

CHAPTER 18

Entrustment with health care tasks: balancing trainee autonomy, supervision, and patient safety

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Abstract

For entrustment with unsupervised practice, an ultimate goal of health care education, modulating trainee autonomy during training is necessary and critical. Trainees benefit from experiencing autonomy during clinical training, but patient safety necessitates restrictions. Balancing these two must be modulated by titrating supervision to an adequate intensity. The patient, trainee, and supervisor constitute a triad in the workplace that revolves around safe and effective provision of health care tasks and effective education. In forming an ‘educational alliance’ with the trainee, the supervisor adjusts their role, based on the trainee’s needs and desires, variations in practice, patient safety considerations, and the trainee’s developmental stage. Programs that capitalize on entrustable professional activities and entrustment decision-making have a deliberate focus on the conditions for entrustment of trainees with health care tasks.

Entrustment decisions about trainee autonomy happen in daily clinical practice in teaching hospitals as ad hoc decisions, sometimes implicit and unarticulated, but often deliberate and negotiated in sound educational trainee–supervisor alliances.

Summative entrustment decisions, made by a team and grounded in adequate assessment data, are meant to formally privilege the trainee for future task execution with increased autonomy, within the restrictions by rules and regulations.

A solid summative entrustment decision process allows for defensible adjustments in responsibility and accountability, and backs supervisors in applying appropriate supervision levels. Entrustment with tasks after established readiness for autonomous performance is educationally advantageous and could have a positive impact on patient safety.

How to cite this book chapter:

Jonker G, Klasen J, Hennis MP, de Graaf J, Schumacher DJ, ten Cate O. Entrustment with health care tasks: balancing trainee autonomy, supervision, and patient safety. In: ten Cate O, Burch VC, Chen HC, Chou FC, Hennis MP (Eds). *Entrustable Professional Activities and Entrustment Decision-Making in Health Professions Education*, Chapter 18, pp. 213–223. [2024] London: Ubiquity Press. DOI: <https://doi.org/10.5334/bdc.r>

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Introduction

The postgraduate medical education reform movement in the 1990s was in part born out of major concerns about patient safety. The 1984 death of 18-year-old Libby Zion, daughter of a well-known New York prosecutor and journalist, resulted from unsupervised care by overworked junior residents in a busy lengthy shift. This led to regulations aimed at ensuring adequate supervision and capping resident duty hours, first in New York and, in 2003, nationally in the USA.^{1,2} In the wake of this incident and with the Institute of Medicine's *To Err Is Human* and other reports,^{3,4} the question of what postgraduate trainees were actually allowed to do became prominent, constraining trainee autonomy and making attending specialists much more active. This North American trend affected medical training elsewhere but has been most prominent in Canada and the USA.

Following these changes, some studies showed that patient safety and trainee well-being indeed improved, but education did not.⁵ In fact, graduating residents seemed less prepared for unsupervised work, paradoxically jeopardizing patient safety after training.^{6,7} Even the US Accreditation Council for Graduate Medical Education (ACGME), which determines rules for duty hours and program execution, now signals that the decrease in autonomy and the 'seniorization' of resident tasks is becoming worrisome.⁸ There are many examples across several specialties⁸ of tasks that can easily be envisioned as entrustable professional activities (EPAs, even if not called by that name) and where evidently entrustment is lacking. However, recent studies in surgery suggest that the decrease in resident autonomy across decades has not improved patient outcomes.⁹⁻¹¹ Trainees who do not experience a sufficient sense of responsibility and autonomy before completion of training will face challenges after training in bearing responsibility in unsupervised practice. A proper balance, or sweet spot, must be achieved, to secure both patient safety and educational value, including an experience of graded autonomy in patient care.

EPAs, defined as units of professional practice to be entrusted to trainees,¹² provide a way to organize autonomy in a curriculum with the aim to unite patient safety and educational needs in order to reestablish the right balance.

Supervision is key in this balance and can be defined as '[t]he provision of guidance and support in learning and working effectively in health care by observing and directing the execution of tasks or activities to ensure that they are done correctly and safely, from a position of being in charge.'¹³

This chapter explores the link between trainee autonomy, entrustment of health care tasks, and patient safety. The chapter elaborates on the triad of patient, trainee, and supervisor, on types of entrustment decisions, and on barriers and enablers of entrustment in the workplace.

The authors are aware of the gaps between potential benefits and current evidence, or between ideals and current practice. This chapter aims to provide guidelines for safe health care task entrustment.

The patient, trainee, and supervisor triad

In balancing safety and autonomy, three actors assume a role: the patient, the trainee, and the supervisor. The dynamics of their intricate and triadic interplay revolve around the axis of safety of health care tasks. The patient, assuming the key role, is not just the focus of health care intervention but is also vital in trainee learning and development. The trainee, in turn, is challenged to embrace autonomy and cultivate a sense of responsibility while often working at the edge of their competence. The supervisor takes the role of the navigator of the scenario, uniting patient safety and trainee learning. While navigating, the supervisor must balance roles of teacher, assessor, and patient guardian, while not micromanaging clinical teaching situations at the same time.¹⁴

During clinical work, the supervisor titrates trainee guidance and support by choosing and switching between observing and (re)directing. The supervisor incorporates teaching opportunities into routine patient encounters, pausing throughout exchanges to provide brief explanations, clarify concepts, or explore evidence-based treatments. By grabbing these teachable moments, skilled supervisors maximize learning opportunities within patient care, transforming it into an integrated process that actively secures that training *contributes* to patient safety, rather than compromising it.¹⁵

The supervisor continuously adapts the degree of trainee autonomy, drawing upon experience and intuition (i.e., their gut feeling about readiness of a trainee to take over) in permitting autonomy versus deciding to ‘step in.’^{15,16} In granting autonomy, the supervisor acknowledges an acceptable variability in practice and even allows for mistakes, while constantly judging the boundaries that guarantee patient safety.¹⁵

Trainee development and graded autonomy are often depicted as linear or curvilinear. On average, this may be true; however, for individual trainees learning curves are much more haphazard.¹⁶ Pushed by a myriad of interacting variables influenced by supervisors, trainees, and patients within the complexity of workplace learning, development and autonomy cannot evolve linearly. Building on earlier work defining five factors that contribute to decisions on how much trust is granted, and thus how much autonomy is allowed (trainee, supervisor, context, relationship and task),^{17,18} we propose to add ‘patient’ as a separate factor (Table 18.1). Although the patient is often regarded as a component of the task,¹⁸ in daily ad hoc entrustment decisions, patient variables weigh in (clinical characteristics, complexity, acuity, and patient preference), irrespective of the particular task.

The nonlinearity of development adds depth to the understanding how learning occurs in unpredictable, changing contexts.¹⁵ Amid these complexities, the educational alliance of trainee and supervisor emerges as a linchpin, binding the triad together. It represents a collaborative effort where trust is not only in the clinical abilities of the trainee but also in the shared commitment to quality care and patient safety. The educational alliance fosters an environment where the trainee can learn, make mistakes, and grow,²⁰ while the supervisor navigates the fine line between guidance and autonomy while guarding patient safety.

Entrustment: ad hoc and summative decisions

The Oxford English Dictionary²¹ defines entrustment as assigning the responsibility for something valued or important to someone. In health professions education, especially in competence-based education operationalized with EPAs, entrustment refers to granting autonomy to trainees to perform health care tasks without direct supervisory involvement, implying a degree of risk for patient safety. Entrustment can be ad hoc, conferred by a supervisor and specific to the moment, or summative, implying a more permanent and comprehensive decision.²²

Ad hoc entrustment

Ad hoc decisions of entrustment, such as leaving an anesthesiology resident alone in the operating room,²³ can be deliberate, but are often implicit and unarticulated, made in the moment. Every day, clinical supervisors consider when and whether to allow a trainee to perform a particular task on their own. Conversely, trainees face tasks at the edge of their competence and consider whether to perform it autonomously or ask for supervisor guidance and support. In all these decisions, the safety of the patient is of high importance.

Table 18.1: Factors influencing degree of ad hoc trainee autonomy allowed in performing health care tasks.

Factor	Examples
Trainee	Learning need, agency, reliability, integrity, capability, humility ¹⁹
Supervisor	Clinical ability, clinical experience, supervisory expertise, propensity to trust, identification of learning opportunity
Supervisor–trainee relationship	Degree of acquaintance, like-mindedness, prior collaborative experience, interpretation and negotiation of applied supervision
Patient	Clinical characteristics, complexity, acuity, preference, socioeconomic status, language, etc.
Task (patient independent)	General difficulty of the task, general risks of the task
Context	Abilities of team members, opportunity to intervene quickly, need for hands/staffing, time of the day, institutional culture of delegating work to trainees

In a productive educational alliance, trainee and supervisor negotiate the appropriate level of supervision and autonomy for a particular task. Intentional ad hoc entrustment decisions are part of a deliberate educational approach²⁴ belonging to the core components of CBME (i.e., tailored learning experiences and sequenced progression).²⁵ Typically, a supervisor making an ad hoc entrustment decision relies on a combination of the estimated trustworthiness of the trainee, the perceived risk of the situation, the urgency of the task, patient characteristics, and the appropriateness of the assigned task for the trainee at that specific moment (see Table 18.1).²⁶ Typically, an ad hoc entrustment decision is a situational, short-term prospective decision for a single occasion.

After an ad hoc entrustment decision, the situation may be evaluated by trainee and supervisor in a feedback conversation. From a patient perspective, ad hoc decisions may be high-stakes, but from the perspective of trainee progression they are low-stakes and formative; their evaluation is one data point in the trainee's portfolio. Even in low-stakes assessments, using an entrustment–supervision scale²⁷ forces supervisors to determine the appropriate supervision level for future occurrences of similar ad hoc entrustment situations. This prospective thinking incorporates risk estimations for future performance and thus takes patient safety into account. Ad hoc entrustments do not imply precedents but do, in aggregate, inform a summative entrustment decision. Multiple low-stakes assessments of multiple occasions by multiple assessors with multiple assessment tools collectively paint a fuller picture of trainee performance. As such, assessments of ad hoc entrustment decisions contribute to summative entrustment decisions endorsing readiness for unsupervised practice.

Summative entrustment

In contrast with ad hoc entrustment, a summative entrustment decision is not made by a single supervisor. In a program that provides significant curricular ownership to trainees, they should know when they are ready for a next step and should proactively request formalized, summative entrustment for a unit of professional practice. Such decisions are deliberately made by a program director with their clinical competency committee and are grounded in thorough evaluation of sufficiency and relevance of assessment data points, including evaluations of ad hoc entrustment decisions collected from various assessors over time.²⁶ A summative entrustment decision

is designed to result in the certification and privileging of the trainee for future task execution with a specified level of supervision.²⁶ The decision results in tangible adjustments to the official permissions granted to a trainee at a specific level of supervision. The supervisory team should be compelled to enact the decrease in supervisor involvement.

In contrast with ad hoc decisions, when all factors of Table 18.1 weigh in, summative entrustment decisions focus largely on trainee factors.²⁵ Decision-makers can use five key groups of trainee features, succinctly captured by the mnemonic 'A RICH': agency (proactivity toward work, team, safety, personal development), reliability (conscientious, predictable, accountable, responsible), integrity (truthful, benevolent, patient-centered), capability (task-specific knowledge, skills, experience, situational awareness), and humility (recognizes limits, asks for help, receptive to feedback).¹⁹

A summative entrustment decision goes beyond assessing current performance of an EPA. It extrapolates to cover the spectrum of EPA manifestations, also under unfamiliar conditions, and implies trust in the trainee's future performance. When a trainee is entrusted with an EPA without supervision, the entrustment not only extends beyond the moment of the decision but also has implications well beyond graduation into practice.²⁸ Entrustment decisions are not merely an attestation of achievement of competence, nor of the end-of-training, but a high-stakes statement of trust in the trainee to provide safe and high-quality care within the scope of the EPA.

Formalizing summative entrustment

Being summatively entrusted with an EPA in patient care should be translated into language in a way that both the trainee and their environment are clear about the trainee's privileges. Statement of awarded responsibility (STAR) has been proposed as term²⁹ for this qualification or authorization. To allow for time-variable progression in a time-fixed model, the recently introduced concept of promotion-in-place (PiP) seems promising.³⁰ PiP provides residents who are deemed competent early with a status of 'sheltered independence' while still in training. While PiP regards the readiness for the full breadth of a specialty, STARS are a similar approach for smaller units, i.e., EPAs.²²

Barriers to and enablers of entrustment during education

The educational philosophy of EPAs and entrustment decisions implies relevant consequences for the entitlement to practice patient care when the readiness for a decrease in supervision is established. This should translate to progressive responsibilities in patient care and a gradual decrease in supervision.

Supervision is crucial and supervisors have dual obligations: to provide learning opportunities and to guard patient safety. From a position of being in charge, the supervisor has the power and obligation to grant and restrict a trainee's autonomy and vary the level of supervision based on their judgments and preferences.

The restriction of responsibility arises further from various regulations, issued by several authorities that set limitations to patient care practice by trainees. In the tensions between educational wishes and regulatory restrictions, the following parties exercise their formal duties (Table 18.2; similar examples can be found in nursing and other health professions with restricted privileges).

Table 18.2: Institutions that have the power to restrict trainee autonomy.

Authority	Role and power	Examples
The law	The law gives patients the option to sue care providers in case of substandard care	The medical license prohibits medical practice by unqualified individuals
Medical boards	Medical and specialty boards certify and can withdraw certification, which de facto affects the possibility to practice	A supervising physician is found to be intoxicated while working clinically with medical students and residents, and the medical board for their jurisdiction suspends their medical license
Hospitals, clinics, and medical centers	Clinical employers issue privileges for all health care professional employees and can restrict or terminate employment if these agreements are breached	A supervising surgeon is repeatedly not in the operating room or even able to be found while surgical residents are operating on patients, leading their medical privileges to be limited before being revoked if compliance with hospital rules for supervising trainees is not met
Insurance companies	Insurance companies set conditions for reimbursement of costs, and usually exclude trainees as independent care providers	A rural hospital employing an emergency medicine resident (licensed, but not yet board-certified) who moonlights in emergency medicine to supplement salary is unable to charge professional fees for moonlighting work, nor is the resident
Accreditors of hospitals and educational programs	Accreditors set standards. Breaches of these may lead to loss of accreditation status of a hospital or educational program	The US ACGME, and the 'Joint Commission' accredit graduate medical education and hospitals respectively; Box 18.1 shows the JC standard for supervision of trainees

The ACGME in the USA distinguishes in its common program requirements—in contrast to the five general levels of supervision used throughout this book—three levels of supervision they deem most germane to postgraduate training: direct (supervisor present with trainee and patient), indirect (supervisor not present but quickly available), and oversight (supervisor available to review after care is delivered).³¹ The trainee's individual level of training and patient complexity and acuity must factor into decisions regarding the level of supervision provided, ensuring that the supervision is appropriate for each patient.

The supervisor is pivotal in the process, having the final responsibility and liability as long as a trainee has not received an unrestricted license, a training certificate,^c or a specialty certification. This makes entrustment decisions significant. In a process where valid summative entrustment decisions are made by a team, grounded in sufficient data and deliberation, a supervisor should feel backed to lean on that process. When adverse events happen after a summative entrustment decision for a particular EPA has been made (e.g., 'the resident may now run the Wednesday-morning clinic'), the supervisor in charge of the care for particular patients may still be liable but should be able to adequately defend the basis for the trust in the trainee, and the adverse event may reflect a happening that could have occurred with any attending professional. However, the fact that a medical malpractice lawsuit may attempt to place responsibility on the attending

^c In the USA, residents in accredited programs are licensed to practice through a *training certificate*. This permits them to practice under supervision until fully licensed. Residents can seek a full license before the end of residency, depending on personal or institutional priorities (<https://www.ama-assn.org>).

Box 18.1: Case example from the Joint Commission's Standards for accredited hospitals (2012).³²

Standard MPE.4: 'The [health care] organization understands and provides the required frequency and intensity of medical supervision for each type and level of medical student and resident trainee.'

The required level of supervision is consistent with the level of training and level of competence of the medical student and resident trainee. Competence cannot be assumed and must be demonstrated early in the training program. A medical school student understands if supervision is provided by a resident or by the patient's primary physician or by a medical school faculty member. [Trainees] understand if the supervision includes daily signing of all notes and orders, or signing of the care plan and progress notes every other day or making a separate entry in the patient's record. There must be evidence of that supervision and uniform expectations for the mentoring/supervision process. Measurable elements of MPE.4 include (amongst others):

- Organization policy identifies the required level of supervision for each level of trainee.
- The level to be provided is based on the demonstrated competence of the trainee.
- Each trainee understands the level, frequency, and documentation of their supervision.
- The organization provides the required level of supervision for each trainee.
- Patient care records are reviewed for compliance with the requirements and frequency.

supervisory physician rather than the trainee who is deemed ready for less supervision can lead supervisors to provide more supervision than is needed. This can rob trainees of opportunities to care for patients with less supervision during training.

The regulations of accreditors (e.g., Box 18.1) align well with the levels of supervision used with entrustment decisions for EPAs. While supervisors have individual responsibilities and liabilities are based on various regulations, the space they have to exercise their education responsibility to offer trainees appropriate opportunities in patient care should be backed by the educational team or competency committee and the culture at the department or health care unit.

Conclusion

An entrustment decision in health professions education is a decision to trust a trainee to perform a health care task without direct supervisory presence.³³ This gives the patient a prominent position. The stakes of ad hoc entrustment decisions may be low with regard to trainee progress, yet they are high because of potential implications for patient safety.

The trainees attending to Libby Zion, discussed above, were not positioned to bear the responsibility for her care. In the context of a busy night shift, they were entrusted with her care with deficient supervision. One can—and, we would contend, should—argue that the supervisors were more to blame than the trainees. In a strong educational alliance, ad hoc entrustment decisions are explicit and intentional, taking risks for patient safety into account. Supervisors should weigh and accept practice variations and serve as guardrails, supporting trainees whenever needed and serving as a stopgap for mishaps whenever they can. The decision can be evaluated in a formative, prospective workplace assessment.

In contrast, a deliberate and defensible summative entrustment decision is made by the supervisory team, after establishing readiness, supported by valid assessment data. It is not primarily a decision that considers learner progress but entails an estimation of future performance and risk in a spectrum of circumstances. It is a high-stakes statement of trust in the trainee to provide safe and high-quality care within the scope of the EPA. These decisions should lead to formal changes in autonomy, responsibility, and accountability, even if a supervisor retains final responsibility. After a valid summative entrustment decision, adverse events can still happen, even among experts, and this does not necessarily imply a deficient decision. However, entrusting and transferring tasks only after established readiness for autonomous performance has a positive impact on patient safety.

Competing interests

The authors declare that they have no competing interests.

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