

POINT: Should the Use of Diagnostic Point-of-Care Ultrasound in Patient Care Require Hospital Privileging/Credentialing? Yes



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ABBREVIATIONS: ACGME = Accreditation Council for Graduate Medical Education; CCM = critical care medicine; PCCM = pulmonary and critical care medicine; POCUS = point-of-care ultrasound

Point-of-care ultrasound (POCUS) refers to the use of ultrasound by a bedside clinician to guide patient management in real time.¹ There is growing consensus that POCUS is an essential tool for clinicians caring for acutely ill patients. Indeed, the integration of POCUS into routine care in the ICU is now widely viewed as standard of care.²

The question at issue in this Pro/Con debate is not whether POCUS is useful (to which we think this answer is clearly “yes”) but whether clinicians should be explicitly privileged by health-care institutions to use POCUS. Before outlining why we believe hospitals should grant POCUS privileges to qualified providers

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only, it is important to review several terms central to this discussion.

A health-care provider performing any task outside of a training environment should be competent; that is, he or she should be able to safely, reliably, and repeatedly perform that specific task to achieve a desired outcome. Institutions and external agencies acknowledge qualifications or competencies through certification. As an example, the American Board of Internal Medicine certifies clinicians to practice internal medicine if they meet a series of training and examination requirements. Credentialing is the process of “obtaining, verifying, and assessing the qualifications of a practitioner to provide care or services in or for a health-care organization.”³ Finally, privileging is the “process of authorizing a specific scope of practice for patient care based on credentials and performance.”⁴ The credentials required to obtain privileges for a specific scope of practice may vary from institution to institution.

It is worth emphasizing that these terms are not synonyms. Indeed, one could be competent at a specific skill and not certified. Similarly, in the absence of ongoing assessment and monitoring, a distant certification may no longer signal current competence.

We hope there is little disagreement with our first assertion that competency should be a requirement of all clinicians who use POCUS to guide the care of acutely ill patients. As with any other imaging modality, misuse or misinterpretation of POCUS has the potential for harm. Mistakenly identifying right heart strain in a patient with a pulmonary embolism or incorrectly assessing inferior vena cava parameters for a patient in shock could result in misguided interventions. Whether the skill in question is interpreting a chest radiograph, inserting an arterial line, or performing qualitative goal-directed POCUS, a clinician who is unable to perform that skill safely and reliably should not be allowed to do so without supervision. For clinicians who practice in the ICU, minimum competency standards for POCUS have been detailed in a consensus statement issued jointly by the American College of Chest Physicians and La Société de Réanimation de Langue Française.⁵

If we accept that POCUS competency should be required for unsupervised use, then it is incumbent on

health-care institutions to vet the skills of providers who wish to use POCUS to guide patient care—at least in the current environment where POCUS training is neither required nor standardized in many specialties. The alternative, and in many institutions the current practice, is to assume that all clinicians who use or wish to use POCUS are competent. We believe this is a troubling approach both for recent fellowship graduates and clinicians already in practice.

Should all fellows graduating from critical care medicine (CCM) training programs be competent with POCUS? Yes. We fully support the assertion of an international consensus statement on training standards for POCUS that “basic-level critical care echocardiography and general critical care ultrasound should be a required part of the training of every ICU physician.”⁶ There is near-universal agreement on this point among pulmonary and CCM (PCCM) fellowship directors in the United States.⁷ POCUS training standards in CCM should ideally mirror those in emergency medicine, where rigorous longitudinal POCUS training has been an Accreditation Council for Graduate Medical Education (ACGME) requirement for years.⁸ Similarly, ACGME program guidelines for anesthesiology detail specific competencies related to ultrasound knowledge, image acquisition, and image interpretation.⁹ If all CCM training programs met this standard, then health-care institutions hiring new graduates could feel comfortable forgoing POCUS privileging because completion of an accredited CCM training program would be a sufficient proxy for competence.

Do all CCM fellowship training programs reliably train fellows to competence with POCUS? Unfortunately, the answer is clearly no. In previous survey-based studies, nearly 50% of PCCM fellowship training programs lacked a formal POCUS curriculum.^{7,10} Because of constraints on time, resources, and the number of adequately trained faculty, even when POCUS is taught in fellowship it is frequently done through informal mechanisms.¹⁰ It is encouraging that an increasing number of fellows are participating in multi-institution intensive POCUS courses.¹¹ However, participation is far from universal. Additionally, many course participants lack access to longitudinal training at their home institution. In the absence of structured follow-up training including didactics, mentored scanning, image interpretation, and longitudinal quality assurance (none of which are currently required by the ACGME), some trainees will neither achieve nor maintain competence.¹² The language surrounding diagnostic POCUS in the

current ACGME program requirements for training in PCCM is telling, stating only that fellows “must demonstrate knowledge of imaging techniques commonly employed in the evaluation of patients with pulmonary disease or critical illness, including the use of ultrasound.”¹³ This is clearly inadequate and falls far short of the standard set by our emergency medicine and anesthesiology colleagues. It is an unfortunate reality that if health-care institutions blindly assume that all recent graduates from CCM training program are competent to use POCUS, some inadequately trained providers will be using POCUS to guide patient care.

Forgoing POCUS privileging for clinicians already in practice is equally problematic. Many practicing clinicians received little or no POCUS education during training. Mechanisms to achieve competency outside of graduate medical education are challenging. POCUS training is available through a number of professional societies; however, these programs are only offered in select locations and are costly. As an example, the certification course offered through the American College of Chest Physicians costs almost \$10,000 to complete.¹⁴ Short courses offered through annual society meetings or as institutional continuing medical education events provide useful introductions to POCUS but are of limited value if they are not paired with downstream longitudinal mentored training.¹² The question of how to best grow faculty expertise with POCUS is an important yet challenging one given the significant time investment required for robust training and the often limited number of faculty with the requisite expertise to oversee institutional educational programs.

Goal-directed diagnostic POCUS is within the scope of practice of numerous specialties that care for acutely ill patients. There is agreement across professional societies that longitudinal multifaceted training should provide the foundation for safe and effective POCUS use.^{6,15,16} As strong POCUS enthusiasts, we look forward to the day when all CCM training programs offer rigorous ACGME-mandated longitudinal POCUS training and all interested practicing clinicians have affordable and locally available mechanisms to cultivate POCUS competency. Until then, it is incumbent on health-care institutions to ensure that only appropriately qualified clinicians are using POCUS to guide patient care.

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COUNTERPOINT:

Should the Use of Diagnostic Point-of-Care Ultrasound in Patient Care Require Hospital Privileging/Credentialing? No



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We present the case against a requirement of specific hospital privileging/credentialing for critical care clinicians to apply diagnostic point-of-care ultrasound (POCUS).

To begin, we would like to clarify what we are not debating. We are not calling into question the value of rigorous training to learn and teach POCUS and we are not arguing against the ongoing, nuanced evaluation of optimal methods to help learners adopt this new skill and ultimately demonstrate proficiency. Instead, we are arguing that hospitals should not require an additional step for intensivists to demonstrate specific POCUS competency to a hospital's administration to use this diagnostic bedside skill.

In all fields of medicine, the skills that compose current standards of care necessarily evolve over time. Each advance in our field has not been met with calls for specific changes to hospital privileges and credentials. Yet, some unique skills do require specific administrative oversight and privileging. So, the key question at the foundation of this pro/con debate is not whether POCUS represents a relatively new technological advance in the practice of critical care medicine (it does) that will encounter challenges and further evolution as it disseminates through the specialty (it will). Instead, the key question is whether diagnostic POCUS should be treated as one of these "special" skills outside the core set of critical care privileges that requires specific oversight and regulation.

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