Future Hospital Journal 2016 Vol 3, No 1: 62–4

Hospitalists, value and the future

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ABSTRACT

Health systems face increasing pressure to optimise value: providing the best quality care for the lowest possible cost. In the US, changes in modern healthcare, along with early efforts to contain costs, fuelled the growth of a new cadre of inpatient clinicians known as hospitalists. This commentary briefly reviews the history of the hospitalist movement through the lens of healthcare value, examines the evidence for value improvement in the care and training provided by hospitalists, and concludes by exploring both the lessons learned and remaining challenges facing hospitalists. We believe that openness to challenging the status quo was a critical enabler of the US hospitalist's impact on both the healthcare workforce and the American care delivery model. This spirit of re-engineering has far-reaching implications, both in the USA and abroad.

KEYWORDS: High-value care, hospitalist, hospital medicine, healthcare delivery, healthcare workforce

Healthcare systems that cannot deliver value – ie high quality for affordable costs – cannot achieve the so-called triple aim of improving population health and patients' experience while reducing per-person costs.[1] Scarce resources must be used wisely, as escalating healthcare costs threaten to sap funding from other important needs, such as education and infrastructure.[2] In this commentary, we reflect on the hospitalist movement in the USA through the lens of healthcare value, and consider applications beyond US borders of both the care structure and lessons learned.

Remarkable growth of the hospitalist field

In response to growing healthcare costs, in the 1980s the US federal government changed its hospital reimbursement through the Medicare programme from retrospective to prospective payments based on diagnosis-related groups, which placed financial pressure on hospitals to decrease length of stay and cut costs.[3] Although this policy had some beneficial effects, further financial pressures led to the expansion of managed care (ie third-party payers employing cost-containment mechanisms such as restricted networks, utilisation review and value incentives) in the early 1990s. In the mid-1990s, the combined effects of the diagnosis-related-group payment system and growth in managed care led hospitals and physicians to explore new ways to organise inpatient care.

This environment created pressure for innovations, one of which was the advent of a new specialist: the hospitalist.[4,5] Hospitalists were a creation of necessity. Previously, the dominant US model was one in which the primary care physician (PCP) remained responsible for the care of patients when they were admitted to the hospital. Incentives for efficiency in both the hospital and outpatient clinic made it increasingly difficult for a single generalist physician to care for patients in both settings. Outpatient clinic panels were larger than ever before, and technological advances allowed for more complex care to be provided outside hospital. As a result, PCPs had fewer hospital patients to care for, and those patients were older, sicker, and often needed immediate assessment, diagnosis, and treatment.[6]

The hospitalist model began with the assumption that having a single inpatient generalist responsible for overseeing hospital care would improve value. When studies showed that the use of hospitalists did decrease costs – largely through decreased length of stay – medical centres agreed to subsidise their salaries, creating the economic engine that drove growth in this new model of care.[7] In the USA, medical school graduates enter a period of focused physician training in a branch of medicine, which varies in length depending on medical or surgical specialty. Restrictions to resident physicians' duty hours since 2003 have created a workforce gap that, along with the ultimate willingness of PCPs to relinquish the care of their hospital patients, further fuelled the growth of hospitalists. The absence of additional licensing or training requirements beyond residency guaranteed the immediate availability of a large labour pool, and graduating residents, many practicing PCPs, and trainees with a generalist bent, who might have pursued primary care in the past flocked to hospitalist work.

Today, a patient admitted to a US hospital is highly likely to receive care from a hospitalist – the fastest growing medical profession in modern history, with some 44,000 currently practising.[8] An analysis of publicly reported data from the US Centers for Medicare and Medicaid Services showed that hospitalists generated two-thirds of all general medical inpatient services billed to Medicare in 2012.[9] Hospitalists have also expanded their scope of practice beyond caring for adult general medical patients. They are increasingly

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comanaging surgical patients and taking ownership of hospital care in specialties ranging from neurology to obstetrics.[10–13] Hospitalists are no longer restricted to the hospital: the model of a site-based generalist coordinating the care of complex patients is now employed in some nursing and long-term care facilities, and in rehabilitation centres.

Hospitalists and value

The rapid expansion of hospitalists has advanced the triple aim by reducing hospital costs while preserving or improving quality of care. Hospitalist care is associated with shorter hospital stays, lower cost per stay, and the same or improved quality metrics and outcomes (eg readmission, mortality).[14,15] There are fewer data on surgical patients, but a recent study of hospitalist co-management of complex vascular surgery patients found that the risk of in-hospital death was reduced nearly five-fold compared to usual care.[16] Survey results show that patients are equally satisfied with hospitalists' care as with that from specialists or their PCP.[17]

For trainees, hospitalists provide unified oversight for an entire group of patients. Under the old system, things were less coordinated – hospital-based trainees were either trying to connect with office-based PCPs about hospital patients or were effectively cobbling together recommendations made by various inpatient subspecialists. In a teaching environment, residents and students increasingly have dedicated inpatient supervisors available day and night, and report a better educational experience as a result.[18]

Furthermore, the benefits are not limited to the inpatient setting. The use of hospitalists can free up enough time for PCPs to see an additional nine patients per week in clinic.[19] Perhaps most important, hospitalists embody 'a core group of faculty members whose inpatient work is more than a marginal activity and who are thus committed to quality improvement in the hospital'.[4] Hospitalists are thus perfectly positioned to be change agents for systems improvement.

Challenges old and new

Although hospitalists have achieved unprecedented growth and tremendous successes very quickly, there are new challenges to address. The pressure for value – the key rationale for hospitalists initially – has now reached even higher levels with the recognition that the US healthcare system wastes as much as US$1 trillion annually, which is about a third of total health spending.[20,21] Several major policy initiatives – many embedded in the Affordable Care Act – have animated the growing pressure for high-value care. In the modern incarnation of value-based purchasing, success is about far more than cost reduction: there are initiatives to publicly report and provide differential payment on the basis of patients' experiences, quality, safety, access and efficiency. Because hospitalists practise in the most expensive segment of the healthcare system, they are perfectly positioned to improve value, and must now sustain success in such work.

Coordination of care is an established challenge that remains equally relevant today. In theory, hospitalists have the potential to be the PCPs of the inpatient setting, accountable for coordinating appropriate transitions of care between in-hospital levels of care and different platforms of care delivery, from the post-acute facility to the clinic to the community. However, the results of studies of that coordinating role have been disappointing. A systematic review (albeit nearly a decade old) showed that direct communication between hospitalists and PCPs occurred less than 20% of the time, and discharge summaries were available at only a third of follow-up visits, often adversely affecting the quality of care.[22] In paediatrics, hospitalists and outpatient providers disagree over who should be responsible for follow-up of outstanding test results at the time of discharge and adverse events thereafter.[23]

The substantial rise in electronic health record systems since 2009 provides the infrastructure for streamlined communication, including immediate visibility of discharge summaries to PCPs within integrated systems and automatic delivery to outside providers. As usual, though, the devil is in the detail. Hospitalists continue to face the challenges created by an absence of standards for discharge summaries, lagging ability to transfer data between electronic health record (EHR) systems, and unclear responsibilities for care transitions.

Although the overall educational experience of trainees has been improved by hospitalists, the perfect balance between autonomy and around-the-clock supervision remains elusive.[24,25] Trainee duty hour limitations prompt more involvement from supervising hospitalists, and as a result patients perceive trainees as being less involved in their care.[26] Although hospitalist involvement and oversight are a positive response to the challenges imposed by duty hour constraints, the US graduate medical education system has to acknowledge that hospitalists could disrupt physician training – particularly if house staff are being robbed of the autonomy they need to develop as independent practitioners. Definition of the role of subspecialists in the education of trainees within a hospitalist-led system is also important.

Academic advancement is a challenge for the roughly 18% of hospitalists who practise in academic settings.[8] Time for scholarship, such as research and publication, competes with clinical education, quality improvement, and non-teaching patient care. More than half of adult academic hospitalists' work is spent on clinical activity including direct delivery of care, which leaves little time for academic pursuits.[8] A survey of academic hospitalists showed that most had not published a first-author peer-reviewed paper.[27]

Future for hospitalists

Of all the changes taking place in American healthcare, we see two emerging areas as ripe for significant hospitalist contribution. First, the digital health movement increasingly links patients with healthcare providers and will continue to facilitate more assessment and care in the community, further reserving care in facilities like a clinic or hospital for the sickest patients. Hospitalists are already deeply involved in the growing fields of data science and medical informatics.[28] Enhancing the portability, user-friendliness, and reliability of EHRs in the quest to improve the care of both individuals and populations are crucial to respond adequately to this trend. Second, healthcare institutions – often involving integrated hospital-clinician networks – are increasingly being held accountable to the population they serve.[29] Hospitals operating in such systems (often under the framework of Accountable Care Organizations, which are networks of providers and payers that agree to coordinate care and share both medical and

financial responsibility for patients) are asking their hospitalists to help ensure that hospital care is cost-effective and seamlessly integrated with outpatient and community modalities.

At this time of unprecedented change in healthcare, hospitalists will need to be defined less by the building in which they care for patients, and more by their stewardship of key resources and their role in integrating systems of care. Similar to PCPs in well-functioning outpatient systems, the hospitalist can and should play the role of coordinator and integrator, to ensure appropriate matching of patients to the hospital level of care and the coordination of post-discharge care. New models might even allow some hospitalists to follow the most complex and fragile patients into the outpatient setting in an effort to minimize readmission and provide better continuity of care.[30]

Undoubtedly, other countries will face different challenges from those of the USA. Financial incentives might not be aligned to emphasise value, hospitals might not have immediate access to capital for expensive value-improvement investments, and there might not be the reservoir of well-trained general internists seeking work outside primary care. Cultural norms and turf wars are very real challenges. However, although the particulars of hospital care might change internationally, the hospitalist experience offers lessons that apply beyond US borders – just as it does beyond the hospital walls. Perhaps the most important lesson learned has less to do with hospitalists themselves and more to do with a movement born out of reengineering the system and openness to change. The future of hospitalists will depend on the continued ability to reimagine the care model and workforce, to measure outcomes rigorously, and to support care delivery systems that work. The pressure to maximise value will only increase with time. Hospitalists have already improved value in US healthcare, and with the spirit of reinvention they might just do it again. ■

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