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p7

Drs. Advani, Meyer, Eagan, Irani, and Badawy share how investing in good onboarding practices improves clinician satisfaction, retention, and performance

IN THE LITERATURE

Cleveland Clinic

p4

Med-lit reviews from Drs. Carson, Krach, Kral, Abdel Ahad, Mohan, Neustadtl, Qaiser, Rotenberg, and Sowunmi

EDUCATION

Integrating QI methods

p17

Drs. Wu, Meo, Paul, Wahl, Redinger, and Khalighi discuss their program

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CONTENT



IN THE NEXT ISSUE...

PrEP and PEP info for hospitalists

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Updates: The Hospital Medicine Community Engagement Committee

By Amira del Pino-Jones, MD, Keshav Khanijow, MD, FACP, SFHM, and Josh Garcia, MD

The past year has been a time of significant change, shaped by shifting policy landscapes, legal challenges, and ongoing national conversations about the role of diversity, equity, and inclusion in medical education and health care. As hospitalists, we care for patients with culturally rich identities, communities with varying access to care, and people with varying levels of trust in the medical system. As healthcare professionals with diverse backgrounds, we are united by a shared belief that everyone deserves an equal opportunity to achieve health and be treated with respect, dignity, and understanding. This commitment lies at the heart of the Hippocratic Oath we have taken as health care providers.

The Hospital Medicine Community Engagement Committee is committed to building and sustaining a strong framework for community engagement across SHM's membership. This work includes strengthening pathways for hospitalists with diverse lived experiences and fostering an inclusive environment in which all hospitalists are heard, welcomed, and valued for the perspectives they bring. The committee will continue to offer educational opportunities to bridge gaps in healthcare delivery, promote equitable outcomes, and recognize that achieving optimal health for all patients may require different approaches to care and resource allocation. Through our scholar-

ship and mentoring programs, we will continue to invest in the next generation of healthcare providers to foster meaningful relationships that extend into their early years of practice.

What is our "Why"?

Our members have different reasons and motivations for serving on the Community Engagement committee. Here are some reflections from several of our committee members.

Amira del Pino-Jones, MD

As I reflect on my journey to and through medicine, two words resonate most deeply: access and opportunity. From a young age, I knew I wanted to become a physician. Although I consistently excelled academically, I often encountered subtle—and at times overt—messages suggesting that medicine was beyond my reach. Comments such as, "Medical school is tough. Are you sure you can handle that?" and "You're going to college? Really?" planted seeds of doubt along my path. Those doubts were further intensified by the limited representation of physicians who shared my identity, particularly Black women, making it challenging to see myself reflected in that role.

Despite these challenges, I was fortunate to encounter mentors who not only believed in my aspirations but also guided me through the complex prerequisites of a medical career. They introduced me to pathway programs that expanded my understanding of medicine and provided invaluable research and clinical expe-



Dr. del Pino-Jones



Dr. Khanijow



Dr. Garcia

Dr. del Pino-Jones is an associate professor in the department of medicine in the division of hospital medicine, and associate dean of health opportunities and professional engagement at the University of Colorado Anschutz School of Medicine in Aurora, Colo. She is also chair of SHM's Hospital Medicine Community Engagement Committee. Dr. Khanijow is a hospitalist and assistant professor of medicine at Johns Hopkins University School of Medicine in Baltimore. Dr. Garcia is an assistant professor of medicine and academic hospitalist at the University of North Carolina School of Medicine in Chapel Hill, N.C.

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periences—experiences essential to becoming a competitive medical-school applicant. I was not given an unfair advantage; rather, I was given knowledge, exposure, and access to opportunities that allowed my abilities to flourish.

Additionally, while pathway initiatives are critical, I have realized that they should not be treated as the ultimate objective. Sustainable change requires institutional cultures that foster safe working and learning environments, honor individuals' lived experiences, and cultivate a genuine sense of belonging. These are instrumental in ensuring that talented physicians are not only recruited into medicine but retained and supported to persist and advance.

My experiences with pathway programming and retention efforts have profoundly shaped my purpose in medicine. I aspire not only to provide exceptional patient care and to excel as an educator, but also to create pathways for other qualified, talented individuals (particularly those who may lack access) to pursue opportunities they might not otherwise encounter. I want to accomplish this while also fostering environments where everyone can thrive. In doing so, I hope to help cultivate the next generation of physicians who can provide quality care to all of the communities we serve.

Keshav Khanijow, MD, FACP, SFHM

My enthusiastic participation in the SHM Community Engagement Committee stems from a dual desire to care for our patients and to create safe spaces for our practitioners.

Volunteering for grassroots LGBTQ+ organizations in Baltimore cemented an early link be-

tween medicine and social justice in my mind; I saw gay men give fake names to volunteer medical practitioners, and observed the interplay between HIV and AIDS, love, and livelihood. It's no secret that healthcare disparities exist within the U.S. by race, geography, and socioeconomic status. As hospitalists, we care for people at their most vulnerable times, and all of us want to make sure our patients receive the best care we can provide. Beyond creatinine's improvement with lactated Ringer's, and fevers improving with ceftriaxone, we want to build a bond with our patients; it's why many of us went into medicine. So far, I have been honored to contribute to SHM's initiatives, including SHM Converge programming on caring for diverse populations and developing online education modules focused on LGBTQ+ health. I hope to continue these efforts with the goal of delivering care that reflects our deepest values as clinicians.

In addition to our patients, it is also important to recognize the well-being of our workforce—our fellow trainees and hospitalists. Growing up as a gay South Asian male in the early 2000s, there was a lot of self-doubt, and my desire to go into medicine seemed out of reach. At a time when same-sex marriage was being debated, and people could be fired for being gay, it was difficult to find "out" LGBTQIA+ role models in medicine. I remember the first time I met a hospice agency provider who was openly gay—it made me realize that I could potentially have a future life as a happy gay man with a partner and a cat. I also remember the first time I learned about "out" clinicians when I was in college—it made me realize that I could also find happiness within my career without hiding part of my identity.

That representation in medicine was important for me to see. The experience made me realize why diverse representation within medicine is important. I use my voice on the committee to ensure that all SHM members have a safe space to be themselves and bring to medicine the richness that comes with our plural identities. It has been a privilege to be a part of the SHM's prior work in recognizing cultural heritage months on social media and setting up Zoom meetups for various affinity groups.

My journey has shown me how deeply representation and belonging influence the care we provide. I am committed to advancing SHM's mission so every patient—and every practitioner—feels seen, supported, and valued.

Josh Garcia, MD

As a Latinx gay physician who grew up in a border town in South Texas, my journey to medicine was not easy. Raised by two working parents with no connection to healthcare, my community of peers and friends was imperative to achieving my goal within medicine. In addition, the makeup of individuals within popular culture and within medicine did not reflect me or my community. Thus, the reality of mentorship did not exist within my journey. My entry into medicine was often one of uncertainty, hardship, resilience, and discovery as I searched for my authentic self as a person and a future physician simultaneously.

Over a decade later, as I have settled into my roles as a hospitalist, husband, and father, I can honestly say I have reached a point where it is my turn to give back to my community, including my patients, my colleagues, and the future gen-

eration of physicians. Events over recent years have resulted in many people feeling unstable, uncertain, and overall uncomfortable. While the work of diversity, equity, and inclusion has been debated during this time, my personal journey has solidified the importance of these properties when pursuing my professional endeavors. I want to provide the highest quality of care for all patients and the highest quality of education for all learners while being authentically myself as a person, physician, and mentor. In the wake of many similar programs being shuttered nationally, I have committed myself to pursuing these endeavors through participation with SHM's Community Engagement committee. Through our work, I hope we educate and empower our colleagues, trainees, and patients on the importance of using and sharing their own stories to enhance their own diverse communities through direct care, mentorship, and education. While the journey may not be easy, the unique opportunity we have as hospitalists to positively impact the lives of many makes this mission imperative.

Conclusion

Our experience has shown that bringing together individuals with diverse backgrounds and perspectives leads to better decisions and stronger, more collaborative teams. That collective strength directly enhances the care we provide to every patient. By fostering a culture where everyone feels respected and supported, we elevate our work and advance the well-being of the communities we are proud to serve. Our commitment to this work is unwavering, and our committee will continue to support SHM and its members in achieving their missions. ■

The Cleveland Clinic's Medical Literature Reviews

By Jenna Carson, MD, Joshua Krach, MD, Natalie Kral, DO, Mandi Abdel Ahad, DO, Maria Mohan, MD, FACP, Aidan Neustadt, MD, Kanza Qaiser, MD, Vitaliy Rotenberg, MD, FACP, and Lora Sowunmi, MD, FAAP, FACP, FHM

The Cleveland Clinic, Cleveland

IN THIS ISSUE

1. Response to Blood Culture Shortage Promotes High Value Care
2. Fluid Restriction Does Not Improve Outcomes in HF Patients
3. Sodium Bicarbonate Does Not Reduce 90-Day Mortality in Severe Metabolic Acidemia with AKI
4. Using Biomarkers to Guide Antibiotic Duration in Suspected Sepsis
5. Predicting Contrast-Associated AKI
6. Liberal or Restrictive Postoperative Transfusion in Patients at High Cardiac Risk: The TOP Randomized Clinical Trial
7. Antibiotic De-escalation in Adults Hospitalized for Community-Onset Sepsis Without Evidence of Multidrug-Resistant Infection Is Safe
8. Should We Aim Higher? Actively Targeting High-Normal Potassium Levels Reduces Ventricular Arrhythmia Events and Hospitalizations in High-Risk Patients
9. Clinical Efficacy of High-Dose Influenza Vaccines in Older Adults

By Jenna Carson, MD

1 Response to Blood Culture Shortage Promotes High Value Care

CLINICAL QUESTION: Do diagnostic stewardship interventions in times of crisis lead to sustained change in blood-culture ordering practices?

BACKGROUND: It is estimated that a third of all blood cultures ordered in the hospital are repeat cultures for known infections, though guidelines support only the use of repeat cultures for specific organisms or in certain clinical scenarios. Unnecessary blood cultures lead to increased cost and potential direct patient harm.



Dr. Carson

STUDY DESIGN: A quasi-experimental study with retrospective chart review

SETTING: One tertiary care academic center and nine community hospitals in Maine

SYNOPSIS: A total of 940 adult patients with bloodstream infections were evaluated before and after stewardship interventions, including clinician education and clinical decision support within the blood culture order, which were implemented in response to a blood culture shortage. The percentage of repeat cultures drawn for gram-negative rod and streptococcal infections decreased from 51.8% to 24.8% ($P < .001$). However, this improvement was not sustained after the shortage ended and blood culture orders returned to their default status, with repeat culture orders rising to 47.0%.

BOTTOM LINE: Interventions aimed at achieving diagnostic stewardship during a time of shortage increase evidence-based care and reduce low-value testing.

CITATION: Ezran C, et al. Shortage as a catalyst for high-value care: evaluation of a blood culture stewardship intervention driven by supply chain disruption. *J Hosp Med.* 2025. doi: 10.1002/jhm.70158.

Dr. Carson is a hospitalist in the department of hospital medicine at the Cleveland Clinic in Cleveland.

By Joshua Krach, MD

2 Fluid Restriction Does Not Improve Outcomes in HF Patients

CLINICAL QUESTION: Does a restrictive fluid strategy improve clinical outcomes in heart failure (HF) patients compared to liberal fluid intake?

BACKGROUND: Fluid restriction is often recommended for patients with HF; however, current guidelines recommend it only for certain patients, and there is limited high-quality evidence. Previous meta-analyses found no difference between restricted and liberal fluid groups but were limited by small sample sizes and inconsistent methods. The recent FRESH-UP study provided new data and enabled an updated systematic review and meta-analysis to examine fluid restriction in heart failure.



Dr. Krach

STUDY DESIGN: Systematic review and meta-analysis of four randomized controlled trials comparing restrictive versus liberal fluid intake in HF patients

SETTING: HF outpatients from multiple hospitals located in Ireland, Sweden, the Netherlands, and the U.S.

SYNOPSIS: This meta-analysis showed no significant differences in all-cause mortality, HF

rehospitalization, or thirst between restrictive and liberal fluid groups. Quality-of-life questionnaires also showed no significant differences between the two groups. There was a nonsignificant trend towards increased acute kidney injury (AKI) in the fluid restricted group. The fluid restricted group had significantly lower fluid intake than the liberal fluid group, but this did not translate into significant differences in outcomes. Notably, sodium restriction was among the study exclusion criteria; therefore, it was not evaluated in this study.

BOTTOM LINE: Despite lowering overall fluid intake, a restrictive fluid strategy has not been associated with any difference in mortality, readmission, thirst, or quality of life scores compared to a liberal fluid intake in heart failure patients.

CITATION: Adamu UG, et al. Optimal fluid management strategies in patients with heart failure: a systematic review and meta-analysis of randomized controlled trials. *Front Cardiovasc Med.* 2025. doi: 10.3389/fcvm.2025.1636862.

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By Natalie Kral, DO

3 Sodium bicarbonate does not reduce 90-day mortality in severe metabolic acidemia with AKI

CLINICAL QUESTION: In critically ill adults with severe metabolic acidemia and moderate to severe acute kidney injury (AKI), does intravenous sodium bicarbonate reduce 90-day all-cause mortality?

BACKGROUND: Severe metabolic acidemia (pH, ≤ 7.20) frequently complicates critical illness with profound physiological consequences that may lead to hemodynamic instability, multi-organ dysfunction, and escalation of life support. Treatment with IV sodium bicarbonate in this population remains controversial. The BICARICU trial failed to demonstrate improved outcomes with IV sodium bicarbonate; however, analysis of subgroups with AKI showed reduced mortality and less need for kidney replacement therapy (KRT).



Dr. Kral

STUDY DESIGN: Multicenter, open-label, randomized controlled trial

SETTING: 43 intensive care units in France

SYNOPSIS: BICARICU-2 randomized 640 adults with pH up to 7.20 and Kidney Disease: Improving Global Outcomes Stage 2 to Stage 3 AKI to IV 4.2% sodium bicarbonate (target pH, ≥ 7.30)

or usual care. Among the 627 patients analyzed, 90-day mortality was similar (62.1% versus 61.7%; absolute difference, 0.4%; 95% confidence interval [CI], 7.2 to 8.0; $P=.91$), with no difference at 28 or 180 days. Bicarbonate therapy reduced KRT use (35% versus 50%; absolute difference, -15.5%; 95% CI, -23.1 to -7.8) and delayed initiation without increased adverse events. The study was powered to detect a 10% absolute reduction in 90-day mortality and, therefore, was underpowered to detect possible, more modest effects on mortality. The trial's open-label design, clinician-directed KRT initiation, crossover, and greater fluid exposure in the bicarbonate group introduced potential bias in dialysis-related outcomes.

For hospitalists involved in critical care, IV sodium bicarbonate may be considered as a temporizing strategy in selected patients with severe acidemia and AKI, but it should not be expected to improve survival.

BOTTOM LINE: IV sodium bicarbonate does not reduce 90-day mortality in severe metabolic acidemia with moderate-to-severe AKI but may decrease or delay KRT use.

CITATION: Jung B, et al. Sodium bicarbonate for severe metabolic acidemia and acute kidney injury: the BICARICU-2 randomized clinical trial. *JAMA*. 2025;334(22):2000-2010. doi:10.1001/jama.2025.20231.

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By Mandi Abdel Ahad, DO

4 Using Biomarkers to Guide Antibiotic Duration in Suspected Sepsis

CLINICAL QUESTION: Can using daily biomarker-guided protocols, procalcitonin (PCT), or C-reactive protein (CRP) to guide antibiotic duration in adults hospitalized with sepsis safely reduce antibiotic use compared with standard care?

BACKGROUND: Appropriate antibiotic duration in sepsis is critical.

Overtreatment increases side effects and antimicrobial resistance, while undertreatment risks worsening infection. Biomarkers like PCT and CRP have been studied to guide antibiotic cessation, with previous trials suggesting PCT may safely shorten antibiotic courses, but evidence quality was low, and routine adoption in sepsis remained uncertain.



Dr. Abdel Ahad

STUDY DESIGN: Multicenter, intervention-concealed, randomized, clinical trial

SETTING: 41 intensive care units in the U.K.

SYNOPSIS: A total of 2,760 critically ill adults hospitalized with suspected sepsis requiring intravenous antibiotics were randomized between January 2018 and June 2024 to daily PCT-guided, daily CRP-guided, or standard-care antibiotic duration protocols. The primary effectiveness outcome was total antibiotic days up to 28 days after randomization, and the primary safety outcome was 28-day all-cause mortality. Patients in the PCT-guided group had a statistically significant reduction in total antibiotic duration versus standard care

(approximately 9.8 versus 10.7 days) and met the noninferiority criteria for 28-day mortality. In contrast, the CRP-guided protocol did not reduce total antibiotic duration and showed inconclusive mortality results. Secondary outcomes (intensive care unit or hospital stay, superinfection rates) showed no major differences. Limitations include modest absolute reduction in antibiotic days, potential clinician behavior influences, and generalizability limited to well-resourced settings.

BOTTOM LINE: In hospitalized patients with suspected sepsis, a daily procalcitonin-guided protocol can safely reduce antibiotic duration compared with standard care; daily CRP guidance does not.

CITATION: Dark P, et al. Biomarker-guided antibiotic duration for hospitalized patients with suspected sepsis: the ADAPT-sepsis randomized clinical trial. *JAMA*. 2025;333(8):682-693. doi:10.1001/jama.2024.26458.

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By Maria Mohan, MD, FACP

5 Predicting Contrast-Associated AKI

CLINICAL QUESTION: Do newer prediction models pooled in a systematic review predict contrast-associated acute kidney injury (CA-AKI)?

BACKGROUND: This systematic review updates a previous evaluation (Silver SA, et al. Risk prediction models for contrast induced nephropathy: systematic review. *BMJ*. 2015;351:h4395. doi:10.1136/bmj.h4395). Since then, the number of CA-AKI models has quadrupled. Silver's systematic review noted the best performing models included age, diabetes, chronic kidney disease, heart failure, and hypotension, with an area under the curve of 0.82 (95% CI, 0.81 to 0.83), and were only relevant to contrast given for coronary angiography.

STUDY DESIGN: Systematic review and meta-analysis

SYNOPSIS: Of 64 models for the primary outcome of CA-AKI (as defined in each included study), 45 studies were included; only nine models (14.1%) had low risk of bias, enabling a summary receiver operating characteristic curve analysis with a pooled C statistic, area under the curve of 0.83 (95% CI, 0.82 to 0.84); sensitivity, 0.74 (CI, 0.7 to 0.78); specificity, 0.78 (95% CI, 0.75 to 0.82). The five most used variables were baseline renal function, age, coronary artery disease, cardiac function, and past medical history (cardiac, diabetes mellitus, peripheral vascular disease, and stroke).

BOTTOM LINE: We do not have a current preferred or clinically useful model to predict CA-AKI. Limitations for models include retrospective nature of studies and bias induced by exclusion of patients with more advanced CKD who never underwent contrast.

CITATION: Feng Y, et al. Predicting contrast-associated acute kidney injury. *JAMA Netw Open*. 2025;8(3):e250107. doi: 10.1001/jamanetworkopen.2025.0107.



Dr. Mohan

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By Aidan Neustadt, MD

6 Liberal or Restrictive Postoperative Transfusion in Patients at High Cardiac Risk: The TOP Randomized Clinical Trial

CLINICAL QUESTION: Does a liberal transfusion strategy decrease the risk of death or major ischemic events after major surgical operations in patients at high risk of cardiac events?

BACKGROUND: Post-operative anemia is associated with an increase in short-term morbidity and mortality. Current guidelines recommend a restrictive transfusion strategy (hemoglobin under 7 g/dL) for most stable inpatients; however, recent trials have suggested harm from a restrictive strategy in those with acute myocardial infarction (MI). Little is known about the optimal transfusion strategy for patients undergoing major surgery who are at high cardiac risk.

STUDY DESIGN: Parallel, single-blind, randomized clinical superiority trial

SETTING: 16 Veterans Affairs medical centers

SYNOPSIS: 1,428 high-risk cardiac patients (ischemic heart disease, MI, peripheral arterial disease, or cerebrovascular accident) were randomized to a transfusion threshold of under 7 g/dL or under 10 g/dL after major non-cardiac surgery. Despite a mean hemoglobin difference of 2.0 g/dL five days after randomization, there was no difference in the primary composite outcome of all-cause death, MI, coronary revascularization, acute kidney failure, or ischemic stroke between the liberal (9.1%) and restrictive (10.1%) transfusion strategies at 90 days. There was a higher incidence of cardiac complications excluding MI in the restrictive group (9.9% versus 5.9%; risk ratio, 0.59; 99% CI, 0.36 to 0.98), which was primarily attributed to new arrhythmias and heart failure.

These findings are consistent with prior trials showing that more restrictive transfusion thresholds are generally safe and add to that literature by including high-risk cardiac patients. However, given the findings of increased cardiac complications when excluding MI and the recent MINT trial results suggesting more liberal transfusion strategies may be safer in acute MI, future research should focus on optimizing transfusion thresholds for inpatients across clinical settings.

BOTTOM LINE: A liberal post-operative transfusion strategy (hemoglobin <10) in high cardiac risk patients did not reduce postoperative death or major ischemic events.

CITATION: Kougiaris P, et al. Liberal or restrictive postoperative transfusion in patients at high cardiac risk: the TOP randomized clinical trial. *JAMA*. 2025;334(24):2197-2207. doi:10.1001/jama.2025.20841.

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Dr. Neustadt

By Kanza Qaiser, MD

7 Antibiotic De-escalation in Adults Hospitalized for Community-Onset Sepsis Without Evidence of Multidrug-Resistant Infection Is Safe

CLINICAL QUESTION: In patients hospitalized with community-onset sepsis, does empiric broad-spectrum antibiotic (BSA) de-escalation (on encounter day four), compared with continuation, affect mortality and length of stay?

BACKGROUND: Current guidelines recommend early empiric BSA for suspected sepsis to avoid delays in treating multi-

drug-resistant organisms (MDROs). However, prolonged exposure to BSAs is associated with adverse drug events, *Clostridium difficile* infection, and antimicrobial resistance.

Therefore, timely de-escalation within 48 to 72 hours is recommended if MDROs are not identified on initial testing, and yet real-world practice varies widely. Prior studies evaluating de-escalation in sepsis have produced mixed results, and clinicians remain concerned about the safety of narrowing therapy in patients who are acutely ill. This study sought to examine the variability in antibiotic de-escalation practices and compare outcomes of empiric BSA continuation versus de-escalation, in the absence of MDRO, with respect to 90-day mortality, length of stay, and antibiotic days.

STUDY DESIGN: Target trial emulation study (observational cohort with inverse probability weighting)

SETTING: 67 hospitals participating in the Michigan Hospital Medicine Safety Consortium in Michigan, U.S.

SYNOPSIS: This large, multicenter target trial emulation used data from 36,924 adults hospitalized with community-onset sepsis across 67 Michigan hospitals (June 2020 to September 2024). Two cohorts were evaluated: patients receiving empiric anti-methicillin-resistant *Staphylococcus aureus* (MRSA) therapy (n=6,926, 18.8%) and those receiving empiric antipseudomonal therapy (PSA) (n=11,149, 30.2%) without evidence of MDRO by hospital day three. Exposure was the de-escalation of BSA on day four versus continuation. Of these, 2,993 (43.2%) and 2,493 (22.4%) were de-escalated from anti-MRSA and anti-PSA coverage, respectively. After inverse probability weighting to balance patient and hospital characteristics, de-escalation of BSA was not associated with higher 90-day mortality (primary outcome) (anti-MRSA: odds ratio, 1.00; 95% CI, 0.88 to 1.14; anti-PSA: odds ratio, 0.98; 95% CI, 0.86 to 1.13). Among secondary outcomes, BSA de-escalation was associated with fewer antibiotic days and shorter length of stay. Limitations include observational design and potential residual confounding. These findings align with stewardship principles and support guideline-recommended reassessment and narrowing of empiric therapy in sepsis when resistant organisms are not identified.

BOTTOM LINE: In adults hospitalized with community-onset sepsis and no evidence of MDRO infection, de-escalating empiric broad-spectrum antibiotics by hospital day four appears safe and reduces antibiotic exposure and hospital length of stay.

CITATION: Gupta AB, et al. Antibiotic de-escalation in adults hospitalized for community-onset

sepsis. *JAMA Intern Med.* 2026;186(2):192-202. doi:10.1001/jamainternmed.2025.6919.

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Dr. Qaiser

By Vitaliy Rotenberg, MD, FACP

8 Should We Aim Higher? Actively Targeting High-Normal Potassium Levels Reduces Ventricular Arrhythmia Events and Hospitalizations in High-Risk Patients

CLINICAL QUESTION: Does a treatment strategy targeting high-normal plasma potassium levels (4.5 to 5.0 mmol/L) reduce the risk of ventricular arrhythmias and cardiovascular events in high-risk patients with implantable cardioverter-defibrillators (ICDs)?

BACKGROUND: Low, or even low-normal, potassium levels are associated with increased ventricular arrhythmia risk in patients with cardiovascular disease, and prior heart failure trials suggest that therapies that raise potassium levels may have a protective effect. However, current guidelines focus primarily on avoiding hypokalemia rather than actively targeting higher potassium levels, and the benefit of intentionally increasing potassium into the high-normal range has not been well studied.

STUDY DESIGN: Multicenter, open-label, event-driven, randomized superiority trial

SETTING: Three cardiac centers in Denmark

SYNOPSIS: The POTCAST trial randomized 1,200 adults with an ICD and baseline plasma potassium up to 4.3 mmol/L to either a “high-normal potassium” strategy or standard care. The intervention group received potassium supplementation and/or mineralocorticoid receptor antagonists along with dietary guidance to target a potassium level of 4.5 to 5.0 mmol/L. Over a median follow-up of 39.6 months, the primary composite endpoint (sustained ventricular tachycardia, appropriate ICD therapy, unplanned hospitalization for arrhythmia or heart failure, or death) occurred in 22.7% of the intervention group compared to 29.2% in the standard care group (hazard ratio, 0.76; 95% CI, 0.61 to 0.95) with appropriate ICD therapy, documented ventricular tachycardia, and hospitalization for arrhythmia accounting for the majority of events. Rates of hospitalization for hypokalemia and hyperkalemia were similar between the two groups. Limitations include an open-label design, restriction to patients with ICDs, exclusion of patients with eGFR under 30, and the homogenous Danish study population, which may limit generalizability.

BOTTOM LINE: Actively targeting high-normal plasma potassium levels may significantly reduce the risk of malignant arrhythmias and related hospitalizations in high-risk patients with ICDs.

CITATION: Jøns C, et al; POTCAST study group. increasing the potassium level in patients at high risk for ventricular arrhythmias. *N Engl J Med.* 2025;393(20):1979-1989. doi: 10.1056/NEJMoa2509542.

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By Lora Sowunmi, MD, FAAP, FACP, FHM

9 Clinical Efficacy of High-Dose Influenza Vaccines in Older Adults

CLINICAL QUESTION: In adults aged 65 years and older, is high-dose influenza vaccine more effective than standard-dose vaccine in preventing severe clinical outcomes of influenza infection?

BACKGROUND: Elderly adults are at increased risk for influenza infection and its complications, including hospitalization and death. Available studies indicate superior benefit of high-dose influenza vaccine (HDIV) compared to standard dose influenza vaccine (SDIV) against lab-confirmed influenza, as

the higher doses boost the attenuated immune response in this population. The Centers for Disease Control and Prevention preferentially recommends HDIV for adults aged 65 years and older. However, no randomized trials have investigated the relative efficacy of HDIV for severe clinical outcomes such as hospitalization in the general elderly population.

SYNOPSIS: 466,320 individually randomized community-dwelling adults aged 65 and older in Spain and Denmark received a single high dose (four times the standard dose) or standard dose of influenza vaccine each influenza season. The trial occurred between 2022 and 2025, with patients evenly divided between both groups. The primary endpoint was hospitalization for influenza or pneumonia, and secondary endpoints included hospitalization for cardiorespiratory disease, laboratory-confirmed influenza hospitalization, all-cause hospitalization, and all-cause mortality. Participants were followed from 14 days after immunization until May 31 of the following year, and data were retrieved from healthcare databases. The analysis showed definitive evidence of superior efficacy of HDIV for hospitalization for influenza or pneumonia (0.56% in the HDIV group versus 0.62% in the SDIV group, with relative vaccine efficacy of 8.8%). All secondary endpoints were reduced in the high-dose versus standard-dose influenza vaccine groups, except for mortality, which was similar between both groups. Serious adverse events were also similar between the two vaccination groups.

BOTTOM LINE: HDIV is more effective than SDIV in preventing severe clinical outcomes of influenza infection, such as hospitalization for influenza. HDIV should be utilized universally in the elderly to improve global vaccine policy and lessen the burden of influenza complications.

CITATION: Johansen ND, et al. Effectiveness of high-dose influenza vaccine against hospitalisations in older adults (FLUNITY-HD): an individual-level pooled analysis. *Lancet.* 2025;406(10518):2425-2434. doi: 10.1016/S0140-6736(25)01742-8.

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Dr. Sowunmi

The Value of Investing in Good Onboarding for Hospitalists

Improving clinician satisfaction, retention, and performance

By Ruth Jessen Hickman, MD

Every hospital system faces the challenges of orienting and integrating new health-care personnel, including new hospitalists, many of whom come straight from residency or fellowship. Some bumps are inevitable, but the overall smoothness with which this happens has real impacts on clinicians, patients, and the overall hospital system.

Over the last few decades, companies and institutions across a wide range of fields have increasingly recognized the importance of effective onboarding practices to increase employee satisfaction, improve retention, and optimize new-hire performance. This trend has extended to medicine, as some hospital systems reinvested in and revised their approach to new hospitalists.

“I think that as the complexity of hospital systems increases, it’s doubly important that we support our providers with a really smooth onboarding,”

said Dan Meyer, MD, division chief of hospital medicine at Maine-Health Medical Center in Portland, Maine.

Farzan Irani, MD, FACP, MBA, MRCP, SFHM, chief medical officer of acute care at Mercy Health – Cincinnati, in Cincinnati, said, “We see onboarding as an important first step in making sure that new hires are here for the long haul. Onboarding is one great way of setting them up to be successful and helping them feel like they are a part of the team, which adds to their whole well-being.”

The Hospitalist talked with Drs. Meyer, Irani, and other hospitalists about their experience in onboarding and their perspectives and advice on this important period.

From Orientation to Onboarding

While the term “orientation” connotes a short-term, heavily text-based method, “onboarding”



Dr. Meyer

is defined as a more holistic and longitudinal process to enculturate employees and help make them productive members of the team.

In the past, the trend was more towards a minimal orientation, providing new hospitalists with administrative paperwork and written resources but without much additional support. The idea was that hospitalists should have received the training that they need during residency, so they should be able to jump immediately into their new roles.

However, physicians right out of residency still need to learn aspects that are more relevant to the role of an attending. Anisha J. Advani, a hospitalist and an associate director for mentorship at Yale University School of Medicine in New Haven, Conn., underscores that the initial months of being an attending physician require extremely rapid growth. She tells new hires, “Along with early internship, these are the most important and humbling months of your entire career; we are here to support you.”

Thus, hospitalists right out of residency, more than 75% of new hires at most centers, need extra attention.¹ Yet many of the day-to-day details needed to be a

successful attending are institution-specific, so even a newly hired veteran hospitalist needs time to get adapted to their new setting.

Several of the hospitalists shared about difficult transitions from their own initial orientation and onboarding experience. Dr. Meyer said, “It felt like a major drop in the amount of feedback that you’re used to getting from your residency experience.”

Dr. Advani said, “I joined this huge system and the experience was rocky; I saw there was so much more opportunity for support and guidance.”

Partly motivated by this perspective, Dr. Advani took on the organization of a new onboarding program at Yale. They now provide an extensive onboarding program for their new hospitalists, including a few days of concentrated orientation-onboarding in a group setting with a follow-up session a couple of months later, a longer-term didactic curriculum, and a ramp-up to full patient care responsibilities under the supervision of a seasoned hospitalist.

These in-person days of dedicated onboarding, designed to be performed with a group of new hires, perform an important social function. They help new hires establish connections among themselves and other members of the institution. Regardless of setup, it’s best practice to find ways to facilitate opportunities for new hospitalists to connect, network, and start to feel at home.²

Jack Badawy, MD, SFHM, a hospitalist with the University of Texas Health Science Center in San Antonio and co-director of the professional development



Dr. Badawy

program within the division of hospital medicine, helped create a similarly structured program at his institution, hosting lectures from major stakeholders across the hospital.

One of the reasons they expanded their onboarding was to help increase retention. Dr. Badawy said, “We also created this program to make a good initial impression and help people connect with key resources early on to hopefully prevent them from getting burnt out.”

Onboarding Continuum

A survey of hospitalist onboarding practices found that in about half of institutions, the onboarding program is considered complete before the new hospitalist’s first independent shift, but some programs have elements that continue for three months, six months, or even longer.¹

Dr. Badawy pointed out that onboarding can be thought of as a continuum, starting as soon as the initial hiring paperwork is signed.

“It’s not just a three-day thing, and it doesn’t end when you start your new job. I give it a year to make sure that people are functioning okay, that they feel comfortable.”

Hiring and Post-Hiring Period

Barbara C. Egan, MD, chief of the hospital medicine service at Memorial Sloan Kettering Cancer Center (MSKCC) in New York, manages a group of



Dr. Egan

hospitalists who enter solely as nocturnists, none of whom have previously been residents at her institution. Because of the nature of MSKCC, they must manage patients with specialized medical situations that they didn’t encounter during residency, which can be challenging.

Setting clinicians up to integrate successfully into a healthcare team begins early. Dr. Egan noted that initial hiring choices—favoring applicants with a positive, collaborative energy—are critical. Proactively promoting a healthy and mutually cooperative workplace culture also helps new people transition more easily.

Moreover, it’s important to keep thinking about how the job requirements will really work for individuals. Dr. Egan said, “We have worked to create a position structure that is satisfying and sustainable so that we not only can get top talent, but we can also keep them.”

A key part of onboarding occurs in the period following hiring. Dr. Irani noted it’s important to maintain communication with new hires and make them confident that they are entering a well-organized system.

Human resources personnel can play a key role during this time, making sure new hires have the essential information they need. Dr. Meyer pointed out that a smooth privileging process that starts well in advance of the start date is a key aspect to prevent misunderstandings and delays down the line. Giving out some information during this time can help to prevent information overload during the hospitalists’ first week.

Orientation-Sessions and Ongoing Didactics

Next is some sort of orientation-onboarding session, usually in person. Such sessions can vary from half-day sessions focused primarily on administrative details to longer, multiple-day onboarding sessions, which allow for social icebreakers and a wider scope of topics from multiple speakers. De-



pending on scheduling, this might happen before or after a new hire’s first shift.

Certain key topics need to be covered in any onboarding program, but others will vary based on institutional type, other institution-specific factors, and desired level of scope for the program. Common topics include administrative issues, clinical workflow, billing and documentation, electronic health record, hospital policies, and orientation to physical location. More extensive instruction related to specific clinical care issues, physician well-being, and career development instruction is part of some programs.

An important best practice is planning these sessions so that attendees receive enough information about policies and procedures to get started while also providing easily accessible tools and references to answer inevitable future questions.² Dr. Advani recommends not flooding new hires with too much information. Instead, repeatedly hit key points, make sure new hires have proper references, and spread the information over time, if possible.

Almost all programs include some sort of primary resource with onboarding material to review, much of which may be accessible via an electronic format. Dr. Egan pointed out that it’s essential for these resources to be regularly supplemented and reviewed as needs change or new aspects emerge.

Not every institution can coordinate the resources for an extended, in-person, group onboarding experience. However, there are other ways to try to provide new hires with key information and connections.

For example, partly because of scheduling constraints specific to their institution, MSKCC cannot plan an extended in-person onboarding program in real time for a class of new hires. They do provide an ongoing evening lecture program with oncology experts, helping strengthen ties between physicians and providing extra educational support where it will be needed. These sorts of ongoing didactic programs, targeted to the needs of new hospitalists, are an added component of many programs.

Ramping Up Responsibilities and Mentoring

Ramping up to full clinical responsibilities is a key element of good practices in onboarding, although the length and structure may vary considerably between hospitals. Most programs include some number of shadowing sessions or “co-attending” arrangements, in which a new hire carries patients independently but has a designated senior colleague available for consultation. Physicians may also assume a lower patient census load for an initial period.

Many hospitalists are eventually expected to cover different types of shifts with quite different responsibilities. Dr. Meyer pointed out that another way to ramp up is to first assign shifts of one type of service and let new hires get acclimated before switching them to another type of service, with renewed opportunities to shadow or co-attend before taking the full census load there.

Shadowing or co-attending arrangements naturally produce connections and informal mentoring, but many programs also assign intentional, deliberate

mentorship connections for new hires during their initial months. Dr. Badawy pointed out that these mentors can provide helpful support during a hospitalist’s first year, although after that, a mentee might seek a different mentor based on interest and mutual fit.

For hires right out of residency, Dr. Meyer sees the whole first year as part of onboarding, as the new attending focuses on operations and clinical medicine. After that first year, he encourages new hires to think about their broader professional development goals. “We let people try to differentiate after that first year and help them get the resources and support they need to have that ongoing professional mentorship.”

Onboarding Challenges

One of the challenges in refining and developing an onboarding program is that a set of formal best practices for onboarding hospitalists is not available.

Although certain elements of onboarding are necessarily institution-specific, some broad elements universally apply. The Society of Hospital Medicine has produced documents with some key guiding principles and case examples to help illustrate different onboarding considerations that might be relevant in different environments, e.g., community versus academic centers.²

Dr. Badawy added that when designing an onboarding program, it’s important to consider the specific strengths, constraints, and idiosyncrasies of a given institution, as well as covering the key universal topics faculty need to learn. For example, an institution might have a large cystic fibrosis or transplant

population, or it might be subject to unusual requirements mandated by the state.

It's also challenging to build a program with enough flexibility to meet the needs of all the new hires, from a new hospitalist coming from a residency within the same hospital system to a veteran hospitalist coming from out of state. Aspects such as length of shadowing or co-attending phases may need to be adjusted accordingly.

"We have folks who come from very diverse backgrounds in terms of geography, demographics, hospital size, community versus academic practice," Dr. Advani said. "It's really important to make sure that everyone feels ready to practice the most cutting-edge and up-to-date medicine, even as a junior attending."

Several of the hospitalists noted the challenges of timing and scheduling constraints when planning onboarding programs. Can new hires come on asynchronously, or should they all come in as a class, if possible, on just one of a couple of dates? If a group of hospitalists enters at the same time, it may be difficult to find enough shadowing or co-attending opportunities, to give one example, but they retain the advantages as-

sociated with starting as a group.

"How do you have a rigorous onboarding but also allow people to join the service with more flexibility throughout the year?" Dr. Meyer asked. He shared that at his program, they found it worked better to limit the number of start dates, such as to one date each in August, September, and October.

If coordinating an initial onboarding session of a few days, it can also be challenging to schedule all the speakers and participants, Dr. Advani said.

Relatedly, programs must also juggle financial and scheduling constraints. Time spent in onboarding sessions or ramping up to full clinical services requires significant financial investment, as new hires are not immediately available to cover full services.

Benefits of Thoughtful Onboarding

Dr. Irani pointed out that the hiring process itself is quite expensive. He urges institutions to make this investment to decrease attrition, which actually improves cost savings. "The biggest challenge is always resources. You make a much larger investment in getting this clinician here, so why wouldn't you make this smaller necessary

investment to help make sure the clinician does well and stays?"

Relatedly, Dr. Meyer noted that onboarding can be part of helping meet overall quality improvement goals, as it can provide education and help get physician buy-in on key initiatives.

Dr. Irani underscored the benefits of helping people feel invested in the needs of the group as part of onboarding. "Hospitalists have to rise up to meet so many different challenges. If they feel like they are part of a group, it helps inspire them to meet them."

Although every institution needs to consider ways to integrate new clinicians, building a more comprehensive program, including coordinated group onboarding sessions over several days, will not be the right choice for every program.

Dr. Advani said, "If you are only onboarding a handful of folks every year, it may not make sense to invest this much, because it is a time and resource investment. If you're onboarding a larger group of folks, you really want to make sure that they hit the ground running, because that actually has a significant impact on clinical care."

However, even more minimalist onboarding programs need to be thoughtful about the way they

structure information and support for their new hires. Some health systems still lack formal onboarding programs, still relying heavily on informal mentorship as individuals step fully into their roles very quickly. The input of experienced colleagues is invaluable, but such ad hoc onboarding may be inconsistent depending on mentor availability and communication style, and critical topics may not be covered.

"Onboarding is people's first window into the culture of your institution, and it's such a key part of building the culture and the brand that you want to have; it is a moment to establish expectations before people learn bad habits," Dr. Advani said. "We've learned just how much value it adds, and it is completely worth the investment."

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Curriculum and Educational Implications of AI

Cultivating physicians who can think in an AI-mediated environment



By Christopher Migliore, MD, MS, FACP, FHM

The emergence of artificial intelligence (AI), particularly generative AI (GenAI), represents an inflection point for medical education. AI is reshaping how trainees acquire knowledge, synthesize information, and participate in clinical decision-making. In order to master this shift in learner experience, curricular response must move beyond passive accommodation.

In simple terms, AI can be thought of as a cognitive multiplier. Contemporary systems can summarize literature, generate differential diagnoses, and otherwise provide infinite riffs on metaphors or learning styles to connect with learners in ways we can't. AI also approximates one-on-one tutoring, adapts to learner pace, and provides iterative feedback—capabilities that traditional curricula, constrained by faculty time and clinical workload, all struggle to deliver.

AI capabilities, however, introduce a paradox. The efficiency of AI-mediated cognition risks attenuating the same processes that medical education is designed to cultivate. Multiple papers have raised concern that reliance on AI outputs can erode critical thinking and independent knowledge construction; these erosions are deeper in early learners.¹ Put practically, diagnostic error carries downstream patient harm; however, if there isn't a proper base, the learner doesn't know the error has happened until it is too late in the Bayesian update. Erosion of skills isn't abstract; it's a quality and safety issue.

AI also has wide and severe effects on assessment. Traditional assessments, including written assignments and remote multiple-choice exams, are increasingly vulnerable to AI augmentation or override. There is now a small but not insignificant shift to assessments that are impervious to assault by AI, including *viva voce*, blue books, and rigorous, observed,

clinical encounters.²

A third domain is faculty development. Data suggest that adoption of AI among faculty remains uneven; there is still a substantial proportion of educators lacking familiarity or direct experience with these tools.³ This creates misalignment between learner behavior and faculty oversight. Trainees are already using AI, overwhelmingly. Combine that with the above, and you get learners using it informally and without guidance; in many cases, we don't have the skills to even broadly supervise its use. Curricular reform, therefore, must include parallel investment in faculty development. Without this, institutions risk creating another arm of the hidden curriculum, where AI use is both ubiquitous and largely unexamined.

Ethics and professionalism represent the fourth domain (there may be more). AI introduces new risk vectors, including hallucinated information, embedded bias, data privacy concerns, and ambiguity in accountability, all of which are po-



Dr. Migliore

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tential risks to the ethical practice of medicine.⁴

AI is also surprisingly good at “pretending,” or choosing words in a probabilistic manner, to seem ethical. The palliative care team here at Columbia has trialed AI to see what it will generate in incredibly difficult circumstances; the results were interesting. For example, a patient at the end of life kept saying they were a fighter, they had been a fighter their whole life, and against the counsel of everyone, they wanted every possible treatment. As a test, the scenario was fed into a commercial large language model, and the response “It might be important now to ask yourself what being a fighter means” is considered a question seasoned palliative care attendings would ask.

These issues are inseparable from professional identity formation. The use of AI in clinical care raises questions of authorship, responsibility, and trust. Who is accountable for a decision? How should uncertainty be communicated to patients? How should a potential diagnosis and treatment plan be credited? All of these questions are central to the formation of the eventual physician.

It’s not all bad. AI does create opportunities to enhance assess-

ment itself. Generative models can construct clinical cases, simulate patient interactions, and provide structured feedback on learner performance. Early work in graduate medical education suggests that AI-enabled simulation can expand access to deliberate practice and, as importantly, standardize feedback.⁵ This can be particularly relevant in hospital medicine, where variability in patient exposure can limit experiential learning. AI may allow programs to “fill gaps” in clinical experience, ensuring exposure to high-value conditions and decision points.

From a systems perspective, AI intersects with all of our workflows. Opportunities include reduction of documentation burden, enhanced decision support, and real-time analytics. These changes will inevitably alter the cognitive environment in which trainees learn. If clinical reasoning is increasingly scaffolded by AI, the question becomes: what is the irreducible skill set of the physician? Curriculum must answer this explicitly. If not, attrition is assured, and entropy will do its damage.

In operational terms, several curricular strategies emerge. First, AI must not be used procedurally, but rather reflectively. It is useful and appropriate for AI to

be a friendly adversary. “Prove my thinking wrong right now.” “Are there any cognitive or other biases my thinking suggests?” After the output is generated, we encourage learners to ask, “Do I trust this? Why or why not?” If the answer was right, did the learner fight against it at any point? If so, why? If the answer was wrong, we teach the learners that it is usually *plausibly* wrong. This plausibility can be instructive. This overall metacognition allows us to turn a ChatGPT session into professional identity formation.

Since AI is not a neutral tool, it must be explicitly taught as an object of study. At Columbia, we teach our learners to ask the same two questions about AI that the Amish use when a new tool is introduced into their culture: 1) What is the purpose of this tool? 2) How does this tool change me as I use it? By having the learners and the faculty continually ask themselves these questions, we aim to minimize deskilling while at the same time encouraging metacognition so the user can engage with AI as a force multiplier.

In summation, AI is not simply another educational technology. It is a reconfiguration of the cognitive infrastructure of medicine. The curricular response must be

equally structured. For hospitalists—who already operate at the nexus of care delivery and education—this represents both a challenge and an opportunity. The goal is not to produce physicians who can use AI, but physicians who can think in an AI-mediated environment. ■

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Quality

QI for Hospitalists: Quality, Safety, Transparency

Exploring hospitalists’ perspectives, the tools used, educational efforts, and recent policy developments

By Larry Beresford

For Joel Bradley, MD, director of graduate medical education quality and safety education and an adult and pediatric hospitalist at Dartmouth Health in Hanover, N.H., quality improvement (QI) by hospitalists is inextricably linked to the safety of hospitalized patients and to improving the quality and safety of the care they receive. However, he said, this link isn’t always emphasized as it should be for frontline clinicians.

“We know from recent research that adverse events are common in hospitals and may be happening in as many as a quarter of cases.”¹ That is often enough that almost every hospitalist is likely to encounter some patient harm every day they come to work. “Our option is to tolerate or not tolerate harm to patients, with the option to intervene as advocates for our patients and their safety,” he said.

Dr. Bradley suggested that quality and safety work for most hospitalists and trainees is best viewed as incremental and small-scale, not requiring complex, multi-site, longitudinal studies or research funding. “I think an incremental framework for improving individual practice



Dr. Bradley

and the systems we work in is the crux of modern clinical practice. It also provides an answer to the statement that many clinicians tend to make that they don’t have time for quality.” Instead, he said, small acts of improvement can be integrated into most hospitalists’ daily work.

“Like reporting patient safety events and trusting that the system will feed back to you what happened, and what was improved, because that is the job of the QI architecture of a health system,” Dr. Bradley said. “It doesn’t matter whether you work in a community setting or an academic setting. There should be a patient safety and quality program that can act on things that frontline physicians report and believe are important to patient care.”

Those who work in quality improvement are writing more and more about patient and family involvement, such as through their advisory councils, Dr. Bradley said. “Ultimately, the purpose of quality work is to serve patients and the communities of our health systems. How are we going to do that unless the data are transparent both to providers and to patients and families?” he said. “The case I would make is that the more we involve patients and families in discussing quality gaps and harm, the more we will feel obligated ethically—as individuals and as clinical teams—to keep improving the system.”

“We’re entering a new phase where provider-patient partnership goes from being an idea in QI to, potentially, a reality,” Dr. Bradley added,

thanks to AI-generated tools that can more swiftly aggregate patient feedback about care. That will invite more hospitalists and other front-line clinicians to the table because there will be unit-level, real, actionable, point-of-care data to work with. “At the end of the day, as a hospitalist, unit medical director, or section chief, you’ll be able to know how you did today.”

What Is Quality?

Quality and QI in hospital medicine start with improving outcomes through evidence-based practices to reduce variability. For Nicholas Meo, MD, associate chief medical officer for quality and safety and a hospitalist at Harborview Medical Center in Seattle, “there are ways to measure how effective we are at healthcare delivery. And that can be viewed through a lot of different lenses.” The umbrella term for this is quality. And of the commonly accepted characteristics of quality, safety is a critical one.

“Safe care is a dimension of quality. If we identify situations in which care is unsafe or if we make care safer, that care becomes higher quality. Along the same lines, if we deliver care that is more patient-centered, then we’re delivering higher quality.” Other examples, Dr. Meo said, include greater efficiency, timeliness, and appropriateness, or delivering care that is evidence-based or in line with the patient’s values.

“Improvement is the set of methods, tactics,



and approaches that we employ to achieve better quality,” Dr. Meo said. There are some common tools that can be used that will help identify a quality problem, be specific about what you’re trying to accomplish to solve that problem, and then employ strategies to iteratively tackle or address it. “So quality improvement is putting those things together, focusing on some aspect of quality, and using a set of tools or approaches to try to close the gap. In our milieu, PDSA [Plan-Do-Study-Act] is a common tool for this,” Dr. Meo said.

“I think engaging in quality is central to the hospitalist physician’s identity. We’re not only experts in how to deliver hospital-based care, but we also understand how to navigate complex systems. And we see where our systems don’t best serve patients. Just going to work, you’re going to learn what quality is and where we may be falling short.”

Dr. Meo oversees all of the patient safety activities at Harborview Medical Center. “So when harm reaches a patient, we can commit to investigating, learning as much as we can about that event, and putting in place a plan to prevent something like that from happening again. We then work with patients and families after they’ve been harmed to try to reach some measure of resolution with them.”

If a hospitalist is involved in reporting a case to the safety department, he said, they may be asked for their perspectives on that case. “You may be asked for your ideas about how we can do it better. And depending on the case, depending on the hospital and its process, you may be asked to participate in communicating back to the patient and family after we have conducted the review,” he said.

“At Harborview, we’re constantly thinking about this and how we can do better by patients in this regard,” Dr. Meo said. “Adverse events will happen. Sometimes they’re not preventable, but sometimes we identify an adverse event that was preventable in some way. And I think that we all have, no matter where we work, a responsibility to be as transparent as possible with patients and families after these events occur.”

Dr. Meo recommended sticking to the facts of the case when informing patients, not speculating, but trying to honestly and authentically share what is known about an event. “And that’s what we’re trying to put in place here—the structures that will allow that to happen.”

He also urged individual hospitalists to engage with the structures that already exist where they work. “Talk to the risk manager, or the patient safety chief, or the patient safety officer in your hospital. Ask them what they expect from a hospitalist in terms of how to talk to families. They probably have either experts or other resources to help you along the way.”

Making It Explicit

“I think quality is such an implicit part of health care that it sometimes takes an effort to make it explicit,” said Prerak Vipul Juthani, MD, MBA, clinical assistant professor of medicine at Stanford Medicine in Stanford, Calif. “I also think quality is the heartbeat of a hospital, because it keeps the hospital going. And if you

don’t have a strong culture of quality, chances are that the next pandemic, or anything else that’s unexpected, will be tougher to manage because you don’t have rigorous quality improvement foundations. QI initiatives teach us to adapt quickly and to learn quickly.”

Dr. Juthani said he got a bit of QI training in medical school, but not enough. “In residency, the only reason I got into it was that I was lucky enough to get involved in QI committees,” he said. Today, he works on a variety of safety projects and task forces at Stanford, including reviews of all sorts of safety events and near misses, as well as more systemic issues.

“We create fishbone diagrams for whenever something occurs. We use A3s [lean problem-solving methodology], which is just an entire template for approaching a qualitative improvement project. And we also create Pareto diagrams. These are all things that are foundational to QI. The good part is that medical schools are picking up on this, with a curriculum behind it. But it’s never too late, even if you didn’t get a formal education in it, because once you start practicing, in whatever capacity, these groups will orient you,” he said.

How do we teach working hospitalists to rise to this level of basic QI? “I think it has to involve leadership taking a grassroots approach if that sort of culture isn’t already present in a hospital,” Dr. Juthani said.

What Is SHM Doing?

SHM teaches QI to hospitalists through its comprehensive Center for Quality Improvement, which offers projects addressing 16 specific clinical topics. SHM also has the Hospital Qual-



Dr. Juthani

ity & Patient Safety (HQPS) Online Academy of internet-based modules to provide training not included in traditional medical education, and eQUIPS (electronic quality improvement programs) for web-based, collaborative, and topic-specific projects. Other avenues include a special interest group in quality improvement, coaching and mentoring, and a variety of educational offerings at the annual SHM Converge.

The Quality and Safety Educators Academy (QSEA), offered by SHM since 2012, most recently in September of 2025, is an intensive, three-day experience for hospitalists who are engaged—or want to be—in teaching QI principles to learners, including medical students, residents, advanced practice providers, and even other hospitalists. The next QSEA offering has not been scheduled yet.

In her keynote address at last year's QSEA, Jennifer Myers, MD, FACP, MHM, executive director of the Center for Healthcare Improvement and Patient Safety at the University of Pennsylvania's Perelman School of Medicine in Philadelphia, and a founding co-director of QSEA, emphasized the team approach across professions. "As physicians, you know, most of our training is done uni-professionally—physicians teaching physicians—but the practice of medicine is a team-based approach." That includes nurses, social workers, patient navigators, physical therapists, and more.



Dr. Myers

"So I spoke about why collaborating with nurses and other healthcare professionals and making that standard practice and a foundation for quality improvement is so important," Dr. Myers said. "That's what drew me to QI early in my career. I liked the interprofessional nature of bringing different brains and eyes together. As you are designing educational experiences, having them co-designed by a nurse and a physician can really result in some innovative things."

QSEA is the only national faculty development academy designed for the teachers of quality, Dr. Myers said. It was specifically designed for hospitalists who were being tapped on the shoulder, or who were raising their hands, to lead quality and safety teaching in their institution.

What has the training of QI educators taught her about how to share this knowledge with working hospitalists? "I would say the way to get involved in QI is to volunteer for QI projects early in your career. You know, if there is a problem in care delivery, volunteer to try to understand it and work to solve it." But it's also important to understand the evolving healthcare system and the emergence of value-based models to understand the metrics related to hospital reimbursement, and what's going to be important to the healthcare system, she said.

"I also think that to learn the work, you need to experience it. You need to be exposed to it. Like handling safety event reports, being part of a QI effort. You need the experience of doing, which is really how we learn anything."

Dr. Bradley said he believes quality is easier to learn once the individual has started working in the context of their job, after completing their education. "It becomes a lot more interesting when I have a junior hospitalist come to me a year or two into practice, saying: 'Hey, I experienced this thing with my patient. What do I do now?' That's a powerful invitation for real teaching, where quality and safety come home to roost," he said.

High-Value Care

Isha Puri, MD, MPH, FHM, is director of quality improvement and scholarly activity for the internal medicine residency program at Texas Health Harris Methodist Hospital in Fort Worth, Texas—and a hospitalist. She has been involved in QI for close to 10 years. "The way it began for me was working on independent projects. The American College of Physicians has an advanced course in QI, which I took and then built my QI project," she said.



Dr. Puri

In a previous position at Peninsula Regional Medical Center in Salisbury, Md., the director of hospital medicine encouraged her to focus on high-value care because of her interest in quality. "QI for antibiotic stewardship was an opportunity to do that. Later, I served as director of quality improvement for the hospitalist program at Lahey Medical Center in Burlington, Mass." In that role, Dr. Puri focused on projects aimed at bringing improvement to the program and its patient care.

"Currently, I'm working with the graduate medical education program for internal medicine residents. I am the QI lead for them. I built their curriculum for QI and patient safety. And we try to keep it exciting because it's for the residents and medical students."

The program follows a structured curriculum of patient safety and quality improvement, based on the Institute for Healthcare Improvement. All residents complete the basic certificate in patient safety and quality improvement. The curriculum also includes interactive workshops, which incorporate small group discussions and mock interactive sessions, she said. One of the simulation sessions focuses on root cause analysis conducted as a small group workshop in which residents role-play simulated near-miss cases.

Dr. Puri's quality program at Harris also partners with other specialties, for example the surgical department, which proposed a project on feeding tube complications. "We were able to roll it out, after both the surgery and medicine residents jumped in to develop an algorithm on how to prevent feeding tube complications. We took that to unit-based council meetings for nursing staff and taught them how to prevent these complications," she said.

"Along similar lines, we've had quite a few quality initiatives with oncology, working with the National Comprehensive Cancer Society Guidelines." Some of these reports have been submitted as QI abstracts for medical meetings, she said. "The last one we did was a pancreatic cancer project, for which the resident actually won the best poster award for a Texas ACP [American College of Physicians] meeting."

And recently, Dr. Puri spoke to a pulmonologist, who suggested looking at prone bronchoscopies. "They wanted us to do it as a quality project and see how our numbers compare with other community hospitals. So I feel like we're helping them and they're helping us," she said.

"As a hospitalist, I think it's important to keep that enthusiasm going. When you feel more connected to your patients, you feel better connected to the nursing staff, and it gives you improved HCAHPS [Hospital Consumer Assessment of Healthcare Providers and Systems] scores because of that engagement."

Attestation of Quality

For Dr. Bradley, the recent adoption of the Patient Safety Structural Measure (PSSM) and protocol by the federal Centers for Medicare and Medicaid Services in August of 2024 illustrates an opportunity for hospitalists to move the daily practice of quality and safety toward more advanced, public-facing reporting structures.

PSSM is an attestation-based measure requiring hospitals to affirm that they have a structure, culture, and leadership commitment prioritizing patient safety across five major domains. Those are: leadership commitment to eliminating preventable harm; strategic planning and organizational policy; culture of safety and learning health system; accountability and transparency; and patient and family engagement. Each domain contains five attestation statements for hospitals to evaluate and determine whether they can affirmatively attest "yes" to each statement.

Reporting is mandatory, and hospitals' attestations to their specific evidence-based practices will be reported along with public reporting of performance on Care Compare starting in the fall of 2026. At this point, Dr. Bradley said, PSSM is more of a box-checking exercise without real teeth. However, it formally incentivizes a practice of prompt, transparent disclosure of medical errors, which is both an obligation for clinicians and a matter of public trust between the hospital, clinical teams, and communities.

"If we treat PSSM as a kind of ethical summons for hospitalists, we can say we now have permission and encouragement from the federal government to do this—including public posting of patient-facing information about our safety and quality (on the hospital floors). This can help hospitalists and clinical teams enter into real conversations with the patients and families about how to make care better."

In a recent article in the *Journal of Hospital Medicine*, Dr. Bradley and Dr. Andrew White of the University of Washington highlight the opportunities for PSSM and for the Communication and Resolution Program (CRP) model, in which hospitals disclose adverse events to patients, investigate, explain what happened, and apologize, coordinating early event detection and reporting, open communication with patients, and efforts to reconcile emotional, physical and financial harms for injured patients.²

"Despite research that this proactive approach improves outcomes without increasing malpractice claims and costs, hospitals have been slow to adopt CRPs, prompting policymakers to intervene," they note.³ For hospitalists, the professional development of communication skills for explaining harm to patients should be a priority. "Hospitalists at organizations with effective CRPs will also experience the satisfaction of contributing to system improvement and the ethical treatment of injured patients." ■

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

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Improving Equity by Making Tobacco Treatment Routine in the Hospital

By Travis Douglass, MD, FACP

Hospitalization represents a critical opportunity to support patients who use tobacco in making a quit attempt, yet tobacco use disorder remains a relatively low priority in many inpatient settings.¹ As of 2025, despite expanded coverage for tobacco cessation treatment through the Affordable Care Act and Medicaid expansion—and although nearly 70% of patients express a desire to quit—nicotine dependence is still too often treated as a personal responsibility rather than an essential component of clinical care.²

One barrier to addressing tobacco use in the hospital setting is the time-intensive nature

of traditional treatment models, such as the 5A framework. This approach requires clinicians to ask about tobacco use, advise patients to quit, assess readiness and barriers, assist with behavioral counseling and pharmacotherapy, and arrange follow-up.³ While evidence-based, this therapeutic approach can be difficult to implement amid the time pressures and competing demands of inpatient care. However, deferring tobacco cessation treatment is especially consequential for patients from marginalized communities, who bear a disproportionate burden of tobacco-related diseases.⁴

A recent snapshot of our hospital medicine service showed that nearly 30% of 273 admitted patients were people who used tobacco,

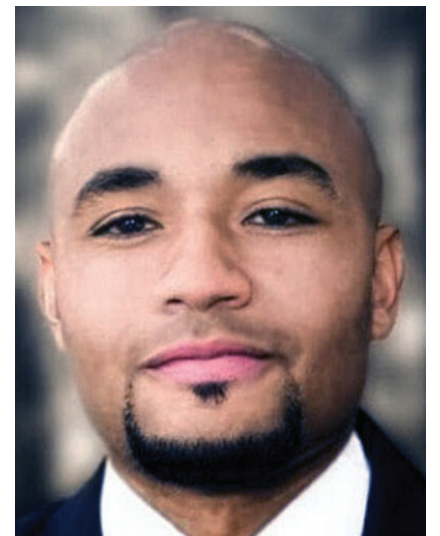
offering clinicians a meaningful opportunity to engage a sizeable at-risk population and support quit attempts that otherwise may not occur in outpatient settings. By incorporating systematic, evidence-based treatment into routine inpatient care, hospitalization can serve as a supportive setting for progress toward quitting and may contribute to improving the quality of care we deliver. Meeting this need will require practical, scalable approaches that integrate tobacco cessation treatment as a consistent element of hospital medicine practice without adding clinician burden.

Solution Overview

A clinician-led quality-improvement initiative introduced a streamlined “ask-and-offer” model to replace the traditional 5A framework for delivering tobacco cessation treatment during hospitalization. The goal was to normalize treatment as part of routine hospital care and promote equitable access by ensuring all identified tobacco users receive a consistent, proactive offer of evidence-based therapy.

Stakeholders

Key participants included the hospitalist delivering frontline care, nursing staff responsible for standardized tobacco-use documentation, adult patients who use tobacco, social services, and pharmacy staff supporting rapid medication fulfillment.



Dr. Douglass

Dr. Douglass is an assistant professor of medicine in the division of hospital medicine at Emory University Hospital Midtown in Atlanta. Dr. Douglass thanks the nursing staff at Emory University Hospital Midtown for their consistent and meticulous documentation of tobacco use status for every admitted patient. Their dedication was instrumental in streamlining the implementation of this model and exemplifies the excellence reflected in the hospital's recent Magnet designation.

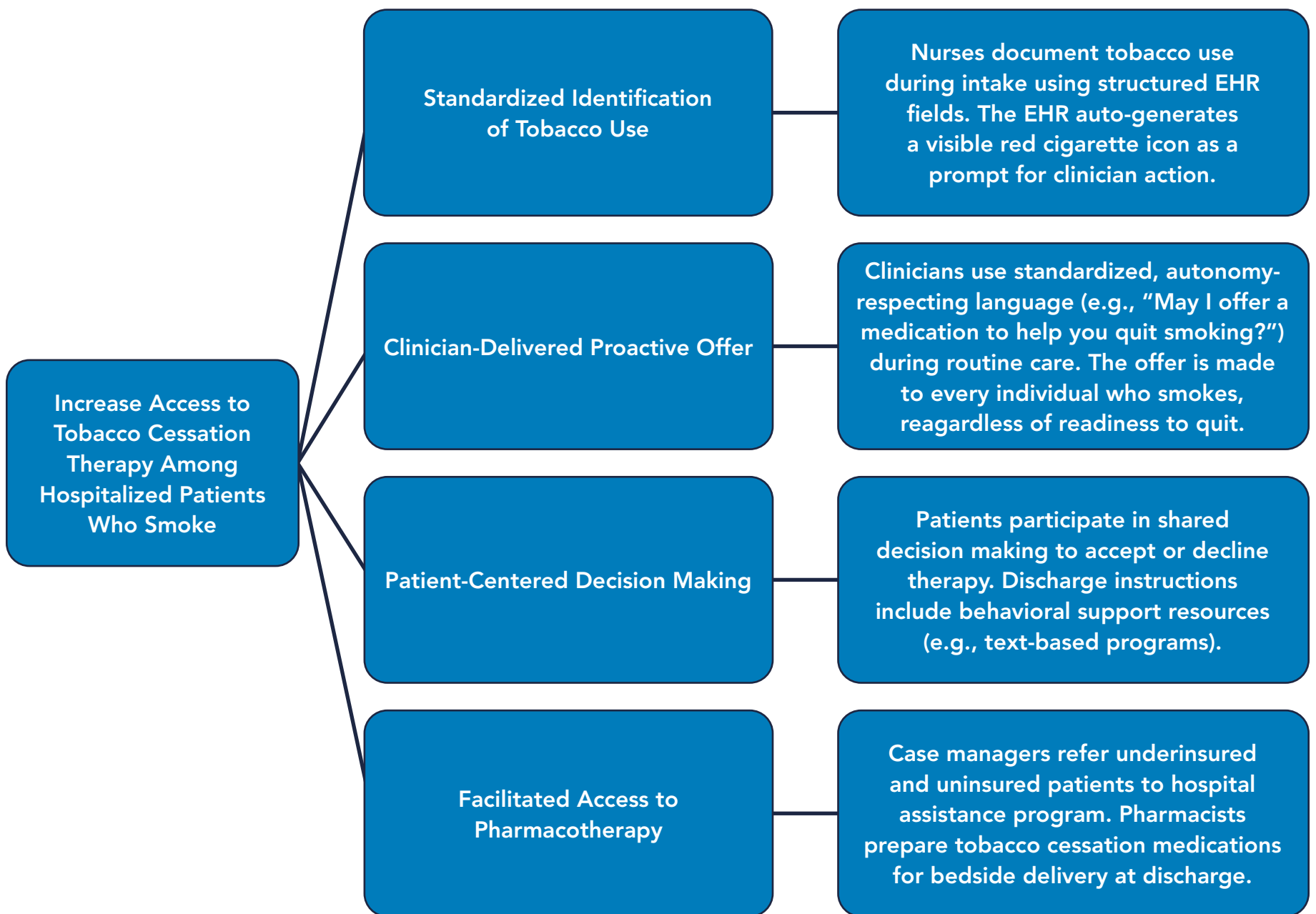
Key Strategies

1. **Quality improvement infrastructure:** The project was conducted over eight weeks using a structured improvement framework and individualized baseline data to assess feasibility and change in prescribing behavior.
2. **Streamlined identification process:** Tobacco use documented during routine nursing intake automatically generated an electronic prompt for the clinician, embedding screening into existing workflows without adding burden.
3. **Simplified, equity-focused offer:** The clinician used a concise, patient-centered question to initiate shared decision making and normalize tobacco cessation treatment as a standard component of inpatient care.
4. **Immediate access to first-line pharmacotherapy:** Accepted offers led to timely prescriptions of a highly effective, guideline-recommended medication, supported by coordinated pharmacy delivery.
5. **Connection to behavioral resources:** Patients also received accessible behavioral support options that could extend treatment beyond hospitalization.

Implementation Process

The intervention was conducted from April 9 to June 8, 2025, using a structured plan-do-study-act (PDSA) framework. To establish a baseline, historical prescribing patterns from 2024 were extracted via Epic Cogito SliceDicer, providing a full-year reference for the lead clinician's prior tobacco-cessation

Figure 1. Key Driver Diagram: Making Tobacco Cessation Treatment Routine

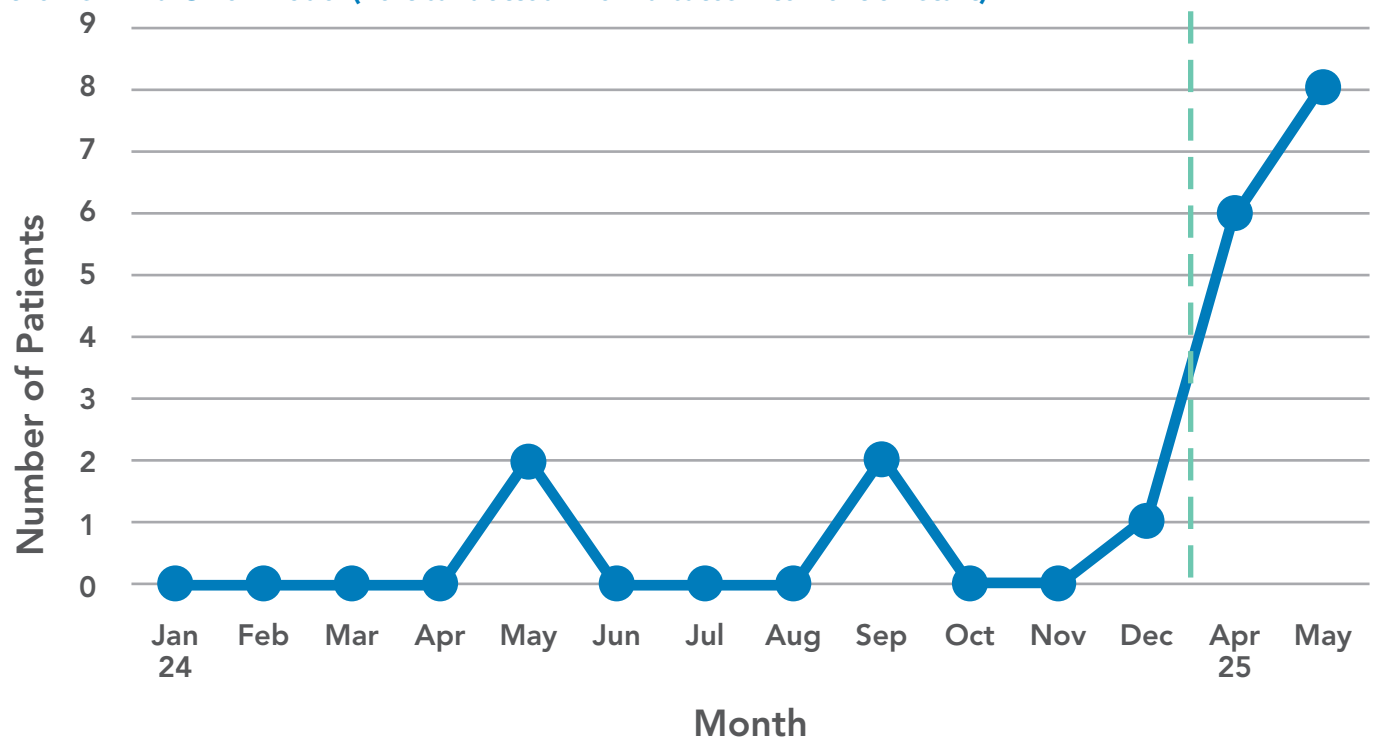


prescribing behavior. The project took place in a large urban academic medical center serving a racially and socioeconomically diverse patient population. Implementation occurred within a hospital medicine service over 33 clinical days during which the lead clinician provided direct inpatient care.

Upon arrival to the medical floor, adult patients aged 18 years or older underwent routine nursing intake, during which tobacco use was documented in structured electronic health record (EHR) fields. Selection of "every day" or "some days" use of cigarettes, cigars, or pipes triggered a red cigarette icon in the Epic interface—a passive, standardized prompt visible to the treating clinician. This automated cue effectively embedded the "ask" component within the existing workflow, eliminating the need for additional clinician-initiated screening steps.

After focusing on acute medical issues during the initial encounter, the clinician delivered a single, standardized offer: "May I offer you a medication to help you quit smoking?" This simple, inclusive invitation supported shared decision making without requiring prior rapport or multiple encounters. The phrasing emphasized immediacy, normalized offering tobacco treatment within routine care, and promoted equity-informed standardization. These

Figure 2. Monthly Varenicline Prescriptions by a Single Clinician Before and After Implementation of the Ask-And-Offer Model (vertical dotted line indicates intervention start)



steps are further illustrated in the key driver diagram (see Figure 1), which outlines the core components of the intervention—from standardized identification to facilitated pharmacotherapy access.

Patients who accepted the pharmacotherapy offer were prescribed varenicline via the EHR, with prescriptions routed to the hospital's on-campus outpatient pharmacy for bedside delivery upon initiation of

a discharge order. The EHR included a preset varenicline order featuring the standard one-month titration schedule (0.5 mg orally once daily for three days, 0.5 mg orally twice daily for the next three days, then 1 mg orally twice daily for the remainder of the month). A separately linked varenicline order (1 mg orally twice daily; 112 tablets) was entered to complete a standard 12-week course. For patients with a creatinine clearance

under 30 mL/min or experiencing end-stage renal disease, a reduced dose of 0.5 mg orally once daily was prescribed for the duration of therapy. Varenicline, a partial nicotinic receptor agonist, was selected as the first-line agent due to its demonstrated superiority over bupropion and nicotine replacement therapy.⁵ It promotes tobacco cessation by modulating dopamine pathways and blocking nicotine binding. A second-

ary analysis of the EAGLES trial further showed that varenicline was more effective across racial subgroups, supporting its use in diverse clinical populations.⁶

Pharmacotherapy was paired with behavioral support by including within the discharge instructions enrollment information for accessible resources such as the National Cancer Institute's mobile cessation program (text "QUIT" to 47848) and the national quit line (1-800-QUIT-NOW).

Obstacles

Due to formulary restrictions, varenicline could not be administered during the inpatient stay, limiting the ability to directly monitor patients for common adverse effects such as nausea or vivid dreams. Furthermore, prescriptions sent to the outpatient pharmacy occasionally require up to one business day for processing, delaying access for patients discharging that same day. To minimize these delays, varenicline prescriptions were submitted to the pharmacy the same day they were offered, regardless of the anticipated discharge date.

Insurance barriers included one request for prior authorization, ultimately approved the following business day through the CoverMyMeds platform. An uninsured patient received varenicline at no cost through the hospital's 340B program, facilitated by social services. Two patients faced a copay, which they accepted.

Key Takeaways

- Leverage existing EHR infrastructure to streamline screening: Use automatic visual prompts—such as a red cigarette icon—triggered by structured nursing intake fields to ensure consistent identification of tobacco use without adding clinician burden.
- Use a simple, inclusive offer to initiate treatment: A standardized, autonomy-respecting question—"May I offer you a medication to help you quit smoking?"—enables universal access without requiring readiness assessments or multiple encounters.
- Advocate for systemic change to sustain impact: Train clinicians about evidence-based tobacco cessation therapy, beginning at onboarding, and reinforced through ongoing education and structured feedback. Embed tobacco treatment into institutional quality metrics to establish it as a core component of routine hospital care.

Table 1. Demographic and Clinical Characteristics of Patients Who Accepted Varenicline (n = 14)

CHARACTERISTIC	NUMBER (%) OR VALUE
Age, median (range), years	61 (41–82)
SEX	
Male	8 (57%)
Female	6 (43%)
RACE/ETHNICITY	
Black	12 (86%)
White	2 (14%)
INSURANCE COVERAGE	
Medicaid	7 (50%)
Medicare Advantage	5 (36%)
Dual eligibility	2 (14%)
CLINICAL CHARACTERISTICS	
Tobacco-related illness present	12 (86%)
Psychiatric or substance-use comorbidity	8 (57%)
Experiencing homelessness	1 (7%)

Readmission data showed that varenicline was not consistently continued across care transitions, highlighting gaps in EHR interoperability and the need for stronger continuity mechanisms—particularly for patients receiving care across multiple systems.

Although all patients had mobile phones, many were unreachable after discharge because their devices were powered off, raising concerns about the use of digital tools such as the National Cancer Institute's SmokefreeTXT program.

Outcomes and Impact

The ask-and-offer model significantly increased prescribing rates of tobacco cessation therapy. Over the eight-week intervention, 14 of 19 eligible patients (74%) accepted a prescription for varenicline, nearly tripling the number (5) prescribed by the same clinician during the entire previous year. Patients who declined pharmacotherapy cited a lack of readiness to quit smoking. This increase is illustrated in Figure 2, which shows the lead clinician's monthly prescribing rates before and after implementation of the ask-and-offer model.

The clinical and demographic characteristics of the intervention cohort reflected populations disproportionately affected by tobacco-related diseases (see Table 1). The median age was 61 years (range, 41 to 82); 86% of patients identified as Black, and most (84%) were insured through Medicaid, Medicare Advantage, or dual-eligibility programs. Tobacco-related diagnoses were documented in 86% of patients, while more than half (57%) had behavioral health or

co-occurring substance use disorders. One patient was unhoused at the time of admission.

Geographic data provides important context. Among the 13 housed patients, 12 (92%) lived in ZIP codes where smoking prevalence exceeded the national average of 11.6%, with some areas surpassing 24%.

Of the four patients who self-reported outcomes, one quit smoking without starting varenicline, another achieved full tobacco cessation while using the medication, a third reduced smoking from 10 to one cigarette per day, and a fourth shared, "I used to go through a pack a day. Now—it's been 14 days, and I still have the pack I bought two weeks ago." While anecdotal, these reports indicate meaningful behavioral changes and strong engagement with treatment.

Lessons Learned

A simplified ask-and-offer model for tobacco cessation treatment can be integrated into existing hospital workflows without additional staffing, new funding, or major disruptions to clinical operations. Multiple disciplines—including hospital medicine, nursing, social services, and pharmacy—were able to rely on familiar processes to deliver evidence-based tobacco-cessation therapy consistently and efficiently.

Proactively offering treatment to every identified tobacco user expanded access for patients who have historically and disproportionately been affected by tobacco-related diseases, including those experiencing financial hardship or managing behavioral health disorders. Contrary to common assumptions that

these patients are uninterested in quitting, many accepted pharmacotherapies readily, without the need for lengthy assessments of readiness or motivation.

Future Directions

Future PDSA cycles of the ask-and-offer model should focus on evaluating its long-term impact, particularly durable behavioral change. Further work should incorporate more robust measures of varenicline adherence and biochemical verification of tobacco cessation. As the model expands across multiple clinicians, it will be important to monitor variability in uptake and patient response to ensure consistency and equity.

Nicotine dependence should not be treated as a personal challenge but as a chronic, treatable disease—no different from diabetes or heart failure. To support this effort, hospital medicine groups can cultivate a culture in which clinicians are equipped and expected to address tobacco use consistently, supported by onboarding, continuing education, and ongoing reinforcement.

The ask-and-offer model was developed to address a local, practical need—to help a clinician reliably incorporate tobacco treatment into routine practice. Yet its simplicity, alignment with existing workflows, and reliance on existing infrastructure suggest that it could be scalable. If meaningful outcomes result from this approach—such as tobacco harm reduction or increased tobacco cessation—it could justify incorporating value-based reimbursement models to encourage greater uptake. By linking tobacco cessation efforts to quality measures and organizational priorities, health systems can reaffirm that tobacco treatment is fundamental clinical care and support broader efforts to reduce inequities in tobacco-related diseases. ■

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QI History & Physical: A Natural Extension of the Clinician Skillset

By Chenwei Wu, MD, Nicholas Meo, MD, Evan Paul, MD, Elizabeth Wahl, MD, MAS, Jeffrey Redinger, MD, and Mehraneh Khalighi, MD

Current approaches to quality improvement (QI) resident education have made limited progress in bridging the healthcare quality chasm, despite over two decades since medical practitioners first recognized the extent of this divide. Prior research has identified the inadequate integration of QI concepts into everyday clinical practice as a significant barrier to their uptake and application by trainees. In response, we developed a novel schema for conceptualizing QI methods as analogs of familiar steps in medical diagnosis. Additionally, we have repurposed the components of the well-known history and physical to serve as an organizing framework for QI activities. By adapting and extending core bedside skills to encompass QI, rather than explaining concepts through an unfamiliar manufacturing lens, we aim to accelerate both the dissemination and acquisition of QI knowledge within practice communities and clinical learning environments.

Background

As we mark a quarter century since the Institute of Medicine published its landmark report “To Err is Human,”¹ clinicians have cause for both celebration and measured introspection. QI is now recognized as an important physician skillset, but its integration into graduate medical education has been limited. In its 2025 Clinical Learning Environment

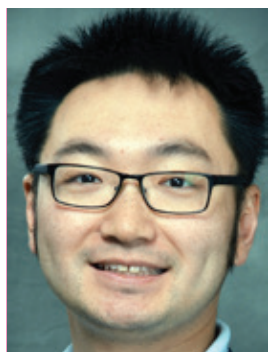


Review, the Accreditation Council for Graduate Medical Education found widespread familiarity with QI concepts at fewer than 4% of surveyed training programs.² We cannot expect physicians to engage in meaningful QI if they graduate with only superficial knowledge and cursory practice. Across training environments, frequently cited challenges have included a lack of expert faculty, competition for scarce time between QI and clinical curricula, and perceived irrelevance of QI to core physician duties.³⁻⁸

Countering these challenges, some programs have achieved pedagogical success by integrating improvement discussions within clinical dialogues, emphasizing experiential rather than didactic learning, and eschewing abstract datasets in favor of bedside problems.^{6,7,9-13} Indeed, the Royal College of Physicians and Surgeons of Canada sounded an urgent call for better integration of QI education and patient care as the best path forward.¹⁴

In response, we propose appropriating a familiar clinical frame-

work, the history and physical (H&P), to teach QI. Following the H&P structure, we present a QI problem in the context of a clinical case and highlight similarities in the approach used to address both. We demonstrate that the core pursuit of QI—the correct determination of root causes followed by rapid cycles of intervention, assessment, and re-adjustment—mirrors the experience of clinicians managing patients from hospital admission through discharge. We reinforce this message by highlighting other shared strat-



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Table 1. History and Physical Components Mapped to QI Correlates

CLINICAL H&P COMPONENT	QI CORRELATE	COMMENTS
Chief complaint	<i>Problem statement</i>	High-level summary of the problem
History of present illness	<i>Stakeholder interviews</i>	Subjective experience of individuals closest to the problem
Allergies and historical factors	<i>Modifying elements</i>	Additional considerations that constrain and inform management
Medications	<i>Technical factors</i>	
Allergies	<i>Financial factors</i>	
Past medical history	<i>Organizational factors</i>	
Social history		
Family history		
Physical examination	<i>Gemba walk</i>	Information collected through direct scrutiny
Vital signs and labs	<i>Outcome, process, and balance measures*</i>	Objective indicators of health to monitor over time
Assessment	<i>Root cause(s)</i>	Synthesis of findings and conclusions about etiology
Treatment plan	<i>PDSA cycle†</i>	Set of interventions to be iteratively studied, reassessed, and refined
Discharge criteria	<i>Aim statement</i>	Clear treatment goal and criteria to declare success

* Outcome measures reflect clinical endpoints, process measures reflect staff performance, and balance measures reflect adverse consequences

† PDSA: plan-do-study-act

egies, including physical examination and adaptation to practical circumstances. By reframing QI through a clinical lens, we aim to make previously obtuse concepts more familiar and to transform QI engagement from something that may seem daunting and peripheral to patient care into an approachable extension of the core activity central to patient care.

Clinical Case Featuring Embedded QI Problem

A 75-year-old man with ischemic cardiomyopathy presents with dyspnea, weight gain, and lower extremity swelling. He denies chest pain. He lives alone, has limited mobility, and admits to eating mostly processed foods. He reports adherence to his oral diuretic regimen. On exam, he has lung crackles bilaterally, distended neck veins, and dependent lower extremity edema. His electrocardiogram is non-ischemic, and biomarkers for myocardial injury are negative. The B-type natriuretic peptide level is markedly elevated. Chest imaging demonstrates pulmonary vascular congestion.

Importantly, the patient was recently discharged from this hospital after completing treatment for acute decompensated heart failure (ADHF). Weights from his hospitalization cannot be found.

Clinicians are taught to organize the above case using a structured H&P, which helps them to remember, communicate, and systematize important points. The central elements of this familiar framework include succinct orientation (chief complaint), pertinent subjective details from the patient and other informants (history of present illness, or HPI), influential medical

and psychosocial details (allergies and historical factors), and objective findings from direct scrutiny (physical examination) and other testing (vital signs and laboratory results). To conclude, a diagnostic impression and initial treatment strategy are constructed (assessment and treatment plan). Acute care of the patient is continued—and continually adjusted—until recovery goals are met (discharge criteria).

After reading the vignette, most clinicians will have little difficulty diagnosing ADHF and intervening to address the patient's volume overload, nutritional insecurity, and excessive sodium intake, which are the root causes of his recurrent exacerbations. They will know how to monitor vital signs, weight, and serum creatinine for evidence of physiological improvement or deterioration and will adjust the treatment plan accordingly based on these indicators.

The vignette also suggests that inconsistent weight tracking during the previous hospitalization may have contributed to his readmission and, if not addressed, could impede his care once more. While most clinicians can confidently manage ADHF, far fewer feel comfortable addressing the systems-level issues underlying structured daily weight collection, especially when using approaches and terminology rooted in manufacturing rather than medicine. However, with their robust background in clinical problem-solving, clinicians already possess the essential skills needed for implementing QI measures. After all, what is the root cause if not a diagnosis? And what is a plan-do-study-act (PDSA) cycle if not a daily treatment plan?

Advancing this concept, we use the well-known H&P framework to present a QI project focused on daily weight collection. Information is presented stepwise to emphasize key similarities as the case progresses. A glossary (see Table 1) maps italicized QI terms to their bolded clinical counterparts.

Formulate a High-Level Summary of the Problem

Scenario: At this hospital, inconsistent daily weight collection impedes ADHF management and increases readmission risk.

Much like the recording of the chief complaint at the beginning of a clinical H&P, the initial step in any QI endeavor is to explicitly and succinctly state the problem being addressed. This problem statement informs interested parties and other team members about the high-level objective of the QI initiative.

Gather Subjective Information About the Problem and Associated Processes Through an Interview

Scenario: Information gathered from patients admitted with ADHF and their providers reveals several issues. Resident trainees frequently forget to activate the computerized provider order entry (CPOE) "daily weight" command because it is absent from the templated ADHF admission order set. Some trainees input free-text instructions for nurses, but the CPOE command and free-text prompts appear in different sections within the electronic health record (EHR). Nurses note that daily weights are recorded in a specific vital sign application, separate from the

primary EHR. Most trainees are unfamiliar with this application and instead transcribe values from a paper flowsheet at the patient's bedside. Nurses also report that the bedside flowsheets are incomplete and used only for rough calculations. Attending physicians depend on trainee reports to make decisions regarding diuretic management. Additionally, there is no standard protocol for weighing patients; the common practice is to attempt weighing at the end of the night shift. Patients often express dissatisfaction with being disturbed so early, and many refuse to be weighed at that time.

Just as the clinical HPI recounts how an illness began, its symptoms, and the factors that modify those symptoms, a similar narrative can be constructed for any QI problem through stakeholder interviews. Asking open-ended questions to gather insights from individuals most familiar with the problem is just as effective in QI as it is in clinical investigations. Furthermore, just as curating pertinent details in the HPI can guide clinicians toward certain diagnoses and treatment strategies, stakeholder interviews can highlight specific process deficiencies and inspire the development of countermeasures.

Catalog Additional Factors Likely to Influence the Final Plan

Scenario: Reduction in readmissions is a hospital-wide priority. Staffing levels are adequate across the organization, and collegiality among staff is strong. Financially, the hospital can afford minor process changes but not large purchases like a new EHR. While

replacing the EHR outright is not possible, limited modifications can be made.

In the same way that the H&P records allergies and historical factors that might sway treatment decisions, improvement projects must acknowledge the technical, financial, and organizational fabric in which they are embedded. By accounting for these modifying elements, surprise challenges and opportunities are often revealed. In this example, we learn that the EHR can be partially customized and professional relationships are strong enough to withstand workflow alterations. We also learn that reducing readmissions is a hospital priority, which means additional resources beyond those originally envisioned may become available. Consequently, the improvement plan that takes shape under these conditions will differ significantly from what it would be without such support.

Physically Examine the System and Identify Parameters that Should Be Tracked

Scenario: On average, the hospital cares for five ADHF patients each day. These patients are randomly distributed across three hospital wards, each equipped with two well-maintained portable scales. Weight collection efficiency is constrained more by nighttime staffing than by scale availability. Additionally, there is no standardized process for collecting or documenting weights. The following parameters are proposed to monitor the effects of implementing a standardized process for weight collection and documentation:

1. Percent of patients admitted with ADHF who have CPOE daily weight orders (process measure)
2. Percent of patients admitted with ADHF who have daily weights recorded in the dedicated vital signs application (process measure)
3. Staff satisfaction with revised workflows (balance measure)
4. Patient satisfaction with revised workflows (balance and outcome measure)
5. ADHF length of stay (balance and outcome measure)
6. ADHF readmission rate (balance and outcome measure)

The QI equivalent of a physical examination is the Gemba walk, a term borrowed from Japanese manufacturing, which means to “go and see in the real place.” Clinically, we inspect, palpate, percuss, and auscultate anatomic sites to supplement the history and refine the differential diagnosis. Similarly, the Gemba walk provides valuable insights into existing processes, the physical environment, and staff dynamics, which are crucial for identifying root causes of a

problem and selecting the most effective improvement strategy.

In managing ADHF, clinicians respond to changes in vital signs, exam findings, and laboratory results, such as serum creatinine levels, by either escalating or curtailing diuresis. Similarly, improvement teams must monitor key parameters, broadly categorized as outcome, process, and balance measures, to track progress and detect deviations. Outcome measures are analogous to clinical endpoints, reflecting the most downstream consequences of an intervention; for our case, this would be the ADHF readmission rate. Process measures evaluate how effectively individuals complete tasks. Balance measures, meanwhile, assess for the emergence of unwanted trends, such as staff dissatisfaction after workflow revisions or longer inpatient stays, even as readmissions decline. As with clinical care, QI projects should adapt intelligently to signals emanating from these vital measures.

Restate the Problem and Synthesize Conclusions

Scenario: Inconsistent daily weight collection hampers effective ADHF management and increases the risk of readmissions. Attending physicians depend on morning weights to guide diuretic dosing, but the unreliability of these data leads to suboptimal care. The root causes include 1) lack of standardized workflows for order entry, weight collection, and weight documentation; 2) bottlenecks resulting from reduced nighttime staffing; and 3) patient dissatisfaction, which often results in refusal to be weighed.

The identification of root causes mirrors the formulation of the assessment in a clinical H&P. Once the relevant subjective, contextual, and objective details are cataloged, the central problem can be restated, and conclusions about its causes can be formally presented.

Propose an Improvement Plan that Will Be Iteratively Tested, Studied, and Readjusted

Scenario: Preparatory work:

Leverage the hospital-wide readmissions reduction campaign to recruit manpower for data collection.

First PDSA cycle:

1. Coordinate morning blood draws with weight collection to reduce patient dissatisfaction.
2. Remove bedside paper flow-sheets and replace them with notices directing providers to check the dedicated vital signs application.
3. Assign weight collection responsibilities to the night shift charge nurse, pending approval from

that stakeholder group.

Future PDSA cycles:

1. Add a discrete “daily weights” order to the ADHF admission order set
2. Automatically import weight data from a dedicated vital signs application into the primary EHR
3. Co-locate ADHF patients on the same ward to streamline care processes

A good improvement plan, much like a curative treatment plan, addresses root causes rather than merely alleviating symptoms. It involves thoughtfully selecting interventions that respect practical constraints. Most importantly, these interventions should be trialed, their effectiveness assessed at regular intervals, and the plan adjusted accordingly. This embodies the essence of the PDSA cycle, which is central to QI and mirrors the iterative nature of patient care in a hospital setting.

Declare Clear Thresholds for Success

Scenario: The endpoint for this project is achieving greater than 90% adherence to daily weight collection among patients admitted with ADHF.

In caring for hospitalized patients, clinicians need to establish clear discharge criteria. For ADHF, this typically involves weaning the patient to baseline oxygenation, diuresing to dry weight, and transitioning to oral medications. Similarly, in QI, setting clear project goals is crucial. These goals are usually detailed in an aim statement, which specifies the degree of improvement sought before success is declared. New interventions should be tested in successive PDSA cycles until this goal is achieved.

Conclusion

As we have shown, QI and clinical care share a single problem-solving paradigm: to succeed, one must hear the complete story, inspect the problem first-hand, determine root causes, and continuously enact, review, and revise a corrective plan. Moreover, our vignette underscores the extent to which QI and clinical problems are entangled, with system deficiencies exerting considerable influence on patient outcomes. To deliver optimal care, providers must address both dimensions, but training in and adoption of QI has been stymied by numerous practical and cultural barriers. After appreciating the parallels between QI and clinical care, which we have drawn, we hope that physicians will feel emboldened to carry out—and to spread—QI according to fundamentals with which they are already familiar and in which they

are already expert.

We recognize that this approach fails to instruct clinicians on more advanced QI concepts, nor does it prepare them to steer enterprise-wide quality measures. However, it is intuitive and easily employed in the clinical learning environment. It emphasizes the relevance of QI to bedside care and provides a schema that any clinician can follow to start teaching improvement methodology. Importantly, while not meant as the final outpost on a path toward QI mastery, our approach nevertheless serves as a catalytic first step in that rewarding journey. ■

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SIG Spotlight: International Medical Graduates

Reinforcing a sense of belonging and professional legitimacy

By Karen Appold

SHM's International Medical Graduates (IMG) Special Interest Group (SIG) was formed out of a simple realization: although IMGs are essential to hospital medicine, many of these graduates navigate their challenges quietly and individually, said Amy Yu, MD, MS, who chairs the SIG. Dr. Yu is a hospitalist in the collaborative internal medicine service, director of the hospital medicine observership program, and an assistant professor of medicine at Johns Hopkins Bayview Medical Center, an academic hospital with more than 400 beds in Baltimore.



Dr. Yu

The idea for the IMG SIG emerged from conversations with IMG colleagues across a variety of training levels and practice settings. Some were residents preparing for interviews, others were early-career hospitalists trying to find their footing, and still others were experienced clinicians wondering how to move into leadership roles.

"Many IMGs expressed uncertainty around career advancement, limited access to mentorship, and a lack of spaces to discuss IMG-specific questions," Dr. Yu said.

Founded in 2024, an early goal of the SIG was to create opportunities for honest discussions about IMGs' experiences in hospital medicine.

That approach shaped the online presentation, "Challenges and Opportunities for IMGs in Hospital Medicine," which focused on common themes including adapting to U.S. clinical culture, communication differences, imposter syndrome, and visa-related stress.

Rather than framing these topics as individual shortcomings, the discussion centered on shared experiences and lessons learned. "Participants talked openly about what helped them succeed, mentorship, peer support, and understanding how systems actually worked," Dr. Yu said. "The strong interest in this session reinforced the value of acknowledging challenges and discussing them in a constructive, solution-focused way."

The IMG SIG also aims to support diversity and inclusion within hospital medicine. "IMGs bring perspectives shaped by different healthcare systems, cultures, and training environments; those perspectives add value to patient care and team dynamics," Dr. Yu said.

The SIG's specific efforts in this area have focused on visibility and participation. By creating IMG-centered programming within SHM, the group helps ensure that IMG voices are part of broader professional conversations.

"For many members, seeing their experiences reflected within SHM spaces has helped to reinforce a sense of belonging and professional legitimacy," Dr. Yu said.

Another goal is to prioritize programming that addresses real, time-sensitive needs. For example, an online session offered practi-

cal guidance to IMGs on how to prepare for residency interviews. Drawing on experiences from IMGs who have already completed this process, the session provided tips on communication strategies and how to handle common challenges.

Dr. Yu noted that a focus on actionable content reflects the SIG's broader philosophy: support should be useful, timely, and grounded in lived experiences. "Whether someone is preparing for residency, transitioning into independent practice, or exploring leadership opportunities, we aim to offer resources that feel immediately applicable," Dr. Yu said.

As a newer SIG, the IMG group has experienced both momentum and growing pains. "One advantage of being new is having flexibility, the ability to respond quickly to members' interests, and being able to shape programming organically," Dr. Yu said. "The SIG has approached growth deliberately, prioritizing relevance and trust over rapid expansion. That foundation has been important in establishing credibility and maintaining members' interest."

Interaction rather than formality has driven engagement within the IMG SIG. "Sessions are designed to encourage conversation, shared reflection, and peer learning," Dr. Yu said. "This format has helped to foster a sense of community, particularly for members who don't have many IMG colleagues at their institutions."

Many participants have stated that connecting with others who understand the IMG journey has been very beneficial. "These

connections often extend beyond formal events and lead to informal mentorship and ongoing collaboration," Dr. Yu said.

Networking within the IMG SIG develops naturally through shared discussions and experiences. "By bringing together IMGs from different backgrounds, regions, and career stages, the group creates learning opportunities that are difficult to replicate in more traditional settings," Dr. Yu said.

Professional development is woven into many of the group's activities, with conversations frequently touching on leadership pathways, career transitions, and navigating institutional systems. The SIG also helps connect members to broader SHM initiatives, reinforcing the idea that IMGs belong at every level of an organization.

In the coming year, the IMG SIG plans to continue offering educational sessions and forums that reflect its members' needs. Future initiatives may include leadership development discussions, wellness-focused programming, and additional resources for trainees and early-career hospitalists.

At its core, the IMG SIG exists to help IMG physicians thrive in hospital medicine. "By creating space for connection, learning, and professional growth, the group contributes to a stronger and more inclusive field, one where IMGs are recognized not only for their presence, but also for their leadership and impact," Dr. Yu concluded. ■

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



Chapter Spotlight: North Bay

Creating connections despite sponsorship and logistical challenges

By Karen Appold

SHM's North Bay Chapter, founded in 2024, was born out of a desire to restore connection after the COVID-19 pandemic. The chapter covers an area of California that is north of San Francisco and Sacramento, up to the Oregon border, and currently has about 45 members.

"My vision was to have a space for hospitalists to come together outside of work to socialize, network, and participate in educational activities while enjoying good food," said Behzad Razavi, MD, FACP, CPE, SFHM, who chairs the chapter and is the hospitalist program director at Providence Queen of the Valley Medical Center, a 208-bed community hospital in Napa, Calif. He's also the regional associate medical director of Hospitalist Programs at Providence Medical Network in northern California.

"I witnessed a lot of burnout during the pandemic, and envisioned a chapter that would offer a safe space for hospitalists to socialize with others and discuss current challenges," Dr. Razavi said.

As in a startup, Dr. Razavi said a lot of motivation, energy, and hope went into forming the chapter. "As a new chapter, we aren't bound by any expectations and can design

meetings and activities that fit members' needs and local culture," he said.

The new chapter has faced a few challenges, however. Unlike the other four SHM chapters in California, North Bay is a non-academic chapter and not affiliated with a university.

The absence of an academic affiliation has made sponsorship more challenging. Sponsors play a critical role in covering meeting expenses, from speaker honoraria to venue and food costs. Without consistent institutional backing, the chapter has had to be resourceful. At times, gatherings have been held in local restaurants, where conversations became the central feature rather than a formal presentation, or held in a hospital conference room to forgo a venue cost.

Thus far, Dr. Razavi has found pharmaceutical companies, medical device companies, health systems, local wineries, and a malpractice insurance agency to serve as sponsors.

Another logistical challenge stems from the chapter's large coverage area of more than 20 counties, which makes it difficult to plan events that are convenient for all members. To address this, the last two chapter meetings offered a virtual attendance option. In addition, the chapter is exploring a geographic rotation calendar so that more hospitalists across the region are given opportunities to attend.

Looking ahead, the chapter has identified several strategic priorities, including expanding

membership, securing engaging speakers for every gathering, and maintaining a welcoming, dynamic atmosphere.

Its first presentation focused on the future landscape of healthcare. Participants explored the expanding roles hospitalists play in leadership, quality improvement, research, and system-wide change management.

At another meeting, a speaker presented a fun exploration of medical myths—debating whether "beauty sleep" has scientific merit and humorously investigating which specialties consume the most coffee in hospital settings.

Discussions have also delved into pressing clinical matters, such as strategies to reduce hospital length of stay, initiatives to lower sepsis mortality rates, and the broader ways hospitalists can influence the trajectory of inpatient care.

A future presentation in 2026 by a malpractice insurance carrier will examine current trends in the liability landscape of hospital medicine and offer practical guidance on risk mitigation.

As the chapter's leader, Dr. Razavi said he loves bringing people together and using the opportunity to build a larger hospitalist community where attendees can learn from each other or from speakers.

Dr. Razavi believes that chapter members benefit by being part of a larger hospitalist community. "We try to mix professional networking opportunities and educational programs with a fun atmosphere and activities, such as having a raffle at the end of each meeting,"

he said. "This approach has helped us to build a community that feels supportive, approachable, and truly ours."

To engage members, functions are designed to feel welcoming, useful, and informal. "Events are simple, social, and relevant, which makes it easier for people to show up and connect," Dr. Razavi said. Decorations and background music set a relaxing mood.

Events offer a mix of practical education in a social setting to help members feel comfortable sharing ideas. As a small chapter, everyone is given the chance to participate in the chapter's direction and have a leadership role if interested.

The chapter also aims to include service-line hospitalists and others in related professions, such as palliative workers, allied health providers, and hospitalist program administrative support staff. They're invited to meetings and are offered discounted SHM membership rates. By broadening its circle, the chapter recognizes that hospital medicine is inherently collaborative and that a stronger community benefits all who contribute to inpatient care.

"We want to make sure that everyone has a good time and spreads the word about our chapter," Dr. Razavi said. In that spirit, the chapter continues to grow—not only in numbers, but in purpose—cultivating a professional home that feels supportive, fun, and inclusive. ■

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



Dr. Razavi



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