

## Improving Geographical Cohorting of Patients Admitted Under Hospitalist Service

Dear Editor:

Hospitalized patients frequently are assigned to specific inpatient wards to improve patient outcomes, a practice known as geographical cohorting or localization.<sup>1</sup> In situations where the hospital beds allocated to hospitalist teams reach capacity, it may become necessary to place patients in inpatient units that typically are not reserved for hospitalists. To mitigate this, hospitalist groups often implement cohorting programs aimed at consolidating care within specific units or reducing the number of units visited by each hospitalist daily. Previous research has shown that localization positively affects hospitalists' workflow, quality of patient care, and productivity, albeit with some challenges.<sup>2,3</sup> We evaluated the effectiveness of a protocol in minimizing patient dispersion and improving quality of care indicators at an academic medical center in Southeast Wisconsin.

This study was conducted from June 2022 through July 2023 at a 711-bed academic medical center with 578 medical/surgical beds. The hospitalist teams had an average daily census of 255 patients throughout the study. Out of the total hospital beds allocated for non-critical care services spread across 21 units, hospitalist teams were assigned 152 beds in 6 units. This resulted in a gap of 103 medicine patient beds and a considerable patient dispersion. To address these issues, an updated localization protocol was implemented in January 2023.

The updated protocol included assessing

bed capacity in each assigned medicine unit and the average census managed by the hospitalist teams. To manage high patient volumes, reassignments were made for home teams and their primary units, which determined the allocation and census of overflow patients. Further, home teams were assigned secondary units to effectively manage the overflow. While these secondary units usually do not have beds specifically assigned for medicine patients, they were utilized to accommodate a high number of overflow patients from the medicine teams.

The primary measured outcome was dispersion, defined as the number of different units in which hospitalists had patients. Secondary outcomes included length of stay index (LOS-I), mortality index, 72-hour readmissions, patient satisfaction scores, and care coordination rounds (CCR) attendance. We also conducted a survey to capture feedback from hospitalists. A *t* test was used for comparison of outcomes before and after the implementation of the protocol. We found that dispersion decreased after protocol implementation, with average dispersion preimplementation of 7.33 units visited daily and postimplementation of 6.51 units (a net difference of 0.82,  $P=0.005$ ) (Table). While LOS-I also decreased, there were no differences in mortality index, 72-hour readmissions, patient satisfaction, or CCR attendance. Our survey findings showed 39% of hospitalists responded, with the majority reporting either improvements or no change in workflow and satisfaction.

Our study showed that a protocol to enhance hospitalist localization without adding newly assigned beds was effective at reducing dispersion. The overall impact was small but statistically significant. This was additionally associated with a reduction in LOS-I, although causation cannot be established. Other metrics, including CCR at-

tendance, mortality, readmissions, and patient satisfaction were not affected. Subjective assessment by hospitalist team members was either positive or neutral. It is possible that with larger reductions in dispersion, these measures may be affected more significantly, so further research is warranted.

—Precious Anyanwu, BS; Kavita Naik, MD; Sanjay Bhandari, MD, MS; Pinky Jha, MD, MPH; Barbara Slawski, MD, MS

### REFERENCES

1. Kara A, Flanagan ME, Gruber R, et al. A time motion study evaluating the impact of geographic cohorting of hospitalists. *J Hosp Med.* 2020 Jun;15(6):338-344. doi:10.12788/jhm.3339.
2. Singh S, Fletcher KE. A qualitative evaluation of geographical localization of hospitalists: how unintended consequences may impact quality. *J Gen Intern Med.* 2014;29(7):1009-1016. doi:10.1007/s11606-014-2780-6.
3. Singh S, Tarima S, Rana V, Marks DS, Conti M, Idstein K, Biblo LA, Fletcher KE. Impact of localizing general medical teams to a single nursing unit. *J Hosp Med.* 2012;7(7):551-556. doi:10.1002/jhm.1948.

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## Integrating Artificial Intelligence Into Radiology Resident Training: A Call to Action

Dear Editor:

The integration of artificial intelligence (AI) has become a game-changing element in the radiology landscape, offering immense potential to enhance patient care. However, it also poses substantial challenges in the training of radiology residents. As AI begins to assume more routine tasks, traditional training curricula must evolve to prepare residents for this new era.

**Table.** Geographical Dispersion and Outcomes

Outcome	Mean		SD		P value
	Pre <sup>a</sup>	Post <sup>a</sup>	Pre <sup>a</sup>	Post <sup>a</sup>	
Dispersion	7.33	6.51	0.59	0.19	0.005
Length of Stay Index	0.84	0.79	0.03	0.03	0.013
Mortality Index	0.22	0.24	0.09	0.03	0.549
72-hour readmissions	2.62%	2.93%	0.31	0.41	0.194
Care coordination rounds attendance	97%	98%	1.26	2.24	0.354
Patient satisfaction	71.8%	71%	4.54	4.58	0.748

Abbreviation: LOS, length of stay.

<sup>a</sup>Pre and post refer to preimplementation and postimplementation of the geographic localization protocol.

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