

Anything You Can Do, I Can Do... Better? Evaluating Hospital Medicine Procedure Services

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Hospital medicine procedure services have proliferated in recent years, driven by multiple synergistic factors, including an interest in improving hospital throughput, bolstering resident education, and ensuring full-spectrum practice for hospitalists. These services have become established and have demonstrated their capabilities, further catalyzed by emerging interest—and expertise—in point-of-care ultrasonography by hospitalists.

Most hospital medicine procedure services (HMPSs) focus on performing ultrasound-assisted procedures at bedside, providing purported advantages in convenience, cost, and potentially timing when compared to services performed by interventional radiology. The scope of procedures performed by HMPSs reflects the populations cared for by hospitalists, including paracentesis, thoracentesis, central venous catheter placement, lumbar puncture and, more recently, pigtail chest tube placement.^{1,2} Fitting with the early development of HMPSs, initial reports regarding these services centered on optimal development of services and emphasized the question, “Are hospital medicine procedure services able to do [procedure x] as safely as radiology or the primary team?”²

Ensuring safety and quality is fundamental to implementing new workflows; however, it is now clear that HMPSs provide high-quality, safe, patient-centered bedside procedures; these services are no longer novel.³ As HMPSs mature, so too must their evaluation, research, and scholarship. It is no longer enough to document that a HMPS can perform procedures as well as interventional radiology or a standard hospital medicine care team—instead, we must identify how these services affect patient outcomes, improve education, add value, and influence the overall process of care in the hospital.

In this issue of the *Journal of Hospital Medicine*, Ritter and colleagues⁴ describe an important first step in this maturing field by evaluating how a HMPS affects process outcomes in the context of paracentesis. The faster time from admission to paracentesis observed in the HMPS population compared with radiology services has important implications for patient satisfaction (symptom relief) and morbidity and mortality (time to peritonitis diagnosis). Ritter et al also demonstrated shorter length of stay (LOS) among patients who had paracenteses performed by the HMPS compared with the radiology service; this finding is consistent with previous studies that, while not evaluating a HMPS per se, demonstrated shorter LOS with bedside paracentesis.

While there were some limitations, such as the findings representing a single-site experience and group differences that necessitated assessment of multiple confounders (some of which may remain unknown), the authors’ efforts to shift focus toward patient and high-value care outcomes should be applauded.

The evaluation of HMPSs has reached an inflection point. The field must now focus on assessing outcomes. Does the appropriateness of procedures improve when those with internal medicine training are performing the procedures rather than radiologists, who have more focused procedural knowledge but less general medical training? What procedures are not or should not be performed by HMPSs? What does the shift of procedures to HMPSs do to the flow of patients and procedures in interventional radiology, and do other patients indirectly benefit? How should hospital medicine groups and hospitals account for lower work relative value unit productivity of HMPSs compared with other traditional rounding services? In what ways do HMPSs provide cost-effective care compared with alternatives? There has been limited evaluation of cost-savings realized when performing paracentesis at the bedside as opposed to in the interventional radiology suite.⁵

Additionally, most HMPSs are staffed by a small number of hospitalists within a group. It is unclear how a HMPS will affect general hospitalist procedural competence, and whether that even matters. Should we still expect every hospitalist to be able to perform procedures, or are HMPSs a step in the evolution of subspecialties in hospital medicine? Such subspecialties exist already, including perioperative medicine and transitional care specialists.

Now that more HMPSs have been established, the next step in their evolution must go beyond feasibility and safety assessments and toward evaluation of their effectiveness. It has become clear that HMPSs can perform procedures safely, but what can they do better?

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