

CONCEPT

A practical primer on clinical supervision of learners in the emergency department

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Abstract

Introduction: Effective supervision of learners in the clinical environment is essential for learner professional development and patient safety. Despite this importance, many supervising attendings receive little to no training around supervising learners. As faculty join emergency departments (EDs) at primary and affiliate training sites, it is essential to provide them with a framework to utilize when approaching learner supervision.

Methods: A workgroup of members from the Society for Academic Emergency Medicine (SAEM) Education Committee was formed to respond to a directive from the SAEM board to identify best practices for new clinician educators when supervising learners. Drawing on their experience and expertise in learner supervision, medical education, and faculty development, the members completed a literature search to identify best practices in supervision, with a special focus on the ED environment.

Analysis: The workgroup identified three domains that must be considered to provide effective supervision to learners: learner characteristics, supervisor characteristics, and clinical environment.

Recommendations: Implementing effective supervision in the clinical environment requires a multifaceted approach and consideration of factors for both the learner and the supervisor. Direct observation, supplemented by standardized assessment tools, is the preferred supervision method; however, the demands of our clinical environment may require supervisors to assess the learner's proficiency using other methods including informal knowledge assessments, inference from oral presentations, review of clinical documentation, feedback from patients themselves, procedural walkthroughs, and secondhand information from the health care or training team.

INTRODUCTION

Working in an academic clinical environment or at an affiliate residency training site involves supervising learners at various stages of training. Providing appropriate levels of oversight is crucial and can impact wellness,^{1,2} autonomy,³ professional development,⁴ and

patient care.^{5–7} While the task of supervision may seem intuitive, multiple dimensions of supervision should be considered to ensure safe and effective oversight for learners with disparate experience and ability levels.

Supervision in medical education has been defined as “the formal provision by qualified health practitioners of an intensive,

relationship-based education and training that is case-focused and which supports, directs, and guides the work of supervisees.⁸ The Accreditation Council for Graduate Medical Education (ACGME) outlines requirements for supervision including offering graded responsibility to residents.⁹ The level of supervision can vary based on the clinical context and may involve direct supervision (supervisor present in person), indirect supervision (supervisor immediately available), or oversight (supervisor available for review after the patient encounter), although this final level of supervision is rare in emergency department (ED) clinical environments.⁹ Competency-based medical education and entrustable professional activities have been proposed as strategies to assess residents' progress toward unsupervised practice across various everyday physician activities.¹⁰ However, these models offer little practical advice about how supervision should be ideally provided; the ultimate goal is to develop trust in the learner's clinical competence while serving as a safety net to prevent patient harm.¹¹

Despite the importance of appropriate supervision and the implications for learners and patients alike, many physicians do not receive formal instruction around how to provide supervision.¹² This guide is intended to be a primer for faculty who are new to clinical supervision, are providing supervision outside of formal academic institutions (e.g., affiliate sites), or lack formal training around supervision to ensure safe and effective supervision in the clinical environment. The strategies reviewed in this paper are intended to be applicable across the full spectrum of learners in the ED, from medical/postgraduate students early in their training to fellows.

METHODOLOGY

The SAEM Education Committee received a directive as part of its 2023 objectives from the SAEM Board of Directors to "create a best practice resource targeting new clinician educators to provide effective learner supervision." The education committee chair identified two co-leads for this objective with specific expertise in medical education and faculty development. The co-leads solicited interest from additional committee members with subject matter expertise on this topic, including members with backgrounds in undergraduate as well as graduate medical education and faculty development. These members represented a variety of practice settings including academic, community, county, and affiliate training sites for students, residents, and fellows. After an initial meeting, it was determined there was a need for a "how-to" guide for supervising physicians who were either new to a supervisory model (e.g., newly hired academic faculty and affiliate faculty at newly acquired training sites) or seasoned faculty who desired additional resources on best practices.

The workgroup performed a comprehensive literature search through PubMed that included the terms "clinical supervision," "medical education," and "learner autonomy" to identify key literature around the topic of supervision of learners with a special

focus on ED environment. The workgroup met via virtual meetings to review the pertinent literature and identified three themes relating to learner supervision to structure the guide: learner characteristics,¹³⁻²¹ supervisor characteristics,^{3,14,19,22-26} and clinical context.^{27,28} The authors collaborated asynchronously via Google Docs (Alphabet), and while individual members completed sections of the guide, the entire workgroup contributed content, editing, and revisions to the full guide prior to submission.

ANALYSIS

Learner characteristics

Learner characteristics that influence a supervisor's level of trust include learner confidence, accountability to complete tasks, reputation, leadership among their peers, self-awareness, educational background, clinical skills, level of training, and previous experiences.¹³⁻¹⁵ However, it is important to note that an individual's confidence in performing a procedure or task is often a poor predictor of actual proficiency or competence.^{16,17} Overconfident learners or those lacking insight into knowledge gaps may require closer supervision, while self-aware learners who proactively seek guidance may benefit from increased autonomy within a supportive framework.^{18,19} Additionally, while prior studies have shown that year of training is a strong empirical predictor of resident autonomy, it is importantly not independently sufficient to understand supervision needs.²⁰ Faculty should assess their learner's knowledge and insight to their gaps prior starting a shift to tailor the supervisory strategy.²¹ One way to achieve this is to ask the learner their learning goals for the shift. Alternately, a faculty member can ask the learner what feedback they have recently been given to build on growth opportunities.

Supervisor characteristics

A supervisor's ability to create a safe learning environment and willingness to preserve learner autonomy significantly impacts learners' experiences with being supervised.³ A safe learning environment encourages open sharing of knowledge gaps without fear of retaliation, values diverse perspectives, and supports a growth mindset for constructive feedback.²² Basic greeting behaviors at the start of a shift and strong communication skills form the foundation of a productive supervisory relationship and are vital for conveying expectations, providing feedback, and fostering a collaborative learning environment.^{14,23} Faculty can promote psychological safety through curious listening (e.g., "Tell me more about why you answered that way"), encouraging input from all members of the team, and role-modeling how to process uncertainty. Learners have reported that "borrowing" comfort from supervisors during times of uncertainty allows them to feel more supported and confident in the availability of a safety net, preventing potential patient errors.¹⁹

The supervisor's comfort level with specific clinical tasks or procedures and their tolerance for uncertainty influence the level of autonomy granted to learners.²⁴ Striking a balance between pushing learners beyond their comfort zone and maintaining patient safety is a delicate equilibrium that supervisors must constantly navigate. This balance avoids the extremes of "micromanagers" who stifle growth and "absentee" supervisors who allow learners to flounder and may compromise patient care.²⁴

The amount of trust a supervisor places in their learner is an important factor in the attending–learner supervisory relationship. When trust is lacking, micromanaging can occur, hindering the learner's autonomy and competence development, although this can be appropriate if the learner has proven themselves to be untrustworthy. Supervisors should strive to understand a learner's developmental pathway within their educational program or curriculum and seek to understand where a learner is positioned along that trajectory. The supervisor must then tailor their supervisory approach, as overestimating or underestimating a learner's abilities can have adverse consequences for both the learner and patient safety. This progressive scaffolding approach allows learners to demonstrate competence in domains where they lack trust.^{25,26} Finally,

supervisors should not view autonomy and supervision as inversely related (i.e., that supervision impedes learner autonomy), but rather use supervision as a tool to further support learner autonomy.³

Clinical environment

The fluctuating and unpredictable nature of the ED often influences the nature of supervision that a learner receives. Supervising physicians must not only consider their learner's unique supervision needs but also be keenly aware of the department census, patient throughput, and patient complexity to find the critical balance between patient safety, effective patient care, and adequate supervision.²⁷ One study of emergency physicians found that supervising physicians rapidly cycle between teacher, assessor, and patient protector depending on the immediate and constantly fluctuating needs of the department.²⁸ For example, if a crashing patient arrives while the supervisor is overseeing a learner's central line, the supervisor will be required to choose which activity takes precedence. Additionally, a high volume of arrivals may force the supervisor to adopt more indirect supervision methods, rather than relying primarily on direct observation of learners.

TABLE 1 When direct supervision is not feasible, physicians should consider indirect supervision strategies.

Indirect supervision strategies
Informal knowledge assessments
Inference from oral presentations
Review of clinical documentation
Patient feedback
Procedural walkthroughs
Secondhand information from health care or training team

RECOMMENDATIONS

Implementing effective supervision in the clinical environment requires a multifaceted approach. Direct observation is a best-practice supervision method, allowing the supervisor to rapidly ascertain details about a learner's skills and growth areas. Direct observation is best utilized in situations where the outcome is easily observable (e.g., procedures, communication, physical examination) and when




		
Learner Characteristics	Supervisor Characteristics	Clinical Environment
<ul style="list-style-type: none">• Confidence• Accountability• Reputation• Leadership among peers• Self-awareness• Educational background• Clinical skills• Level of training• Previous experiences	<ul style="list-style-type: none">• Ability to create psychologically safe learning climate• Successful preservation of learner autonomy• Clinical & procedural confidence• Trust in learner	<ul style="list-style-type: none">• Overall department census• Patient arrival boluses• Patient throughput demands• Patient complexity and acuity

FIGURE 1 Three domains to consider in providing effective learner supervision: learner characteristics, supervisor characteristics, and clinical environment.

the learner is a novice, needs remediation, or is new to the supervisor or their proficiency with a task is unknown. This form of supervision should be supplemented with standardized checklists or rubrics (e.g., EM-specific entrustable professional activities,²⁹ validated procedural checklists) and immediate, robust feedback. This approach ensures that learners understand expectations and can improve while also mitigating potential biases and disparities in subjective assessments.^{30,31}

While direct observation is a reliable method, it is not always practical, and supervisors may need to assess the learner's proficiency using other methods (Table 1). This can be achieved through informal knowledge assessments, inference from oral presentations, review of clinical documentation, feedback from patients themselves, procedural walkthroughs, and secondhand information from the health care or training team.^{11,13} These indirect methods should be used as indicators for the need for more directed supervision but should not be relied on as standalone evidence of abilities or lack thereof.¹⁴

CONCLUSIONS

In summary, effective supervision of learners in the clinical environment is crucial for ensuring patient safety, promoting learner development, and fostering an optimal educational experience. Learner and supervisor characteristics along with the clinical environment influence supervisory decisions (Figure 1). Supervision should be tailored for each learner, incorporating strategies like direct observation supplemented by standardized assessments and robust feedback, adapting to changing situations, establishing clear expectations, and fostering open communication. By utilizing these strategies, clinical supervisors can create a supportive learning environment that cultivates learner growth while upholding high standards of patient care.

AUTHOR CONTRIBUTIONS

Study concept and design: Sara M. Krzyzaniak, Julie Tondt, Natalie Strokes, Nicholas Hartman, Josh Davis, Benjamin H. Schnapp. Acquisition of data: Sara M. Krzyzaniak, Julie Tondt, Natalie Strokes, Nicholas Hartman, Josh Davis, Benjamin H. Schnapp. Analysis and interpretation of data: Sara M. Krzyzaniak, Julie Tondt, Natalie Strokes, Nicholas Hartman, Josh Davis, Benjamin H. Schnapp. Drafting of the manuscript: Sara M. Krzyzaniak, Julie Tondt, Natalie Strokes, Nicholas Hartman, Josh Davis, BHS. Critical revision of the manuscript for important intellectual content: Sara M. Krzyzaniak, Julie Tondt, Natalie Strokes, Nicholas Hartman, Josh Davis, Benjamin H. Schnapp. Statistical expertise: N/A. Acquisition of funding: N/A.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

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