting tracks at the same base salaries as their MBA hires. Pure MDs without an advanced degree often do make it into consulting, but consulting firms often recruit the pipeline they know: MD or MBA candidates from top medical or business schools. The five-year clinical practice benefit mentioned above that holds for hospital and hospitalist clinical administrative tracks does not generally apply to the non-clinical world. If anything, the opposite is true. Delay in completion of the master's degree risks pricing the physician out of entry-level roles where the advanced degree is an assumed prerequisite.

3. Program prestige is judged differently in different circles. Per LS's poster data referenced above, the type of master's did not appear to make a difference in the clinical aggregate, and the general recommendation was to pursue the master's that fit the physician's cost, location, timing, and family circumstances. That guidance still holds, but with important caveats 14 years on. The MBA and master's in health administration (MHA) rankings do not map onto each other, and prestige is judged differently depending on the audience and the preferred job (hospital administration or clinical positions, versus consulting, versus pharma). The right answer in degree and program selection depends on what the physician is trying to accomplish. The "Pursue Learning, Not Letters" article on page 9 of the same issue hints at this, though the choice is more deliberate than that framing suggests.

The aforementioned points add context and color to the recent Commentary from the January 2026 issue (https://tinyurl.com/4rvnze22) titled, "Being a Hospitalist in Your 60s and 70s," focusing on the benefits of more senior hospitalists, the value of advanced degrees, and the impact of both on career trajectories.

By the way, both of us agree that getting a master's worked well for our careers! ■

In the Literature

The University of North Carolina's Medical Literature Reviews

By Aaron Fried, MD, MBA, Evan Raff, MD, SFHM, Josh Garcia, MD, K. Danielle Aldrich, MD, Nelly Bellamy, MD, Nisar Ahmed Asmi, MBBS, MD, Rimma Osipov, MD, PhD, Robert W. Lampman, MD, Ashmita Chatterjee, MD, Ann Marie Kumfer, MD, and Jennifer McEntee, MD, MPH, MAEd, FHM

The University of North Carolina, Chapel Hill, N.C.

IN THIS ISSUE

By Aaron Fried, MD, MBA

1 Low-Dose Morphine as a Treatment for Chronic Breathlessness

CLINICAL QUESTION: Does low-dose, long-acting oral morphine improve self-reported breathlessness at 28 days for adult patients with moderate to severe chronic breathlessness?

Dr. Fried

BACKGROUND: Chronic breathlessness is a debilitating symptom for which opioids, and particularly morphine, have long been used for treatment. Most evidence of benefit arises from laboratory-based exercise studies, while at-home pragmatic studies have not demonstrated a significant effect on breathlessness outcomes.

STUDY DESIGN: Double-blind, parallel-group, randomized, placebo-controlled trial

SETTING: 11 clinical centers in the U.K.

SYNOPSIS: 143 patients with cardiorespiratory disease and a modified Medical Research Council breathlessness scale grade of at least 3 were randomized to 5 mg of modified-release oral morphine twice daily versus placebo for 56 days. Dose titration to 10 mg twice daily was performed for patients without improvement over baseline by day seven and with acceptable harms. No difference was detected in the primary outcome of worst breathlessness on a self-reported numerical rating scale at day 28 (adjusted mean difference 0.09; 95% CI, -0.57 to 0.75), nor at any other time point assessed.

An increase in activity by several measures (calories, steps, moderate to vigorous activity, reduced sedentary activity) was noted with morphine, although the measures are imprecise and failed to meet significance. More adverse events were seen in the morphine group, but they were mostly mild. Limitations include a predominance of chronic lung disease (98%) despite broader eligibility criteria, and under-representation of females and non-white patients.

BOTTOM LINE: Low-dose morphine was well tolerated but did not improve chronic breathlessness at 28 days, although additional study is needed to understand the potential benefit to patients of improved activity tolerance under the same burden of breathlessness.

CITATION: Johnson, MJ, et. al. Morphine for chronic breathlessness (MABEL) in the UK: A multi-site, parallel-group, dose titration, double-blind, randomised, placebo-controlled trial. *The Lancet Respiratory Medicine* 2025;13(11):967-77.

Dr. Fried is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Evan Raff, MD, SFHM

2 Telehealth-Based Sepsis Recovery Support Does Not Reduce 90-Day Readmission or Mortality

CLINICAL QUESTION: Does a telehealth-based sepsis transition and recovery (STAR) program improve 90-day mortality or hospital readmission among high-risk sepsis survivors?

Dr. Raff

BACKGROUND: Sepsis survivors face substantial long-term morbidity, mortality, and readmission risk after discharge, yet scalable post-discharge interventions remain limited.

STUDY DESIGN: Stepped-wedge, cluster-randomized, clinical trial

SETTING: Seven U.S. hospitals within a single healthcare system from July 2020 to June 2023

SYNOPSIS: Of 19,151 hospitalized adults screened for eligibility, 3,548 patients with sepsis at high risk for readmission were enrolled in the ENCOMPASS (Engagement and Collaborative Management to Proactively Advance Sepsis Survivorship) trial and assigned to usual care (n = 1,426) or a navigator-led, telehealth-based STAR program (n = 2,122) providing post-discharge support for 90 days. The primary composite outcome combined 90-day all-cause mortality and hospital readmission, which were also analyzed separately as secondary outcomes. The composite outcome was similar between groups (48.2% versus 48.0%; adjusted odds ratio [OR], 1.05; 95% confidence interval [CI], 0.90-1.24; $P = 0.53$), although STAR participants had lower mortality (17.3% versus 20.5%; adjusted OR, 0.88; 95% CI, 0.77-0.99; $P = 0.04$) and numerically higher readmission rates (35.9% versus 33.5%; adjusted OR, 1.13; 95% CI, 0.92-1.38; $P = 0.24$). No differences were observed in hospital-free days, emergency department visits, or outpatient visits. Limitations include pandemic-era confounding, lack of patient-reported outcomes, complex intervention design, and early withdrawal of one site.

BOTTOM LINE: A multicomponent, navigator-led telehealth-based post-sepsis recovery program did not improve the composite 90-day outcome of mortality or readmission, despite being associated with lower mortality and numerically higher readmission rates when these outcomes were analyzed individually.

CITATION: Taylor SP, et al. Proactive telehealth-based sepsis transition and recovery support, hospital readmission, and mortality: a randomized clinical trial. *JAMA Intern Med*. 2025;185(10):1238–1246. doi:10.1001/jamainternmed.2025.3699.

Dr. Raff is a hospitalist and professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Josh Garcia, MD

3 Discontinuation of APMs Post-Discharge Reduces Adverse Clinical Outcomes

CLINICAL QUESTION: Does discontinuation after discharge of antipsychotic medications (APMs) started for hospital delirium result in reduced adverse clinical outcomes compared to APM continuation in geriatric patients?


Dr. Garcia

BACKGROUND: APMs are frequently used off-label to manage behavioral disturbances due to hyperactive delirium in hospitalized geriatric patients. Clinical consensus has recommended using APMs for the shortest duration possible in delirious patients, and about one-third of older patients are continued on APMs upon discharge. APMs have been linked to multiple adverse clinical outcomes, including death, falls, urinary tract infection (UTI), pneumonia, and stroke.

STUDY DESIGN: Population-based cohort study

SETTING: Two nationwide databases: U.S. Medicare claims data from July 1, 2013, through December 31, 2018, and a large de-identified U.S. commercial healthcare claims database (Optum CDM) from July 1, 2004, through May 31, 2024

SYNOPSIS: This study compared discontinuation versus continuation of APMs initiated within 30 days of hospitalization in geriatric patients in two databases. Oral forms of atypical APMs and haloperidol were considered. Exclusion criteria included: diagnosed psychiatric disorders, prior exposure to APM, end-stage kidney or liver disease, metastatic solid tumors, and palliative or hospice care. Incidence density sampling was used to match APM discontinuers (gap of more than 45 days) and continuers based on the type of APM prescribed, time since their first APM prescription, and whether they had been admitted to intensive care prior. A total of 13,712 propensity–score-matched pairs were included. APM discontinuation was associated with lower risks of rehospitalization (hazard ratio [HR], 0.89; 95% CI, 0.85-0.96), recurrent inpatient delirium (HR, 0.87; 95% CI, 0.79-0.96), fall-related visits (HR, 0.77; 95% CI, 0.67-0.90), hospitalization with UTI (HR, 0.79; CI, 0.66-0.94), and all-cause mortality (HR, 0.77; 95% CI, 0.69-0.86). No significant difference was seen in the risk of pneumonia or stroke. Subgroup analysis by dementia status, type and dose of APM, and duration of APM exposure yielded consistent results. Limitations included a lack of specific information on the type of delirium, potential other indications for APM use, and reliance on the gaps between APM for timing of treatment discontinuation.

BOTTOM LINE: Discontinuation of APMs after hospitalization is associated with decreased risk of rehospitalization, all-cause mortality, recurrent inpatient delirium, fall-related visits, and hospitalization with UTIs regardless of age, sex, or dementia status. This highlights the importance of minimizing use after acute hospitalization.

CITATION: Yang C, et al. Health outcomes of discontinuing antipsychotics after hospitalization in older adults. *JAMA Psychiatry*. 2025;82(7):671–680. doi:10.1001/jamapsychiatry.2025.0702.

Dr. Garcia is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, NC

By K. Danielle Aldrich, MD

4 Urea Should Be Considered for Treatment of SIADH-Associated Hyponatremia

CLINICAL QUESTION: Is urea a safe and effective treatment option for syndrome of inappropriate antidiuretic hormone secretion (SIADH)-associated hyponatremia?


Dr. Aldrich

BACKGROUND: The management of hyponatremia, particularly that which is due to SIADH, can be challenging. Fluid restriction adherence can often be difficult, and salt administration can often lead to adverse effects such as fluid retention and elevated blood pressure. Urea is emerging as a potential second-line treatment, though comprehensive data and randomized clinical trials are lacking.

STUDY DESIGN: Systematic review and meta-analysis

SETTING: Articles obtained across four databases, the majority of which were retrospective studies.

SYNOPSIS: There were 16 studies included in this review that reported at least one outcome related to serum sodium concentration, symptom resolution, or adverse effects related to urea administration among patients with SIADH-associated hyponatremia. The studies varied in size, ranging from three to 50 patients. Some studies included hospitalized patients followed for a short term, while others followed patients up to a year. Pooled data showed that urea significantly increased sodium and urea levels, though with high heterogeneity in the absolute change. In studies with comparator treatments, urea was comparable to fluid restriction and vasopressin receptor antagonists. Compared to an untreated control group, urea was associated with a significant increase in serum sodium level. Urea was well tolerated, with poor palatability being the most common adverse effect. A rare incidence of hypernatremia was reported in three studies. The study has limitations, most notable being publication bias and inclusion of primarily observational or retrospective studies. However, randomized controlled trials are limited. Therefore, this study is a helpful review that supports the use of urea as a safe and effective therapy for SIADH-related hyponatremia.

BOTTOM LINE: Urea is a safe, effective, and well-tolerated treatment for SIADH-associated hyponatremia.

CITATION: Chander S, et al. Urea to treat hyponatremia due to syndrome of inappropriate antidiuretic hormone secretion: a systematic review and meta-analysis. *Am J Kidney Dis*. 2024;85(3):303-319. doi:10.1053/j.ajkd.2024.07.011.

Dr. Aldrich is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Nelly Bellamy, MD

5 De-Escalate Antibiotics for Community-Onset Sepsis After Four Days

CLINICAL QUESTION: Is de-escalation of broad-spectrum antibiotics (BSAs) safe on encounter day four in patients with community-onset sepsis with no positive tests for multidrug-resistant organisms (MDROs)?

BACKGROUND: Studies have shown that BSAs covering MDROs have been associated with lower mortality in patients with increased risk of MDRO infections and are recommended by the 2021 Surviving Sepsis Guidelines. However, their use is associated with *Clostridioides difficile* infections and antibiotic resistance.


Dr. Bellamy

STUDY DESIGN: Two target-trial emulation studies (observational)

SETTING: A total of 67 hospitals in the Michigan Hospital Medicine Safety Consortium

SYNOPSIS: Of 36,924 patients with community-onset sepsis on BSAs on encounter day four, 6,926 patients were eligible for the methicillin-resistant *Staphylococcus aureus* (MRSA) trial, and 11,119 patients were eligible for the *Pseudomonas aeruginosa* (PSA) trial. Inclusion criteria included receiving BSAs on day three and no positive MRSA or PSA testing on day one or two. Inverse probability of treatment weighting was used to balance patient factors, including chronic health conditions, site of infection, and predicted 30-day mortality on presentation. A total of 43.2% of patients were de-escalated from anti-MRSA coverage, and 22.4% from anti-PSA coverage. The patients who were de-escalated by day four had similar 90-day all-cause mortality (anti-MRSA OR, 1.00; 95% CI, 0.88-1.14 and anti-PSA OR, 0.98; 95% CI, 0.86-1.13). The de-escalated patients also had shorter lengths of stay and fewer days on antibiotics compared to patients who continued to receive BSAs. The study's main limitation is that it was observational and may have had confounding. These findings are similar to those of trials such as the SIMPLIFY trial, though further randomized controlled trials are needed.

BOTTOM LINE: De-escalation of empiric BSAs by day four was associated with similar 90-day mortality and shorter length of stay.

CITATION: Gupta AB, et al. Antibiotic de-escalation in adults hospitalized for community-onset sepsis. *JAMA Intern Med*. 2026;186(2):192-202. doi:10.1001/jamainternmed.2025.6919.

Dr. Bellamy is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Nisar Ahmed Asmi, MBBS, MD

6 Digitoxin in Patients with HFrEF May Improve Outcomes

CLINICAL QUESTION: In patients with chronic heart failure with reduced ejection fraction (HFrEF, defined as left ventricular ejection fraction of up to 40% with New York Heart Association class III–IV symptoms, or left ventricular ejection fraction of up to 30% with New York Heart Association class II symptoms) receiving guideline-directed medical therapy, does the addition of digitoxin reduce the risk of death or first hospitalization for worsening heart failure compared with placebo?


Dr. Asmi

BACKGROUND: Cardiac glycosides like digoxin and digitoxin have been used for centuries to manage heart failure and atrial fibrillation. Their positive inotropic effects and neurohor-

monal modulation improve symptoms and exercise tolerance in heart failure. The earlier DIG trial demonstrated that digoxin reduced hospitalizations for worsening heart failure without impacting overall mortality. A post hoc analysis suggested increased mortality at higher serum digoxin levels, particularly with renal impairment, as digoxin is primarily renally cleared.

The clinical benefit of digitoxin in the modern era of guideline-directed therapy is uncertain. Digitoxin has more stable pharmacokinetics than digoxin and is less dependent on renal clearance, potentially making it useful in advanced heart failure. However, evidence from modern randomized trials has been limited.

STUDY DESIGN: International, randomized, double-blind, placebo-controlled trial (DIGIT-HF)

SETTING: Multicenter international trial conducted at 65 sites primarily in Europe with a median follow-up of 36 months

SYNOPSIS: The DIGIT-HF trial evaluated whether digitoxin added to guideline-directed therapy improves outcomes in patients with advanced HFrEF. Patients were randomized to digitoxin or placebo and followed for clinical outcomes. The primary endpoint was a composite of death from any cause or first hospitalization for worsening heart failure.

The study demonstrated that digitoxin therapy reduced the risk of the composite endpoint, largely driven by fewer hospitalizations for heart failure but also some reduction in mortality. These benefits were observed despite patients receiving contemporary heart failure therapy, albeit with fewer participants being on newer agents like angiotensin receptor-neprilysin inhibitors and sodium-glucose co-transporter 2 inhibitors, limiting generalizability to future cohorts.

BOTTOM LINE: In patients with advanced HFrEF receiving guideline-directed therapy, digitoxin reduced the risk of death or hospitalization for worsening heart failure compared with placebo, suggesting that this older cardiac glycoside may still have a role as adjunct therapy in selected patients.

CITATION: Bavendiek U, et al. Digitoxin in patients with heart failure and reduced ejection fraction. *N Engl J Med*. 2025;393(12):1155-1165. doi:10.1056/NEJMoa2415471.

Dr. Asmi is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

SHORT TAKES

Prophylactic Antibiotics for Upper Gastrointestinal Bleeding in Patients with Cirrhosis

By Ann Marie Kumfer, MD

This systematic review and Bayesian meta-analysis did not demonstrate a mortality benefit of a longer course (five to seven days compared to zero to three days) of antibiotics in patients with cirrhosis and upper gastrointestinal bleed; shorter courses were inferior for the secondary outcomes of rebleeding and bacterial infections. Further high-quality randomized controlled trials are needed.

CITATION: Prosty C, et al. Prophylactic antibiotics for upper gastrointestinal bleeding in patients with cirrhosis: a systematic review and Bayesian meta-analysis. *JAMA Intern Med*. 2025;185(10):1194–1203. doi:10.1001/jamainternmed.2025.3832.

Dr. Kumfer is a hospitalist and assistant professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

Adopting a More Liberal RBC Transfusion Threshold of 9 g/dL in Patients with Acute Brain Injury May Enhance Outcomes

By Jennifer McEntee, MD, MPH, MAEd, FHM

This international, multicenter, phase 3, randomized, clinical trial revealed that patients with traumatic brain injury who received blood transfusions more liberally for hemoglobin less than 9 g/dL within the first 10 days of injury (compared to a restrictive blood transfusion threshold of less than 7 g/dL) had 10% decrease in unfavorable neurological outcomes and 4.7% decrease in cerebral ischemic events.

CITATION: Taccone FS, et al. Restrictive vs liberal transfusion strategy in patients with acute brain injury: the TRAIN randomized clinical trial. *JAMA*. 2024;332(19):1623–1633. doi:10.1001/jama.2024.20424.

Dr. McEntee is a hospitalist, palliative care provider, and associate professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Rimma Osipov, MD, PhD

7 Private Equity Acquisition of Hospitals is Associated with Decreased Staffing, Increased Patient Transfers, and Increased ED Mortality

CLINICAL QUESTION: How does acquisition by private equity firms impact patient outcomes in emergency departments (EDs) and intensive care units (ICUs), and how is this related to changes in hospital staffing?

Dr. Osipov

BACKGROUND: Over the last two decades, medical practices, skilled nursing facilities, and hospitals have increasingly been acquired by private equity. Currently, around 460 U.S. hospitals have private equity owners. Differing from traditional for-profit ownership, private equity firms pool large amounts of borrowed capital to acquire businesses that range from restaurant chains to medical practices, aiming for rapid resale to maximize profit. Ethicists, public health researchers, and watchdog organizations have raised concerns about the fundamental mismatch between these organizations' goals to maximize profit and hospitals' duties to provide patient care and access. Several prior studies have raised concerns about the quality of care at private equity-owned facilities.

STUDY DESIGN: Matched difference-in-differences analysis

SETTING: Hospital-level cost and claim data from U.S. hospitals that were acquired by private equity in 2010 and 2017 and matched control hospitals that were not.

SYNOPSIS: Researchers used RAND Corporation hospital cost data and Medicare claims to compare 49 hospitals that had undergone private equity acquisition between 2010 and 2017 with 293 control hospitals matched on geographic region, size, and temporality of data. Overall, hospitals that had been acquired by private equity experienced a 13.4% increase in ED mortality as compared to controls. Private equity-acquired hospitals also saw increased transfers of ED and ICU patients to other facilities at a rate of 4.2% and 10.6%, respectively. No significant difference was seen in ICU mortality. Over this same period, private equity-acquired hospitals reduced ED salary expenditures by 18.2% and ICU salary expenditures by 15.9%. Of note, patient comorbidity and payer mix did not change significantly in either group of hospitals over this period. Although this study demonstrates a notable correlation between staffing reduction, a known profit-maximizing tactic employed by private equity owners, and adverse patient outcomes, further work may be needed to demonstrate causation. Confounding factors, for example, other cost-cutting practices, may have also contributed to differences in outcomes.

BOTTOM LINE: Private equity acquisition of hospitals is correlated with decreased staffing, increased ED mortality, and increased transfers of ED and ICU patients to other hospitals.

CITATION: Kannan S, et al. Hospital staffing and patient outcomes after private equity acquisition. *Ann Intern Med*. 2025;178(11):1529-1538. doi:10.7326/ANNALS-24-03471.

Dr. Osipov is a hospitalist and associate professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Robert W. Lampman, MD

8 Pulse Oximetry Discrepancies and Occult Hypoxemia in ICU Patients: Predictors and Clinical Outcomes

CLINICAL QUESTION: What is the prevalence of, and what are the risk factors for, occult hypoxemia in ICU patients, and does that impact patient outcomes?

Dr. Lampman

BACKGROUND: The finding of occult hypoxemia, i.e., the presence of hypoxemia as measured by arterial blood gas compared to the readings of pulse oximeters, is more common in patients identifying as Black. There is limited evidence addressing whether occult hypoxemia is associated with differences in patient outcomes.

STUDY DESIGN: Retrospective cohort analysis of registry data (Blood-gas and Oximetry Linked Dataset [BOLD])

SYNOPSIS: Data were drawn from the BOLD database, a composite of three publicly available registries of de-identified patient information. However, data used were limited to only the

eICU-CRD registry, which is drawn from the Philips Healthcare eICU Telehealth Program. This registry comprises patient information from 208 hospitals and more than 200,000 admissions (from 2014 to 2015). BOLD reports SaO2-SpO2 pairs with a separation of less than five minutes. The rationale for limiting the review to this cohort was to limit technological variation as a cause of error. The authors analyzed 36,280 patient readings. The authors defined occult hypoxemia as follows: 1) PaO2 below 60 or SaO2 below 89%, 2) SpO2 over 88%, 3) discrepancy between SaO2 and SpO2 over 2.99%. Of that group, 8,559 patients were found to have SaO2-SpO2 discrepancies, and 1,719 met the above criteria for occult hypoxemia (4.7% incidence). Results showed that Black patients were more likely to have an SaO2-SpO2 discrepancy (adjusted odds ratio [aOR], 1.35; CI, 1.25-1.47) and more likely to have occult hypoxemia (aOR, 1.22: CI, 1.04-1.44). The authors also reported a novel finding: a higher Charleston Comorbidity Index score in patients with occult hypoxemia (3.9 versus 4.2; aOR, 1.05: CI, 1.03-1.08). Importantly, the unadjusted risk of mortality with an SaO2-SpO2 discrepancy was 18.7% while the unadjusted risk of mortality for patients with occult hypoxemia was 26.4%. The adjusted multivariate regression analysis gave an adjusted odds ratio for mortality with occult hypoxemia of 1.73 (CI, 1.53-1.94). Though other factors had an elevated adjusted odds ratio, none were as significant as the presence of occult hypoxemia.

BOTTOM LINE: Occult hypoxemia is more prevalent in patients identifying as Black and, to a lesser extent, in patients with multiple comorbidities. Occult hypoxemia is independently associated with an increased risk of mortality.

CITATION: Saidy S, et al. Pulse oximetry discrepancies and occult hypoxemia in ICU patients: predictors and clinical outcomes. *J Intensive Care Med*. 2025;40(12):1269-1278. doi: 10.1177/08850666251351594.

Dr. Lampman is a hospitalist and associate professor of internal medicine at the University of North Carolina in Chapel Hill, N.C.

By Ashmita Chatterjee, MD

9 Seven Versus 14 Days of Antibiotics for Gram-Negative Bloodstream Infection

CLINICAL QUESTION: Is a seven-day course of antibiotics noninferior to a 14-day course for adults with Gram-negative bloodstream infections?

Dr. Chatterjee

BACKGROUND: Traditionally, the standard duration of therapy for Gram-negative bacteremia has been 14 days. However, recent randomized trials suggest shorter courses may be sufficient and could reduce adverse effects, antimicrobial resistance, and complications associated with prolonged antibiotic use.

STUDY DESIGN: Systematic review and Bayesian meta-analysis of randomized controlled trials

SETTING: Multicenter randomized trials conducted in hospitals in Israel, Italy, Switzerland, Spain, Canada, Australia, New Zealand, Saudi Arabia, and the U.S.

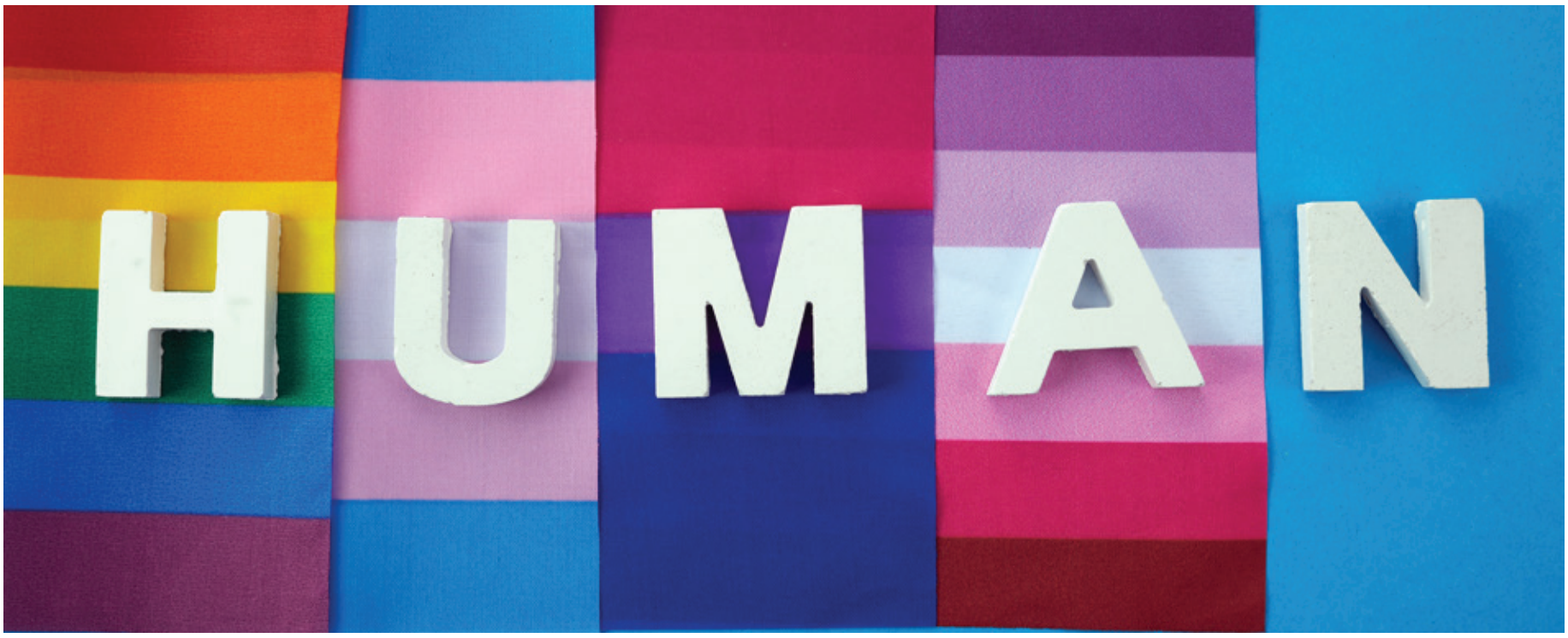
SYNOPSIS: This systematic review and meta-analysis included four randomized controlled trials with 3,729 adults hospitalized with Gram-negative bloodstream infections randomized to receive either seven or 14 days of antibiotics. Most infections were caused by *Enterobacterales* species, and urinary sources were common.

In the intention-to-treat analysis, the risk ratio (RR) for 90-day mortality with seven versus 14 days of therapy was 0.91 (95% credible interval [CrI], 0.69–1.22), corresponding to a 97.8% probability of noninferiority using a predefined margin of RR up to 1.25. In the per-protocol analysis, the RR was 0.93 (95% CrI, 0.68–1.32), with a 95.1% probability of noninferiority. Mortality occurred in 12.0% of the seven-day group and 13.7% of the 14-day group. Evidence certainty was graded as high. Limitations include the small number of trials, underrepresentation of immunocompromised patients, and predominance of *Enterobacterales* infections.

BOTTOM LINE: Seven days of antibiotics is likely noninferior to 14 days for uncomplicated Gram-negative bloodstream infections with adequate source control.

CITATION: Lee TC, et al. Seven vs fourteen days of antibiotics for Gram-Negative bloodstream infection: a systematic review and noninferiority meta-analysis. *JAMA Netw Open*. 2025;8(3):e251421. doi:10.1001/jamanetworkopen.2025.1421.

Dr. Chatterjee is a hospitalist and associate professor of internal medicine and pediatrics at the University of North Carolina in Chapel Hill, N.C. ■



VETRE – STOCK.ADOBE.COM

Leveraging Research, Education, and Communication for Better LGBTQIA+ Health

Roles for hospitalists start with building trust

By Ruth Jessen Hickman, MD

Andrew Keaster, MD, is a hospitalist with The Ohio State University Wexner Medical Center in Columbus, Ohio, who also takes some shifts at the gender-affirming care clinic that he helped found. There, trans and gender-diverse people can get hormone treatments or general medical care in a safe and supportive environment. "If we have any group of patients with a need, we try to identify it and provide care," he said. "It doesn't hurt the bottom line, and it provides opportunities for learners."


Dr. Keaster

Providing sensitive environments is key. A sizable proportion of LGBTQIA+ adults report negative experiences in healthcare settings, such as being treated with disrespect or having their family not recognized by practitioners. Many members of this community also face a variety of increased health risks from marginalization and stigmatization.[1] Research, education, and quality of care have improved over the last few decades, but politicization of health concerns in this population, especially for trans individuals, has set back some of the most recent gains.

Carl Streed, Jr., MD, MPH, FACP, FAHA, a primary care physician and researcher specializing in LGBTQIA+ health at Boston Medical Center and Boston University Chobanian & Avedisian School of Medicine, both in Boston, said, "In the current political climate, our patients do not necessarily have to have personal experience of discrimination targeted at them individually for it to have a real impact on their health."


Dr. Streed

Keshav Khanijow, MD, is a hospitalist and an assistant professor of medicine at Johns Hopkins University School of Medicine in Baltimore. He noted that, in light of current political rhetoric and current events, some patients might not be forthcoming about their medical history for the sake of safety. Unfortunately, this climate can damage the patient-physician relationship and contribute to patients avoiding the healthcare system, which can lead to more severe presentations at the time of treatment.


Dr. Khanijow

"For some people, the hospital setting may be their only interaction with the healthcare system. Showing that we care about people as human beings, no matter their sexual orientation or gender identity, does help cultivate the patient's perspective on whether healthcare is a safe space for them," Dr. Khanijow said.

Hospitalists and hospital systems can do a lot to continue to increase this trust, improve the mental and physical health of these individuals, and continue to advocate for their needs, even while operating within systemic restraints.

Research Gains, Setbacks, and Challenges

Population-specific research is critical because it reveals population needs and the ways that health systems might be falling short for specific groups. Without research focused on LGBTQIA+ people, clinicians operate on assumptions that may not apply, which can lead to missed diagnoses, inappropriate treatment, and erosion of patient trust.

Over the past several decades, a body of evidence has demonstrated that marginalization and stigmatization lead to adverse health consequences. Under this Minority Stress Theory, first described by Virginia Brooks in 1981, chronic, high-level stress from external pressures or internalized stigma can lead to anxiety, depression, or maladaptive coping behaviors which carry negative health consequences (e.g., smoking, excess alcohol use, isolation, and inactivity), and poorer overall health.[2]

Differences and disparities that are never investigated are unlikely to be recognized. Dr. Streed said, "We have to continue to develop rigorous research results to inform how best to improve population health."

Dr. Streed explained that the largest areas of research to date in the LGBTQIA+ population have focused on human immunodeficiency virus or mental health. Thankfully, over the last few decades, research has grown around additional conditions, such as substance use and cardiovascular health.

For example, some of Dr. Streed's work has focused on cardiovascular research in gender-diverse and transgender people, identifying higher cardiovascular disease risks and increased cardiovascular mortality in this specific population. These risks may be largely driven by chronic stress from discrimination, stigma, and internalized transphobia, contributing to factors such as smoking, excess alcohol use, and depression, compounded by structural inequalities such as lower employment levels and poorer access to healthcare.[3]

These minority stress factors can affect every system of the body. Moreover, for trans populations, differences in hormonal milieu and additional factors can lead to impacts on the body that differ somewhat from data gathered from cis populations. Researchers have begun to explore beyond cardiovascular health. For example, research has identified specific impacts in chronic liver disease, cancer, and bone health,[4-6] but many areas are yet to be explored.

These gaps in existing research can directly impact clinical decision making. For example, Dr. Streed pointed out that clinical decision-aid tools such as the Predicting Risk of Cardiovascular Disease EVENTs (PREVENT™) calculator do not work very well for trans adults, so clinicians should be aware of these limits if utilizing them.[7] "We don't yet have large cohort studies to inform how best to modify those tools," Dr. Streed said.

Another major challenge is the loss of federal funding for research centered on LGBTQIA+ populations. Dr. Streed pointed out that the administration is also trying to erase public data previously collected by the Centers for Disease

NAMYO - STOCK.ADOBE.COM

Control and Prevention (CDC) with respect to sexual orientation and gender identity (SOGI), eliminating the possibility of using these data in future research studies.

Under political pressure, such information is also at risk of being removed from electronic health records (EHR) in medical systems. This was an area of progress in the last two decades, with many medical systems making changes to allow SOGI data to be easily collected and displayed in their EHR, along with other key information such as patients' preferred name and pronouns.

Rita Lee, MD, FACP, is a professor of medicine and a cofounder of the UCHealth integrated transgender care program in Aurora, Colo. She explained, "A lot of medical systems pull their quality initiatives data from the EHR. If LGBTQIA+ people don't have the opportunity to identify themselves [via SOGI], they become an invisible population, and then it's impossible for us to know where there are inequities."

Dr. Lee

Dr. Lee noted that even for systems that easily allow for the collection of SOGI, this data isn't always collected and entered in the EHR in real-world settings. This can limit future research possibilities, but it can also directly impact patient experience and clinical care. She also points out that many population-based national surveys have never included information on SOGI.

Studies have demonstrated that improved access to gender-affirming hormone therapy in transgender, nonbinary, and gender-diverse adults improves mental health outcomes, but funding ongoing work is a challenge.[8]

Alexandra Schoenberger, MD, MSEd is the med-peds chief resident at the University of Cincinnati Medical Center/Cincinnati Children's Hospital Medical Center in Cincinnati, and a part of the LGBTQIA+ Health workgroup at her institution. "We are going to keep supporting the research showing that this is evidence-based medicine and keep providing evidence-based care, which is what we should do for all of our patients, regardless of their identity."

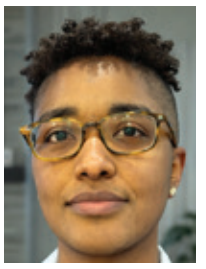
Dr. Schoenberger

Dr. Streed said, "Our ability to provide competent clinical care and do rigorous, appropriate population-level research requires politicians to get out of the way of the science, to allow it to be based on the rigorous scientific method."

Education

Ongoing education is another key element for ultimately improving health in LGBTQIA+ people. Ideally, this should include education at all levels of medical training, as well as training for other health professionals and healthcare personnel, adapted for different roles' needs.

Chelsea Marion, MD, FAAP, a pediatric hospitalist with Children's Healthcare of Atlanta in Atlanta, pointed out that patients' perception of an environment depends not just on a physician's knowledge and affirming attitude, but also on the practices and tone of other personnel.



Dr. Marion

Dr. Streed believes training on these topics is falling short in many ways and at many levels of career training, e.g., on hormone management for trans people and human immunodeficiency virus pre-exposure prophylaxis (see our article on PrEP and PEP on page 12). Additionally, he noted that continuing medical education requirements do not include significant training on these issues, even though many of these physicians learned very little about LGBTQIA+ health during their medical school or residency.

Medical systems can offer additional education and training in LGBTQIA+ health to interested clinicians, e.g., through opt-in journal clubs, training pathways, and fellowships. Although such education and collaboration are essential for creating expertise and ultimately contributing to quality research and clinical care, opt-in training often misses the people who most need education in these topics.

Dr. Schoenberger noted that it is critical to integrate LGBTQIA+ education into an ongoing curriculum, as they have done at the University of Cincinnati. For example, one could include an LGBTQIA+ individual in a noon conference case study, even if that might not be medically central to the case. It's important to analyze knowledge gaps, e.g., in a class of residents, and find ways to address those areas through ongoing repetitive educational opportunities.

"Just like we expect everyone to manage acutely compensated heart failure, we should all be able to recognize that a woman who is tachycardic while on estrogen for gender affirming hormone therapy might have a pulmonary embolism," Dr. Schoenberger said. "We want people to view this education not as something extra for those who are interested, but as something that is within our scope of practice."

Dr. Khanijow, who has worked with SHM on continuing medical education opportunities, noted that employing a humble, empathetic, non-shaming attitude is important when engaging with trainees at all levels of education on LGBTQIA+ health and cultural topics. He pointed out that many want to do the right thing for LGBTQIA+ patients, but some may not have had the culturally affirmative training to do so, whether they went to medical school in the U.S. or abroad. For learners with very little experience, it can help to start with basic information.

Still, Dr. Schoenberger acknowledges that learning about some of these topics can be uncomfortable for some learners. "But a lot of the things we are talking about are not hard, like asking someone's preferred name and pronouns," she said. "Just because we are not super comfortable taking in-depth sexual histories doesn't mean we shouldn't be doing it."

Hormone Education

One potential knowledge gap for many clinicians is hormones for transgender patients, as a significant proportion will be on regimens at the time of inpatient admission. For example, feminizing hormone therapy—typically estrogen combined with an anti-androgen—carries a modestly elevated risk of venous thromboembolism, particularly with oral estrogen formulations.

Several of the hospitalists and experts recommended being very cautious about stopping these hormones, not doing so unless it is truly

medically necessary, which usually isn't the case.

Dr. Keaster noted that although it might be advisable to hold estrogen in a context such as venous thromboembolism, via a process of shared decision making, the default should be to continue the primary hormone. One potential exception to this is spironolactone, sometimes prescribed in relatively high doses for its anti-androgenic effects, which may need to be temporarily held during hospitalization because of risks of acute kidney injury.

Dr. Lee agrees on the key importance of shared decision making in this context, emphasizing that stopping these hormones unnecessarily can be both physically and emotionally traumatic for patients.

Dr. Schoenberger pointed out that some physicians may feel uncomfortable managing hormones because of politicization or lack of training during medical school, but these are the same medications used in many other medical settings. "We should seek out the information and education we need to provide this care," she said.

Dr. Schoenberger also pointed out that caring for LGBTQIA+ patients doesn't require a vastly different approach, although clinicians may need to be more cognizant about certain aspects. In fact, many of the general best practices for caring for this population—being affirmative and non-judgmental, inquiring about personal connections, not making assumptions, addressing people in the way they prefer, taking comprehensive medical histories—apply to patient care more broadly.

LIGHTFIELD STUDIO - STOCK.ADOBE.COM

Communicating Support

In addition to providing informed, up-to-date clinical care, providing a supportive medical environment for LGBTQIA+ individuals requires both innovations in medical systems and a proactive attitude by physicians to help meet gaps.

For example, pronouns and preferred names should be prominently flagged in the EHR, appearing on wristbands, room signage, and patient handouts if possible. SOGI fields should be embedded in the EHR registration workflow, and they should be collected consistently and non-judgmentally. Even if systems don't easily include such information, clinicians should strive to document it and utilize it, as it can have major impacts on the patient's experience.

Dr. Marion shared how heartbreaking it can be for patients to be repeatedly called by the wrong name. "Some of them make multiple corrections, and still, staff members or even sometimes physicians do not make those adjustments," she said.

"If you don't give them that space to tell you that they're trans or they have a preferred name or other things, then you may not know that important piece of information about your patients," Dr. Keaster said. It's critical, Dr. Marion added, not to make assumptions, to ask open-ended questions, and to be professional and level in one's response.

General hospital policies can also make a difference in the patient experience, e.g., preferentially granting trans patients or non-binary patients single rooms, if available, or housing them with someone with the same gender identity, noted Dr. Lee.

Visually affirming environments, e.g., with inclusive art or a sign on inclusive care, can also help people feel more comfortable. "The onus is on us to provide a comfortable environment for patients rather than patients teaching us about how to provide them a comfortable environment," Dr. Khanijow said.

It's also important for hospitalists and hospital systems to accommodate individuals' social support systems and family of choice, as this might or might not include their family of origin. This should include asking about patients' medical power of attorney, Dr. Lee advises, to ensure that their selected person could make medical decisions, if that became necessary.

Communicating with patients about local resources is also key. As in any hospital discharge, hospitalists should loop in the primary care physician or attempt to connect the patient to a practitioner who is likely to serve this patient's needs well, if not already established.

Dr. Marion strongly recommends getting to know one's local outpatient resources, which might or might not be ones with specific labeling as LGBTQIA+. Unfortunately, in some environments, these resources may be limited, especially currently with respect to trans minors, but it's still important to know what options are available for patients at different ages.

Sometimes, it's possible to take initiative and help create that outpatient resource, as Dr. Keaster worked to do while an intern. Dr. Keaster points out that in addition to its benefits for patients, the gender-affirming clinic provides a learning environment for trainees from multiple backgrounds while also providing a potential setting for helpful research studies. Dr. Keaster shared that there are now multiple such centers in Ohio and neighboring states.

It's also critical to have ongoing conversations with the LGBTQIA+ community. The inclusion of SOGI information on patient satisfaction surveys, for example, can help provide feedback for improvement. Dr. Schoenberger also emphasized the importance of having ongoing conversations in an active way, like having one-on-one conversations with patients about what they want out of their medical care. Sometimes, these conversations reveal areas of improvement that clinicians haven't even considered, some of which might not be difficult to meet.

Ongoing communication and advocacy with the broader community are also critical.

Hospitalists can be "stewards against misconceptions," Dr. Khanijow said, reliable experts who can help teach others and defend LGBTQIA+ patients. Dr. Marion said, "We must be willing to educate people and meet them where they are without judgment. Understand how important your voice is and how much it might impact someone." ■

Ruth Jessen Hickman, MD, is a graduate of the Indiana University School of Medicine in Bloomington, Ind., and a freelance medical writer.

References

1. Montero A, et al. Poll finding: LGBT adults' experiences with discrimination and health care disparities: findings from the KFF survey of racism, discrimination, and health. Kaiser Family Foundation website. https://www.kff.org/racial-equity-and-health-policy/lgbt-adults-experiences-with-discrimination-and-health-care-disparities-findings-from-the-kff-survey-of-racism-discrimination-and-health/. Published April 2, 2024. Accessed April 22, 2026.

2. Brooks VR: *Minority stress and lesbian women*. Lexington, MA: Lexington Books; 1981.

3. Streed CG, et al. Assessing and addressing cardiovascular health in people who are transgender and gender diverse: a scientific statement from the American Heart Association. *Circulation*. 2021;144:e136–e148. doi: 10.1161/CIR.0000000000001003.

4. Nguyen TN, et al. Chronic liver disease and hepatology care in transgender and gender diverse populations. *Lancet Gastroenterol Hepatol*. 2026;11(4):334-344. doi: 10.1016/S2468-1253(25)00287-0.

5. de Blok CJM, et al. Breast cancer risk in transgender people receiving hormone treatment: Nationwide cohort study in the Netherlands. *BMJ*. 2019;365:l1652. doi: 10.1136/bmj.l1652.

6. Giacomelli G, Meriggiola MC. Bone health in transgender people: A narrative review. *Ther Adv Endocrinol Metab*. 2022;13:20420188221099346. doi: 10.1177/20420188221099346.

7. Khan SS, et al. Development and validation of the American Heart Association's PREVENT equations. *Circulation*. 2024;149(6):430-449. doi: 10.1161/CIRCULATIONAHA.123.067626.

8. Reisner SL, et al. Gender-affirming hormone therapy and depressive symptoms among transgender adults. *JAMA Netw Open*. 2025;8(3):e250955. doi: 10.1001/jamanetworkopen.2025.0955.

Konstantin Yuganov - Stock.Adobe.com

PrEP and PEP: What Hospitalists Need to Know

Discussing and prescribing PrEP requires a better understanding of how it can help patients; PEP remains more straightforward

By Vanessa Caceres

Although it may not always be top of mind for hospitalists, discussing or prescribing pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) for human immunodeficiency virus (HIV) can become a valuable part of a patient's hospital stay.

"Because of systemic barriers, time constraints, and ongoing stigma, opportunities to identify and protect patients at risk for HIV are often missed during a hospitalization. It's essential that hospitalists are equipped to recognize eligible patients and feel comfortable initiating discussions about HIV prevention," said Rachel Holloway, MD, an internal medicine-pediatrics PGY-3 at the University of Cincinnati in Cincinnati.

Dr. Holloway

The Hospitalist interviewed several physicians about PrEP and PEP treatments, why PrEP and sometimes PEP may not be discussed with patients, how to broach the PrEP discussion, and how to help patients get consistent with PrEP and PEP medication use.

The Basics of PrEP and PEP

When used as prescribed, PrEP lowers the risk of getting HIV infection from sex by 99%, according to the Centers for Disease Control and Prevention (CDC).[1] For people who inject drugs, PrEP can lower the risk of HIV infection by at least 74%.[1]

There are four drugs available for PrEP, two of which are oral and two of which are injectable:

- Emtricitabine/tenofovir disoproxil fumarate (Truvada), an oral medication approved for daily use for anyone at risk of HIV through sex or injection drug use. Truvada also has a generic form.
- Emtricitabine/tenofovir alafenamide (Descovy), also an oral medication used daily. It's not geared toward those having receptive vaginal sex because researchers have not evaluated the drug's effectiveness in this population.
- Cabotegravir (Apretude), an injectable medication administered every other month, is designed for both adults and teens at risk for HIV through sex.
- Lenacapavir (Yeztugo), an injectable medication administered twice a year to those at risk for HIV through sex, although there is a starter dose that includes oral medication.

Both of the injectable medications are offered in a practitioner's office and are not for self-injection.

Patients starting PrEP need a negative HIV test before initiation. Other lab tests include a pregnancy test if applicable, sexually transmitted infection (STI) screening, and kidney function and hepatitis B testing.

Those using the oral form of PrEP must see a physician every three months to get another HIV test and to get a medication refill. Those using the injectable form will return to their physician's office at regular intervals for the injections and any other follow-ups needed, including HIV tests.

CDC guidelines recommend the use of PrEP for those who:

- Have had anal or vaginal sex in the previous six months and have had a sexual partner with HIV, have not consistently used a condom, or have been diagnosed with an STI in the previous six months
- Have injected drugs and have an injection partner with HIV or share needles, syringes, or other drug injection equipment; and
- Have been prescribed PEP for multiple courses or who have used PEP and also continue risk behaviors

Patients who inquire about PrEP and don't have the factors above also may use PrEP as long as they don't have HIV.[2] The CDC recommends that physicians prescribe PrEP to anyone who asks about it, even if they don't have any known risk factors.[3]

James R. Watson, MD is an assistant professor in the department of medicine's division of hospital medicine at Duke University, and attending hospitalist at Duke University Hospital, both in Durham, N.C. He recently did PrEP research to expand its use at his hospital, and was surprised to see how broad the recommendations are.

Dr. Watson

"That doesn't necessarily mean everyone who

is sexually active has to or should be on it, but the conversation should be had," he said. Having that discussion in the hospital can be valuable, particularly at safety-net hospitals that help those without regular primary care, he said.

PEP is given as oral therapy and usually involves three drugs taken for 28 days by those who have had potential exposure to HIV within the previous 72 hours. This includes exposure through sex or through a needlestick injury. However, those using PrEP medications consistently do not require PEP if potentially exposed to HIV.

Before starting PEP, patients should have a negative rapid HIV test and a negative pregnancy test. Other labs to perform include a serum liver enzyme test, a blood urea nitrogen and creatinine test, STI screening, and hepatitis B and C tests. However, it's okay to start PEP before you get all of the patient's lab results, according to the CDC.[3]

Once a patient finishes PEP, they can transition to PrEP so long as they remain HIV-negative.

STANISLAV - STOCK.ADOBE.COM

When and Why PrEP Is Under the Radar

The use of PrEP may remain under the radar for some hospitalists if it doesn't come up naturally during a patient's hospital stay.

"Guidelines recommend discussing PrEP with all sexually active individuals, so it starts with a good sexual history. We often see that sexual history takes a backseat to other elements of the history, especially when clinicians are busy," said Andrew Keaster, MD, hospitalist and associate professor at The Ohio State University in Columbus, Ohio. Dr. Keaster specializes in hormone therapy and transgender care and is co-founder of The Ohio State's transgender primary care clinic.


Dr. Keaster

There may also be confusion over who should use PrEP.

"It's easy to cite risk factors as reasons to offer PrEP to patients, but the reality is that we should be offering PrEP to many more folks than we often think," said Alexandra Schoenberger, MD, MSEd, an internal medicine-pediatrics chief resident at the University of Cincinnati College of Medicine, Cincinnati Children's Hospital Medical Center in Cincinnati.


Dr. Schoenberger

Dr. Watson has found through his research that awareness of PrEP was more common among men having sex with men and that this population of patients was more likely to have a prescription for it, compared with people who inject drugs. In his discussions with patients in the latter group, he found they may be aware of their higher risk for HIV and the importance of clean needle programs, but they may not be aware of PrEP medications.

A lack of awareness about PrEP among patients and sometimes medical practitioners may be why the use of PrEP is lower than it could be. CDC data from 2022 found that only 36% of the 1.2 million Americans who could benefit from PrEP were prescribed it. Although that was an increase compared with 23% in 2019, there was still a big gap between white patients who were prescribed it versus Black and Latino patients.[4]

Hospitalists may have some awareness of PrEP, but do not know about the various options available for treatment. Then, there's the follow-up factor. With hospitalists often focused on inpatient care, a medication that requires HIV testing every three months (to ensure the patient does not have HIV while using PrEP) may seem like it's out of their purview.

"I think it takes a little more digging or nuance in thinking about how PrEP can be integrated into hospitalist care," said Aniruddha (Anu) Hazra, MD, an associate professor of the section of infectious diseases and global health, director of the infectious diseases fellowship program, and medical director of the UCM Sexual Wellness Clinic in the department of medicine at the University of Chicago in Chicago.


Dr. Hazra

"A lot of hospitalists are going to be hesitant and say, 'PrEP is not in my wheelhouse. Should I be starting it if I'm not following up on it?'" said Dylan Baker, MBBS, an assistant professor with the Emory University department of medicine, medical director at Emory Grady Primary Care Center, and associate medical director in the Grady HIV Prevention Program at Emory University, all in Atlanta. Still, Dr. Baker thinks it's useful to prescribe PrEP when called for and to help schedule a follow-up with outpatient services, so long as the patient has a negative HIV test.


Dr. Baker

Broaching the Topic

There are a few ways to broach the topic of PrEP with patients without making patients feel stigmatized:

- **Normalize questions about sexual activity and substance abuse while taking an admissions history**, Dr. Holloway said. "Set up the conversation as a regular screening process and use open-ended questions about sexual practices and substance abuse," she said.
- **Discuss the topic or broach it again after the acute reason for hospitalization has been stabilized**. This may require coming back in the afternoon after rounds and waiting until visitors are not present, Dr. Holloway said.
- **Approach discussions of HIV prevention as a routine part of preventive healthcare.** Dr. Hazra likens PrEP to prescribing a statin for someone with high cholesterol or metformin for a patient with diabetes. Here is one way to frame PrEP that Dr. Schoenberger recommends, particularly when a patient does not have a regular primary care physician: "Looking through your chart, I noticed that you don't follow with a primary care doctor yet. Based on your age and history, there are a few things I would like to discuss to keep you healthy and, ideally, out of the hospital. One of them is a medication called PrEP, which can help prevent you from getting HIV in the future. Would you be open to learning more about it in the hospital while we work to connect you with an outpatient healthcare team?"
- **Avoid the use of shame-based or fear-based language**. "For example, using the term 'increased risk' rather than 'high risk' can help foster a more patient-centered, nonjudgmental approach," Dr. Holloway said. Another example from Dr. Keaster: Avoid statements like, "I think what you're doing is risky" or "I'm worried you'll get HIV if you don't get on PrEP." Instead, try: "PrEP gives you control over your sexual health" and "PrEP is an extra layer of protection to help keep you protected from HIV."
- **Offer to discuss PrEP with any sexually active adult or any adult who requests it, or with any adult who injects drugs or uses substances**, Dr. Schoenberger said. This helps PrEP to reach more people and also decreases the risk that the physician's own biases will negatively impact access.
- **If a patient appears overwhelmed by the discussion of PrEP**, drop the topic and come back to it later. Or recommend a post-discharge follow-up that includes the discussion of HIV prevention.
- **Expect a range of potential reactions when discussing PrEP and PEP.** This could include relief, curiosity, hesitation, resistance, or concern about stigma and judgment, Dr. Holloway said. Some reactions may reflect a lack of understanding about personal risk factors or the side effects of PrEP or PEP, mistrust of the medical system, and lack of established outpatient care. Use your time with the patient to address questions and concerns.
- **Help patients identify other resources where they can learn about PrEP.** For example, you may have colleagues in or out of the hospital who can provide more PrEP education, Dr. Hazra said. Identifying PrEP champions in your hospital also may help you or other hospitalists learn more about PrEP, he said. There are also websites like PrEPlocator.org where patients can find out where to get PrEP, Dr. Keaster said.
- **Normalize the discussion of other types of prophylaxis**, including the use of barrier methods like condoms, Dr. Baker said.

Discussing PEP is often more straightforward, as a patient might be at the hospital due to an STI or potential exposure to HIV. Hospitalists can start patients on PEP but also broach the PrEP discussion at or around the same time.

If a patient already uses antiretroviral therapy and you are doing a medication reconciliation, confirm if the patient is using their therapy for PrEP, PEP, HIV treatment, or hepatitis B, Dr. Holloway said. There may be reasons to temporarily stop therapy, such as acute kidney injury or significant drug-drug interactions.

"At the same time, be mindful of situations in which therapy should be continued, as unnecessary interruptions may reduce effectiveness or, in the case of hepatitis B co-infection, risk viral reactivation," she said.

Helping Patients Get Consistent

One advantage of PrEP is that there are different ways to take it, which means that patients can choose the option that will help them the most with adherence.

PrEP (and PEP) are also usually covered by private insurance, as well as Medicare and Medicaid. Patients who are uninsured may qualify for patient assistance programs from manufacturers.

Emphasize timeliness when discussing PEP with patients who need it, including starting therapy within 72 hours after exposure and finishing the full 28-day course of the medication. Make patients aware of mild side effects, such as gastrointestinal symptoms that will likely improve.

"Preparing patients with realistic expectations ahead of time can enhance the likelihood of regimen adherence down the line," Dr. Holloway said.

Here are a few tips to share with patients so they can stay on track with adherence, even if you, as the hospitalist, won't monitor this long-term:

- Suggest pairing oral medication with another habit, such as brushing their teeth or eating breakfast.
- Let patients know about the variety of electronic reminders available via apps and their phones.
- Help to set up appointments with a practitioner while the patient is still in the hospital. Although you can't guarantee they will go to the appointment, having something set saves the patient a step.

Wrapping It Up

Even if a patient decides that PrEP isn't for them for now, hospitalists still play a role in opening the discussion door on the topic of prophylaxis.

"Planting the seed by starting the conversation and educating patients about these options can be life-changing in the long term," Dr. Holloway said. ■

Vanessa Caceres is a medical writer in Bradenton, Fla.

References

1. U.S. Department of Health and Human Services. Pre-exposure prophylaxis. HIV.gov website. https://www.hiv.gov/hiv-basics/hiv-prevention/using-hiv-medication-to-reduce-risk/pre-exposure-prophylaxis. Accessed April 23, 2026.
2. U.S. Centers for Disease Control and Prevention. Preventing HIV with PrEP. CDC website. https://www.cdc.gov/hiv/prevention/prep.html. Updated April 15, 2026. Accessed April 23, 2026.
3. U.S. Centers for Disease Control and Prevention. Clinical guidance for PEP. HIV Nexus: CDC Resources for Clinicians website. https://www.cdc.gov/hivnexus/hcp/pep/index.html. Published February 10, 2025. Accessed April 23, 2026.
4. U.S. Centers for Disease Control and Prevention. Expanding PrEP coverage in the United States to meet EHE goals. CDC National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention website. https://www.cdc.gov/nchhstp/director-letters/expanding-prep-coverage.html. Published October 17, 2023. Accessed April 23, 2026.

The Flipside

Sir William Osler: Is He the First Hospitalist?

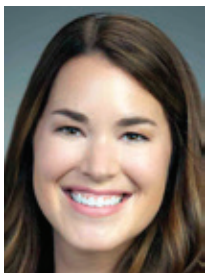
By Mary G. Wardrop, BS, MS3, Laren D. Spaeth, DO, PGY-3, Erin Ramelb, MD, and Richard M. Wardrop III, MD, PhD, MACP, FAAP, SFHM

Sir William Osler occupies a revered place in the mythos of the history of medicine, medical education, and medical practice. Because he is celebrated as the "father of internal medicine," his legacy and practice have been claimed by hospitalists, specialists, and generalists alike. Throughout his career, he blended inpatient care and bedside teaching and promoted continuous learning. In this regard, he may be clearly viewed as a proto-hospitalist even though his career spanned an era when inpatient care, bedside teaching, and longitudinal physician-patient relationships were not yet distinct domains but were intertwined expressions of the nascent professional identity of physicians.

Understanding where he truly fits requires looking beyond the mythology to the practical realities of his work—how he spent his time, what responsibilities he prioritized, and how he conceptualized the role of the physician and the relationship of physicians to patients, trainees in medicine, institutes of higher learning, communities, and society.

This Flipside considers these viewpoints as seen through the eyes of SHM member trainees, hospitalists, and medical educators, and sets the stage for a closer examination of Osler as a clinician, educator, and system builder, and what his example reveals about the evolving identity of hospitalists, generalists, and internal medicine specialists everywhere.


Ms. Wardrop


Dr. Spaeth


Dr. Ramelb


Dr. Wardrop

Ms. Wardrop is a third-year medical student at the West Virginia University School of Medicine in Morgantown, W.Va. Dr. Spaeth is a third-year resident at OhioHealth Riverside Methodist Hospital in Columbus, Ohio. Dr. Ramelb is a hospitalist and assistant professor of medicine at the University of Nebraska Medical Center in Omaha, Neb. Dr. Wardrop is the chief medical officer and professor of medicine and pediatrics at Northeast Ohio Medical University Healthcare in Rootstown, Ohio, chair of the American Board of Internal Medicine's board, and an American Board of Internal Medicine council member.

Osler Was an Archetype and a Prototypical Hospitalist

A hospitalist, as defined by Drs. Wachter and Goldman in 1996, is a specialist in inpatient medicine who is uniquely positioned to focus on clinical quality improvement and research, development of practice guidelines, and teaching clinical medicine.[1] By this definition, Osler exemplified the quintessential hospitalist.

Osler lived during a time when quality improvement and practice guidelines did not exist as they do today. While he did not conduct quality improvement or research experiments by modern standards, Osler's scientific methods contributed greatly to the advancement of medicine. As his career progressed, he continued to gain clinical experience in hospital settings in Montreal, Boston, Philadelphia, and Baltimore.[2] It was in his work in the hospital where he refined the concepts of time management and compartmentalized bedside rounding, opening a new chapter in medical education that connected medical knowledge learned in classrooms to lived clinical experiences. Although practice guidelines did not exist at the time, Osler drew on his advanced knowledge and experience to write his classic textbook, "The Principles and Practice of Medicine," and to set standards for medical school education and clinical training programs.[2]

While all these accomplishments are impressive, Osler's dedication to all phases of education stands the test of time. His teaching methods, which are centered on learning from patients at the bedside, became the precursors to medical students' clinical clerkships and the medical residency system that still exist today. Thus, as a dedicated lifelong learner, an expert diagnostician and clinician, and a beloved educator, Sir William Osler was one of the first hospitalists.

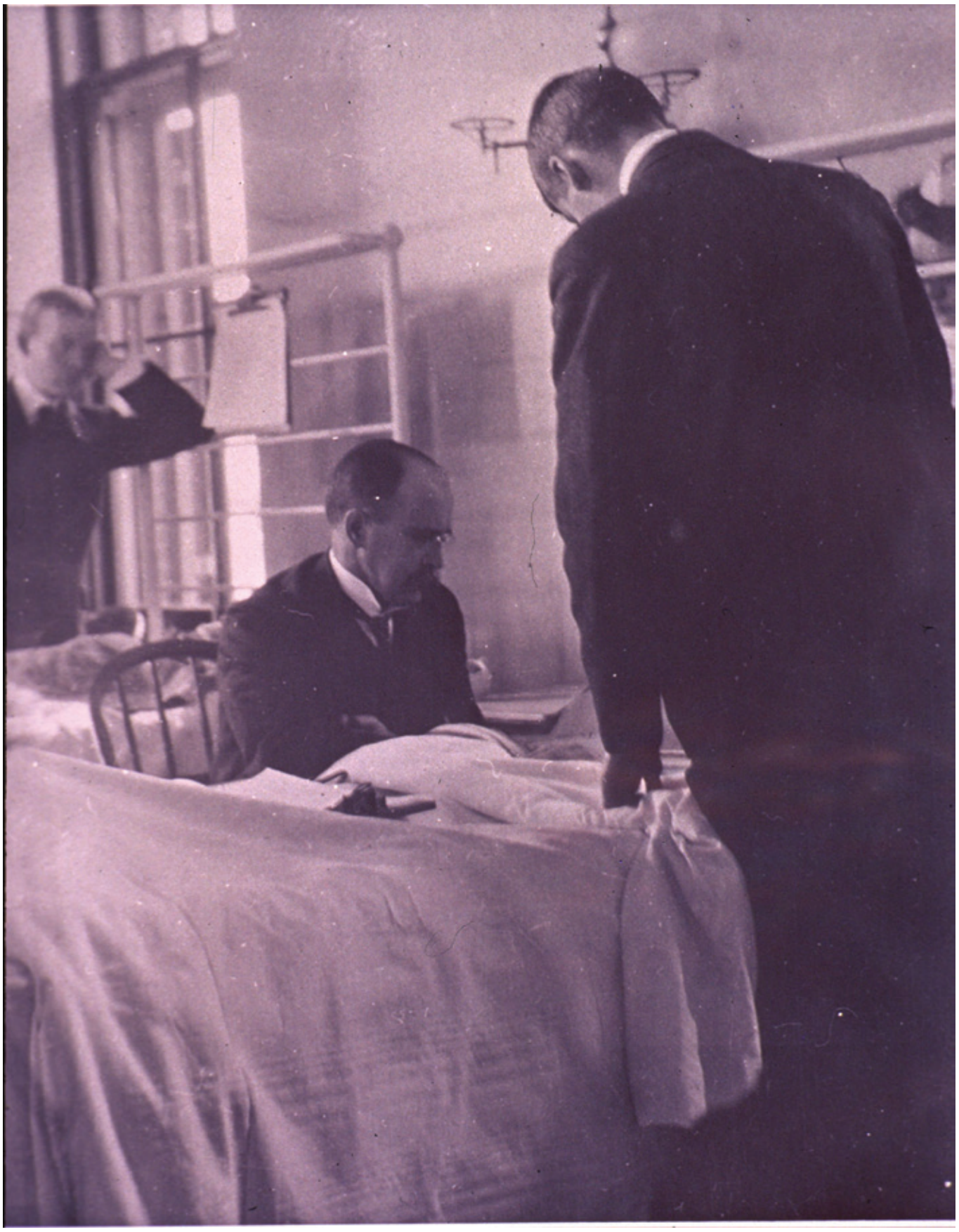
Osler Was a Classic Generalist, Medical Educator, and Humanitarian

Osler was not limited to the practice of hospital medicine; instead, he was a scientist and architect of the profession. After finishing his medical school training at McGill University in Canada, he spent a year observing the emerging clinical practices of anesthesia and surgery and set his

sights on becoming an ophthalmologist, only to be edged out by the competition, which prompted an entry into what resembled today's primary care as a local physician. Given his skills, he was recruited to join the teaching faculty at McGill University as a clinical professor of medicine. There, he performed thousands of autopsies and helped bridge the gap between pathology and histology for his students and in his practice. Demonstrating his dedication, he volunteered to be the smallpox doctor, using leftover funds to purchase more microscopes for his students.[3,4]

The next phase of his career was foundational—literally. Osler was the first chair of clinical medicine at the University of Pennsylvania; he founded the Association of American Physicians and co-founded the medical school at John Hopkins. These roles cemented his profound influence on medicine. Apart from writing his famous textbook, Osler actively brought the bedside to life for young medical students, modeling not only from books but also from patients. His role as professor of medicine led to the development of the concept of residency training and today's journal clubs. As a leader of the school, Osler was instrumental in opening the door of medical admissions to women. Later in his career, he convinced his peers that having women doctors only benefited the success of the institution and advanced the profession.[3]

Perhaps it is his kindness and equanimity that truly define the Oslerian spirit in defining his legacy. While serving as the Regis Professor of Medicine, his home in England was affectionately named the "Open Arms," serving as a gathering place for all to enjoy his home and personal library. As a person, he remarked on the importance of having a "clear head and kind heart," aiming to be the best at everything he did as a physician, an educator, an advocate, and as a true humanist.[5] Though he spent many hours at the bedside practicing hospital medicine, his roles and responsibilities extended well beyond and shaped medicine for generations to come.



THE NATIONAL LIBRARY OF MEDICINE. HTTP://RESOURCES.NLM.NIH.GOV/101448228

Sir William Osler, celebrated at the "father of internal medicine" at a patient's bedside.

Osler Is for Everyone to Claim

Today's medical students are all too familiar with arriving on the first day of a new rotation, seeking the correct preceptor, and working hard to make the right impressions with the team as quickly and unobtrusively as possible. How would Osler approach this today? Luckily, we have access to Osler to help inform and inspire us.[6]

Hospitalist or not, Osler provides all of those in medicine essential non-academic advice that can help, regardless of specialty or level of training. Osler strongly believed that punctuality and "running on time" are the prime essentials of the physician. Everyone knows the importance of timeliness, yet it regularly falls through the cracks in medical practice. Patients, fellow learners, and attending physicians alike will be satisfied (and maybe even impressed) by routine punctuality.[7] Similarly, Osler emphasized the importance of appropriate bedside manner in an 1885 address to graduates of medicine at McGill University. He advised students that every patient will form an opinion of you based on your conduct at the bedside, even if the interaction does not reveal the extent of your medical knowledge.[5] It is often paraphrased in the quote by Theodore Roosevelt, "They don't care how much you know until they know how much you care." These basic principles of patient-centered care make patients feel well cared for and will not go unnoticed by seniors from all specialties.

Osler is quoted as saying that "the education of the heart … must keep pace with the education of the head."[8] All physicians, from student doctors in their clerkships to board-certified senior attendings, can improve their practice by adopting Osler's philosophy of compassionate care, which starts with something as simple as arriving on time. We encourage everyone in medicine to "find your inner Osler," embrace kindness and charity, and above all, possess equanimity. ■

References

1. Wachter RM, Goldman L. The emerging role of "hospitalists" in the American health care system. *N Engl J Med.* 1996;335(7):514-7. doi: 10.1056/NEJM199608153350713.

2. National Library of Medicine. Profiles in science: William Osler biographical overview. NLM website. https://profiles.nlm.nih.gov/spotlight/gf/feature/biographical-overview. Accessed April 24, 2026.

3. Stone R. Sir William Osler: science & the art of medicine. American Osler Society YouTube website. https://youtu.be/UxxZDePeeK0?si=Fe_k7aoUoGxfD0_Y. Published April 20, 2023. Accessed April 24, 2026.

4. American Osler Society. The American Osler Society. AOS website. https://www.americanosler.org/content/about/the-aos-and-its-history. Accessed April 24, 2026.

5. Osler, W. *Aequanimitas: with Other Addresses to Medical Students, Nurses and Practitioners of Medicine.* 2nd ed. London: HK Lewis; 1914. https://archive.org/details/aequanimitas00osle. Accessed April 24, 2026.

6. VanderVeer JB, Bryan CS. *Osler for White Coat Pockets: A Vade Mecum for Medical Students and Residents.* Morgantown, Pa.: Masthof Press; 2017.

7. Osler, W. *Osler's "A Way of Life" & Other Addresses, with Commentary & Annotations.* Hinohara S, Niki H, eds. Durham, N.C.: Duke University Press; 2001.

8. Spaulding WB. Osler-as much heart as head: The importance of compassion. *Can Fam Physician.* 1992;38:1617-21.

Bridging the Gap: A Hospitalist-Designed, Nurse-Driven Palliative Care Model in a Community Hospital

By Natasha Rai Morris, MD, MHA, CHCQM, CRCR, CCDS, and Jessica Staton, MSN, MBA, RN, CCM

Palliative care is both a medical specialty and an art. However, the number of clinicians trained in palliative care is insufficient to meet the increasing demand for goals-of-care and advance care planning discussions. Many hospitals lack embedded palliative care teams, which means high-need patients may go without timely goals-of-care conversations, advance care planning, or hospice transitions. In an 86-bed community hospital that is part of a larger health system, there was no on-site palliative care service. Clinicians at the bedside were managing medically complex, high-acuity patients without structured support for these conversations. The result was delayed or inconsistent documentation of code status, unclear goals of care, and discharge plans that did not always align with patient values. The need was clear: create a scalable, sustainable model to deliver high-quality palliative communication without relying solely on scarce palliative-trained physicians and advanced practice practitioners (APPs).

Key Takeaways

- A trained RN care manager, partnered with a hospitalist, can deliver palliative-informed conversations in a hospital with no formal palliative service.
- Two-thirds of patients received palliative-aligned discussions within 72 hours of admission, which supports better alignment of care and is associated with lower cost and shorter length of stay.
- Advance directive completion and DNR clarification increased significantly after structured RN-led bedside conversations.
- Staff reported higher clarity on patient wishes, lower uncertainty, and improved satisfaction with the care planning process.
- Discharge planning discussions maintain an important role in post-acute management of the palliative care patient population, ensuring alignment of patients and families expectations with recovery goals.
- This model is scalable, sustainable, and realistic for other community hospitals facing palliative staffing limitations.

Solution Overview

To address this gap, a 90-day pilot program was designed and implemented by a hospitalist and registered nurse care manager. The purpose was straightforward: expand access to early goals-of-care conversations, advance care planning, and appropriate hospice referral without waiting for a fully staffed specialty palliative team.

The pilot model reassigned core elements of palliative communication to a highly experienced nurse care manager. This nurse—trained through a formal End-of-Life Nursing Education Consortium course and mentored by inpatient palliative practitioners—served as the primary point of contact for patients and families.[1] The RN led bedside discussions about prognosis understanding, treatment preferences, resuscitation wishes, and post-acute options; documented advance directives; and facilitated alignment between the medical team and the patient's stated goals.

Key objectives of the pilot were to:

- Identify eligible patients early in the admission[2,3]
- Hold structured, compassionate goals-of-care discussions[4-9]
- Normalize advance directive completion and code status review[10,11]
- Support transitions to post-acute facilities or agencies, or hospice when appropriate

The stakeholders included hospitalists, bedside nurses, care management, speech therapy, and (when available) an APP from the division's palliative team. The hospitalist champion and the RN care manager partnered to embed this workflow into multidisciplinary rounds, with daily follow-up as needed.

This model reframed palliative care from "a consult with a specialist" to "a core function of coordinated inpatient care," making palliative principles available in a hospital that previously had none.

Implementation Process

Program design and training

Because no dedicated palliative service existed on campus, the hospitalist leader and a seasoned nurse care manager co-designed the pilot. The registered nurse (RN) selected for this role brought 27 years of clinical experience across maternal-child, trauma, inpatient case management, discharge planning, and utilization review, and held a national certificate in case management (CCM). She completed a two-day End-of-Life Nursing Education Consortium train-the-trainer course1 and spent two weeks shadowing experienced palliative care clinicians to build confidence and consistency in high-stakes conversations.

Early patient identification

The team implemented an early-trigger approach. Patients were screened within 72 hours of admission for serious chronic illness (advanced cancer, end-stage organ failure, end-stage renal disease, advanced dementia), frequent readmissions, loss of functional independence, and complex decision-making needs.[2,3] These triggers were reinforced in multidisciplinary rounds to surface candidates in real time rather than waiting for a traditional "palliative consult." By design, this brought palliative thinking to the bedside on day 0 to 3, not day 8 to 10. In the pilot, 66.7% of consults occurred within 72 hours of admission.

Workflow at the bedside

Once the patient was identified, the RN met with them and/or the family, introduced the concept of palliative care as supportive, clarified understanding of the current medical situation, explored values and goals, and addressed preferences around interventions and resuscitation.[4-9,12] The RN encouraged completion of advance directives and documented code-status decisions.[10,11] Discussions regarding discharge planning options were held with patients and families to ensure alignment with goals and expectations. The RN also coordinated multidisciplinary family meetings with hospitalists, nursing leadership, care management, and ancillary services when needed for alignment and discharge planning. Follow-up visits were used to reinforce understanding, answer questions, and maintain trust.

Documentation and communication

A standardized documentation template in the electronic health record captured decision makers, goals of care, advance directives, healthcare surrogate designation, living will status, code status, psychosocial context, and discharge disposition planning. This ensured the entire care team saw the same plan, in the same language. This is critical in community settings, where handoffs are frequent, and verbal nuances can get lost.

Dr. Rai

Ms. Staton

Dr Rai is vice president of clinical services and a hospitalist and physician advisor for AdventHealth Central Florida Division in metropolitan Orlando, Fla. Ms. Staton is the director of care transformation at AdventHealth Central Florida Division in metropolitan Orlando, Fla.

Embedding in team culture

The palliative RN and palliative advanced practice registered nurse presented to physician groups both to clarify when to engage this process and also to distinguish palliative care from hospice. Visibility on the units, participation in multi-disciplinary rounds, and informal curbside teaching increased awareness and normalcy. Speech therapy in particular became a reliable referral source after swallow evaluations flagged high-risk patients.

Barriers and how they were addressed:

- **Barrier:** Misconception that "palliative equals giving up"
  - **Strategy:** Reframed messaging around aligning care with patient goals at any stage of serious illness, not just end of life[4,7-9]
- Barrier: Discomfort initiating high-stakes conversations
  - **Strategy:** Provided scripting support, reinforced communication techniques (open-ended questions, silence, best-worst-most likely-case framing), and modeled bedside language for physicians, nurses, and case managers.[4-6,9]
- **Barrier:** Limited specialty staffing
  - **Strategy:** Used the RN as the consistent, trained point person, with an APP from the system palliative care team available for medically or psychosocially complex cases.[1,7]

The pilot ran for 90 days.

Outcomes and Impact

Over the 90-day pilot, 96 patients were seen by the nurse-led palliative workflow. Every patient received:

- A structured goals-of-care conversation
- A review of advance care plan-

ning and, when appropriate, completion of documents
- A discussion of code status and resuscitation preferences
- A discussion on discharge planning options

Patient profile

The patients represented high-acuity, high-need populations: 24.8% had a cancer diagnosis; 26.3% had end-stage renal disease; 23.7% had dementia; 12.4% had congestive heart failure; and 12.4% had COPD.

Timing of intervention

Two-thirds (66.7%) of consults occurred within 72 hours of admission, which, in the literature, is associated with reduced length of stay and lower overall cost of care.[2,3] This timing matters: palliative alignment early in the admission helps drive appropriate disposition planning and avoids "crisis conversations" the night before discharge.

Advance care planning and code status clarity

Before the RN encountered them, only 36.5% of patients had a designated healthcare surrogate documented, and just 17.7% had a living will. After discussion, an additional 25% of patients completed a healthcare surrogate form, and an additional 17.7% completed a living will during the pilot.

Similarly, only 20.8% of patients had a documented do not resuscitate (DNR) order at the time of initial contact. After goals-of-care discussions, an additional 21.9% of patients chose and documented DNR status. This is a major patient-safety and ethical win: code status decisions were clarified proactively rather than in the middle of an emergency.

Discharge alignment

Most patients were discharged home, often with home health support; 30% were discharged either with home hospice or transferred to an inpatient hospice unit. Five-month chart review showed a mortality rate of 28.1% in the pilot population, underscoring that these were medically fragile patients for whom goal-concordant care is critical.

Cultural impact

Post-implementation surveys of physicians, nurses, and care managers caring for these patients showed:
- 86% reported improved understanding of the role and purpose of palliative care.
- 93% reported a better understanding of each patient's wishes and values, which in turn informed the plan of care and treatment decisions.
- Respondents felt patients had a clearer understanding of their options and plan of care and reported perceived improvement in patient satisfaction.

DIMITRY - STOCK.ADOBE.COM

In short, this model produced measurable documentation gains, earlier advance-care planning, and culture change toward goal-concordant care without requiring a full dedicated palliative team on site.

Lessons Learned

First, you do not need a fully staffed palliative care service to deliver palliative value. A trained, empowered RN, embedded in multi-disciplinary rounds, resourced with scripting, and backed by a hospitalist-APP partnership, can dramatically expand access to goals-of-care conversations in a community hospital. This allows the specialty-trained palliative-care APP to focus on more complex cases and/or cancer pain management.

Second, early identification is everything. Building triggers into routine multidisciplinary rounds (less than 72 hours from admission; high-risk diagnoses; recurrent readmissions; functional decline) made consults proactive instead of reactive. When you wait until day eight to talk about what matters to the patient, you've already lost ground clinically, emotionally, and financially.

Third, standardization protects patients and staff. Using a structured template in the electronic health record means the patient's voice is visible to every clinician. It also normalizes advance directive and code status documentation as standard care rather than "awkward" or "sensitive," which reduces moral distress for staff and improves continuity.

Additionally, patient and family recovery hopes are often misaligned with available post-acute options. Candid discussions regarding post-acute care and discharge planning are crucial to bridge the gap between hospital and home.

Finally, language matters. Frontline teams often equate "palliative care" with "end of life care," which can delay appropriate consultations. Deliberate re-education—"palliative care aligns treatment with the patient's values at any stage of serious illness"—was necessary and should not be skipped.[12,13]

Future Directions

The pilot demonstrated proof of concept: a hospitalist-designed, nurse-driven palliative care workflow can be stood up in a resource-limited community hospital and still deliver meaningful clinical, operational, and human outcomes. The next step is scale and sustainment.

Future priorities include:
- Continuing RN-led goals-of-care consults as a standard inpatient resource rather than a "pilot."
- Formalizing referral triggers in admission workflows (e.g., embedding the "surprise question": "Would you be surprised if this patient died within the next six months?") to standardize early identification.[14]
- Expanding structured communication training (open-ended questioning, silence, best-worst-most likely framing) to hospitalists, APPs, bedside RNs, and care managers so that these skills are no longer rare or personality-dependent.
- Clarifying role boundaries so that routine advance care planning remains RN- or case-manager-led, while medically or psychosocially complex cases continue to escalate to an APP or physician with formal palliative expertise.
- Evaluating additional metrics such as length-of-stay impact and cost avoidance, which were not measured in this initial 90-day window but are expected to be favorable based on published literature linking early palliative engagement to shorter stays and lower cost of care.[2,3]

In short, the vision is to operationalize this as standard of care, not a special project. ■

References

1. American Association of Colleges of Nursing. End of Life Nursing Education Consortium (ELNEC) website. https://www.aacnnursing.org/elnec. Accessed May 7, 2026.

2. Bartholomew MB. "What are my options?": how to have a goals-of-care conversation. *Nurse Pract.* 2022;47(7):15-21. doi: 10.1097/01.NPR.0000832500.60846.8c.

3. What is palliative care? Center to Advance Palliative Care website. https://www.capc.org/about/palliative-care/. Accessed May 7, 2026.

4. Davis MP, et al. The influence of palliative care in hospital length of stay and the timing of consultation. *Am J Hosp and Palliat Med.* 2022;39(12). doi. org/10.1177_10499091211073328.

5. El-Sourady M, Martin S. Goals-of-care discussions in acute life-threatening illness: a three-question framework to get your learners started. *J Palliat Med.* 2021;24(9):1270-1271. doi: 10.1089/jpm.2021.0282.

6. Kaldjian LC. Clarifying core content of goals of care discussions. *J Gen Intern Med.* 2020;35(3):913-915. doi: 10.1007/s11606-019-05522-5.

7. Moran S, et al. An integrative review to identify how nurses practicing in inpatient specialist palliative care units uphold the values of nursing. *BMC Palliat Care.* 2021;20(1):111. doi: 10.1186/s12904-021-00810-6.

8. National Alliance for Care at Home. Advance directives. Caring Info website. https://www.caringinfo.org/planning/advance-directives/. Accessed May 7, 2026.

9. National Institute on Aging. Advance care planning: advance directives for health care. National Institutes for Health website. https://www.nia.nih.gov/health/advance-care-planning/advance-care-planning-advance-directives-health-care. Accessed May 7, 2026.

10. Comer A, et al. Identifying goals of care. *Med Clin North Am.* 2020;104(5): 767-775. doi:10.1016/j.mcna.2020.06.002.

11. Reif M, et al. The duality of "goals of care" language: a qualitative focus group study with frontline clinicians. *J Pain Symptom Manage.* 2023; 66: e658-e665. doi. org/10.1016/j.jpainsymman.2023.08.014

12. Roberts B, et al. Narrative approach to goals of care discussions: assessing the use of the 3-act model in the clinical setting. *J Pain Symptom Manage.* 2020;60(4):874-878. doi: 10.1016/j.jpainsymman.2020.06.017.

13. Ushpol A, et al. Promoting early goals of care conversations in the CICU with a surprise question-based EHR workflow. *BMC Palliat Care.* 2024;23(1):288. doi: 10.1186/s12904-024-01602-4.

14. Zaborowski N, et al. Early palliative care consults reduce patients' length of stay and overall hospital costs. *Am J Hosp Palliat Care.* 2022;39(11):1268-1273. doi: 10.1177/10499091211067811.

JHM's Next Steps Adopts Broader Focus

By Thomas R. Collins

TSHINEY - STOCK.ADOBE.COM

The Choosing Wisely initiative, which was started in 2012 and led by the American Board of Internal Medicine, spurred 70 medical societies, including the Society of Hospital Medicine, to create lists of practices within their field that are likely performed more often than necessary.

The campaign was so expansive that it inspired regular journal features that kept the Choosing Wisely theme in mind, focusing on things physicians and other health professionals could do differently in the name of value and optimal outcomes. One of those has been the "Next Steps" column in the *Journal of Hospital Medicine*.

Since it was introduced in 2014, the column has been called "Choosing Wisely: Next Steps in Improving Healthcare Value," with forward-looking, big-picture pieces on ways to improve healthcare systems—in the vein of Choosing Wisely, but with somewhat broader themes and aims.

The Choosing Wisely campaign officially ended in 2023, and now the Next Steps column is evolving as well. It will be re-titled "Next Steps: Improving Healthcare Value" or "Next Steps: Policy in Clinical Practice," depending on the subject matter. The change made sense because it allows for topics beyond the scope of Choosing Wisely to be considered and makes for a more streamlined title, said Michael Tchou, MD, the column's editor and an assistant professor of pediatrics at the University of Colorado, where he is a pediatric hospitalist at The Children's Hospital Colorado in Aurora, Colo.


Dr. Tchou

Dr. Tchou, who has been the column's editor since 2021 and works alongside Oanh Nguyen, MD, MAS, associate professor of medicine at the University of California, San Francisco, said the Choosing Wisely campaign "has really helped increase awareness of the things we do that are probably low-value to patients in the healthcare system" and has inspired a lot of quality improvement work. But he said the time had come to shift the focus of the column, while keeping the roots in mind.


Dr. Nguyen

"We didn't want to limit just to Choosing Wisely-related things," he said. "It's kind of an expanded view of the same topic area that Choosing Wisely was focused on, but really thinking about how to maximize that impact, whether it's policy change or changing the systems of care on a broader scope."

Dr. Tchou said he was drawn to the concept of Next Steps largely because he has had a professional interest in quality improvement. During his pediatric hospitalist fellowship at Cincinnati Children's Hospital, his research focused on the overuse of medical resources, mostly from laboratory testing.

He led a project that looked at electrolyte testing, which are basic tests that many pediatric patients routinely get, but that usually don't change their management very much. While he was at Cincinnati, he and his team were able to reduce this electrolyte testing by about 30%, a reduction maintained for at least the next two years until he moved to the Children's Hospital Colorado.

Despite the substantial reduction in testing, there was no worsening of outcomes, such as length of stay, he said. But the change significantly decreased the number of overnight awakenings for the pediatric patients—a notable development considering that it can be difficult for the children to fall back to sleep—as well as early-morning awakenings, while also decreasing the anxiety of the children who dread the blood draws. The change also reduced demand on nursing resources.

"We were really proud of that work, and I think it was a model for thinking about how do we think about this concept of diagnostic stewardship—doing the right test at the right time that we think will be most beneficial for patients in making decisions," he said.

Much of Dr. Nguyen's research has focused on how social and structural determinants of health affect outcomes for people who have been underserved and historically marginalized, and on interventions to overcome these factors.

The editors have brought that eye toward improvement to the Next Steps series, with the choice of topics and thorough exploration of those topics.

One piece looked at changes needed in the era of prescribing the opioid partial agonist buprenorphine in the context of no longer needing an X waiver, with writers suggesting developing order sets for easier prescribing and reducing errors, as well as educational interventions to decrease bias and increase confidence in prescribing appropriately.[1]

In another piece, writers described an "innovation center" around COVID-19 policies, with staff members at the center invited to propose ideas, and seed funding going to ideas that were chosen. The innovation center produced nearly 200 ideas covering personal protective equipment, testing, and data analytics.[2]

In perhaps one of the biggest-picture pieces in the series, authors in 2022 examined the limitations of the Choosing Wisely campaign itself, arguing that the grassroots, "bottom-up" nature of the campaign had possibly maxed out on the impact it could have. Authors pointed to hindrances for making change leading to value, including that wasteful practices are often intertwined with high-value practices, and that some interventions, such as automated alerts, have simply led to "clinicians overriding such alerts virtually all of the time."[3]

Endorsing a strategy of both physician-led and system-wide approaches, they pointed to a Canadian initiative to reduce unnecessary red-blood-cell transfusions that outlined benchmarks for appropriate use and offered quality-improvement credit in the accreditation process to participating hospitals.

"More substantive reductions in low-value care will depend on a new approach—one that tackles broader system-wide targets through an approach that combines grassroots efforts with health policy changes to healthcare delivery," the authors wrote.

Dr. Tchou said he is hoping to raise the profile of the series, and said he would welcome article proposals.

"Our goal moving forward is to try to garner more interest in this series," he said, adding that potential writers can get in touch "if people have a topic that they're passionate about or an area of interest." The email for suggested columns is nextsteps@hospitalmedicine.org.

"We would invite them to email us even if it's just a really short bullet-point summary," Dr. Tchou said.

He also would like to interact with readers more and hopes to draw more ideas from them, as well.

"It would be great to get ideas from readers, too, because our goal with the series is really to bring people with the experience in these topic areas, policy, or system-wide improvement, and write articles that help the readers in their daily practice and help them understand these higher, bigger issues and these next steps." ■

Tom Collins is a medical writer based in South Florida.

References

1. Haber LA, et al. Policy in clinical practice: elimination of the buprenorphine "X-waiver". *J Hosp Med.* 2023;18(10):931-933. doi: 10.1002/jhm.13176.

2. Shumacher ME, et al. Use of an innovation center to foster high-value COVID-19 care at an academic healthcare system. *J Hosp Med.* 2022;17(5):384-388. doi: 10.1002/jhm.12824.

3. Levinson W, Leis JA. Improving healthcare value: Lessons learned from the first decade of Choosing Wisely®. *J Hosp Med.* 2023;18(1):78-81. doi: 10.1002/jhm.12969.

Building a Hospitalist Research Career

Recap of Research SIG Virtual Roundtable

By Alexander S. Roseman, MD, Mary Ann Kirkconnell Hall, MPH, Angela Keniston, PhD, MSPH, Waseem Khaliq, MBBS, MPH, Lubna Jamal, MD, MBA, Boomer Olsen, DO, Amanda Ward, MD, and Shaheen Fatima, MD

Despite high levels of research interest, hospitalists often participate at lower levels due to numerous barriers, including limited mentorship, difficulty balancing clinical work and research, and insufficient funding.[1,2] To discuss these barriers and solutions to overcome them, the Society of Hospital Medicine's (SHM) Research Special Interest Group (SIG) organized a virtual roundtable titled "From First Steps to Legacy: Building a Hospitalist Research Career."[3,4] We invited four established hospitalist-researchers with more than 22,000 combined citations: Peter Lindenauer, MD, MSc, from the University of Massachusetts Chan Medical School—Baystate in Springfield, Mass.; Valerie Press, MD, MPH, from the University of Chicago in Chicago; Matthew Pappas, MD, MPH, from the Cleveland Clinic in Cleveland; and Sagar Dugani, MD, PhD, MPH, from the Mayo Clinic in Rochester, Minn. The roundtable was a wide-ranging discussion on getting started in research, mentorship, funding, maintaining momentum, and integrating clinical and research time. Their advice converged on common themes: success comes from finding problems worth solving, cultivating professional relationships, aligning clinical practice and research, and anchoring work to a larger purpose.

Roundtable Speakers


Dr. Lindenauer


Dr. Press


Dr. Pappas


Dr. Dugani

Getting Started: Find Stones in Your Shoe

Choosing a research topic can be challenging for hospitalists. The panelists agreed that they often find projects by focusing on issues that bother them about current clinical practice. Dr. Pappas draws inspiration for his research from "stones in [his] shoe that annoy [him]...where medicine is not serving our patients as well as it could be," which led him to study when to restart warfarin or apixaban after an upper gastrointestinal bleed.[5] To then take that inspiration and turn it into an actionable research question, Dr. Press recommends becoming a "micro-expert" to identify gaps in the literature. But a compelling question is only the beginning; the right team determines whether it moves forward.

Mentorship: Build a Team

Mentorship is a significant barrier to hospitalist research, with only 19% of hospitalists having access to research mentors.[6] Each panelist had a story about how working in teams helped their career. Dr. Press recommends finding "someone who can help you with a goal, whether it's a partner, whether it's someone senior to you that has methods or content expertise; you can't do anything alone." Dr. Dugani reiterates that "you need a team of mentors and a team of people to help you." Mentorship does not need to be a classic mentor-mentee dyad; alternative models, such as peer mentorship or research coaching, can be equally effective.[7]

Mentorship also need not be exclusive to your institution. Dr. Lindenauer remarks that SHM fostered collegiality, especially in the field's early days, when his home institution had limited opportunities. Building on this legacy, the Research SIG offers opportunities to collaborate and grow scholarship. Offerings include the Hospital Medicine National Writing Challenge, abstract and poster design webinars, and an interactive Research SIG forum at SHM Converge, where members brainstorm ideas, refine projects, and network with peers. Distilling the need for teams in research, Dr. Dugani recommends, "Build a team, ask for help, and don't suffer alone." However, even with the right mentorship team in place, competing demands can limit the available time for research.

Work-Life Balance: Align as Much as Possible

Balancing clinical and teaching commitments with research remains a struggle for most hospitalists. To navigate the competing demands, Dr. Press advises hospitalists to "align as much as possible." For example, Dr. Press built synergy between her clinical work in a transitional care clinic and her research on care transitions. Similarly, early in his career, Dr. Lindenauer leveraged data from his quality-improvement initiatives to generate research questions about hospitalized patients. These examples illustrate that clinical care, teaching, and research do not need to exist in silos. However, even with alignment, protected time is often needed to further research, and funding is often the best way to obtain it.

Funding: Start Local

Lack of funding is a barrier to hospital medicine research: only 11% of hospitalists receive funding.[8] While most hospitalists think of funding in terms of extramural funding through the National Institutes of Health, Dr. Press recommends starting locally, such as with local internal grant mechanisms or foundations, and not to "hesitate to work with people who have established funding." State funding and funding from the Agency for Healthcare Research and Quality were also discussed as options. Additionally, aligning with institutional priorities can be helpful, as Dr. Pappas recommends that hospitalists "look for overlap between the institution's goals and [your] own," which could also open up internal funding opportunities. Yet even with funding secured, another barrier remains: sustaining momentum.

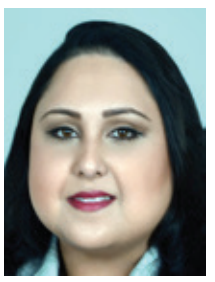
Continued on page 22


Dr. Roseman


Ms. Hall


Dr. Keniston


Dr. Khaliq


Dr. Jamal


Dr. Olsen


Dr. Ward

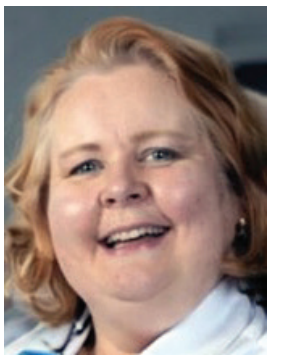

Dr. Fatima

Dr. Roseman is a med-peds academic hospitalist, assistant professor of medicine and pediatrics at UMass Chan Medical School–Baystate in Springfield, Mass., and a member of The Hospitalist's editorial board. Ms. Hall is the senior medical writer at the Emory University School of Medicine's division of hospital medicine in Atlanta. Dr. Keniston is the director of data and analytics for the division of hospital medicine and an associate professor at the University of Colorado in Anschutz, Colo. Dr. Khaliq is an associate professor of medicine at the Johns Hopkins University School of Medicine and director of the research elective and Summer Hospitalist Academic Research Program (SHARP) in the division of hospital medicine at Johns Hopkins Bayview Medical Center, both in Baltimore, and serves as vice chair of SHM's Research SIG. Dr. Jamal is a physician with over a decade of experience across clinical medicine, public health, and the life sciences, engaged in global clinical research in oncology with scholarly interests in care coordination, digital health–enabled care models, health systems innovation, and improving outcomes in complex and high-risk patient populations. Dr. Olsen is a postdoctoral research fellow and incoming hospitalist at the University of Utah Health in Salt Lake City. Dr. Ward is an academic hospitalist at Greater Baltimore Medical Center in Towson, Md. Dr. Fatima is an assistant professor of medicine at Emory University School of Medicine and a hospitalist at Grady Memorial Hospital, both in Atlanta. SHM's Research Special Interest Group periodically contributes articles supporting hospitalists in building and advancing their research careers.

Applying the 2024 ACG Guidelines on Acute Pancreatitis to Hospital Medicine

By Naveed Choudry, MD, FACP, FHM, Jennifer L. Barnett, DMSc, PA-C, DFAAPA, CAQ-HM, CPHQ, SFHM, and Krista A. Suojanen, MD


Dr. Choudry


Dr. Barnett


Dr. Suojanen

Dr. Choudry is associate division chief of hospital medicine and an academic hospitalist at MedStar Washington Hospital Center and an assistant professor of medicine at Georgetown University School of Medicine, both in Washington, D.C. Dr. Barnett is a hospital medicine physician assistant and associate medical director of the inpatient readmission reduction program at MedStar Franklin Square Medical Center in Baltimore. Dr. Suojanen is a hospitalist at MedStar Georgetown University Hospital in Washington, D.C.

Acute pancreatitis is one of the most common gastrointestinal diseases managed by hospitalists. In the U.S., it accounts for nearly 300,000 admissions each year, more than one million patient inpatient days, and an estimated $2.5 billion in healthcare costs. Although most patients recover without incident, roughly one in five develop complications such as necrosis or organ failure that prolong hospitalization and increase mortality.

In 2024, the American College of Gastroenterology released updated Guidelines for the Management of Acute Pancreatitis,1 revisiting several long-standing practices. The revised guidance emphasizes more judicious use of imaging, balanced fluid resuscitation, early nutrition, antibiotic stewardship, and standardized surgical timing. For hospitalists, these recommendations have direct implications for how these patients are managed day to day.

Diagnosis

Diagnosis requires at least two of three criteria: (1) epigastric or left upper quadrant pain, typically constant with radiation to the back, chest, or flank; (2) serum lipase or amylase greater than three times the upper limit of normal; and (3) characteristic findings on abdominal imaging.

Lipase is the preferred biomarker, as it remains elevated longer and is more specific than amylase.

Routine CT imaging on admission is not recommended, as most patients have mild, uncomplicated courses that can be diagnosed on clinical and laboratory grounds alone, and early scanning rarely changes management. The guidelines reserve imaging for cases where the diagnosis is unclear or for patients who fail to improve after 48 to 72 hours of initial treatment. This shift reduces unnecessary radiation exposure, contrast use, and cost.

Bottom line: When clinical presentation and enzyme levels are consistent with acute pancreatitis, start treatment and hold off on imaging unless the patient isn't improving.

Etiology and Work-Up

Gallstones and alcohol are the leading causes of acute pancreatitis, accounting for 40% to 70% of cases and 25% to 35% of cases, respectively. The guidelines recommend abdominal ultrasound for all patients admitted with acute pancreatitis to evaluate for a biliary cause, with a repeat study if the initial examination is inconclusive. In the absence of biliary or alcohol etiology, check serum triglycerides, as levels above 1,000 mg/dL point to hypertriglyceridemia as the cause. In patients over 40 with no clear etiology, pancreatic malignancy should be on the differential, as ductal obstruction from a mass can precipitate pancreatitis.

For patients with a second episode of idiopathic pancreatitis, cholecystectomy is recommended even without confirmed gallstones, given evidence of reduced recurrence.

Bottom line: Gallstones and alcohol are the most common causes of acute pancreatitis. Obtain an abdominal ultrasound in all patients to look for a biliary cause and repeat if the initial study is inconclusive. When biliary and alcohol etiologies have been excluded, check triglycerides and consider imaging for a pancreatic mass in patients over 40. Once a patient has experienced recurrence of idiopathic pancreatitis, refer for cholecystectomy.

Risk Stratification

Roughly one-third of patients with acute pancreatitis will progress to moderately severe or severe disease. Moderately severe disease involves transient organ failure resolving within 48 hours and/or local complications such as peripancreatic fluid collections, pseudocysts, or walled-off necrosis. Severe disease is defined as persistent organ failure that fails to resolve within 48 hours and/or death; it is responsible for nearly all the morbidity and mortality associated with the condition.

No scoring tool or imaging study reliably identifies who will deteriorate, but several early findings should raise concern:

- Systemic inflammatory response syndrome (SIRS) criteria on admission
- Blood urea nitrogen (BUN) greater than 20 mg/dL, rising BUN, and/or hematocrit greater than 44
- Altered mental status
- Age greater than 55
- Obesity (body mass index greater than 30)
- Signs of hypovolemia
- Radiographic findings of pleural effusion or pulmonary infiltrates

Patients with any of these features should be admitted to a monitored or intensive care unit.

Bottom line: Factors that suggest a higher risk of progression to severe disease include SIRS criteria, elevated or rising BUN and/or hematocrit, altered mental status, obesity, hypovolemia, or findings of pleural effusion or infiltrates.

Fluid Resuscitation

Intravenous hydration remains the cornerstone of management. The guidelines recommend moderately aggressive intravenous hydration using lactated Ringer's (LR) rather than normal saline. LR reduces the risk of metabolic acidosis, supports better electrolyte balance, and has been associated with a lower risk of SIRS compared with normal saline. Large volume infusions of normal saline are also associated with abdominal discomfort and may exacerbate symptoms.

In euvolemic patients, start with up to 1.5 mL/kg/hr of LR. For patients showing signs of hypovolemia, give a 10 mL/kg bolus first. Reassess at six hours and again at 24 to 48 hours using BUN trend, hematocrit, urine output, and vital signs. Adjust for patients with cardiac or renal disease to prevent fluid overload. Aggressive hydration beyond 48 hours can cause harm, particularly in older adults, and should be avoided once the patient is stabilized.

Bottom line: Use LR for all patients with acute pancreatitis. Start at 1.5 mL/kg/hr, or if hypovolemic, bolus 10 mL/kg. Reassess frequently and pull back on fluids by 48 hours.

Nutrition

Keeping patients nil per os until symptoms improve and then advancing slowly from clear liquids is no longer the standard. The guide-

Key Takeaways

- Diagnosis: Lipase more than three times the upper limit of normal, plus abdominal pain typical of acute pancreatitis, is sufficient to begin treatment. Hold CT imaging unless the diagnosis is uncertain or the patient isn't improving after 48 to 72 hours.
- Etiology: Gallstones and alcohol account for most cases of acute pancreatitis. Obtain an abdominal ultrasound in all patients to evaluate for a biliary cause, and repeat if the initial study is inconclusive. If gallstones and alcohol are excluded, check triglycerides and consider imaging for a pancreatic mass in patients over 40.
- Risk stratification: SIRS criteria, rising BUN, elevated hematocrit, altered mental status, obesity, hypovolemia, and pulmonary findings all signal a higher risk of progression to severe disease, and these patients should have closer monitoring.
- Fluid resuscitation: Use lactated Ringer's, not normal saline. Start with 1.5 mL/kg/hr for patients without hypovolemia, or 10 mL/kg bolus if hypovolemic. Reassess at 6 hours and again at 24 to 48 hours.
- Nutrition: Feed early. Start low-fat solids within 24 to 48 hours. Use NG tube feeds if the patient cannot eat; avoid total parenteral nutrition or NJ tube.
- Antibiotics: Prophylactic antibiotics are not indicated. Treat confirmed infections only.
- ERCP: Early ERCP only for cholangitis or persistent obstruction. Consider same-admission cholecystectomy for mild gallstone pancreatitis.

lines recommend starting oral feeds within 24 to 48 hours as tolerated, beginning with low-fat solid foods rather than working up from liquids. Early feeding maintains gut integrity, reduces bacterial translocation, and shortens length of stay.

For a patient who cannot safely eat, enteral nutrition via nasogastric tube is preferred over parenteral nutrition or the previously recommended nasojejunal (NJ) route.

In moderately severe and severe disease, enteral feeding via nasogastric (NG) tube should still be pursued when feasible. Parenteral nutrition should be avoided unless the enteral route is not possible, not tolerated, or not able to meet caloric needs.

Bottom line: Feed patients early. Start low-fat solids within 24 to 48 hours when tolerating oral intake. NG tube feed those who cannot eat safely; avoid parenteral nutrition and NJ tubes.

ERCP and Biliary Pancreatitis

In gallstone pancreatitis, a persistent common bile duct stone can lead to obstruction and, in turn, to necrosis or cholangitis. Most gallstones will pass on their own, and most patients with gallstone pancreatitis will not need endoscopic retrograde cholangiopancreatography (ERCP).

For patients with cholangitis, ERCP within 24 hours is supported by evidence of reduced morbidity and mortality. In all other cases, the guidelines favor medical management over ERCP in the first 72 hours. In the absence of these findings, patients should be managed conservatively, with magnetic resonance cholangiopancreatography or endoscopic ultrasound used to confirm choledocholithiasis before any procedural intervention is considered.

Rectal indomethacin (100 mg) should be given to all patients at high risk for post-ERCP pancreatitis. For patients at the highest risk, a prophylactic pancreatic duct stent in addition to indomethacin further reduces the risk.

For patients with mild gallstone pancreatitis who stabilize with conservative care, same-admission cholecystectomy is recommended to prevent recurrence.

Bottom line: Most patients will not need ERCP. For those with choledocholithiasis or jaundice, communicate early with gastroenterology and consider a magnetic resonance cholangiopancreatography prior to ERCP. For mild gallstone pancreatitis, discuss with surgery for cholecystectomy before discharge.

Antibiotics

Prophylactic antibiotics are not recommended in acute pancreatitis, even in severe disease or sterile necrosis. Antibiotics should only be used when an infection is confirmed, such as in infected necrosis, cholangitis, or bacteremia.

In infected necrosis, the approach depends on stability. Unstable patients should be considered for urgent debridement. For stable patients, a two- to four-week course of antibiotics prior to intervention allows the inflammatory process to organize, making drainage and debridement more feasible. Antibiotic selection and timing should be determined in concert with infectious disease and surgery.

CT-guided fine-needle aspiration is no longer recommended to confirm infected necrosis before starting antibiotics. Clinical suspicion, blood cultures, or the presence of gas in the necrosis on CT are sufficient to guide the decision to start antibiotics.

Bottom line: Avoid prophylactic antibiotics in acute pancreatitis, regardless of severity. For infected necrosis, start antibiotics early and coordinate with infectious disease and surgical teams about selection and duration of antibiotics and timing of drainage.

Evaluating the Evidence

The American College of Gastroenterology applied the GRADE framework to classify each recommendation by strength (strong or conditional) and evidence quality (high to very low). Most recommendations relevant to hospitalists are conditional, supported by low or very low-quality evidence, reflecting the scarcity of randomized trial data in this space, with recommendations driven largely by physiologic rationale and expert opinion.

Examples:

- LR preferred over saline (conditional, low quality)
- Early oral feeding (conditional, low quality)
- Avoidance of prophylactic antibiotics (conditional, very low quality)

Within our institutional MedStar Hospital Medicine Evidence Watch Committee, each recommendation was evaluated across the strength of evidence, relevance to hospital medicine, and feasibility for implementation by our hospitalists system wide.

We concluded that LR use with moderately aggressive fluid resuscitation, early feeding, and antibiotic restraint is a low-risk intervention with a plausible benefit profile and few downsides. Areas like infected necrosis management and procedural timing are where multidisciplinary input from gastroenterology and surgery remains essential. ■

Reference

1. Tenner S, et al. American College of Gastroenterology guidelines: management of acute pancreatitis. *Am J Gastroenterol*. 2024;119(3):419-437. doi: 10.14309/ajg.0000000000002645.

Research SIG

Continued from page 19

Motivation: How Will Medicine Be Better if You Complete This Project?

As most hospitalists do not have protected time for research, most scholarly work, including research, is completed during personal time.[8] Therefore, internal motivation is often needed to drive a research project to completion. Our panelists offered a layered approach to maintaining motivation through the highs and lows of conducting research.

First, the research question should be genuinely interesting and a problem; as Dr. Dugani emphasizes, you should "[care] about the problem at three o'clock in the morning." Next, the research project should feed your overall career goals. Dr. Lindenauer recommends "stepping back [and] envisioning where you want to be in five to 10 years and work backwards." This career planning aligns interim challenges with your overarching goal. Dr. Press agreed that it is helpful "to [have] a goal to work towards because it's easy to get caught up in life."

Finally, legacy is also a powerful motivator. Dr. Pappas is guided by the question, "How will medicine be better if you complete this project?" This multi-level advice can help sustain a research project through most obstacles to completion.

As our panelists illustrated, research careers are built intentionally, not accidentally. There is clearly a desire among hospitalists to conduct research, but how to do so remains daunting. As our panelists discussed, the barriers are real but navigable. Research begins with noticing "stones in your shoe" that arise in daily practice and show up much earlier than in the literature. Hospital medicine is a team sport, and research advances in similar ways through teams and mentorship. Research endures through purpose, either tied to long-term goals, stubborn problems, or commitment to make medicine better. Ultimately, research is not reserved for those with protected time, but for those willing to notice problems, build partnerships, and persist with intention. ■

ADOBE.COM - STOCK-ADOBE.COM

References

1. Dugani SB, et al. Perception of barriers to research among internal medicine physician hospitalists by career stage. *Hosp Pract* (1995). 2020;48(4):206-212. doi: 10.1080/21548331.2020.1779537.
2. Pappas MA, et al. State of research in adult hospital medicine: updated results of a national survey and longitudinal analysis of national data. *J Hosp Med*. 2023;18(6):519-523. doi: 10.1002/jhm.13096.
3. Quinn R. SIG spotlight: research. The Hospitalist website. https://www.the-hospitalist.org/hospitalist/article/38956/sigs/sig-spotlight-research/. Published May 1, 2025. Accessed April 23, 2026.
4. Research SIG. HMX by SHM. https://connect.hospitalmedicine.org/SIGs/research. Accessed February 27, 2026.
5. Pappas MA, et al. Resuming anticoagulation following upper gastrointestinal bleeding among patients with nonvalvular atrial fibrillation-a microsimulation analysis. *J Hosp Med*. 2019;14(7):394-400. doi:10.12788/jhm.3189.
6. Dang Do AN, et al. Research and publication trends in hospital medicine. *J Hosp Med*. 2014;9(3):148-154. doi:10.1002/jhm.2148.
7. Rohatgi N, et al. Research mentorship models in hospital medicine: A narrative review. *Br J Hosp Med (Lond)*. 2025;86(11):1-18. doi:10.12968/hmed.2025.0089.
8. Elias R, et al. Protected time for research among academic hospitalists: a qualitative study of hospitalist group leaders. *J Gen Intern Med*. 2024;39(5):723-730. doi: 10.1007/s11606-023-08525-5.

Society of Hospital Medicine

Inspiring, Empowering, & Shaping the Leaders of Tomorrow

Join us in Scottsdale, AZ, October 19-22, 2026 to convene with the top minds in hospital medicine and gain the tools, confidence, and strategies to lead through today's healthcare complexities. Choose from one of four courses whether you are exploring something new or returning for fresh perspectives.

Secure your spot at **shmleadershipacademy.org**

"Attending the SHM Leadership Academy helps you get to know fellow leaders in hospital medicine while gaining a lot of strategies on how to cope with the stresses of being a leader. Having completed all the academies, I've been able to apply what I've learned directly into my daily practice."

Allison Heinen Taylor, DO, FHM

Upcoming Conferences:

Pediatric Hospital Medicine
August 6-9, 2026
Kansas City, MO

Hospital Medicine Essentials (PAs/NPs) (Formerly Boot Camp)
August 30 - September 2, 2026
Nashville, TN

Multisite Leaders in Hospital Medicine Summit 2026
September 17-18, 2026
Philadelphia, PA

Converge 2027
March 30 – April 2, 2027
Las Vegas, NV

Scan to Learn More →