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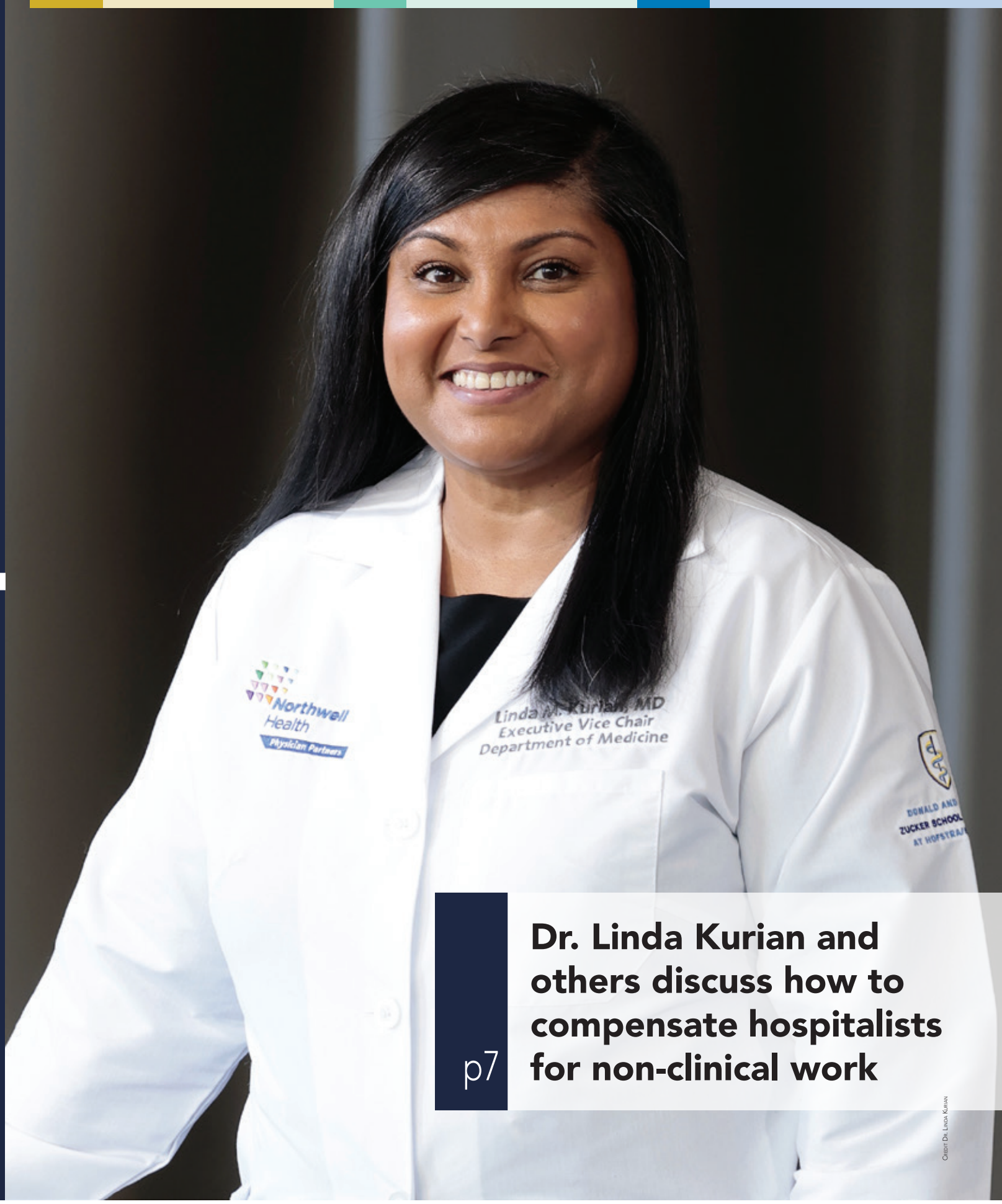

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IN THE NEXT ISSUE...
National Hospitalist Day Spotlights

AI and the Hospitalist: Between Promise and Prudence

By Arunab Mehta, MD, MEd

Artificial intelligence (AI) has quickly moved from novelty to near inevitability in hospital medicine. While tools like ChatGPT captured public attention in 2022, AI had already been shaping inpatient care long before, through predictive models, sepsis alerts, and risk stratification tools quietly embedded in our workflows. What has changed is not just the capability of AI, but its visibility and accessibility to frontline clinicians. It is therefore no surprise that a growing majority of physicians now see potential upside in its use.[1]

This issue highlights both the promise and the tension inherent in AI's expanding role. On one hand, AI offers relief from some of hospital medicine's most burdensome tasks: documentation, chart review, and synthesis of overwhelming amounts of data. Many hospitalists trained in an era when UpToDate revolutionized point-of-care learning are now watching trainees turn to AI-powered tools that surface primary literature and guidelines in seconds. Used thoughtfully, these tools can accelerate knowledge acquisition and support decision-making in complex cases.

Yet speed and efficiency come with trade-offs. As one article in this issue thoughtfully explores, ambient documentation and AI scribes may reduce time spent typing, but they also risk changing how we listen, how we distill information, and how we communicate with one another. Longer notes are not inherently better notes. The discipline of the one-liner, the curated assessment, and the abbreviated handoff remain central to safe hospital care. If AI amplifies noise rather than clarity, we risk solving one problem while creating another.

At a systems level, AI-driven predictive models have shown promise in identifying clinical deterioration and improving outcomes, including modest but meaningful reductions in mortality. These tools illustrate AI at its best: operating quietly in the background, augmenting, but not replacing, clinical judgment. However, AI is only as good as the data and incentives that shape it. Bias embedded in datasets, lack of personalization, and opaque decision-making processes should give hospitalists pause, particularly as AI begins to influence utilization management and post-acute care decisions. In fact, experiencing an insurance company denying patient care using AI tools is not uncommon anymore.

Perhaps the most important message from this issue is that AI is not something happening *to* hospitalists; it is something that must be shaped *by* them. Whether through governance committees, pilot programs, or daily use at the bedside, hospitalists have a responsibility to advocate for AI that is transparent, equitable, and clinically meaningful. AI may help us reclaim time, reduce burnout, and process information more efficiently. But preserving judgment, presence, and humanity in hospital medicine will always remain our work. ■

Dr. Mehta

Dr. Mehta is an associate professor of medicine and vice-chair of Inpatient Clinical Affairs at the University of Cincinnati in Cincinnati, Ohio. He is also the associate editor for The Hospitalist.

References

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In the Literature

Nebraska Medical Center Medical Research Reviews

By Austin Rupp, MD, Shelby Hackett, MPAS, PA-C, CAQ-HM, Thuytien Nguyen, MD, Mitchell Nohner, MD, Jill Zabih, MD, Joseph Pachunka, MD, Kurt Andree, DMSc, PA-C, CAQ-HM, Brian Shahan, MD, FAAFP, DFPHM, Bridgette O'Neill, MD, and Chris Snyder, MD, MBA

Nebraska Medical Center, Omaha, Neb.

IN THIS ISSUE

By Austin Rupp, MD

1 Lactated Ringer's No Different Than Normal Saline for Routine Inpatient IV Fluid Administration

CLINICAL QUESTION: In hospitalized patients, does IV administration of lactated Ringer's solution (LR) reduce mortality or readmission compared to normal saline (NS)?

BACKGROUND: Crystalloid fluid administration, most often LR or NS, is one of the most common interventions performed in the inpatient setting. There has been concern regarding the chloride load associated with NS administration and increased risk of resultant hyperchloremic acidosis and acute kidney injury that is not associated with balanced fluids like LR. Previous studies have largely evaluated emergency department and intensive-care unit patients with mixed results. Recently, a systematic review and meta-analysis of almost 39,000 intensive care unit (ICU) patients showed no difference in mortality, but a Bayesian meta-analysis of almost 35,000 ICU patients concluded there is a high probability of LR being associated with lower in-hospital mortality. This study sought to compare LR to NS as the hospital-wide IV solution of choice in all patients with respect to 90-day mortality and readmission.

Dr. Rupp

STUDY DESIGN: Cluster-randomized crossover trial

SETTING: Seven academic and community hospitals in Ontario, Canada

SYNOPSIS: In this cluster-randomized crossover trial, seven hospitals were randomized to either LR or NS as the hospital-wide default IV fluid. From 2016 to 2020, 43,626 patients were included (22,017 received LR, 21,609 received NS). The trial included two 15-week periods consisting of a one-week run-in, 12-week analysis, and a two-week washout. The 15-week process was repeated with the other fluid three weeks later. The primary outcome was a composite of death or readmission to the hospital within 90 days. The primary outcome was not statistically significant, with a mean incidence (averaged across seven hospitals) of 20.3%, +/-3.5%, in the LR group and 21.4%, +/-3.3%, in the NS group, with an adjusted absolute difference of –0.53% (95% CI. –1.85 to 0.79%) favoring LR. Secondary outcomes were also not statistically significant. Limitations included early termination of enrollment due to COVID-19 (originally targeted 16 hospitals and 144,000 patients for the power to detect a 1% absolute difference), limited individual-patient data, and relatively low adherence in the LR group (78.2%).

BOTTOM LINE: Hospital-wide administration of LR versus NS did not result in a significant difference in 90-day mortality or readmission to the hospital, and hospital-wide institution of a default IV crystalloid solution may not change meaningful patient outcomes.

CITATION: McIntyre L, et al. A crossover trial of hospital-wide lactated Ringer's solution versus normal saline. *N Engl J Med*. 2025;393(7):660-670. doi: 10.1056/NEJMoa2416761.

Dr. Rupp is a hospitalist at the Nebraska Medical Center and assistant professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Shelby Hackett, MPAS, PA-C, CAQ-HM

2 FMT is a Noninferior Treatment Option for Primary CDI

CLINICAL QUESTION: Is fecal microbiota transplantation (FMT) safe and efficacious in the treatment of primary *Clostridioides difficile* infection (CDI)?

BACKGROUND: FMT is currently recommended for treatment of recurrent CDI, however, oral antibiotics, including vancomycin and fidaxomicin, remain the treatment of choice for primary CDI. Whether FMT may have a role in the treatment of primary CDI is unclear.

Ms. Hackett

STUDY DESIGN: Open-label, phase 3, randomized, controlled trial

SETTING: Hospitals and primary care facilities in Norway

SYNOPSIS: A total of 100 adult participants with primary CDI and no previous CDI within one year were assigned to FMT versus vancomycin treatment arms. The primary endpoint was a composite of clinical cure (formed stools or less than three bowel movements daily) at 14 days and no disease recurrence within 60 days. The primary outcome was achieved in 66.7% of the FMT arm and 61.2% of the vancomycin arm. FMT versus vancomycin showed a difference in treatment response of 5.4% (95.2% confidence interval [CI], -13.5% to 24.4%) with a prespecified absolute noninferiority margin of 25%. The trial was stopped early due to meeting the prespecified noninferiority criterion for the primary endpoint in an interim analysis.

In the FMT arm 11 patients and in the vancomycin arm four patients received additional treatment for lack of clinical cure at day 14, or clinical deterioration. Secondary endpoint was clinical cure without recurrence, with or without additional treatment, and was achieved in 78.4% of the FMT arm and 61.2% of the vancomycin arm, with a difference in treatment response of 17.2% (92.5% CI, -0.7 to 35.1). There were no significant differences in the number of adverse events between treatment groups.

BOTTOM LINE: FMT may have a role in the treatment of primary CDI, given a similar efficacy and safety profile as oral vancomycin, though availability and standardization of FMT processing and administration may remain a logistical barrier.

CITATION: Juul FE, et al. Fecal microbiota transplantation versus vancomycin for primary *Clostridioides difficile* infection: a randomized controlled trial. *Ann Intern Med*. 2025;178(7):940-947. doi: 10.7326/ANNALS-24-03285.

Ms. Hackett is a physician assistant at the Nebraska Medical Center in Omaha, Neb.

By Thuytien Nguyen, MD

3 LLMs and Physicians Generate Comparable Hospital Discharge Summaries

CLINICAL QUESTION: Can large language models (LLMs) produce hospital discharge summary narratives comparable in quality and safety to those written by physicians?

BACKGROUND: High-quality hospital discharge summaries are necessary to facilitate safe transition of care from the hospital to the post-acute setting; however, they contribute to clinical documentation burden. LLMs may provide the opportunity to draft narratives to be reviewed and edited by physicians.


Dr. Nguyen

STUDY DESIGN: Cross-sectional study

SETTING: University of California, San Francisco (UCSF)

SYNOPSIS: Between 2019 and 2022, 100 inpatient hospital medicine encounters at UCSF with a length of stay between three and six days were randomly selected for LLM-generated discharge summary narratives. LLMs and physician-generated hospital discharge narratives were blindly reviewed by 22 attending physicians for errors and overall quality. LLM-generated narratives were more likely to contain errors, with a mean error per summary [standard deviation] of 2.91 [2.54], compared to physician-generated summaries at 1.82 [1.92]; however, there was no significant difference in the potential for harm between the two groups. LLM- and physician-generated narratives were equivalent in overall quality on a Likert scale. LLM-generated narratives were more concise and coherent, but less comprehensive. This study was limited by the number of patient encounters included and the shorter length of stay. The ability of LLMs to generate narratives for more complex encounters is unclear.

BOTTOM LINE: LLMs have the potential to draft hospital discharge narratives for clinician review and editing.

CITATION: Williams CYK, et al. Physician- and large language model-generated hospital discharge summaries. *JAMA Intern Med*. 2025;185(7):818-825. doi: 10.1001/jamainternmed.2025.0821.

Dr. Nguyen is a hospitalist at the Nebraska Medical Center and assistant professor and associate medical director of hospital medicine informatics in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Mitchell Nohner, MD

4 Navigational Bronchoscopy is Diagnostically Non-Inferior Compared to Transthoracic Needle Biopsy in Evaluation of Lung Nodules

CLINICAL QUESTION: In the evaluation of peripheral lung nodules, how does navigational bronchoscopy compare to transthoracic needle biopsy regarding diagnostic accuracy and procedural complications?

BACKGROUND: Previously, transthoracic needle biopsy, as performed by interventional radiologists, had a higher diagnostic accuracy rate than two-dimensional navigational bronchoscopy. With advancements in navigational bronchoscopy, the accuracy rate of bronchoscopy has greatly improved. Thus, a direct comparison between the two diagnostic methods was warranted to better characterize their accuracy and safety in a head-to-head manner.


Dr. Nohner

STUDY DESIGN: Randomized, parallel group, noninferiority trial

SETTING: Multiple U.S. centers, including both tertiary care academic centers and private community hospitals

SYNOPSIS: Eligible patients included those with a single, peripheral, indeterminate, pulmonary nodule 10 to 30 mm in diameter with a pretest cancer risk of at least 10%. They were randomly assigned to either navigational bronchoscopy or transthoracic needle biopsy. 234 total patients were evaluated. The primary outcome of diagnostic accuracy demonstrated non-inferiority between methods (79% accuracy for navigational bronchoscopy versus 73.6% for transthoracic needle biopsy; P=0.003 for non-inferiority, P=0.17 for superiority). Secondary outcomes of note included higher procedural complications in the transthoracic biopsy group (29.2%, versus 5% for bronchoscopy), with the majority of complications being pneumothorax. Strengths of the study included mitigation of possible expertise bias by the involvement of multiple healthcare sites and proceduralists. Limitations included a higher use of rapid onsite cytologic evaluation in bronchoscopy cases (94.8%) as compared to transthoracic biopsies (7.2%), which may have impacted diagnostic yields.

BOTTOM LINE: For the evaluation of pulmonary nodules, navigational bronchoscopy is noninferior in diagnostic accuracy as compared to transthoracic needle biopsy but with a superior safety profile.

CITATION: Lentz RJ, et al. Navigational bronchoscopy or transthoracic needle biopsy for lung nodules. *N Engl J Med*. 2025;392(21):2100-2112. doi: 10.1056/NEJMoa2414059.

Dr. Nohner is a hospitalist at the Nebraska Medical Center and assistant professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Jill Zabih, MD

5 Adding Budesonide to Albuterol Rescue Therapy in Patients with Mild Asthma Decreases Severe Exacerbations

CLINICAL QUESTION: Is as-needed albuterol-budesonide superior to albuterol alone in patients with mild asthma?

BACKGROUND: Although patients with mild asthma are often considered low risk, they still can have severe exacerbations. Typically, these patients rely on short-acting beta-2 agonists (SABAs) for as-needed symptoms, but SABAs do not address airway inflammation. Data for patients with moderate to severe asthma support the use of combined SABA-inhaled corticosteroid rescue therapy.


Dr. Zabih

STUDY DESIGN: Randomized, double-blinded

SETTING: Multiple U.S. centers

SYNOPSIS: More than 2,400 patients aged 12 or older (97% were over age 18) were enrolled and randomized to either use albuterol alone or albuterol-budesonide as needed for asthma symptoms. The trial was stopped early for efficacy after an interim analysis showed a 47% lower risk of severe exacerbations with albuterol-budesonide (P <0.001). Rates of severe exacerbations and systemic corticosteroid exposure were also significantly lower in the albuterol-budesonide group. Adverse events were similar between the two groups.

BOTTOM LINE: Incorporating an inhaled corticosteroid into rescue therapy can significantly improve outcomes in patients with mild asthma when compared to SABA alone.

CITATION: LaForce C, et al. As-needed albuterol-budesonide in mild asthma. *N Engl J Med*. 2025;393(2):113-124. doi: 10.1056/NEJMoa2504544.

Dr. Zabih is a hospitalist at the Nebraska Medical Center and an assistant professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Joseph Pachunka, MD

6 The cogPOISE-3 Trial: No Changes in Neurocognitive Outcomes Associated with Perioperative Hypotension Avoidance Versus Hypertension Avoidance

CLINICAL QUESTION: Does perioperative hypotension avoidance versus hypertension avoidance carry an increased risk of postoperative delirium or cognitive decline?

BACKGROUND: There is concern that increased rates of intraoperative hypotension can lead to an increased risk of postoperative delirium or cognitive decline, while various observational studies have implicated both intraoperative hypotension and hypertension.


Dr. Pachunka

STUDY DESIGN: Randomized, controlled, multi-center, unblinded trial

SETTING: 54 centers across 19 countries

SYNOPSIS: The cogPOISE-3 Trial (a sub study of POISE-3) randomized patients undergoing noncardiac surgery who were on chronic antihypertensives, over age 45, and without dementia to the two blood pressure management strategies, comparing rates of postoperative delirium and evidence of cognitive decline. This was the largest, and first multicenter, trial regarding this question to date.

Using the 3-Minute Diagnostic Interview for Confusion Assessment Method (3D-CAM) (or Confusion Assessment Method for the ICU, or CAM-ICU, when appropriate), 95 of 1,310 (7.3%) patients in the hypotension-avoidance group and 90 of 1,293 (7.0%) in the hypertension-avoidance group experienced delirium, a relative risk of 1.04 (95% CI, 0.79 to 1.38).

The primary analysis for cognitive decline used a decrease of more than two points on the Montreal Cognitive Assessment from baseline findings at one year, with 129 of 347 (37.2%) patients in the hypotension-avoidance group and 117 of 354 (33.1%) in the hypertension-avoidance group meeting this criteria, a relative risk of 1.13 (CI, 0.92 to 1.38).

The rate of intraoperative hypotension requiring intervention was 19% in the hypotension-avoidance and 27% in the hypertension-avoidance group, a relative risk of 0.63 (CI, 0.52 to 0.76). Rapid identification of intraoperative hypotension and intervention likely limited impact on clinical outcomes.

BOTTOM LINE: There was no effect on postoperative delirium or cognitive decline at one year between the hypotension-avoidance or hypertension-avoidance strategy.

CITATION: Marcucci M, et al. Effects of a hypotension-avoidance versus a hypertension-avoidance strategy on neurocognitive outcomes after noncardiac surgery. *Ann Intern Med*. 2025;178(7):909-920. doi: 10.7326/ANNALS-24-02841.

Dr. Pachunka is a med-peds internal medicine hospitalist and outpatient internal medicine-pediatrics practitioner at the Nebraska Medical Center and an assistant professor at the University of Nebraska Medical Center, both in Omaha, Neb.

By Kurt Andree, DMSc, PA-C, CAQ-HM

7 Oral Semaglutide and Cardiovascular Outcomes in High-Risk Type 2 Diabetes

CLINICAL QUESTION: Does oral semaglutide decrease major cardiovascular events in patients with type 2 diabetes and cardiovascular disease and/or chronic kidney disease?

BACKGROUND: Approximately 828 million adults have diabetes, with 90% having type 2. The injectable form of semaglutide has demonstrated cardiovascular safety and effectiveness in type 2 diabetics with atherosclerotic cardiovascular disease, chronic kidney disease, or both. Meanwhile, the oral form has not yet been fully studied for cardiovascular efficacy. This trial targeted individuals with known cardiovascular disease, representing about 32% of the diabetic population.


Mr. Andree

STUDY DESIGN: Double-blinded, placebo-controlled, event-driven, superiority trial

SETTING: 444 sites across 33 countries

SYNOPSIS: The Semaglutide Cardiovascular Outcomes (SOUL) Trial enrolled 9,650 participants from 33 countries between June 2019 and March 2021. Half of the participants received 14 mg of semaglutide daily (escalated from 3 mg), and the other half received a placebo. The primary outcome was major cardiovascular events—a three-point composite of death from cardiovascular causes, nonfatal myocardial infarction, or nonfatal stroke. In the semaglutide group, a primary outcome event occurred in 12% of participants, compared to 13.8% in the placebo group (hazard ratio [HR], 0.86; CI, 0.77 to 0.96). The absolute risk reduction for the semaglutide group compared to placebo was 2%, with a number needed to treat of 50. Semaglutide showed positive results for secondary outcomes. Statistical significance was not demonstrated for major kidney disease events. The overall findings align with trials evaluating injectable GLP-1s. Both groups experienced similar adverse events, but gastrointestinal issues and medication discontinuation were more common with semaglutide. Although the safety profile of oral GLP-1 medications has been established, this trial highlights their cardiovascular benefits.

BOTTOM LINE: Oral semaglutide lowers major adverse cardiovascular events in individuals with type 2 diabetes and cardiovascular disease, chronic kidney disease, or both.

CITATION: McGuire DK, et al. Oral semaglutide and cardiovascular outcomes in high-risk type 2 diabetes. *N Engl J Med*. 2025;392(20):2001-2012. doi: 10.1056/NEJMoa2501006.

Mr. Andree is a physician assistant at the Nebraska Medical Center and an adjunct assistant professor at the University of Nebraska Medical Center, both in Omaha, Neb.

By Brian Shahan, MD, FAAFP, DFPHM

8 Discordant Pleural Exudates Are Common and Have a Different Diagnostic Pattern Than Concordant Pleural Exudates

CLINICAL QUESTION: How common are discordant pleural fluid exudates, and do they have different diagnostic patterns compared to concordant pleural fluid exudates?

BACKGROUND: Pleural effusions are classified as an exudate if at least one of Light's Criteria are met: (1) pleural fluid protein: serum protein ratio greater than 0.5; (2) pleural fluid lactate dehydrogenase (LDH): serum LDH ratio greater than 0.6; or (3) pleural fluid LDH is two-thirds the normal serum LDH, per reference range for the laboratory. Previous studies suggest that up to 25% of transudates are misclassified as exudates when using Light's Criteria. Misclassifying a pleural effusion can delay diagnostic and treatment decisions. A discordant exudative pleural effusion is either when the LDH is elevated or the protein, but not both. The diagnostic patterns of discordant pleural effusions are not known and may represent an opportunity to improve diagnostic accuracy.


Dr. Shahan

STUDY DESIGN: A retrospective cohort study

SETTING: Oxford University Hospitals (U.K.)

SYNOPSIS: 715 exudative pleural fluid samples from Oxford University Hospitals (a tertiary center) from 2015 to 2017 were studied, after excluding subsequent samples from the same patient. Exudative samples were defined as discordant (low protein and high LDH or vice versa) and concordant (high protein and high LDH). A multidisciplinary pleural team used medical records to determine the final diagnosis and cause of each pleural exudate. Chi-squared analysis was used, with adjustments for age and sex.

Discordance occurred in 32% of the exudates analyzed. Discordant exudates had a significantly higher likelihood of diagnosis of fluid overload (10% versus 2%, *P* <.0001), benign asbestos-related pleural effusion (14% versus 9%, *P*=.031), and intensive-care-unit–associated effusion (9% versus 3%, *P*=.001) compared to concordant effusions. Pleural infection (6% versus 16%; *P* <.0001) and malignant pleural effusion (34% versus 42%; *P* =.025) were less frequent in discordant than in concordant exudates. Limitations of this study include the retrospective, single-center format and a study population with a potentially higher incidence of asbestos-related effusions than the general population.

BOTTOM LINE: Discordant pleural exudates are common and have a distinct diagnostic pattern that is more likely to represent a fluid overload state or a benign asbestos-related effusion, and less likely to be a pleural infection or malignant effusion when compared to concordant pleural exudates.

CITATION: Addala DN, et al. Incidence of discordant pleural fluid exudates and diagnostic patterns: a retrospective cohort study. *Chest*. 2025;168(6):1517-1527. doi: 10.1016/j.chest.2025.05.048.

Dr. Shahan is a hospitalist at the Nebraska Medical Center and an associate professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Bridgette O'Neill, MD

9 CPOE Prompts Reduce Use of Empiric Extended-Spectrum Antibiotics for SSTIs Without Increasing ICU Admissions or Hospital LOS

CLINICAL QUESTION: Can computerized provider order entry (CPOE) prompts safely reduce empiric extended-spectrum antibiotic use for noncritically ill, hospitalized patients with skin and soft tissue infection (SSTI) by presenting patient- and pathogen-specific multidrug-resistance-risk factors to ordering physicians?

BACKGROUND: 30 to 50% of hospitalized patients with SSTI receive extended-spectrum antibiotics despite low likelihood of infection with multidrug-resistant organisms (MDROs). Physicians have cited the presence of co-morbidities, insufficient diagnostic data, and concern that the incorrect antibiotic choice will lead to extended hospitalization as reasons for non-adherence to SSTI guidelines. However, extended-spectrum antibiotic overuse can cause harm.


Dr. O'Neill

STUDY DESIGN: Cluster-randomized, controlled trial

SETTING: 92 hospitals within the Hospital Corporation of America healthcare system

SYNOPSIS: 118,562 hospitalized, noncritically ill adult patients were included. Hospitals were randomly assigned to the routine stewardship group or the CPOE bundle group. The routine stewardship group received educational materials and coaching, including antibiotic selection guidelines and prospective feedback to de-escalate antibiotics. The CPOE bundle group received the same tools as well as CPOE prompts recom-

mending empiric standard-spectrum antibiotics for patients with an absolute risk less than 10% of *Pseudomonas* or MDRO SSTI, education on risk estimate calculations and local *Pseudomonas* and MDRO prevalence, investigator site visits and webinars, and clinician SSTI antibiotic prescribing reports. There was a 28% reduction in empiric extended-spectrum antibiotic use without an increase in hospital length of stay or need for early ICU transfer in the CPOE bundle group compared to the routine stewardship group. Study strengths include study size, validated and robust risk estimators, stewardship approach, and the sustainable nature of the intervention. Limitations include the use of skin cultures despite the inability to distinguish colonization from infection. A higher threshold of MDRO risk may have also been equally safe and more effective.

BOTTOM LINE: Unnecessary extended-spectrum antibiotic use for SSTI was safely decreased with the use of electronic medical record prompts, patient risk-stratification, and provider education.

CITATION: Gohil SK, et al. Improving empiric antibiotic selection for patients hospitalized with skin and soft tissue infection: the INSPIRE 3 skin and soft tissue randomized clinical trial. *JAMA Intern Med*. 2025;185(6):680-691. doi: 10.1001/jamainternmed.2025.0887.

Dr. O'Neill is a hospitalist at the Nebraska Medical Center and an assistant professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb.

By Chris Snyder, MD, MBA

10 Oral Anticoagulation and Risk of Adverse Clinical Outcomes in VTE

CLINICAL QUESTION: How do the three most prescribed oral anticoagulants compare in regard to venous thromboembolism (VTE) recurrence, prevention, and major bleeding?

BACKGROUND: Oral anticoagulants substantially reduce the risk of recurrent VTE. Since 2012, direct-acting oral anticoagulants (DOACs) have increasingly replaced warfarin, and in 2021, the American College of Chest Physicians recommended DOACs over warfarin for most patients with VTE. However, guidelines do not distinguish between DOACs, and head-to-head data remains limited.

Dr. Snyder

STUDY DESIGN: Retrospective, population-based, cohort study

SETTING: Three U.S. administrative healthcare databases, including both publicly and commercially insured patients from 2016 to 2024

SYNOPSIS: A total of 163,593 adults from three U.S. claims databases (2016 to 2024) who initiated apixaban, rivaroxaban, or warfarin within 30 days of VTE discharge were analyzed. Eligible patients were 18 years old or older, with at least 365 days of continuous insurance coverage. Exclusions included prior DOAC use, VTE hospitalization within the past year, end-stage kidney disease, or palliative care. Propensity score-matching weights adjusted for confounding. The mean age was 71.4 years; 56.7% were female. Treatment distribution was 58.5% apixaban, 25.7% rivaroxaban, and 15.8% warfarin.

Weighted incidence rates (per 1,000 person-years) for recurrent VTE were 23.3 (apixaban), 26.8 (rivaroxaban), and 38.3 (warfarin). Major bleeding rates were 30.6, 44.6, and 47.2, respectively. Apixaban was associated with lower recurrent VTE than rivaroxaban (HR, 0.87; 95% CI, 0.78 to 0.96) and warfarin (HR, 0.77; 95% CI, 0.69 to 0.87), and lower major bleeding than rivaroxaban (HR, 0.69; 95% CI, 0.63 to 0.75) and warfarin (HR, 0.70; 95% CI, 0.64 to 0.76). All-cause mortality was similar across agents. In patients with active cancer, DOACs were associated with higher mortality than warfarin, a finding that may reflect limitations of the study's observational design and reliance on administrative claims.

BOTTOM LINE: Apixaban demonstrated the best balance of safety and efficacy with lower rates of recurrent VTE and major bleeding when compared to rivaroxaban and warfarin, with comparable all-cause mortality.

CITATION: Bea S, et al. Oral anticoagulation and risk of adverse clinical outcomes in venous thromboembolism. *JAMA Intern Med*. 2025;185(7):837-846. doi: 10.1001/jamainternmed.2025.1109.

Dr. Snyder is a hospitalist at the Nebraska Medical Center and an assistant professor in the department of internal medicine at the University of Nebraska Medical Center, both in Omaha, Neb. ■

Complexity in Compensation in Academic Medicine

Valuing invisible work

By Ruth Jessen Hickman, MD

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Physicians in academic hospital medicine are usually motivated not just by their interest in clinical care, but by a love of intellectual progress, academic citizenship, mentorship, and teaching. For those attracted to these aspects as well as to direct patient care, a career as an academic hospitalist can bring a balanced sense of fulfillment, as one contributes to both immediate patient well-being and the broader missions of academic medicine.

Yet the multifaceted nature of these responsibilities can make it challenging to build a compensation structure that is truly fair. In some cases, clinical productivity metrics may unfairly weigh specific clinical achievements, while leaving other important contributions relatively unrecognized and invisible.

Dr. Kurian

"Traditional models of hospitalist compensation were mostly focused just on clinical productivity," said Linda M. Kurian, MD, executive vice chair of the department of medicine at Northwell Health, and professor of medicine at the Zucker School of Medicine at Hofstra/Northwell, both in New York. "In hospital medicine, and in academic medicine in general, there's been a lot of resurgence of trying to think about how we can also compensate for the non-clinical work that physicians are doing." Such work might include not just research and teaching, but other important aspects, such as committee work or quality improvement projects.

Institutions have developed different approaches and metrics to financially compensate academic hospitalists for these different responsibilities, but all have their drawbacks. Delving into such questions brings up broader tensions: What is the difference between "academic" and "nonacademic" hospitalists, fundamentally? Can all important contributions be measured, and should we even try? What motivates people to do good work, and to what extent should compensation reflect that? Will some kinds of work necessarily be reflected in relatively poorer compensation?

The Hospitalist talked with Dr. Kurian and several other hospitalists about these interrelated and hard-to-answer questions.

Compensation Models

Currently, most hospitalists are paid a base yearly salary, requiring a certain number of clinical hours. This salary often comes with the potential for bonuses or incentives, which might constitute a relatively small or quite large proportion of the base salary depending on the institution and the individual; these can be specified in various ways.

wRVU

These extra bonuses are sometimes quantified in terms of work relative value units (wRVUs). These units originally derive from the Centers for Medicare and Medicaid Services, which specifies the base physician fee schedule they will pay for specific physician services. Thus, they reflect income for the health center via Medicare and other insurance payors.

Community and private hospitals often use this measure. As part of a salary bonus, physicians may earn a certain base rate per wRVU which reflects their clinical output and the revenue they have generated; a minority of hospitalists are paid entirely based on their wRVUs.

Many have criticized the wRVU system, arguing that it prioritizes revenue concerns over patient health, makes volume more important than quality of care, and negatively impacts physician well-being. Jack Percelay, MD, a clinical professor of pediatrics in the division of hospital medicine at Stanford Medicine in Pleasanton, Calif., noted that the allocated wRVU doesn't always match the care that is needed. For example, a hospitalist often needs more time to perform patient education during discharge than the corresponding wRVU will cover.

Dr. Percelay

Whatever its flaws, however, the wRVU system at least has the advantage of attempting to capture the primary mission of these settings: providing clinical care.

FTE Models and Academic Medicine Settings

Applying wRVU is more complicated in academic settings. Kevin J. O'Leary, MD, MS, chief of the division of hospital medicine and the John T. Clarke Professor of Medicine at Northwestern University Feinberg School of Medicine in Chicago, shared, "In academic hospital medicine, patient care is the most important mission, but the mission is also in teaching and doing innovative research to discover new knowledge."

Dr. O'Leary

Thus, many academic medical centers use a different salary model, the full time equivalent (FTE) model. Here, physicians are paid a salary based on their time commitment, e.g., requiring a certain number of shifts.

Because of the intensity of time on the wards, such physicians primarily pursue non-clinical

tasks when they aren't on service. In such a model, interested physicians might apply for certain opportunities, e.g., in teaching or research, that buy out part of their time. For example, an administrative, research, or teaching position at .2 FTE might allow for a consequent 20% reduction in expected clinical time. This gives physicians additional time to pursue these non-clinical interests.

Partly due to increasing budgetary pressures, some academic hospitals have begun incorporating wRVUs in contracts to potentially increase clinical revenue. This has important implications for academic hospitalists who want to pursue non-clinical avenues as part of their career, as wRVUs do not capture this other important work.

For example, Christopher Sankey, MD, FACP, SFHM, is director of the program in hospital medicine and associate professor of internal medicine at Yale School of Medicine in New Haven, Conn. His institution moved from an FTE model to one based on clinical productivity, under which faculty are expected to generate a certain threshold of wRVUs per year. He has a combination of teaching and administrative roles that bought out 60% of his time, so his expected annual wRVU expectation was reduced by 60%.


Dr. Sankey

However, it's difficult to match this up exactly, in either a wRVU or FTE system; many nonclinical roles realistically take up more time than the percent allotment, which can impinge on other job tasks or personal time.

Additionally, many academic hospitalists have other responsibilities and expectations that don't fall under specifically funded "protected" time. For example, Dr. Sankey participates in a longstanding student preceptor program that requires significant time, but without any additional time allotment or alteration in wRVU expectations. It's often culturally expected that academic hospitalists take on this sort of additional work, although it may not technically be required. Academic faculty often hope this work be viewed favorably in academic promotions considerations, but this is also becoming less the case, noted Dr. Sankey.

Thus, academic hospitalists may be expected and pressured to assume certain responsibilities, responsibilities that are relatively invisible at the institutional oversight level, in contrast to wRVU. These pressures can lead to underprioritizing important non-clinical work that is part of the academic hospital mission; moreover, such invisible work can contribute to poor job satisfaction and physician burnout.

Tara Lagu, MD, MPH, recently moved from a full-time role in academic medicine with Northwestern University to adjunct status there and a position with Alliant Insurance Services, with additional work as a per diem hospitalist at MaineHealth. The relentlessness of these extra responsibilities was a big part of the reason she made this choice, although she loved the world of academic medicine.


Dr. Lagu

Dr. Lagu shared, "At some points in my academic career I was doing so much of that extra work like mentoring, giving lectures, and serving on committees that I wasn't having time to do my own research. I was working every weekend and night to get it all done."

Academic Hospitalist Compensation and Motivation

For complicated reasons, academic hospitalists have a lower median annual salary compared to non-academic hospitalists of the same level. This may be partly based on differences between medical schools and private hospitals, the relevant payers, and the kind of communities served. Also, clinicians in a community setting have more of an opportunity to significantly increase their income via additional clinical wRVUs.

"In the community setting, there's often a larger percentage of the compensation that is dependent on clinical productivity versus an academic setting," Dr. O'Leary said.

Dr. O'Leary pointed out that academic medical centers have additional responsibilities that impact their net income, which can impact potential salaries downstream. "Funding through research grants and funding for medical education is just not as lucrative as the clinical payment rate," he said.

Yet most people pursuing academic medicine do so out of intrinsic motivation and their desire to contribute. "Pediatric hospital medicine educators and researchers didn't go into this for the money," Dr. Percelay said.

Whether or not these compensation differences *should* matter is a sticky question. Academic hospitalists are still well paid, if not quite as well as some of their colleagues. Shouldn't that be enough? Or, if they truly value education, research, and other essential non-clinical work, shouldn't institutions make every effort to reflect that in financial compensation?

By the Numbers

SHM's State of Hospital Medicine Report is packed with research and trends on hospital medicine group configuration and operation that can help hospitalists make decisions and improve groups. The following data, pulled from the report, relate to compensation and wRVUs:

According to the SoHM Report, in 2025, the median compensation for adult academic internal medicine hospitalist faculty was $278,258 per year, and the median number of wRVUs were 3,419. The median compensation for pediatric academic hospitalist faculty was $213,143 per year.

Physician compensation is comprised of three categories—base, production, and performance. For adult hospitalists, on average, that breaks down to 81.6% base, 11.2% production, and 7.2% performance. For nocturnists, on average, it breaks down to 87.5% base, 5.7% production, and 6.8% performance. For nurse practitioners or physician assistants, on average, it breaks down to 94.6% base, 1.5% production, and 4.0% performance.

The most commonly used performance measures for individuals were citizenship (attending meetings, working on committees, etc.), 58.3%; accuracy and/or timeliness of documentation, coding, or billing, 38.6%; clinical process measures, 23.8%; and academic productivity, 22.9%. The most common performance measures for groups were patient satisfaction, 51.1%; readmission rates, 50.2%; inpatient flow or throughput measures, 49.3%; and discharge time, 38.6%.

Scan the QR code to learn more about the SoHM Report or to purchase your copy. ■

Dr. Sankey explained that salary differences between academic and clinically focused faculty don't necessarily bother him, as long as they truly reflect payment for a different type of work: Taking a pay cut for a job with more non-clinical protected time and opportunities for other academic work, or vice versa, might appeal to different faculty members.

However, Dr. Sankey pointed out that the work of "academic hospitalists" and "non-academic hospitalists" has been converging in recent years, such that the field would benefit from more clearly defining the roles, skills, and goals of academic faculty. For example, some hospitalists at academic medical centers pursue only clinical responsibilities. Are they also academic hospitalists?

Present-day academic hospitalists in general have less protected time and greater clinical expectations than in the past, with wRVU-based models now creeping into compensation. Conversely, more community and clinical hospitalists are likely doing more academic work. As hospitalist jobs converge, salary differences may be less defensible in the absence of a clearer delineation of the roles and expectations of academic faculty.

Dr. Sankey is also concerned that viewing faculty strictly through the lens of wRVUs may ultimately lead to the extinction of the classic academic hospitalist role. From a purely fiduciary standpoint, if an academic hospitalist generates fewer wRVUs than their more clinically focused colleagues, do they become less valuable to the institution? This perspective risks overlooking the many important, often invisible, contributions that academic hospitalists make to academic medical centers beyond the generation of clinical revenue as measured by wRVUs.

"If academic hospitalists are going to continue to exist, we need to figure out a clear, convincing, and authentic way to show that we offer 'different value' and not lesser value," Dr. Sankey said.

Hybrid Models, Academic RVU, and Other Tracking

To balance the advantages and disadvantages of pure salary or pure wRVU methods, many health systems are moving towards some sort of hybrid compensation model. These might include compensation for wRVU but also for specific academic achievements, for teaching, or for other non-academic contributions. At an academic center, these bonuses are often a relatively small percentage of the overall salary, perhaps not an amount sufficient to truly change behavior.

Dr. Percelay explained, "These are used to demonstrate respect and recognition, to give people confidence, but it's not dollar for dollar the same as the clinical compensation. But that works for the people in the field who are primarily motivated to be educators and researchers." This is deliberately a relatively small percentage at Northwestern, explained Dr. O'Leary, because they are primarily hoping to tap into physicians' intrinsic motivation for such work.

Some centers have also devel-

oped explicitly non-clinical RVU systems to help better compensate physicians for their non-clinical work, including teaching, research, administrative work, quality improvement projects, committee work, curriculum development, mentorship, and more.

Under such a system, certain activities might be defined in terms of their worth, e.g., a certain number of non-clinical RVU for giving grand rounds, serving as a clerkship director, or publishing a peer-reviewed paper. Depending on the context, these might also be termed "academic RVU," "teaching RVU," or "research RVU." A certain number of non-clinical RVU might be required as part of one's contract, and/or such nonclinical RVU might be used to help calculate bonus compensation along with clinical wRVUs.

Many institutions have been excited about the potential of non-clinical RVU systems to help more fairly allocate resources in an objective and transparent way. One major challenge, however, is that unlike wRVUs, no national standard exists for what constitutes a unit of non-clinical work. Thus, institutions have had to develop their own methodologies to calculate and track such non-clinical RVUs.

"Everyone believes in the value of academic RVUs, but the operationalization of that has been the biggest challenge," Dr. Kurian said.

Dr. Kurian shared that Northwell's division of hospital medicine began tracking non-clinical RVU several years ago, with the aim of potentially moving to a compensation system that included it as an element. However, they found it extremely burdensome to track and oversee physician self-reporting, and it was difficult to develop a system that properly reflected different kinds of contributions. Other institutions have also experienced challenges developing non-clinical RVU systems that properly value non-clinical contributions without creating excessive documentation and administrative overhead.

Currently, Northwell is employing a more relaxed tracking method in which physicians yearly self-report on a number of academic and non-clinical contributions, information which can help guide departmental decisions. Even if not used directly as part of compensation measures, tracking can have benefits for academic departments, Dr. Kurian noted.

"I think we do need to show the value of the clinical and academic work physicians are doing as an academic department, because there's immense value in that work, and it helps us to justify equitable compensation," Dr. Kurian said.

Dr. Percelay advises physicians to try to track such work personally, even if not required by their institution. If non-clinical work is becoming burdensome, such data can be helpful in discussions with your division chief, for example. It can also help you recognize if work is encroaching on personal time; such knowledge may help you set limits and say no to extra unpaid professional responsibilities if overstretched.

Dr. Lagu also speculates on the potential value of evaluating processes and rethinking what institutions should ask of their academic physicians, eliminating or reorganizing components that aren't adding real value. "We aren't likely to be able to pay academics more, but what can we reduce to offset some of the additional workload we're putting on them?" she asked.

Helping physicians feel valued in their non-clinical work isn't just about compensation. Dr. O'Leary said, "There are so many ways to show people that we value their academic work."

For example, support might mean providing the right mentorship, helping someone get access to data or statistical resources, or providing curricular expertise. Dr. O'Leary also underscores that not everyone has the same interests and goals in medicine, and he tries to maintain a healthy division by supporting everyone's individual gifts.

Ultimately, many agree on the goal of getting better recognition for non-clinical work in academic medicine. Dr. Percelay sees these efforts as best originating from either the departmental level or across the entire school of medicine or academic center rather than specifically from a hospital medicine program or division. "Ultimately the goal is to get better recognition across the board for this non-clinical work. But it's going to be incremental, and it's going to be slow," he said.

"As a profession, we need to keep working on how to apply these principles to academics in a way that's fair and equitable," Dr. Lagu said.

"Hospital medicine is so pivotal in the functioning of any academic medical center," Dr. Kurian added. "It is incredibly important to try to capture and quantify the value of hospitalists' academic efforts from research, quality, innovation, and then to appropriately compensate for that, because that does have an impact on the way we deliver care for our patients." ■

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How Are AI's Seismic Transformations Impacting Front-line Hospitalists?

And how can they make artificial intelligence work for them?

By Larry Beresford

Amith Skandhan, MD, FACP, SFHM, a hospitalist and associate professor at UT Health in San Antonio, is so fascinated by the promise of artificial intelligence (AI) to transform medicine—especially hospital medicine—that he is completing advanced post-graduate training in AI and machine learning. His goal is to understand the technology deeply enough to bridge the gap between AI and medicine, advocate for its responsible deployment, and help redesign hospital workflows through a human-centered lens.


Dr. Skandhan

Dr. Skandhan said he believes hospitalists don't need to get that involved in the technical side of AI. But they do need AI literacy, which means understanding the basics. "You have to learn when to rely on AI and when not to," he said. "When it comes to AI, I feel what limits us is our imaginations, not the technology."

The Future is at Hand

Dr. Skandhan encouraged his colleagues to imagine a near-future version of hospital medicine where AI quietly supports care behind the scenes. "I wake up, and AI has already been analyzing my patient list overnight. It highlights what's likely to change with these patients, what needs follow-up, and what safety checks are required."

On hospital rounds, AI synthesizes data while the hospitalist speaks with the patient. It forms answers to the patient's questions, drafts notes in the background, and schedules needed clinical studies. "Can orders be placed without breaking our conversation?" he posed. "Can AI tell me, before sign-out, which patients are likely to deteriorate today, based on data and clinical trajectory? That technology exists—we just haven't reimagined and integrated it."

Dr. Skandhan said the best AI will be invisible, fully embedded into the electronic health record (EHR), and running quietly. If the system is working, he said clinicians simply show up and incorporate its insights into their care. "AI doesn't replace our judgment, but it amplifies our clinical acumen. It gives back the time and space that we want to spend with our patients."

But that future requires the right design and the right voices shaping it, he said. To get the version of AI doctors actually want and need—safe, empathetic, and practical for the doctor, for the hospital system, and, most importantly, for the patient—hospitalists must be part of its development, participating as the co-creators of the AI tools.

What Are We Talking About?

AI has been defined in terms of the simulation of human intelligence by computer systems that are able to absorb and analyze huge amounts of information. "AI has been around for a long time, but it very much entered the public consciousness recently," especially since the launch of OpenAI's ChatGPT in November 2022, said Zahir Kanjee, MD, MPH, a hospitalist at Beth Israel Deaconess Medical Center and assistant professor of medicine at Harvard Medical School, both in Boston.


Dr. Kanjee

"But we've been using artificial intelligence for a long time: for example, machine learning models. We've had sepsis alerts and all sorts of algorithms to help guide our thinking for a long time," he said.

"I think when a lot of people think about AI right now, what they're talking and dreaming and worrying about are the large language models, generative AI that can do a whole lot more than it used to do. We're learning more, and every week there's some new potential use case, or some other new thing that we see that they're capable of doing that we didn't think they were capable of doing," Dr. Kanjee said.

"I'm absolutely loving the ways it can reduce some tedium in my job, the mindless tasks. What I'm currently using includes discharge summary tools and ambient listening technologies. The AI medical scribe we use is called Heidi." He said AI can also help with diagnostic and management steps. "It could be potentially transformative for our jobs once we know exactly when and how to use it—or not."[1,2]

Ron Castillo, APRN is the lead advanced practice practitioner at Yale New Haven Health and one of the medical informatics officers for Yale Health, both in New Haven, Conn. He has an integral role in introducing its AI scribe and documentation assistant and other AI tools to the inpatient setting. He also sits on the Hospital Medicine Steering Board for EHR manufacturer EPIC.


Mr. Castillo

"As you can imagine, AI is a pretty hot topic on the EPIC board. One of the things we've talked about is the wide variety of perspectives and experiences with AI. Ask a clinician, administrator, or IT [information technology] person what AI means to them, and you will get different answers," said Mr. Castillo.

How AI is encountered is partly a matter of what people's interests are, and what they think is going to make their day easier or help them take care of their patients better, he said. Digital scribes, which listen to the doctor's conversation with the patient and incorporate the pertinent findings into a draft note or discharge summary, are generating a lot of interest in hospital medicine right now.

What AI can do for hospitalists is also institution-dependent, with hospitals on a spectrum of where they are at in adopting AI. "Some institutions are all in, and others are saying: Let's take a step back and see what everyone else does, see what works and what doesn't work, before we jump into this," Mr. Castillo said.

"At Yale, we are starting to get our feet wet with documentation assistance. We have predictive models for things like clinical deterioration or readmission risk." Yale Health uses clinical deterioration scores such as AgileMD's eCART software, which continuously reviews nearly a hundred data points to determine the patient's risk of clinical deterioration, he said. "The higher the score gets, we really should be thinking about what's driving that and whether we need to revisit the patient's care before we have a bad outcome on the floor," he said.

"I think it's one of those things, just like the EHR, that's not going away. We have to figure out how we can use AI to our advantage, our patients' advantage, to take good care of our patients and maintain that same quality and safety that we strived for pre-AI."

Language and Large Language

AI is a huge, multi-faceted field, rapidly evolving, with major transformations measured in months, not years, said Andrew Olson, MD, FAAP, FACP, SFHM, an adult and pediatric hospitalist and division director of hospital medicine at the University of Minnesota Department of Medicine, in Minneapolis, Minn. Of the various applications of AI, those most relevant to medicine use large language models, defined as complex neural networks that can make predictions about the associations between words. They are trained on vast amounts of text data to understand and generate human-like language.


Dr. Olson

When AI tools first started entering the healthcare system, you had to actively engage with them, opening the tools on your computer, Dr. Olson said. "More and more, the tools are being incorporated into the EHR, and there are models you're beginning to engage without even knowing that you're engaging with AI."

Dr. Olson has been an educational and clinical researcher throughout his medical career, with a particular interest in diagnostic error and how clinicians and teams make decisions. "I'm interested in these AI tools because I think they have an opportunity to change and improve how we make clinical decisions. But that needs to be studied."[2,3,4]

He suggested that it's possible to talk about AI's role in hospital medicine in three big buckets. The first is using it in routine and mundane ways to help with the routine work that hospitalists do every day. "The sheer volume of tasks that need doing in hospital medicine is a challenge," Dr. Olson said.

"So, can we use AI to help with tasks that maybe don't require our whole cognition, like chart review or writing notes? I think discharge summaries will become a bigger part of AI for the practicing clinician, summarizing what happened in the patient's course of hospitalization. We can do that now. They're quite good."

A second bucket is to use the technology for tasks that doctors were already doing, but to do them better. That might include displaying information that will enable the doctor to think better. And a final bucket is finding new and different ways to do things, or what an economist might call disruptive innovation, Dr. Olson said.

"For example, what we call a chart note, what if it became more like an individualized Wiki page for what you need to know about this particular patient, based on your specialty?" This could also apply to accessing clinical resources to answer patient care questions, moving from actively searching to having an AI tool suggest resources proactively.

"I think about other disruptive ways of communicating across handovers of care," Dr. Olson said. "What if I'm working at night and I walk into a rapid response situation? Could I just talk to the computer and say, 'Tell me what I need to know right now?' I think we often get stuck in doing what we've always done, just wanting to do it faster and more easily. We need to think about how we might do things differently than we've ever done before."

How Is AI Being Used?

Mihir H Patel, MD, MPH, MBA, FACP, CLHM, SFHM, is chair of the Inpatient Clinical Informatics Council at Ballad Health in Johnson City, Tenn. He recently relocated to Sacramento, Calif., where he practices hospital medicine part-time for Kaiser Permanente and Sutter Health. He also chairs SHM's Health Information Technology Special Interest Group.


Dr. Patel

"Everyone's talking about AI now, because it's finally powerful enough to make a real difference, with greater capacity, broader capability, able to support more applications," Dr. Patel said. "For hospitalists, that power sits right in our hands—through our phones, the EHR, and the tools we use at the bedside."

He explained that AI can support risk prioritization, streamline hospitalist workflow, and strengthen safety across transitions of care. This includes automatically summarizing a hospital stay for discharge, highlighting readmission risk, and bringing attention to social determinants of health or other subtle risk factors that might otherwise be overlooked.

"AI feels like a second pair of eyes, continuously reviewing details in the background and surfacing what is clinically important, so that in the pace of hospital work I can stay present with the patient rather than with the screen," Dr. Patel said. "Ambient documentation gives me back my time—turning pajama-time charting into family time, preserving not only hours but my passion for medicine."

The promise of AI is that it is becoming an assistant that can make various aspects of the job easier, such as in the diagnosis and treatment of patients, said Peter Barish, MD, a hospitalist at the University of California, San Francisco (UCSF) in San Francisco. "Large language models are already great for assisting in diagnosis, but how, particularly on the treatment side, can AI help us adhere to evidence-based practice?" he said.

"I think there is a big question about how can this help us synthesize complete data to make diagnoses, reduce diagnostic error, and then choose appropriate management. Can it help us access information in ways that are easier to use, more patient-targeted, more streamlined?" Dr. Barish said.

UpToDate and the Open Evidence medical information platform have been widely used by physicians to look up quick answers to clinical questions, especially for less common conditions, and these are being enhanced with the advances in AI. Published clinical guidelines don't always apply to every single patient, he said. "I think AI has the real potential to help customize and tailor evidence-based management to a particular patient."

What Can Hospitalists Do?

Find your hospital's AI Governance Committee and join it—or, if there isn't one, help to form one, Dr. Skandan said. "Right now, we don't have standardized AI governance in medicine, and the problem is that our AI policy will shape how we use it faster than the developments in AI technology itself."

He also recommended seeking out further education, peer discussion, and shared learning. "Have conversations with other hospitalists through SHM and other forums." A journal club or shared case discussions could be a great way to talk about what's working and what isn't.

One of the keys to working with AI is making sure it is guarding protected patient personal information, although that is also the responsibility of the hospital and its systems. The individual physician should not be entering protected data into software programs that aren't under the hospital's protected umbrella. But as more systems are integrated into the EHR, that will become less of an issue.

"We often talk about complacency in medicine and how that's a bad thing," Mr. Castillo said. "It's no different with AI. If I just blindly sign my AI-drafted note and I don't proofread it at all, and there's false information or missing information in there, that's on me." The system needs to have people testing, looking at, and studying whatever the latest technology is.

"How do we make sure that AI doesn't go off the rails? I think we continue to do what we always do as clinicians. We do our due diligence and our investigations. I think clinicians by nature are sort of skeptical beings to begin with, and that's no different here," Mr. Castillo said. "I'm certainly excited to be at the forefront of this technology in hospital medicine, but I want to make sure we do it right."

Dr. Olson said it's important for hospitalists to play with AI tools outside of their professional lives, especially the ones that are interesting to use—like a tool that can plug into their calendar and find open calendar slots for appointments.

Redefining Excellence

AI, obviously, is a huge, multifaceted phenomenon, bearing down on medicine and the rest of society like a massive tidal wave, with all sorts of implications, opportunities, and concerns. Robert Wachter, MD, of UCSF in San Francisco, a pioneer of the hospitalist movement in the U.S. and author of books about medical errors and the adoption of the EHR, has a new book coming out in February 2026 titled "A Giant Leap: How AI is Transforming Healthcare and What That Means for our Future." It explores generative AI's transformative potential for medicine as well as the lesson from the fraught implementation of EHRs that digital transformation in healthcare is harder than it looks.

Dr. Skandhan noted that this huge topic of AI has generated a lot of excitement but also misunderstandings among physicians. "Personally, I feel this is a very exciting time for hospitalists," he said, adding that fears that it is going to replace physicians seem unfounded. "Hospitalists stand at the crossroads of the hospital. Our voice is essential in determining how AI is used—for patients, for our teams, and for ourselves. We know better than anyone how it can be used safely, ethically, meaningfully."

Dr. Skandhan believes hospitalists should be mapping their own workflow to identify where AI could help, and to understand the data any tool is trained on. "Bias isn't just a technical concern. It's a patient safety issue. AI can magnify disparities if we don't put guardrails in place." He also thinks SHM has a major opportunity to lead the way in national advocacy for responsible AI. "There must be transparency. There must be safety checks. Deployment should be clinician-led and hospitalist-led."

Ultimately, he believes AI will raise the standard of care. "I think hospitalists who use AI will redefine excellence. It helps us process information faster, so we have more time to be empathetic, present, and human at the bedside—why we went into medicine in the first place." ■

Larry Beresford is an Oakland, Calif.-based freelance medical journalist.

References

1. Kanjee Z, et al. Accuracy of a generative artificial intelligence model in a complex diagnostic challenge. *JAMA*. 2023;330(1):78-80. doi: 10.1001/jama.2023.8288.
2. Goh E, et al. Influence of a large language model on diagnostic reasoning: a randomized clinical vignette study. *medRxiv* [Preprint]. 2024:2024.03.12.24303785. doi: 10.1101/2024.03.12.24303785.
3. Goh E, et al. Large language model influence on diagnostic reasoning: a randomized clinical trial. *JAMA Netw Open*. 2024;7(10):e2440969. doi: 10.1001/jamanetworkopen.2024.40969.
4. Selvakumar S, Olson APJ. Faster and better for everyone-the future of AI-generated discharge summaries. *J Hosp Med*. 2025. doi: 10.1002/jhm.70186.

Technology

Hospitalist-Led AI Research

Shaping clinical practice through evidence

By R. Logan Jones, MD, Adam Rodman, MD, MPH, and Andrew S. Parsons, MD, MPH

Artificial intelligence (AI) is entering hospital medicine at a moment when the field needs it most and when the risks of getting it wrong are high. For many hospitalists, interest in AI has grown out of day-to-day pressures: notes completed late at night, fragmented data streams, and a sense that cognitive work is being squeezed by administrative tasks. In response to these pressures, AI tools are increasingly being explored as ways to support information management and clinical work. But without rigorous research, the real-world effects of AI on clinical reasoning and patient care remain uncertain, and its broader implications for our specialty are unclear.

Our research teams, composed primarily of hospitalists and spanning multiple academic medical centers, have been studying these tools in real clinical and educational settings to answer critical questions: How do AI scribes affect learner development? Can large language models (LLMs) actually improve diagnostic accuracy? What happens to clinical reasoning when algorithms enter the decision-making process? How do we implement these tools safely and at scale? Underlying all of these is a more pragmatic concern: What changes when AI becomes part of the ordinary cognitive environment of inpatient care?

Understanding AI's Impact on Clinical Reasoning Development

AI tools might be the fastest-adopted health technology in history, and they've crept into virtually every part of hospitalist workflows. The most visible integration may be in clinical reasoning itself: OpenEvidence, an LLM-based system that references published medical literature, is now used by more than 40% of U.S. physicians for point-of-care decision support.[1] Alongside these reasoning-assist platforms, ambient listening systems that capture clinical encounters and generate notes automatically are rapidly expanding. While implementation of AI scribes on hospital medicine services has lagged behind primary care services, in some institutions these tools are already being piloted on busy teaching services, while in others they are being discussed primarily as a burnout mitigation strategy. While often framed as efficiency solutions, their educational impact has received far less attention than their workflow effects.

A multi-site study now underway examines whether exposure to AI scribes during training influences how residents develop clinical reasoning. One important question raised by this work is whether trainees who spend less time constructing clinical narratives (e.g., problem lists, assessments, and plans) develop those skills differently over time. In daily practice, this is not a hypothetical concern; it shows up when residents struggle to explain why a plan changed or how competing problems were prioritized. At the same time, it is also possible that AI-assisted documentation reduces extraneous cognitive load and allows learners to focus more deliberately on synthesis and decision making. The study will track both possibilities without assuming in advance which effect will dominate.

In parallel, early research collaborations are underway, creating evaluation frameworks for groups considering ambient AI adoption. These toolkits will aim to provide standardized approaches to assess utility, detect harms, and train clinicians to recognize AI-generated errors before they reach patients. Rather than positioning AI as something to embrace or resist, this work reflects a practical question hospital leaders are already asking: "How do we know if this is actually helping?"

Dr. Jones

Dr. Rodman

Dr. Parsons

Dr. Jones is an associate professor of medicine in the division of hospital medicine at Oregon Health & Science University in Portland, Ore., where he also chairs the OHSU school of medicine's entrustment group. He co-chairs national efforts on best practices for implementing ambient AI and helps develop national physician AI competencies. Dr. Rodman is a hospitalist at Beth Israel Deaconess Medical Center, assistant professor at Harvard Medical School, and director of AI programs at the Carl J. Shapiro Center for Education and Research, all in Boston. He is also an associate editor for NEJM AI. *Dr. Parsons is an associate professor of medicine at the University of Virginia School of Medicine in Charlottesville, Va., where he also serves as associate dean for clinical competency and director for research and academic advancement in the division of hospital medicine. He is primary investigator on the Clinical Reasoning Research Collaborative at UVA, site lead for the ARISE research network, evaluating AI through real-world studies, and associate editor for the journal* Diagnosis.

Testing AI's Effect on Diagnostic and Management Decisions

While ambient AI automates documentation, LLMs are also being tested as direct clinical reasoning support, and recent randomized

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controlled trials have produced some of the first empirical data on how AI assistance influences physician decision-making in diagnostic and management tasks.

The findings reveal both promise and risk. In studies published in *JAMA Network Open* and *Nature Medicine*, physicians using AI assistance demonstrated improved diagnostic accuracy on complex cases.[2,3] However, the same studies identified automation bias, the tendency to over-rely on algorithmic suggestions, even when incorrect. For clinicians accustomed to making rapid decisions with incomplete information, this creates a familiar but uncomfortable dynamic: confidence without full understanding.

Additional research in *JAMA* and *JAMA Internal Medicine* shows that LLMs can estimate diagnostic probabilities and complete structured reasoning tasks at levels approaching physician performance.[4,5] What remains less clear is how these outputs are interpreted once they enter real clinical workflows, particularly when time pressure, interruptions, and competing priorities are present.

A *Lancet* perspective situates modern reasoning-model AI within the lineage of cognitive psychology and script theory, arguing that while LLMs may display "emergent" reasoning, true clinical reasoning remains a human, contextual act.[6] Work published in the *Journal of Hospital Medicine* and *NEJM AI* emphasizes the need for human benchmarking, transparency about AI limitations, and systems that support, rather than replace, clinical judgment.[7,8]

For hospital medicine, these studies matter because they address the actual cognitive work hospitalists do: synthesizing fragmented data, managing competing priorities, and making decisions under time pressure. Understanding how AI changes these processes is essential before integrating it into daily practice.

Defining What Physicians Need to Know About AI

Perhaps the most consequential research involves translating frontline findings into educational competencies and implementation standards. Work with the Association of American Medical Colleges and other national organizations is defining the knowledge that future physicians must know to practice safely in AI-augmented environments.

This includes practical skills: recognizing automation bias, auditing AI-generated content for errors, recognizing moments when algorithmic suggestions warrant closer scrutiny, and maintaining clinical reasoning skills even when AI assistance is available. It also includes systems-level competencies: evaluating AI tools before adoption, advocating for transparent implementation, and participating in institutional governance around AI use.

Research on management reasoning, the process hospitalists use to decide what to do next amid uncertainty and competing demands, provides a useful lens for teaching and assessing these skills.[9,10] By examining how AI interacts with the mechanics of clinical decision-making, this work contributes shared language to conversations many hospitalists are already having.

What This Means for Hospitalists

The research emerging from hospitalist-led studies offers several areas for consideration:

For clinical practice: AI tools show potential to enhance diagnostic accuracy, while also introducing new cognitive risks. Hospitalists should approach AI assistance thoughtfully with informed skepticism, using it as a reasoning aid while maintaining independent clinical judgment. Institutions implementing AI should provide training on recognizing automation bias and auditing AI outputs.

For education: Ambient AI may affect how trainees develop reasoning skills. Programs adopting these tools may wish to monitor learner outcomes and preserve opportunities for trainees to practice the cognitive work of clinical synthesis. Deploying AI without attention to educational context may have unintended effects on skill development.

For institutional adoption: Hospitals considering AI tools are likely to benefit from rigorous evaluation frameworks before widespread deployment. The evidence-based toolkits now being developed provide methods to assess utility, detect harms, and optimize implementation, moving beyond vendor claims to actual measurement of impact on workflow, safety, and clinical outcomes.

For the specialty: Hospital medicine sits at the intersection of clinical complexity and systems thinking, placing hospitalists in a position to help translate AI capabilities into clinical contexts. As this technology improves, ongoing engagement from hospitalist researchers and frontline clinicians will be important, focusing on how AI changes not just what we do, but how we think.

Moving Forward

The hospitalist-led research described here represents work in progress within a rapidly advancing field. Many critical questions remain unanswered: What is AI's long-term impact on diagnostic skill maintenance? How do we prevent algorithmic disparities from amplifying existing healthcare inequities? What regulatory frameworks balance AI safety with innovation?

What is becoming clearer is that hospitalists are active participants in how AI technologies are studied, implemented, and evaluated. The cognitive work of hospital medicine—rapid decision-making, synthesis of incomplete data, and coordination across fragmented systems—means that even modest changes in decision support can have meaningful downstream effects.

Hospitalist researchers are building the evidence base. Whether that evidence translates into better care will depend on clinicians who bring not just curiosity about AI, but the judgment to know when it helps and when it doesn't. ■

References

1. OpenEvidence Collaborates with Microsoft to Expand AI. Openevidence.com website. https://www.openevidence.com/announcements/openevidence-collaborates-with-microsoft-to-expand-ai-leadership-in-healthcare-bringing-clinical-evidence-and-guidelines-to-enterprise-clinician-workflows. Published October 16, 2025. Accessed January 10, 2026.

2. Goh E, et al. Large language model influence on diagnostic reasoning: a randomized clinical trial. *JAMA Netw Open*. 2024;7(10):e2440969. doi: 10.1001/jamanetworkopen.2024.40969.

3. Goh E, et al. GPT-4 assistance for improvement of physician performance on patient care tasks: a randomized controlled trial. *Nat Med*. 2025;31(4):1233-1238. doi: 10.1038/s41591-024-03456-y.

4. Kanjee Z, et al. Accuracy of a generative artificial intelligence model in a complex diagnostic challenge. *JAMA*. 2023;330(1):78-80. doi: 10.1001/jama.2023.8288.

5. Cabral S, et al. Clinical reasoning of a generative artificial intelligence model compared with physicians. *JAMA Intern Med*. 2024;184(5):581-583. doi: 10.1001/jamainternmed.2024.0295.

6. Rodman A, Topol EJ. Is generative artificial intelligence capable of clinical reasoning? *Lancet*. 2025;405(10480):689. doi: 10.1016/S0140-6736(25)00348-4.

7. Rodman A, Kanjee Z. The promise and peril of generative artificial intelligence for daily hospitalist practice. *J Hosp Med*. 2024;19(12):1188-1193. doi: 10.1002/jhm.13363.

8. McCoy Liam, et al. Assessment of large language models in clinical reasoning: a novel benchmarking study. *NEJM AI*. 2025;2(10); doi: 10.1056/Aldbp2500120.

9. Parsons AS, et al. How postgraduate medical trainees conceptualise management reasoning: A qualitative study. *Med Educ*. 2025. doi: 10.1111/medu.70123.

10. Dreicer JJ, et al. The diagnostic medical interview. *Med Clin North Am*. 2022;106(4):601-614. doi: 10.1016/j.mcna.2022.01.005.

Unique Elective in Hospital Medicine for Medical Students

By Kathryn Haroldson, MD, Adriem Ortiz, MD, and Cynthia Glickman, MD

Hospital medicine requires both clinical expertise and an understanding of healthcare systems. While some residency programs offer hospital medicine electives, including the Junior Hospitalist Elective offered at our institution (Cooper Medical School of Rowan University, in Camden, N.J.) medical students often receive limited exposure beyond required rotations. A significant challenge exists for fourth-year medical students (M4s) who seek to advance their clinical independence through sub-internships but face limited availability.[1,2] This lack of early exposure and restricted opportunities prompted two junior faculty members to develop the sophomore hospitalist elective. Designed to introduce medical students to key aspects of hospital medicine, this elective was developed to provide hands-on experiences in patient care, interdisciplinary collaboration, and system-based practice. By addressing these challenges during medical school, the goal was to enhance students' readiness for future training and careers in hospital medicine.

Key Takeaways

- The sophomore hospitalist elective was created to provide more opportunities for fourth-year students to participate in sub-internship positions and to provide early exposure to hospital medicine.
- The elective focuses on enhancing clinical independence and confidence in patient management through direct patient care responsibilities and one-on-one supervision from attending physicians.
- The elective has shown success, with a high percentage of participating students matching into internal medicine and positive feedback from students, indicating its effectiveness in fostering interest and possibly preparing students for careers in the field.
- Future directions include tracking career paths post-residency, faculty development, and expanding the elective to third-year medical students.

Solution Overview

The primary objectives of the sophomore hospitalist elective include enhancing clinical independence, building confidence in patient management, and fostering a deeper understanding of the hospitalist's role on a direct care service. Key stakeholders in this initiative include medical students, hospitalist faculty, residency program leadership, and hospital administrators.

By engaging with experienced hospitalists, students gain insight into the challenges and rewards of this specialty, preparing themselves for more advanced clinical responsibilities in their training. The sophomore hospitalist elective was initially created to increase available internal medicine inpatient electives for fourth-year medical students in the 2023 to 2024 academic year. The inpatient teams at our hospital have one resident, one or two interns, one sub-intern, and two third-year medical students taking care of up to 14 patients. This often limits opportunities for the sub-interns to take on a census of more than three or four patients. On the other hand, each student in the sophomore hospitalist elective is assigned six patients to help instill confidence in clinical decision making of a larger patient census compared to their third year of medical school. Students are responsible for responding to messages from nurses, calling pharmacies, providing updates to family members, and updating discharge paperwork and handoffs. This hands-on responsibility is critical for developing autonomy, reinforcing the ability to synthesize medical knowledge, and improving efficiency in inpatient care settings.

There were three other important strategies in the development of the sophomore hospitalist elective. Our hospital has nine internal-medicine inpatient teaching services, but also includes many other capable educators who are interested in engaging with students. This elective has created new opportunities for junior hospitalist attendings to gain experience with teaching students. For some fourth-year medical students deciding between internal medicine and another specialty, this elective provided valuable insight into the day-to-day responsibilities of an internal medicine resident and played a significant role in informing their final career choice. Finally, some students participated in this elective after the Match, providing a valuable opportunity to prepare for intern year.

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Implementation Process

The sophomore hospitalist elective was developed approximately six months prior to implementation. It was approved by the medical school's phase II subcommittee (for third- and fourth-year medical student courses) and the curriculum committee. Within two weeks of starting the elective, the students met virtually with one of the course directors to discuss expectations and workflow. Leading up to each student's first day on the elective, the course directors emailed expectations to the hospitalist attendings (see Table 1) and made sure the hospitalist site directors and administrative staff were aware of the students rotating on the elective.

Of note, there were two obstacles the course directors encountered. At our institution, medical student notes cannot be cosigned for billable purposes, so attendings needed to adjust their workflows. In addition, in the summer months, there are new incoming interns, and many educational resources are devoted to them, but this is also a very popular time for the students to take the course. To address these obstacles, the course directors were able to lower the census of these teams by one to two patients to allow for increased time for teaching.

The program stands out because it did not require any compensation or reduction of clinical duties for the course directors or faculty. It has become a sustainable program that benefits students and hospitalist faculty without any additional resources or costs.

Outcomes and Impact

The sophomore hospitalist elective is a one-of-a-kind course designed to introduce the idea that hospitalists not only perform as clinicians, but also as leaders who aim to improve their hospital system. Creating opportunities for learners to interact one-on-one with attendings and increasing their clinical care responsibilities has received consistently positive feedback:

"I enjoyed and was grateful to have the kind of autonomy that I was given during this elective. I truly felt like I was months away from being a real doctor!"

"The clinical faculty I worked

Table 1. Expectations set with students and attendings prior to the start of the sophomore hospitalist elective course

DURATION	2 weeks
HOURS	50 hours/week, no nights or weekends
SUPERVISION	Attending physician (no residents)
CLINICAL EXPERIENCE	• Pre-round and write daily progress notes on 6 patients • Bedside rounds with attending physician • Provide clinical updates during multidisciplinary rounds • Call consultants and provide updates to family members • Afternoon table rounds for updates • Update handoffs and discharge paperwork

with were amazing and really knew the best ways to get me involved and more prepared for residency in ways that the general [internal medicine] sub-i[nternship] did not. I appreciate that they got me more involved in direct patient care, such as placing orders and reaching out to referrals. They also went out of their way to ensure I was being appropriately taught, and they really prioritized my education."

"The sophomore hospitalist elective was amazing, and did an excellent job at giving insight into hospital medicine. One of the strengths is being able to see six patients throughout the week. By being able to go up to six patients, I was able to learn from each one and present all of them with a plan to my attending physician. Another strength is being able to pend orders and discuss different management protocols with my attending physician. This allowed me to specifically learn the insight into different order protocols and how to do them."

Faculty members have also requested to rotate on this elective frequently:

"I think it's a great elective to get 1:1 with a student. On a teaching team, there are so many people that it's really hard to focus on a trainee's strengths and weaknesses, so this is a great place to be able to do that. Sometimes it may add more work, but overall, I think that having a strong trainee makes

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your life easy and, honestly, fun. Sometimes direct care is a little lonely!"

"I had a great week on this rotation. I would certainly participate in this rotation again. "

"I think this is a good rotation—it's still teaching but much less formalized with more rapid feedback and a collaborative environment. I structured rounds as me shadowing the student directly most days to directly observe their bedside manner, and this was well received by the student I worked with."

The sophomore hospitalist elective has served 15 medical students during 30 elective weeks in two years, with 73% matching into internal medicine, notably 100% in the most recent year. In addition, the elective has developed into a reliable source of letters of recommendation for students. The first year, only one letter of recommendation was written; however, in the second year of the elective, seven letters of recommendation were written because of clinical interactions during this elective.

Lessons Learned

The sophomore hospitalist elective is an effective way to create new opportunities for fourth-year medical students to rotate with hospital medicine attendings as they try to gather letters of recommendation and finalize their chosen field for residency applications, despite limited sub-internship spots. The elective also gives students the chance to experience the workflow of a direct care service, which they would not otherwise see until they become attendings. This elective has also created teaching opportunities for junior faculty that they would not otherwise have. To sustain the program, the elective directors will continue to recruit junior faculty members and will expand the program as staffing continues to grow.

Future Directions

We plan to create and implement a survey about how this elective affects students' perceptions of hospital medicine and future career plans. For students who match into internal medicine programs, we plan to track their career paths after residency to see if they decide to become hospitalists. We also plan to explore offering this program to third-year medical students during their spring elective period (we would call this the freshman hospitalist elective). We hope to create a model that not only supports students in making informed career decisions but also fosters enduring professional relationships. ■

References

1. Lin D, et al. Implementation of a hospital medicine rotation and curriculum for internal medicine residents. *MedEdPORTAL*. 2020;16:10977. doi: 10.15766/mep_2374-8265.10977.

2. Ludwin S, et al. Training residents in hospital medicine: the Hospitalist elective national survey. *J Hosp Med*. 2018;13(9):623-625. doi: 10.12788/jhm.2952.

Commentary

AI Scribes and the Disconnection in Documentation

By Juan Ortega-Sandoya, MD

A recent headline in *Forbes* declared, "AI won't replace you, a human using AI will," highlighting the transformative potential of artificial intelligence (AI) assistance in practice. In hospital medicine, one prominent implementation is the AI scribe, a tool designed to transcribe clinician-patient interactions in real time, populating the electronic health record with structured documentation.

Imagine walking into a patient room, microphone activated, speaking freely, with no notetaking required as the AI scribe listens in the background. Then, upon returning to the workstation, the encounter is already documented. Thus begins the era of the AI scribe, and its seductive promise: less typing, more talking.

In hospital medicine, the use of AI as a scribe is enticing, supported by data indicating that hospitalists spend approximately 17% of their time on direct patient care and 64% on indirect patient care, with 26% of the latter devoted to documentation.[1] A similar distribution of time is seen among emergency department physicians, who spend 31% of their time on documentation.[2] With hospitalists often allocating more time to reviewing electronic health record and documentation than to direct patient interaction, can an AI scribe help clinicians spend less time typing and more time gathering information from patients? In addition, according to the study "Where Did the Day Go?", it was also observed that many hospitalists postpone documentation until later.[3]

AI-scribes offer a solution: real-time transcription of histories and physical exams, consultation notes, and progress notes. They promise to eliminate deferred documentation and enhance the time required for clinical documentation.

However, they may also introduce challenges in obtaining pertinent clinical information. If the AI is listening and recording, are we really listening? These apps promise time saved, but that time has to come from somewhere. And it may be coming from our cognitive presence at the bedside, listening, interpreting, and making meaning.

In recent discussions with colleagues regarding the use of AI scribes, I have noticed that users of AI transcription tools are often identifiable by the increased length of their histories of present illness. A pattern also extends to Epic Chat, where more extensive messages may suggest the involvement of an AI scribe. As a result, lengthy messages often require multiple readings to fully grasp the consultation or concern. Then I nostalgically remember being taught to present patients with one-liners. It forced clarity. Now I read notes and Epic Chats that span paragraphs.

While AI scribes may reduce time typing, I worry they might create barriers, not just between physicians and patients, but among clinicians ourselves. As technology integrates into practice, we must remember that faster is not always better and longer does not always mean more meaningful. Documentation should serve understanding, not obscure it. ■

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References

1. Kim CS, et al. Hospitalist time usage and cyclicality: opportunities to improve efficiency. *J Hosp Med*. 2010;5(6):329-34. doi: 10.1002/jhm.613.

2. Füchtbauer LM, et al. Emergency department physicians spend only 25% of their working time on direct patient care. *Dan Med J*. 2013;60(1):A4558.

3. Tipping MD, et al. Where did the day go?—a time-motion study of hospitalists. *J Hosp Med*. 2010;5(6):323-8. doi: 10.1002/jhm.790.

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The Power of Coaching

Addressing distress and enhancing fulfillment in medicine

By Chris Sankey, MD, FACP, SFHM

I am a mid-career academic hospitalist deeply interested in physician wellness and burnout. At SHM Converge 2025 in Las Vegas, I attended the wellness plenary by Dr. Sandeep Jauhar titled "Our Emotional Lives Are Written on Our Hearts: Health, Wellness, and Burnout in Clinical Practice Today" with great anticipation. While the session highlighted the alarming state of physician burnout, I found the conclusions unsatisfyingly vague. "So, what can we do, as healthcare professionals, to improve our lives and our health?" he asked the room.

A growing body of evidence offers an actionable response: get a coach.

Physician coaching is increasingly recognized as a transformative, strengths-based approach that empowers clinicians to develop clarity, resilience, and purpose in a demanding profession. Unlike advising, mentorship, or psychotherapy, coaching focuses on facilitating self-directed growth and insight. As it gains traction in academic and clinical settings, coaching has demonstrated measurable benefits in reducing burnout, enhancing professional fulfillment, and promoting adaptive leadership.[1,2]

This article summarizes five published coaching interventions in medicine, highlighting various program designs, key outcomes, and lessons learned (see Table 1). These studies provide insight into how coaching can act as an effective lever for individual and organizational well-being.

The primary study by Mann et al. was a large, multicenter, randomized, clinical trial evaluating the impact of a four-month virtual group coaching program—Better Together Physician Coaching—on the well-being of 1,017 women physician trainees across 26 U.S. institutions.[3] Participants randomized to the coaching group received live group video coaching, anonymous written coaching, and weekly self-directed modules. Compared to controls, coached participants experienced significant improvements in emotional exhaustion, depersonalization, impostor syndrome, moral injury, self-compassion, and overall flourishing. The number needed to treat was 11 to resolve one case of burnout and nine for impostor syndrome, highlighting the intervention's clinical significance and scalability.

Building on this, Thibodeau et al. conducted a secondary analysis to explore how moral injury and discrimination trauma affected coaching outcomes within the same cohort.[4] At baseline, higher moral injury was strongly associated with worse well-being across multiple measures. The analysis revealed that discrimination trauma moderated the relationship between moral injury and outcomes such as impostor syndrome and self-compassion, indicating that these two forms of distress interact and may compound each other. Post-intervention, while the coaching program was broadly effective, its positive effects were diminished in participants with high levels of moral injury, particularly in reducing impostor syndrome.

Together, these studies provide critical insight into the effectiveness and limitations of coaching interventions. While coaching can significantly enhance physician trainee well-being, its impact may be diminished in those facing unresolved systemic harms. The findings highlight the importance of pairing individual-level support with organizational and cultural changes that directly address discrimination and moral distress.

Kiser et al. conducted a randomized clinical trial to evaluate the impact of individualized peer coaching on physician burnout and well-being at the Massachusetts General Physicians Organization.[5] A total of 138 physicians were randomized to receive either six individualized coaching sessions from certified physician peers over

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three months or standard institutional wellness resources. Among the intervention group, 52 completed at least one coaching session and were included in the modified intention-to-treat analysis.

Results showed statistically significant improvements among coached participants compared to controls. Notably, interpersonal disengagement decreased by 30.1%, overall burnout fell by 21.6%, professional fulfillment increased by 10.7%, and work engagement rose by 6.3%. Although changes in emotional exhaustion and depersonalization did not achieve significance, qualitative feedback and fidelity assessments indicated strong participant satisfaction and perceived value. Importantly, 100% of coached participants reported they would pursue coaching again.

The study highlights peer coaching as a viable, scalable, and cost-effective intervention. It not only benefited individual physicians but also showed potential for organizational impact, as themes emerging from coaching were shared with leadership and helped guide system-level initiatives. Although limitations included self-selection bias and a short follow-up period, the findings support integrating peer coaching into broader strategies to address physician burnout and foster workplace engagement.

The 2025 Winkel et al. study assessed the effects of a coaching program aimed at supporting medical students as they transitioned to residency at a single academic institution.[6] The intervention, part of New York University's Transition to Residency Advantage (TRA) program, involved faculty coaches meeting with residents throughout their intern year using a semi-structured, individualized approach. Researchers compared self-reported outcomes from this "coached" cohort to those of a prior "uncoached" cohort using validated scales for resilience, burnout, professional fulfillment, and program support.

Among 156 PGY-2 residents, survey responses (n=86) indicated that the coached group reported significantly higher levels of resilience, professional fulfillment, career self-efficacy, mentoring quality, and perceived institutional support. While both groups exhibited high engagement in self-directed learning habits, residents in the coached cohort demonstrated more positive attitudes toward goal setting. The positive effects of coaching were even more pronounced among residents who reported burnout, particularly in areas such as professional fulfillment and career support.

Although the study design cannot prove causality, the findings suggest that coaching may mitigate the negative effects of burnout and assist trainees in facing the professional and emotional challenges of early residency. Residents perceived coaching as having a moderately positive influence in various areas, including personal development and clinical decision making.

Dyrbye et al.'s randomized clinical trial, the first in individualized physician coaching, assessed the effectiveness of professional coaching in reducing burnout and improving well-being among physicians.[7] A total of 88 physicians from Mayo Clinic were randomized to receive six sessions of one-on-one professional coaching over five months or no coaching. Coaching was provided by certified professionals and tailored to individual needs and goals.

Results indicated significant improvements in the coached group compared to the control group. Emotional exhaustion scores decreased (mean change: –5.2 points versus –1.5 points), and overall burnout was lower. Furthermore, coached physicians reported greater increases in quality of life and resilience. The coaching did not have a significant impact on depersonalization or job satisfaction, although trends were favorable.

This study demonstrates that individualized coaching is a promising intervention for reducing distress and promoting well-being among practicing physicians. By focusing on goal setting, self-reflection, and personal growth, coaching may serve as a valuable tool for addressing the widespread issue of physician burnout in clinical settings.

Summary

Recent research emphasizes the growing role of coaching as a strategy to enhance physician well-being throughout the training and practice continuum. These studies explore various coaching formats—from group-based to individualized, peer-delivered to professionally facilitated—and show that coaching positively impacts burnout, resilience, professional fulfillment, and career self-efficacy.

Several highlight that coaching may be particularly beneficial for those experiencing higher levels of distress, such as moral injury or early-career burnout, which is particularly relevant to hospital medicine, given published wellness data.[8] Emerging themes in these studies include the importance of psychological safety, the ability to reveal systems-based issues through physician coaching, and the feasibility of scaling interventions through virtual or peer-led models. Collectively, this body of work reflects a shift to viewing physician coaching as a practical, evidence-based component of physician support and professional development rather than a luxury. ■

References

1. Stephany AM, et al. Professional coaching in medicine and health care. *Clin Sports Med.* 2023;42(2):195-208. doi: 10.1016/j.csm.2022.11.001.

2. Schulte EE. enhancing leadership and faculty development: the benefits of coaching for physicians and physician leaders. *J Pediatr.* 2024;268:113827. doi: 10.1016/j.jpeds.2023.113827.

3. Mann A, et al. Online well-being group coaching program for women physician trainees: a randomized clinical trial. *JAMA Netw Open.* 2023;6(10):e2335541. doi: 10.1001/jamanetworkopen.2023.35541.

4. Thibodeau P, et al. The moderating effects of moral injury and discrimination trauma on women physician trainees' well-being. *J Gen Intern Med.* 2025;40(11):2679-2686. doi: 10.1007/s11606-025-09434-5.

5. Kiser SB, et al. Physician coaching by professionally trained peers for burnout and well-being: a randomized clinical trial. *JAMA Netw Open.* 2024;7(4):e245645. doi: 10.1001/jamanetworkopen.2024.5645.

6. Winkel AF, et al. Evaluating the impact of coaching through the transition to residency. *J Gen Intern Med.* 2025;40(1):10-16. doi: 10.1007/s11606-024-08865-w.

7. Dyrbye LN, et al. Effect of a professional coaching intervention on the well-being and distress of physicians: a pilot randomized clinical trial. *JAMA Intern Med.* 2019;179(10):1406-1414. doi: 10.1001/jamainternmed.2019.2425.

8. 2023 State of Hospital Medicine Report. Society of Hospital Medicine website. https://education.hospitalmedicine.org/Listing/2023-State-of-Hospital-Medicine-Report-Electronic-Print-Version-9342. Published 2023. Accessed December 27, 2025.

Table 1. Studies on coaching and physician well-being

STUDY	POPULATION	COACHING STRUCTURE	KEY OUTCOMES	NOTABLE FINDINGS	STRENGTHS	LIMITATIONS
Mann et al., 2023[3]	1,017 women physician trainees	Four-month virtual group coaching	Decreased burnout, moral injury; increased flourishing, self-compassion	NNT=11 for burnout, NNT=9 for impostor syndrome	Large multicenter sample; virtual, scalable intervention; high engagement	Potential selection bias; lower follow-up in control group; no long-term data
Thibodeau et al., 2025[4]	1,017 women physician trainees (Mann et al. cohort)	Four-month virtual group coaching	High moral injury weakened coaching effectiveness; discrimination trauma influenced well-being outcomes	Moral injury blunted positive coaching effects	Insights into moderators of coaching effectiveness; large, diverse sample	Secondary analysis; causality cannot be inferred
Kiser et al., 2024[5]	138 physicians, all specialties	Six peer coaching sessions over three months; coaches specifically trained	Decreased burnout, increased professional fulfillment, work engagement	100% of those coached would pursue coaching again	Certified peer coaches; high acceptability; system-wide insights	Small sample size; short duration; single institution
Winkel et al., 2025[6]	PGY-2 residents	PGY-1 coaching by faculty coaches	Increased professional resilience, career self-efficacy, program support	Coaching most effective in residents with highest reported burnout	Coaching application to training transition; robust faculty development	Single-site; modest response rate; potential confounding from COVID-19
Dyrbye et al., 2019[7]	88 practicing physicians	Six individual coaching sessions over five months; coaches specifically trained	Decreased emotional exhaustion, increased quality of life, resilience	No change in depersonalization or job satisfaction	First randomized, controlled trial of individualized coaching in practicing physicians; rigorous design	Small sample; single site; lack of control

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MSK and Vascular POCUS: Underused Bedside Tools

By Elian D. Abou Asala, MD, MBA

Point-of-care ultrasound (POCUS) is a critical extension of the physical examination in hospital medicine, and its use reflects a shift toward immediate, bedside-driven diagnostic decision making.[1,2]

While cardiac and pulmonary POCUS are now widely used, musculoskeletal (MSK) and vascular ultrasound remain underutilized despite their substantial clinical utility.[3,4] MSK POCUS enables precise evaluation of soft tissue infections, joint effusions, tendon injuries, and procedural targets.[3] Vascular POCUS informs fluid responsiveness, guides intravenous access, and assists in identifying deep vein thrombosis (DVT) with high sensitivity when performed by trained clinicians.[4]

Case 1: The Diabetic Thigh Swelling

A 62-year-old man with poorly controlled type 2 diabetes presents with two days of progressive left thigh swelling, warmth, and erythema. The examination reveals diffuse tenderness but no clear fluctuance. The patient is febrile and tachycardic. Bedside MSK POCUS demonstrates a 2.5-cm hypoechoic fluid collection with posterior acoustic enhancement, confirming a drainable abscess layered beneath cellulitic tissue. Incision and drainage are performed at the bedside, followed by rapid clinical improvement.

Clinical Pearl

The physical exam alone is unreliable in differentiating cellulitis from abscess, especially in obesity, diabetes, or deep soft-tissue involvement.[5] MSK POCUS improves diagnostic accuracy and allows earlier intervention for source control.[5]

Case 2: The Ambiguous Knee Effusion in Possible Septic Arthritis

A 44-year-old woman with long-standing rheumatoid arthritis presents with acute severe right knee pain and inability to bear weight. Despite swelling, the exam is obscured by habitus. MSK POCUS reveals a moderate suprapatellar effusion with synovial thickening. Ultrasound-guided arthrocentesis yields purulent joint fluid, leading to immediate antibiotic therapy and urgent orthopedic consultation.

Clinical Pearl

MSK POCUS reliably identifies even small or difficult-to-palpate joint effusions.[6] Ultrasound-guided arthrocentesis increases first-pass success.[7] Early recognition of septic arthritis is crucial; delays correlate with joint destruction and long-term functional impairment.[8]

Case 3: Shoulder Pain After a Hospital Fall

An older inpatient experiences a witnessed fall and subsequently develops severe lateral shoulder pain with limited abduction. Radiographs show no fracture or dislocation. MSK POCUS demonstrates an anechoic subacromial–subdeltoid bursal effusion and a partial-thickness tear of the supraspinatus tendon. This allows for targeted analgesia, early physical therapy intervention, and appropriate outpatient orthopedic follow-up without the need for urgent MRI.

Clinical Pearl

MSK POCUS can quickly differentiate soft-tissue injuries, guide management, and prevent unnecessary imaging.[3] Ultrasound is uniquely positioned to visualize dynamic tendon motion and detect effusions or bursitis with no radiation exposure.[9] Early identification of partial-thickness rotator cuff injuries can prevent chronic dysfunction and overuse of opioids.[10]

Case 4: Volume Status Dilemma in Acute Kidney Injury

A 76-year-old woman is admitted for pneumonia with acute kidney injury on labs. Exam findings are inconclusive, and her chart lists both prior heart failure and chronic diuretic use. Vascular POCUS shows a plethoric inferior vena cava with less than 15% collapsibility, and hepatic venous Doppler demonstrating systolic flow reversal—patterns consistent with venous congestion. Her diuretics are resumed rather than administering IV fluids, leading to improvement in renal function.

Clinical Pearl

Inferior vena cava assessment alone is imperfect, but integrating hepatic or portal venous Doppler markedly

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improves accuracy in evaluating venous congestion.[11] POCUS-guided fluid management reduces iatrogenic volume overload, which is especially relevant in heart failure and renal failure.[12] Recognizing venous congestion early prevents worsening acute kidney injury and respiratory compromise.[13]

Case 5: Suspected Femoral DVT With Delayed Imaging Availability

A 55-year-old man recovering from abdominal surgery develops right leg swelling and pain. Formal vascular ultrasound is delayed for 12 hours. A hospitalist performs a two-point compression ultrasound at the common femoral and popliteal veins, demonstrating noncompressibility of the right femoral vein. Anticoagulation is initiated immediately, and confirmatory imaging the next morning agrees with the bedside findings.

Clinical Pearl

Compression ultrasound performed by trained hospitalists has high sensitivity for proximal DVT.[14] Early POCUS enables time-sensitive initiation of anticoagulation when formal imaging is unavailable or delayed.[15] Recognizing proximal DVT promptly reduces morbidity associated with pulmonary embolism and post-thrombotic syndrome.[16]

Case 6: Difficult IV Access in a Septic Patient

A 47-year-old woman with sepsis and profound peripheral edema requires rapid IV access. Multiple blind attempts fail. Bedside vascular ultrasound identifies a 4-mm basilic vein at 0.6 cm depth. Real-time ultrasound guidance results in successful cannulation on the first attempt, allowing timely initiation of IV antibiotics and resuscitation.

Clinical Pearl

Ultrasound-guided peripheral IV access significantly improves success rates and reduces complications in patients with edema and obesity, and reduces the need for peripherally inserted central catheters and midline catheters in patients with vasculopathy.[17] Consideration should be given to adopting ultrasound guidance as the default approach for difficult-access patients to increase chances of success while maintaining patient comfort.[18] ■

References

1. Thind GS, et al. Point-of-care ultrasonography for the hospitalist. *Cleve Clin J Med*. 2021;88(6):345-359. doi: 10.3949/ccjm.88a.20141.

2. Bhagra A, et al. Point-of-Care ultrasonography for primary care physicians and general internists. *Mayo Clin Proc*. 2016;91(12):1811-1827. doi: 10.1016/j.mayocp.2016.08.023.

3. Situ-LaCasse E, et al. Utility of point-of-care musculoskeletal ultrasound in the evaluation of emergency department musculoskeletal pathology. *World J Emerg Med*. 2018;9(4):262-266. doi: 10.5847/wjem.j.1920-8642.2018.04.004.

4. Theophanous RG, et al. Point-of-care ultrasound screening for proximal lower extremity deep venous thrombosis. *J Vis Exp*. 2023;(192). doi: 10.3791/64601.

5. Subramaniam S, et al. Point-of-care Ultrasound for diagnosis of abscess in skin and soft tissue infections. *Acad Emerg Med*. 2016;23(11):1298-1306. doi: 10.1111/acem.13049.

6. Boniface K, et al. Point-of-care ultrasound for the detection of hip effusion and septic arthritis in adult patients with hip pain and negative initial imaging. *J Emerg Med*. 2020;58(4):627-631. doi: 10.1016/j.jemermed.2019.11.036.

7. Finnoff JT, et al. American Medical Society for Sports Medicine (AMSSM) position statement: interventional musculoskeletal ultrasound in sports medicine. *Br J Sports Med*. 2015;49(3):145-50. doi: 10.1136/bjsports-2014-094219.

8. Jeffers K, et al. What is the utility of point-of-care ultrasound for diagnosis of soft tissue abscess vs. cellulitis? *J Emerg Med*. 2025;72:121-128. doi: 10.1016/j.jemermed.2024.11.012.

9. Balaban M, et al. Evaluation of tendon disorders with ultrasonography and elastography. *J Ultrasound Med*. 2021;40(7):1267-1286. doi: 10.1002/jum.15520.

10. Dickinson RN, Kuhn JE. Nonoperative treatment of rotator cuff tears. *Phys Med Rehabil Clin N Am*. 2023;34(2):335-355. doi: 10.1016/j.pmr.2022.12.002.

11. Giangregorio F, et al. Assessing venous congestion in acute and chronic heart failure: a review of splanchnic, cardiac and pulmonary ultrasound: part 1: conventional B-Mode, colordoppler, and vexus protocol. *J Clin Med*. 2025;14(22):8147. doi: 10.3390/jcm14228147.

12. Patel S, et al. Objective methods of assessing fluid status to optimize volume management in kidney disease and hypertension: the importance of ultrasound. *J Clin Med*. 2023;12(19):6368. doi: 10.3390/jcm12196368.

13. Boyd JH, et al. Echocardiography as a guide for fluid management. *Crit Care*. 2016;20(1):274. doi: 10.1186/s13054-016-1407-1.

14. Fischer EA, et al. Hospitalist-operated compression ultrasonography: a point-of-care ultrasound study (HOCUS-POCUS). *J Gen Intern Med*. 2019;34(10):2062-2067. doi: 10.1007/s11606-019-05120-5.

15. Barrosse-Antle ME, et al. Point-of-care ultrasound for bedside diagnosis of lower extremity DVT. *Chest*. 2021;160(5):1853-1863. doi: 10.1016/j.chest.2021.07.010.

16. Cox C, Roberts LN. Basics of diagnosis and treatment of venous thromboembolism. *J Thromb Haemost*. 2025;23(4):1185-1202. doi: 10.1016/j.jtha.2025.01.009.

17. Galen B, et al. Reducing peripherally inserted central catheters and midline catheters by training nurses in ultrasound-guided peripheral intravenous catheter placement. *BMJ Qual Saf*. 2020;29(3):245-249. doi: 10.1136/bmjqs-2019-009923.

18. Vegas A, et al. Guidelines for performing ultrasound-guided vascular cannulation: recommendations of the American Society of Echocardiography. *J Am Soc Echocardiogr*. 2025;38(2):57-91. doi: 10.1016/j.echo.2024.12.004.

Beyond the Stethoscope: Embracing the Transition to Administrator

By Teela Crecelius, MD, MBA, Ann Perrin, MD, MPH, and Joy Engblade, MD, MMM

Defining the Physician Administrator

In the past several years, health systems have experienced an increasing number of physicians transitioning to leadership roles that extend beyond patient care.[1] This trend is largely driven by a need for healthcare administrators who can bridge the gap between clinical acumen and organizational management while also navigating the rapidly evolving healthcare landscape. As value-based care, quality metrics, and patient satisfaction scores become increasingly tied to an organization's success, physicians offer critical insights that non-clinical administrators lack.

A physician administrator is a physician who has transitioned from direct patient care to leading a service line, department, or entire health system. Physician administrators can fill various roles, such as medical director, division chief, chief quality officer or CQO, chief information officer or CIO, chief medical officer or CMO, and even president, or chief executive officer or CEO, of a medical group or healthcare system. In these roles, physician administrators participate in clinical operations, strategic planning, policy development, and quality improvement projects.

The physician administrator's role is complex, requiring clinical knowledge, leadership skills, and the ability to navigate the intricate and ever-evolving healthcare industry. The best organizational leaders are often those who also understand what happens at the bedside. Hospitalists have prioritized patient care for years, listening attentively to patients, synthesizing complex information, and developing comprehensive care plans during sometimes arduous hospital stays. We understand the functions of individual organ systems, as well as how these systems interact with one another, and this ability to view patient care on multiple levels lends itself to the transition to understanding the health system on multiple levels. Hospitalist leaders shape policies, improve workflows, and manage diverse teams to ensure that excellent patient care leads to better results for the entire system. Given the thorough understanding of how the health system functions, hospitalists are uniquely positioned to drive change within the organization, both for patients and for clinicians. The frontline experience hospitalists bring to administrative roles connects systems thinking and the reality of direct patient care.

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Dr. Perrin

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Leveraging Hospitalists' Unique Skillset

Hospitalists thrive in the fast-paced environment offered in the hospital, where caring for acutely ill patients, communicating with team members, making complex decisions, and multitasking are part of every shift. This skillset, learned during work on the wards, makes hospitalists a natural choice for leadership roles. We are experts in engaging multidisciplinary teams, optimizing hospital throughput, and balancing patients' clinical and social needs. These skills are precisely what is needed when transitioning into administrative roles when engaging with colleagues, department heads, and hospital administrators. Complex information is translated within the different contexts of reimbursement, documentation, and liability. As with a true internist, expertise is not gained in any single area; rather, familiarity with each is critical. Instead of approaching this transition as entirely new, we approach this transition as a shift in an existing skill set.

Hospitalists are inherently leaders on the wards, with nursing, patient-care techs, case managers, and social workers looking to us to set the tone for the day. We play a pivotal role in maintaining the culture and morale of the team. With administrative positions, this informal leadership becomes more formalized with higher expectations. We continue to lead by example, but now in a different setting in meetings and boardrooms, and we continue to advocate in respectful ways and to communicate in multiple forums and to different audiences with a broader impact.

Cultivating Essential Qualities

Regardless of whether a physician naturally embodies characteristics of a good leader or has diligently worked to develop skills over time, a leader must show authenticity and curiosity, be open to feedback from peers and mentors, and be able to view issues from differing perspectives. Physician leaders are creative, resilient, and empathetic, fostering relationships, building trust, and actively engaging with others.[2] Great leaders are those who have taken time to reflect and learn their unique leadership style. Professional development tools such as the dominance, influence, steadiness, conscientiousness (DiSC®) assessment and the Thomas-Kilmann Conflict Mode Instrument can give a rising leader great insight into communication tendencies and conflict resolution preferences. Leaning on this information, hospitalists can recognize weaknesses and build upon their strengths, resulting in a more effective leadership style.

The leadership journey differs for each hospitalist. Many question whether to pursue an advanced degree, such as an MBA. While these degrees offer a valuable understanding of operations, strategy, and healthcare economics, they are not required for a leadership role, especially in the healthcare setting. Effective leadership is less about having a specific degree and more about emotional intelligence, communication skills, and the ability to inspire and motivate others. Several leaders utilize prior experiences, smaller leadership roles, mentorship, and professional development programs to develop the skills necessary to function as an effective leader. Most of this can be learned in practical settings and enhanced by conferences such as the Society of Hospital Medicine's Leadership Academy, the American College of Physicians' Leadership Academy, or numerous courses offered by the American Association for Physician Leadership and American College of Healthcare Executives. The value of building relationships, engaging with team members, and staying committed to a shared vision exceeds any credential. While an MBA or other advanced training program lends itself to a pathway to leadership, prior experiences and personality traits are what ultimately lead to success in the role.

Embracing the Challenges (and Opportunities!)

Transitioning from a physician to an administrator comes with a unique set of challenges, particularly when it comes to managing competing priorities. Physicians must learn to shift the scope of their practice from patient care and individual outcomes to larger, organizational concerns such as budget constraints and compliance regulations. Balancing the clinical aspects of patient care with the operational demands of leadership can be quite delicate. Physician administrators must maintain a balance between high quality standards of care and financial sustainability, while also building a collaborative culture and meeting the needs of a diverse team. Developing skills in time management, delegation, and systems thinking is essential to effectively balance these competing demands.

These challenges also present opportunities. Hospitalists in administrative roles are in a unique position to influence hospital policies, streamline delivery of patient care, develop quality initiatives, and advocate for clinician wellness. Firsthand knowledge of how patient care is delivered allows for the development of practical solutions across the system. Physician administrators have the opportunity to find new meaning in their careers by shaping the system rather than simply functioning within what already exists. Witnessing how a decision made as an administrator impacts patient care, improves outcomes, and builds a positive work environment leads to personal growth and career satisfaction.

Conclusion

The healthcare industry benefits from physician administrators who drive meaningful change by linking their medical expertise with knowledge of quality improvement, healthcare finance, practice guideline development, and transitions of care. While navigating the journey from physician to administrator presents challenges, the impact of physician leaders in shaping policies, driving organizational change, and improving patient outcomes is indisputable. As the healthcare landscape continues to evolve, the role of physician administrators will remain essential in providing effective, patient-centered care. ■

References

1. Gallagher, TM. Medical director and physician executive leadership survey. AJG website. https://www.ajg.com/news-and-insights/medical-director-and-physician-executive-roles-increase-nationally-in-number-and-complexity/. [Paywall] Accessed January 10, 2026.

2. Knight R. 8 Essential qualities of successful leaders. Harvard Business Review website. https://hbr.org/2023/12/8-essential-qualities-of-successful-leaders. Published December 13, 2023. Accessed January 10, 2026.

Beyond the Med List

Making medication reconciliation work for patients and physicians

By Mihir H. Patel, MD, MPH, MBA, FACP, CLHM, SFHM


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I still remember one of my first nights on service as a new hospitalist nearly 14 years ago. A frail elderly man had just arrived from the emergency department with congestive heart failure. His daughter sat at the bedside, clutching a plastic grocery bag filled with pill bottles—half empty, half relabeled, some prescribed years ago. As I sifted through them, I realized I had no idea which medications he was taking. The daughter didn't either. "Mom used to handle all that," she said quietly.

That night stayed with me. It was my first true lesson in medication reconciliation—not as a regulatory checkbox, but as a detective story that determines whether a patient leaves the hospital safer than they arrived.

The Daily Struggle Behind the List

Hospitalists know the ritual well: open the chart, find the "med rec" section, and hope the list you see is accurate.

Patients forget doses, outpatient records don't sync, and facility medication lists may be weeks out of date. Pharmacy technicians and nurses often do the heavy lifting—calling retail pharmacies, reviewing bottles, and clarifying doses—but the final responsibility still lands with us.

Even with that support, the process is far from perfect. The handoffs between outpatient, inpatient, and post-acute settings remain some of the leakiest points in our system. When reconciliation goes wrong, the results can be devastating—a missed anti-epileptic medication here, a duplicate sedative there—and suddenly a preventable readmission becomes a case for root-cause analysis.

When Teamwork Turns the Tide

I've learned the best reconciliation is a team sport.

Some of the most successful programs I've seen don't rely solely on the admitting physician. Pharmacists and pharmacy technicians start the process—verifying medications, contacting pharmacies, and reviewing discrepancies—while hospitalists review, clarify intent, and confirm before orders are finalized.

One of our partner hospitals piloted a tele-reconciliation model: remote pharmacists connected via secure video, reviewed medication histories, and even counseled patients before discharge. It sounded futuristic—until we saw the results. Admission medication reviews were completed far more consistently, and discharge reconciliation and education became remarkably efficient, with patients feeling better supported and more confident in their medication plans. Even more importantly, any potential discrepancies identified at discharge were immediately flagged to the attending physician by the telepharmacist, ensuring real-time clarification and an extra layer of safety around medication changes.

The takeaway was clear: reconciliation works best when it's shared, structured, and supported.

How Technology (Almost) Helps

Electronic health records (EHRs) and automation have made parts of this easier, but not effortless.

The reconciliation module in most systems highlights discrepancies and pulls pharmacy fill data. That's helpful—but only if the upstream data is clean. I've had plenty of "reconciled" lists that were anything but accurate because an outside source hadn't updated the record.

Recently, we've begun experimenting with AI-assisted reconciliation tools that can read free-text notes and flag inconsistencies across sources. Early results are promising—faster, fewer errors, and less time manually entering drug names. But even the smartest algorithm can't replace the conversation with a patient who looks you in the eye and says, "Actually, I stopped taking that months ago."

The Human Side of Safety

The most transformative moments come when patients—and their caregivers—become part of the process.

I've had families who keep a beautifully typed spreadsheet of every dose, and others who scribble notes on napkins. Either way, they want to be heard. When I slow down, use plain language, and ask them to repeat back the new plan—the teach-back method—the difference is tangible. They leave more confident, and I leave less anxious about the 48-hour callback from a confused relative.

Medication reconciliation isn't just data hygiene; it's relationship repair. It's a conversation about trust, understanding, and shared responsibility.

Building One Source of Truth

One of the most overlooked steps in medication reconciliation is ensuring that the discharge medication list and the discharge summary speak the same language. Too often, they live in separate parts of the EHR, leaving future clinicians uncertain about which medications were new, stopped, changed, or continued.

When the final medication list is embedded directly within the physician's discharge summary—clearly identifying each of those categories—it becomes a single, reliable source of truth. It saves time, reduces confusion, and turns the summary from a regulatory document into what it should be: a clear bridge between hospital and home.


Dr. Patel

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Measuring What Matters

Every hospital loves dashboards, and reconciliation is no exception. We track the percentage of admissions with completed med recs, the number of discrepancies, and 30-day readmissions tied to medication errors.

But the metrics that matter most to me aren't always in spreadsheets. They're in the moments when a nurse messages me, "Thanks for clarifying that insulin dose," or when a patient says, "Now I finally understand what all these pills are for."

That's the real ROI, not just "return on investment," but return on intention.

Closing the Loop—and the List

After years of practicing hospital medicine, I've learned that reconciliation works best when systems protect time and give hospitalists the space to do it right. When census pressures ease, when pharmacists and techs are empowered, when digital tools and human judgment meet halfway, that's when safety stops being theoretical and becomes personal.

Every now and then, I remember that first night—the daughter, the grocery bag, the uncertain pills—and I'm reminded that reconciliation is one of the quietest, most powerful acts of patient safety we perform.

If we can make medication reconciliation work for us, it will work for our patients — and that's the list that really matters. ■

Demystifying Performance Measures for Hospitalists: Mortality

By Matt Cerasale, MD, MPH, SFHM, Kristin Gershfield, MD, FHM, Preetham Talari, MD, MBA, SFHM, and Anunta Virapongse, MD, SFHM

Mortality is the ultimate outcome metric for patient care. In the hospital, measuring mortality appears simple and straightforward, but upon considering the layers of attribution and risk stratification, it becomes significantly more complex. Measures of mortality are used in various quality reporting and national ranking programs, making them a common focus of hospital leadership. However, the connection between hospitalists and measures of mortality is not always clear.

Case

Mrs. Smith is an 86-year-old woman who presented to the hospital with abdominal pain. Initial evaluation showed acute cholecystitis, and surgery was consulted for a laparoscopic cholecystectomy. Medicine was also consulted due to her underlying hypertension, diabetes mellitus type 2, hyperlipidemia, and coronary artery disease. The operation was completed successfully, but she developed post-operative pneumonia. She was transferred to the hospital medicine team for treatment. Unfortunately, the patient's respiratory status worsened and required transfer to the intensive care unit. In the unit, her condition worsened further, and goals of care conversations with the family led to hospice enrollment. The patient was discharged to the hospice unit and passed the next day.

- Should this mortality be connected to the hospital encounter?
- Would the answer to the above question change if the patient was deemed hospice appropriate, but the family chose not to enroll?
- Which service should the patient be linked to (surgery, hospital medicine, intensive care unit)?
- Was this mortality expected based on their condition?

A variety of names are used for measures of mortality, including mortality rate, mortality index, and ratio of observed to expected, or O/E, mortality. It is often initially assessed at the level of the hospital, but it can also be evaluated by specific disease states or specialty service lines within a hospital, or in a broader context of an accountable care organization or health plan. Institutions or organizations may choose to attribute at an even more granular level, such as groups, specific hospital service lines, or potentially at the individual level.

Appropriate attribution can be difficult given the complex nature of hospital-based care, especially if taken to the individual hospitalist level, as illustrated in the case above. The level of contribution any one provider makes to a patient's ultimate outcome is difficult to ascertain, as the entire continuum of care is involved in a patient's clinical trajectory before, during, and after a hospitalization that can prevent or lead to a patient's passing. Primary care plays a significant role in this measure as well, as they manage the patient's chronic diseases and ideally start advance care planning, especially with known severe or terminal conditions.

Mortality measures are typically reported at monthly, quarterly, or yearly intervals. At the most basic level, the data are easy to obtain for the number of discharges alive compared to the number of discharges deceased. Risk-adjusted mortality rates require more information to calculate and can go through complex formulas managed by third-party analytics organizations, such as Vizient, Midas, or Premier. The addition of risk adjustment adds an opportunity to improve the outcome from a very different approach. Unadjusted mortality focuses on the care provided, and improvement opportunities include clinical process measures, such as guideline-directed therapy for heart failure or meeting sepsis time-to-treatment goals.

Risk stratification is based on the documented primary diagnosis for the patient, in addition to other clinical conditions that add to the patient's complexity. The primary focus of improvement in this area is provider documentation, which can be a robust enterprise within many programs. Documentation offers an opportunity for a hospitalist to affect mortality metrics on a case-by-case basis, with an aggregated improvement in documented severity of illness. There are examples of institutions improving their reported risk-adjusted mortality through the implementation of targeted documentation-improvement programs.[1,2]

Other opportunities to improve reported mortality metrics can be dependent on the specific definitions for mortalities attributed to a hospitalization. One common definition excludes patients who passed while in the care of a hospice, even if directly enrolled from the hospitalization. This could create pressure to enroll patients in hospice who are imminently passing and were raised publicly as a concern.[3] A balancing measure for this potential unintended consequence is measuring time from hospice enrollment to passing. Another exclusion in some programs is patients being in observation status rather than inpatient at the time of passing. The use of observation status has been described in specific population workflows, but has not been more universally evaluated.[4] In other measure models, hospitals are accountable for the patient's survival for 30 days following discharge, which includes both public reporting in Hospital Compare and, in some cases, payment adjustments from the Centers for Medicare and Medicaid Services.[5] A greater emphasis on connection post-discharge care is required for improvement in these measures.

Conclusion

With all the complexities of risk adjustments and multiple definitions, it can be easy for a front-line hospitalist to get lost in how they can contribute to improvement. Focusing on mortality can also generate emotional strain on hospitalists, as many of the patients passing on hospitalist services pass from acute events, such as codes. Attribution at the group or service line level can help to avoid some of the individual strain, while keeping the measure relevant. The case above and related questions highlight how attribution, mortality definitions, and multi-disciplinary care go into measuring mortality. Improvement efforts within hospitalist groups can range from documentation improvement and hitting sepsis targets to enhanced advance-care planning. The strategy that best fits a group will depend on what definition their organization prioritizes and the related resources available.

Scan the QR code for the companion table prepared by members of SHM's Performance Measurement and Reporting Committee for additional information about this measure. ■


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References

1. Kessler BA, et al. Reducing the reported mortality index within a neurocritical care unit through documentation and coding accuracy. *World Neurosurg*. 2020;133:e819-e827. doi: 10.1016/j.wneu.2019.10.022.

2. Horwood CR, et al. Improving the mortality index by capturing patient acuity through interprofessional real-time documentation improvement in a single hospital system. *Surgery*. 2018;164(4):687-693. doi: 10.1016/j.surg.2018.04.045.

3. Morgenson G. 'You're not God': Doctors and patient families say HCA hospitals push hospice care. NBC News website. https://www.nbcnews.com/health/healthcare/doctors-say-hca-hospitals-push-patients-hospice-care-rcna81599. Published June 21, 2023. Accessed January 10, 2026.

4. Baugh CW, et al. A hospice transitions program for patients in the emergency department. *JAMA Netw Open*. 2024;7(7):e2420695. doi: 10.1001/jamanetworkopen.2024.20695.

5. Center for Medicare & Medicaid Services. Hospital Readmissions Reduction Program. CMS.gov website. https://www.cms.gov/medicare/quality/value-based-programs/hospital-readmissions. Accessed January 12, 2026.

Advocating for Health Beyond the Bedside

Pediatric hospitalists as agents of change

By Patricia Tran, MD, MS

In pediatric hospital medicine, we often find ourselves treating children whose health outcomes are influenced by factors far beyond the walls of the hospital. Social determinants of health (SDOH)—such as food insecurity, inadequate housing, and lack of access to care—are frequently the underlying causes of illness and poor outcomes. While we provide essential care during a child's hospital stay, these root causes remain unaddressed unless we, as pediatric hospitalists, engage in broader advocacy efforts.

Historically, pediatricians have been leaders in advocating for public health. From seat belt laws to immunization campaigns, our profession has consistently used its voice to enact positive change. However, while we are strong advocates within clinical settings, we often hesitate to extend this influence to the policy arena, where decisions about healthcare funding, public health infrastructure, and social services are made.

Yet, as pediatric hospitalists, we are uniquely positioned to advocate for changes that can improve the health and well-being of children on a larger scale. Advocacy is not an optional part of our work, it is essential to our mission of delivering high-quality care. We see firsthand how SDOH negatively impact our patients, and we have the clinical expertise to inform policies that address these issues. The time is now for pediatric hospitalists to step up and engage in advocacy efforts that go beyond individual patient care.

One area where I have seen the power of advocacy is in addressing food insecurity, a critical issue affecting many of the children we serve. As co-leader of Project Elephant, which addresses food insecurity in pediatric hospital care, I helped implement a screening process to identify families in need of food assistance. By providing shelf-stable food boxes and connecting families to local resources, we addressed not just the immediate clinical needs of our patients, but also one of the root causes of their poor health. This project highlighted how hospitalists can make a tangible difference by addressing SDOH through advocacy and community collaboration.

But advocacy should not stop at the hospital door. Pediatric hospitalists must also engage in legislative advocacy. By working with local and national policymakers, we can help shape the policies that affect our patients. In my own experience participating in virtual Hill visits and advocating for policies that promote children's health, I have seen the impact that our voices can have. Policymakers rely on healthcare professionals to provide insights into the real-world implications of legislation, and pediatric hospitalists can bring invaluable perspectives to these discussions.

Moreover, advocacy is not a solo endeavor. It requires collaboration across disciplines and sectors. Pediatric hospitalists can partner with outpatient providers, social workers, community organizations, and public health officials to create systems of care that address both medical and social needs of our patients. The COVID-19 pandemic has underscored the importance of this kind of collaboration, showing us that effective healthcare requires coordination at all levels—from hospital care to public health infrastructure.

As pediatric hospitalists, we also have a responsibility to advocate not just for our patients, but also for our field and our profession. The recognition of pediatric hospital medicine as a subspecialty has been a significant achievement, but it has also raised questions about inclusivity, particularly for those who may not qualify for board certification through traditional pathways. Advocacy within our profession is essential to ensure that all pediatric hospitalists, regardless of their certification status, have access to ongoing education, training, and professional development opportunities.

In the coming years, I believe pediatric hospitalists will play an even greater role in shaping the future of healthcare for children. As healthcare systems continue to evolve, we must advocate for policies that support not only the clinical care we provide but also the broader social and environmental factors that influence child health. By stepping into this advocacy role, we can extend our impact far beyond the bedside.

Advocacy is not an optional aspect of pediatric hospital medicine—it is integral to our role as physicians. By advocating for policies and practices that address the root causes of poor health, we can ensure that the care we provide in the hospital is connected to broader efforts to improve health outcomes for all children. The time is now for pediatric hospitalists to embrace advocacy as a core part of our mission, both in the hospital and in the communities we serve. ■

Dr. Tran

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Rachel Tenenbaum, MCC, CNTC

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Wednesday, April 1, 2026
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