



Comanagement by Hospitalists: Why It Makes Clinical and Fiscal Sense

Twenty-two years after the term *hospitalist* was coined, the specialty of hospital medicine continues to evolve, both within the vast domains of internal medicine and pediatrics and to specialties such as obstetrics and gynecology, neurology, and psychiatry, to name a few.^{1,2} The hospitalist model of care has shown benefits in terms of reductions in cost, mortality, and length of stay, and improvement in quality and safety measures.³ This is evident both where hospitalists are the primary attending and in the *comanagement* model of care. In the comanagement model, the hospitalist works in partnership as an active consultant, writing orders in the patient's chart, rounding with the primary team, and communicating with the staff, patient and family, and outpatient providers, thereby providing cohesive coordination of care.⁴ Orthopedic surgery, neurosurgery, and vascular surgery represent some of the surgical specialties that have adopted the comanagement model where the same hospitalists may be dedicated to these surgical services year round. This affords the surgeon (primary attending) more uninterrupted time in the operating room while the hospitalist actively comanages the medical care of the patients.^{4,5}

The biggest benefit of introducing a comanagement model is effective prevention and early diagnosis and management of medical complications. With progressive knowledge of the patients, procedures, and providers of the service the hospitalist may be comanaging, the comanagement hospitalists in each specialty develop a unique skill set over time. A comanagement hospitalist would be able to anticipate diagnoses that were not established on prior encounters; catch early decompensation; manage complex anticoagulation questions in the perioperative period; carefully manage fluids in patients with heart or renal failure; or individualize pain management for patients at high risk of delirium (instead of providing the standard protocolized care). The experiential and evidence-based knowledge required to effectively manage these patients

continues to grow, as comanagement hospitalists are exposed to newer specialties, and the medical complexity of patients is on the rise.

Given the benefits of the comanagement model across multiple surgical fields,⁴⁻⁷ should internal medicine-trained hospitalists be incorporated into the medical subspecialties of cardiology, gastroenterology, oncology, and hematology, where outpatient care remains a significant component of these specialties' patient volumes? Based on the surgical comanagement benefits, one may postulate that such a model may continue to drive successful quality and safety results, allow the primary attending in these specialties to have more time for procedures or clinic, and ultimately foster a higher level of efficiency for the specialist in both the inpatient and outpatient settings.

The comanagement hospitalist role has a positive impact on patient outcomes and is of great value to the health care system; however, it may present complexities of its own. Comanagement hospitalists may initially feel a loss of autonomy, as the service they are comanaging may not agree with or follow all their recommendations. However, in our experience, within a few months these interdisciplinary, collaborative relationships usually solidify. A successful comanagement model requires mutual respect and timely communication between the services. Hospitalists should be utilized for their cognitive and communication skills and systems-based knowledge instead of the tasks that may be perceived as less desirable. Comanagement hospitalists are dependent on the census of the services they comanage, and may have lower clinical productivity (commonly measured as work relative value units [wRVUs]) compared with traditional hospitalists. All patients receiving the service may not need to be seen by the comanagement hospitalist; it may suffice for the hospitalist to simply communicate about these patients with the primary team regarding discontinuation of fluids, address missed or incorrect medications, or ensure laboratory tests where indicated, as examples. Hospitalist compensation largely comes from the fee-for-service billing and clinical productivity, or shift-based payment. Currently, the number of wRVUs allocated for services rendered by hospitalists remains 2-7 times lower than that of the physicians in the services they

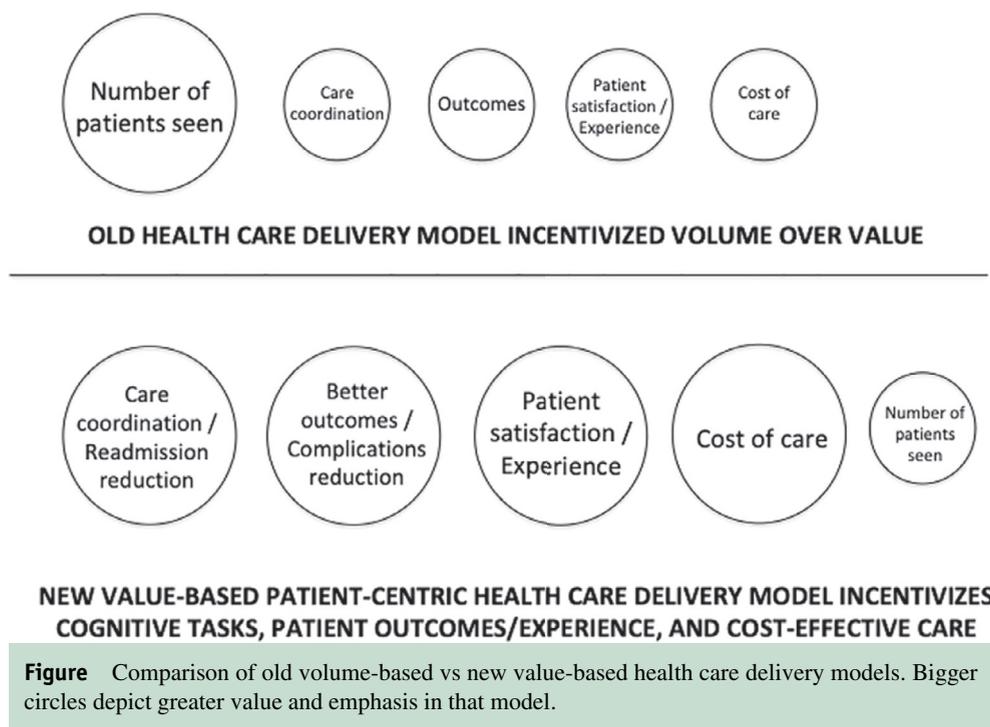
Funding: None.

Conflict of Interest: None.

Authorship: All authors had a role in writing this manuscript. No data was used in writing this manuscript.

Requests for reprints should be addressed to Nidhi Rohatgi, MD, MS, 1265 Welch Road, Mail code 5475, Stanford, CA 94305.

E-mail address: nrohatgi@stanford.edu



comanage. Additionally, the payment per wRVU is 1.2-1.5 times lower for hospitalists than for the services they comanage.

Are comanagement hospitalist models financially viable, or even profitable, for institutions? Despite the positive impact of comanagement by hospitalists, it is an initial investment for institutions. Health care delivery has shifted to a value-based model where better clinical outcomes, improved patient experience, and cost-effectiveness are rewarded (Figure). Merit-based incentive payment system and alternative payment models are here to stay. With the evolving value chain, it is increasingly more substantiated that hospitalists may significantly impact financial gains for institutions.

Comanagement hospitalists are uniquely placed to streamline pathways throughout the episode of care. Several comanagement hospitalists see patients in preoperative clinics and assist in medical optimization of patients preoperatively, or sometimes, dissuade the surgeons from operating on patients in whom the risk may seem prohibitive. Hospitalists also play a vital role in improving post-hospitalization outcomes by providing patient education, connecting with the outpatient or post-acute care providers to improve care coordination (by diagnosis and appropriate management of medical comorbidities or complications during the hospitalization), and reducing medication errors. Some hospitalists have taken on the role of skilled nursing facility specialist or transitionalists, managing patients at skilled nursing facilities or in post-discharge clinics until the patients can get to their primary care provider.

As the field of hospital medicine continues to evolve, hospitalists will continue to take on new roles. With their

clinical expertise and system-based knowledge, comanagement hospitalists can improve patient outcomes and help institutions thrive financially in this era of value-based payment.

Nidhi Rohatgi, MD, MS*
 Kevin Schulman, MD, MBA
 Neera Ahuja, MD
*Department of Medicine, Stanford
 University School of Medicine,
 Stanford, Calif*

References

1. Messler J, Whitcomb WF. A history of the hospitalist movement. *Obstet Gynecol Clin N Am* 2015;42(3):419–32.
2. Josephson SA, Douglas VC. Hospitalist neurology. *Semin Neurol* 2015;35(6):609. <https://doi.org/10.1055/s-0035-1567868>.
3. Williams MV. Hospitalists and the hospital medicine system of care are good for patient care. *Arch Intern Med* 2008;168(12):1254–6 [discussion 1259-1260].
4. Rohatgi N, Loftus P, Grujic O, Cullen M, Hopkins J, Ahuja N. Surgical comanagement by hospitalists improves patient outcomes: a propensity score analysis. *Ann Surg* 2016;264(2):275–82.
5. Tadros RO, Faries PL, Malik R, et al. The effect of a hospitalist comanagement service on vascular surgery inpatients. *J Vasc Surg* 2015;61(6):1550–5.
6. Rohatgi N, Wei PH, Grujic O, Ahuja N. Surgical comanagement by hospitalists in colorectal surgery. *J Am Coll Surg* 2018;227(4):404–410.e5.
7. Montero Ruiz E, Rebollar Merino Á, Rivera Rodríguez T, García Sánchez M, Agudo Alonso R, Barbero Allende JM. Effect of comanagement with internal medicine on hospital stay of patients admitted to the Service of Otolaryngology. *Acta Otorrinolaringol Esp* 2015;66(5):264–8.