Chapter 7
Laws and Liability Relating to the Education and Supervision of Trainees and Allied Health Professionals

James E. Szalados

Medical Education

The History of Medical Education in the USA

The history of medical education is a gradual evolution of standardization and professionalization, a history that largely parallels the development of American medicine from a cottage industry to the modern model of academic medical centers and private health systems. The traditional purpose of education was the creation of a "learned gentleman." Thus, an education in medicine was the purview of aristocracy. At its infancy, the education of medical practitioners, both physicians and nurses, was largely through apprenticeship. In some cases, practitioners could establish their practices based on experience and reputation, skills honed in the battlefield, or within the community.

Medical schools in Europe, primarily in London, Oxford, Edinburgh, and Paris, began to attract students from the USA who desired a more formal education. In the latter part of the eighteenth century, the College of Philadelphia developed (1766) as an affiliation of physicians with the Pennsylvania Hospital, culminating in what is often referred to as the first US medical school intended not to replace but to supplement the apprenticeship model of American medical education. Subsequently, the medical department of Harvard College was established in Cambridge Massachusetts in 1783; the medical department of Dartmouth College was established in 1798; and the King's College in New York developed into the College of Physicians and Surgeons in 1807. These first US medical schools were

J. E. Szalados (✉)
Director, Surgical and Neurocritical Care Units, Rochester Regional Health System at Rochester General Hospital, Rochester, NY, USA

The Szalados Law Firm, Hilton, NY, USA
e-mail: james.szalados@rochesterregional.org; jszalados@aol.com

© Springer Nature Switzerland AG 2021

J. E. Szalados (ed.), *The Medical-Legal Aspects of Acute Care Medicine*,
https://doi.org/10.1007/978-3-030-68570-6_7

essentially proprietary, or private, business ventures by local physicians who presented didactic lectures supplemented by classes in anatomy. Formal requirements for acceptance to medical school, such as written exams and oral interviews, started to become accepted in the 1880s. A typical, but nonstandard, curriculum was generally 2 years in duration. At gradation, the matriculating physician achieved a de facto license to practice medicine, since, at the time, certifications and licensing boards had not yet been established. Specialization after graduation from medical school was largely based on experience and, again, through apprenticeship. William Osler was the first physician to establish a structured postgraduate residency training at Johns Hopkins Hospital. The American Medical Association (AMA) did not establish educational standards for internship programs until 1919. In the diverse stand-alone US medical schools, although the AMA developed regulations for medical education and postgraduate training, it nonetheless had a limited influence and lacked disciplinary oversight. In 1910, the Flexner Report criticized the US medical education system as a lax apprenticeship system established primarily for financial gain and which lacked educational goals and standards. The Flexner Report was the result of a study from the Johns Hopkins University Medical School which critically appraised the quality of educational facilities, entrance requirements, and the qualifications of faculty members at medical schools.

The duration of early medical postgraduate training was arbitrary; often determined by the institution, it became more standardized as national certifying bodies, and their certification examinations became established. In 1951, the US National Intern Matching Program was created in an attempt to regulate the placement of medical school graduates into accredited internship and residency program based jointly upon graduates' and hospitals' preferences. The Accreditation Council for Graduate Medical Education (ACGME) was established in 1981 with the mission of providing one powerful national body to oversee the diverse providers of graduate medical education with respect to the duration, content, and the qualifications of instructors and entities. In 2003, the ACGME moved to restrict the duty hours of residents and in 2011 established a ceiling of no more than 80 hours per week. The ACGME continues to add new areas of subspecializing to its oversight responsibilities as the science and technology of medicine continue to evolve.

Foreign medical graduates (FMGs), also referred to as international medical graduates (IMGs), are physicians who complete their medical education at a school outside the USA and are composed of both US citizens who chose to study abroad and citizens of other countries who immigrate to, and practice medicine, in the USA. American citizens who chose to study abroad may do so for a variety of reasons, including a desire for a cultural experience or to circumvent the very high costs of medical education or the limited number of positons available in medical schools in the USA and Canada. FMGs may complete their studies at universities in other countries or in "offshore" medical schools, such as those in the Caribbean. The challenges of a foreign medical education together with the challenges to integration within the US postgraduate training and licensing systems may be a testament to the drive and dedication of those who study abroad. Many argue that the availability of physicians lags with respect to the projected demand for physicians

in the USA especially given the aging population and the prevalence of chronic disease. Thus, FMGs or IMGs represent an important segment of the US physician workforce; at present, approximately 33% of the US physician workforce is composed of foreign-trained graduates [1], from 25% in 2015 [2]. Foreign-trained graduates must pass high quality standards to ensure that their competency is comparable to that of American medical graduates; they must graduate from a school listed within the World Directory of Medical Schools, be certified by the Educational Commission for Foreign-Trained Medical Graduates (ECFMG); pass the same examinations taken by domestic graduates, and pass the US Medical Licensing Examination (USMLE). FMGs also compete increasingly effectively with US graduates of allopathic and osteopathic medical schools for postgraduate residency positions. In 2019, the graduates of US allopathic medical had a 93.9% match rate; graduates of US osteopathic medical schools had an 84.6% match rate, and US citizen international medical graduates had a match rate of 59% [3].

The US healthcare workforce enjoys a similar level of international diversity with respect to allied health providers. As of 2016, approximately 24% of dentists, 20% of pharmacists, and 16% of registered nurses are graduates of foreign educational programs [4]. Once healthcare professionals are duly certified and licensed, they are integrated into the US healthcare system.

Liability for Medical Students and Medical Student Liability

A key issue in medical education is the balance between classroom education which focuses on the basic and applied medical sciences and the need to train students in the basic practical skills of clinical patient care. Medical students are in a unique position; they need to learn and practice their provider-patient skills, physical examination skills, and even procedural skills on patients since the process of acquiring such skills is a process, not an occurrence. Of course, medical education during clinical training does not occur in a vacuum; rather it is, or should be, closely supervised, monitored, and assessed. However, the degree of oversight of medical students can vary greatly between hospitals, depending on the culture and the teaching orientation of the institution. For example, medical students may be supervised by interns, residents, advanced practice provides, attendings, or a combination of these at any one time. There is substantially more to a solid clinical rotation than allowing students to be present at rounds, conferences, and case discussions or even to observe procedures and surgery; an effective medical rotation must allow a degree of hand on experience. The degree of hands on experience can vary from listening to lung sounds, to checking a blood pressure, to holding retractors, and to indirectly "assisting" with procedures. In some institutions, medical students can even write notes and orders, which of course must be cosigned by a licensed provider to be meaningful or effective. Procedures performed by medical students are usually of a basic nature and, even so, should never be performed independently.

Since medical students must be supervised, the assessments they make or the orders they write are always of a preliminary nature; nothing a medical student does

during a clinical rotation is considered final. Thus, medical student malpractice is rarely an issue; even in a situation where an assessment is incorrect or a procedure is poorly performed, it is the attending or the hospital that is held liable under the doctrine of negligent supervision. Since the student is not a licensed professional, he or she cannot personally held liable for medical errors, unless they willfully and negligently acted outside the scope of their position, misrepresented themselves as a licensed provider, or willfully disregarded rules and regulations. Medical students doing clinical rotations in the USA are required to carry medical professional liability insurance; such insurance is usually maintained either through their medical school or through the teaching hospital or both.

A more common issue implicating liability for medical students is that of informed consent, consent to interview, examine, and participate in procedures. Informed consent requires that the patient agrees to a provider's involvement in his or her care [5]; this is especially true when the relationship does not in fact medically *require* the presence of the student. Medical students are taught to introduce themselves as such, whoever data suggests that students may often avoid or disguise their actual roles either to (1) increase the probability of patient consent, (2) reassure patients of the near-professional status of the student [6], or (3) as a self-image perception where the perceived importance of conveying one's student status diminishes as medical students progress through medical school and near their internships [7]. Although only 37.5% of teaching hospitals specifically informed patients that students would be involved in care [8], the vast majority of patients will consent to procedures by a medical student even as most also felt that they should be informed of the student's status [9]. Leung and Patel argue that explicit informed consent is essential for theater-based teaching, even when students are simply acting as observers in the operating theater [10]. Students must also be educated regarding and also agree to be bound by the patient privacy rules of HIPAA. Mostly, such agreements occur as business associate agreements with medical schools.

Malpractice Liability in Graduate Medical Education

In general, medical malpractice is the principal legal risk facing residency training programs and their faculty. Both sponsoring hospitals and the educational institutions share liability for errors of commission or omission arising during the course of graduate medical education involving patient care. It is well recognized that residents may provide needed care to patients; however, they do so not as providers but as trainees. Hospitals receive federal funding and often stipends from the respective universities, for the supervision and training necessary to oversee the care provided by residents. Thus, teaching hospitals have a contractually created legal duties to both provide and supervise patient care [11] and are directly liable for any breaches. In general, lawsuits naming residents alone are rare; more likely the attending and the hospital will be the primary defendants in the lawsuit. Resident physicians, attending physicians, and graduate medical education (GME) institutions share a collective and shared responsibility to the patients they treat. Although the attending

is legally responsible for the care provided by trainees under his or her supervision, residents and other trainees are commonly also named when they have been involved in the care provided.

Medical malpractice cases involve negligence liability, which is a fault-based system in tort law, whereby the plaintiff must establish that a defendant's conduct did not conform to the applicable standard of care. The standard of care in malpractice cases is established through expert witness testimony; however, the standard to which a graduate medical trainee, either intern, resident, or fellow, should be held remains less clear. In general, there are three views that courts have adopted regarding the standard of care that is applicable to graduate medical trainees.

In *Rush v. Akron General Hospital* [12], a first-year resident sutured a lacerated shoulder closed but failed to identify retained glass fragments; one piece measured 3–1/4 inches. The *Rush* ruling was the first case to address the standard of care for a first-year resident. The *Rush* court adopted a subjective rule that tied the standard to that which interns ordinarily possess under similar circumstances.

Another potential standard to which a physician-in-training may be held is that of general licensed physician or a general practitioner. The case of *Jenkins v. Clark* [13] overruled the standard of care described in *Rush*, holding instead that first-year residents should be held to the standard of "reasonably careful generalist physicians or hospital emergency room attendings, not that of interns." *Jenkins* is important since it ushered in a new standard, changing the standard of care from that of other interns similarly situated to that of a general practitioner attending working in an emergency department (ED). The standard of care, as articulated in *Jenkins*, required that the plaintiff proved that the resident physician "did or failed to do something" that a "physician or surgeon of ordinary skill, care, and diligence" would (or would not) have done under like or similar conditions or circumstances. The "general practitioner standard" thus became widely accepted. In the case of *McBride v. United States* [14], McBride, a retired naval officer, suffered a fatal heart attack, and his estate commenced a wrongful death action. McBride presented to the ED with complaints of pain in his lower chest after a hospitalization for the same complaints 3 days prior where a workup had revealed no evidence of heart disease. The resident on duty in the ED interpreted the electrocardiogram (EKG) and advised McBride that the pain was probably a result of a gastrointestinal disturbance and advised admission to the coronary care unit; McBride instead expressed a preference to return home where he died shortly afterward. At trial, the resident acknowledged that he had erroneously interpreted McBride's EKG as normal, although it in fact was abnormal. Plaintiff experts testified that a general practitioner with ordinary skill would have read the electrocardiogram accurately. The Chief of Cardiology testified that many interns and residents would not have recognized the abnormal tracings, and thus the misinterpretation did not demonstrate negligence in the context of the resident's lack of special training and experience. The American Law Institute has noted that the duty of care owed to the patient does not vary according to the doctor's individual knowledge or education and thus the normal standard will be altered only if the doctor represents to his patients that he possesses special skill. The court held that "McBride had the right to expect the quality of care usually

found in the medical community and the hospital was obliged to provide physicians who could meet that standard," thus finding that the resident should be held to the standard of a general licensed physician staffing an ED. *Centman v. Cobb* [15] further affirmed *Jenkins* when it held that first-year residents are medical practitioners who must exercise the same standard of skill as a physician with an unlimited license to practice medicine.

Finally, an alternative approach is that of specialist standard of care. In the case of *Powers v. United States* [16], Powers, following a prior cervical laminectomy, was diagnosed with an instability of his cervical spine at C3–C4 and was referred for a posterior cervical facet fusion of C2 through C7 with a fibula bone graft. The operation was performed by four physicians: Raycroft, the senior attending supervising surgeon for this operation; assisted by Biondino, a first-year orthopedic resident; Cole a third-year orthopedic resident; and Romero, a first-year surgical resident. The operative report indicated that Dr. Biondino was the surgeon and indicates that while Drs. Raycroft and Romero operated on the leg to remove the fibula bone graft, Drs. Biondino and Cole operated on the neck at the fusion site. Powers had a complicated postoperative course during which time Biondino regularly assessed Powers; subsequently, Powers was discharged with weakness which was later found to be due to narrowing of the cervical spinal canal at C5 and C6 with cord impingement. Expert testimony later testified that "Powers suffered spinal cord impingement and nerve root compression because the excessive anterior angulation of the spine after the fusion brought the cord into constant contact with the preexisting bony ridges on Powers' vertebrae." The Court found "that the surgeons who performed the plaintiff's fusion failed to adequately take into account his unique, pre-fusion spinal condition, including his bone spurs and cervical subluxation. As a result, they fused the plaintiff's cervical spine at an excessive angulation for him and, in so doing, failed to exercise the good judgment required in each individual case by the standard of due care involved." The Court also stated that "the postoperative care which he received did not measure up to the standards of care ordinarily exercised in similar cases in Connecticut." Moreover, the "senior attending orthopedic surgeon for the operation, Dr. Raycroft, having been alerted to the problem by Dr. Biondino, failed to adequately monitor Powers' condition and he offered Dr. Biondino virtually no personal diagnostic supervision and assistance in correcting his postoperative condition." Here, the court held the resident to a standard of care expected of a specialist orthopedic surgeon performing a similar operation. In other words, the conduct was measured against that of an attending surgeon performing a cervical fusion, although the defendant was in training [17].

A similar case that reached a similar conclusion is *Gonzalez v. St John Hospital & Medical Center* [18] involved a third-year surgical resident who performed a colorectal surgery procedure that led to patient injury and litigation. The patient-plaintiff argued that a physician could be held to the standard of a specialist without being board-certified in the specialty, especially since the resident was receiving advanced surgical training at the time of the procedure. The Michigan court decided that residents who "limit their training to a particular branch of medicine or surgery

and who can potentially become board-certified in that specialty are specialists" for standard of care purposes.

Alternatively, courts will deliberately avoid the legal issue with respect to the applicable standard of care that applies to physicians in training. In *National Bank of Commerce v. Quirk* [19], a medical malpractice action was commenced against several physicians, including two licensed residents. Here, plaintiff's expert stated the standard of care which would apply to an attending but admitted that he did not know the standard that would apply to a resident. The court ruled in favor of the resident defendants citing the uncertainty of the standard of care. The uncertainty of what standard to apply is reiterated in the case of *Mercil v. Mathers* [20]. In *Mercil*, a malpractice claim was brought by the estate of a woman who died shortly after childbirth. A first-year resident who assisted during the delivery was among the defendants. Although the court opined that an unlicensed, first-year resident is not immune from liability, the standard of care to which a first-year resident must be held is that "degree of skill and learning which is normally possessed and used by doctors in good standing in a similar practice."

In summary, the trend in verdicts and case law favors the view that graduate medical trainees, including interns who are in their first year of training, have to be generally held to a professional standard of care in medical malpractice case expected of a licensed nonspecialist, such as a general practitioner [21]. However, courts may hold resident physicians who are in a specialty training program to the same standard expected of the average specialist in that specific field [22]. Given the nature of medical training and the attendant supervision requirements mandated by evolving focus patient safety and public health, it would seem reasonable to hold physicians in training to that standard which applies to the supervising physician, since supervision is presumed by all parties.

Reviews of medical malpractice claims data suggests that trainees are named as defendants in 22% [23] to 27% [24] of malpractice claims. Medical malpractice cases involving surgical residents disproportionately involved junior residents and resulted in a median payout of $900,000 [25]. The payment of any claim against a provider, including a physician-in-training, must be reported to the National Practitioner Data Bank (NPDB). The Accreditation Council for Graduate Medical Education (ACGME) requires institutions that sponsor-accredited training programs provide physicians-in-training with professional liability insurance to cover claims arising from training [26]. Lawsuits can also produce stress and emotional distress; 95% of physicians sued for malpractice report emotional distress during the litigation process [27]. For a physician-in-training, such distress may add to the stresses of the training program and may produce lasting impact.

Physicians-in-training should seek supervision and attending physicians to provide such supervision. Supervision in itself does not diminish or detract from a training opportunity, rather it provides an opportunities to improve or hone skills, oversight, and rescue in the event of an evolving potential patient harm. Arguably, failure to properly supervise a technical procedure, other than routine procedures performed by experienced trainees, is a higher level of negligence. Certainly, at some point one must relinquish the scalpel, the needle, the drill, or the trocar;

however, that decision should be made after a careful risk assessment. Attending physicians face malpractice exposure not only for the care they themselves provide but also for the care they direct. In addition, attendings are likely to be held vicariously liable for the negligence of resident physicians working with them or directly liable for inadequate supervision. In cases such as those outlined above, the trainee, the supervisor, and the institution(s) are all potentially liable. Nonetheless, supervising physicians may, in addition to an allegation of malpractice, also be held liable under a separate and distinct cause of action that of negligent supervision, above and beyond malpractice. Thus, in addition to being named as a defendant through vicariously liability, attending may also have a direct liability based in negligent oversight or negligent supervision [28]. The precise parameters that legally define responsibility for supervision are not yet well defined in the case law; what exactly constitutes adequate supervision remains unsettled in the law [29].

In the case of *Lownsbury v. VanBuren* [30], an expectant mother was admitted for induction of labor; the on-call resident physicians instead ordered a contraction stress test, erroneously interpreted the test, and subsequently discharged the patient home. Later, the mother delivered a newborn with severe brain damage and filed suit against the on-call attending physician for negligent supervision. That on-call attending physician was not an employee of the hospital, but was under contract to provide on-call services in obstetrics. The on-call attending physician had neither seen the mother nor been contacted by the on-call resident physicians. Thus, the on-call physician argued that there was no patient-physician relationship and therefore he could not be found legally responsible. The court held that despite the lack of patient contact, or even a constructive actual knowledge of the circumstances, the on-call agreement was sufficient to indirectly construe the existence of a patient-physician relationship and a concomitant duty to supervise the residents.

In contrast, the case of *Prosise v. Foster* [31] involved a 4-year-old who presented to the ED with chicken pox and lethargy. The patient was examined by a first-year resident physician, who discussed the case with a third-year resident physician. The child was evolving pulmonary complications; the resident physicians failed to diagnose and instead treated her with intravenous fluids and discharged her home. The residents did not contact the ED attending physician, who was on-call at home. The child later died as a result of pulmonary complications. In this case the court held that the mere existence of an on-call relationship was an insufficient basis upon which impute a patient-physician relationship, and the court dismissed the dismissed claim of “failure to supervise.”

Finally, in the case of *Mozingo v. Pitt County Memorial Hospital* [32], the court did not specifically opine on the issue of liability arising from an on-call relationship. *Mozingo* involved the case of a pregnant woman who presented to the ED in difficult labor. The resident physicians contacted the attending obstetrician who was on-call at home and who had no prior contact with the patient, but nonetheless came immediately to the hospital. When the attending arrived, the delivery had already occurred, but the child had sustained a shoulder dystocia, which led to severe permanent disability. The family brought suit against the attending physician for negligent supervision. Here, the existence of a patient-physician relationship and a

concomitant duty to supervise were not in dispute, since the attending acknowledged his duties. Nonetheless, the plaintiff introduced expert testimony which rendered an opinion that the physician on-call physician would have called into the hospital during the evening to learn about potential cases that may require the presence of an attending physician; the defendant countered and introduced expert testimony that an on-call physician would not customarily do so. In its analysis, the court considered that "[m]edical professionals may be held accountable when they undertake to care for a patient and their actions do not meet the standard of care for such actions as established by expert testimony. Thus, in the increasingly complex modern delivery of health care, a physician who undertakes to provide on-call supervision of residents actually treating a patient may be held accountable to that patient, if the physician negligently supervises those residents and such negligent supervision proximately causes the patient's injuries." The trial court granted summary judgment for the physician. The appellate court reversed the trial court's summary judgment for the defendant concluding that "a contract providing for supervision of resident physicians in a manner which substantial evidence tends to show is negligent will not shield a supervising physician such as the defendant from legal liability for providing such negligent supervision, at least where, as here, the plaintiff patient was not a party to that contract." The appellate court here explicitly left open the possibility that merely being available to answer questions from home may not qualify as adequate supervision, but not decide that issue. The dissent by Justice Meyer in this case is important, reasoning that "contrary to the majority's conclusion, Dr. Kazior did not have a duty of general supervision of the residents. Pursuant to his employment with Eastern, Dr. Kazior merely assumed responsibility to provide limited supervision of the residents to remain at home when he was assigned on-call supervision and to make himself available by telephone for advice and assistance to the chief resident…. the cases relied upon by the majority do not support the conclusion that Dr. Kazior owed any duty beyond that which he voluntarily assumed pursuant to his employment agreement with Eastern… [t]o permit liability for negligent supervision to be imposed against Dr. Kazior, however, flies in the face of the cardinal principles of contract and tort law. We have long recognized that a physician may contractually limit the extent or scope of professional services to be rendered."

Therefore the case varies widely by jurisdiction and the specific circumstances. Nonetheless, case law does illustrate the fact that, at least in some instances, courts will hold a supervising physician liable to patients treated by their house staff, including patients with whom they have never had direct contact. The assignment of liability will depend on (1) the existence of a colorable patient-physician relationship through explicit agreement or implicit promises that allocates a duty beyond a supervisory responsibility, and (2) the threshold determination by the court of the adequacy of the supervision under the appropriate standard of care. Again, although that standard is unclear, the courts have not clearly ruled that passive supervision from home in itself rises to negligence, and court rulings have suggested willingness to look beyond prior customary practice in the interest of patient care and public policy.

Due Process in Medical Education and Discipline

Throughout the professional education process, from medical school, and through the postgraduate physician-in-training continuum, situation may arise, either based in academic performance or in behavior, which necessitate disciplinary sanctions such as remediation or dismissal. Moreover, through all stages of disciplinary action, policies and procedures, including due process, must be followed. Termination without due process can lead to litigation. In general, where there is a strict adherence to process, faculty and intuitional decisions are upheld by the courts. The US Supreme Court, in *Board of Curators, Univ. of Missouri v. Horowitz* [33], addressed this issue on point. In *Board of Curators*, the clinical performance of a medical student during a pediatrics rotation was determined unsatisfactory by the Medical School's Council of Evaluation who recommended that the student be advanced to her final year only on a probationary basis; after further faculty dissatisfaction with the student's clinical performance during that year, the Council reevaluated her progress and concluded that she should not be considered for and that, absent "radical improvement," she be dropped as a student in her final year of medical school. Following additional negative review, when a report on another rotation turned out to be negative, the Council recommended that the student be dismissed. The student then appealed to the provost, who, after review, sustained the decision of the Council. The student then brought suit under 42 USC § 1983, contending that she had not been accorded her due process rights prior to her dismissal.

42 US Code § 1983 provides the basis for civil action for deprivation of their constitutional rights. Such rights may include violations of due process rights or rights under the Fourth Amendment (searches) and Fifth Amendment (self-incrimination). 42 USC § 1983 states, in relevant part:

> Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other persons within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceedings for redress, except that in any action brought against a judicial officer for an act or omission taken in such officer's judicial capacity, injunctive relief shall not be granted unless a declaratory decree was violated or declaratory relief was unavailable. …

The 14th Amendment makes the Due Process Clause of the Fifth Amendment [34] binding in the states. Furthermore, the 14th Amendment, Section 1, of to the US Constitution includes several clauses, such as the Citizenship Clause, Privileges or Immunities Clause, Due Process Clause, and Equal Protection Clause [35]. The 14th Amendment states, in relevant part:

> No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

The intent of due process is to provide procedural safeguards for the protection previous of individuals from arbitrary actions. Due process is implicated in hospital medical staff peer review actions, state medical board disciplinary actions, actions by state professional regulatory agencies [Chap. 6], and actions of federal agencies [Chap. 30]. Due process includes substantive and procedural components: procedural due process requires notice and an opportunity to be heard, whereas substantive due process mandates a showing of a legitimate basis for the action so as to overcome a claim that the action was arbitrary or capricious.

The US Supreme Court, in *Horowitz*, deferred to the University Council stating that "university faculties must have the widest range of discretion in making judgments as to the academic performance of students and their entitlement to promotion or graduation." Here, the Court also noted that:

> [t]he procedures leading to respondent's dismissal for academic deficiencies, under which respondent was fully informed of faculty dissatisfaction with her clinical progress and the consequent threat to respondent's graduation and continued enrollment, did not violate the Due Process Clause of the Fourteenth Amendment. Dismissals for academic (as opposed to disciplinary) cause do not necessitate a hearing before the school's decisionmaking body. (citing Goss v. Lopez, 419 US 565)
>
> *Horowitz*, 435 US 84–91

A similar case was again heard by the US Supreme Court regarding the dismissal of a medical student: *Regents of University of Michigan v. Ewing* [36]. Typically, at the University of Michigan, a student who successfully completed the requirements of the six-year Interflex program would, upon graduatioon, be awarded both undergraduate and doctorate of medical degrees. One requirement for progression through the Inrerflex program was a successful score on Part I of the National Board of Medical Examiners (NBME) examination test. In the case of *Ewing*, a student who was dismissed from the University after failing to pass the NMBE I (notably achieving the lowest examination score in the recorded history of the Interflex program), brought suit against the University alleging violation of his rights as guaranteed by the 14th Amendment. The US Supreme Court once again upheld the dismissal, holding that:

> Even if respondent's assumed property interest gave rise to a substantive right under the Due Process Clause to continue enrollment free from arbitrary state action, the facts of record disclose no such action. The record unmistakably demonstrates that the decision to dismiss respondent was made conscientiously and with careful deliberation, based on an evaluation of his entire academic career at the University, including his singularly low score on the NBME Part I examination. The narrow avenue for judicial review of the substance of academic decisions precludes any conclusion that such decision was such a substantial departure from accepted academic norms as to demonstrate that the faculty did not exercise professional judgment.

Thus, dismissals of students by Universities based on academic failures, when policies and procedures are followed, will generally be upheld by the courts, who accord broad deference to educational standards. In situations where a disciplinary action is based in aspects of character, such as professionalism, courts again will generally

defer to educational institutions, as long as the policies and procedures and procedural due process are followed [37].

In general, the courts will treat physicians-in-training within programs of graduate medical education (GME) as students subject to the academic requirements as established by the program and as administered by the Program Director and/or GME Director. In the case of *Hernandez v. Overlook Hospital* [38], a resident in Internal Medicine had his contract terminated on the basis of observations and reports by peers, and on the the conclusion of the Program Director, that the resident had exhibited poor judgment, poor leadership qualities, and a lack of professonalism. Here, the Supreme Court of New Jersey opined that:

> [i]f academic termination hearings are transformed into legal proceedings that involve legal procedures, the academic hearing would become an adversarial and litigious contest. The panel of doctors would no longer be acting as academics reviewing medical decisions, but rather as judges, ruling on legal issues that they are not trained or qualified to evaluate.
> [149 N.J. 80]

> The court went further to state that:
> A graduate or professional school is, after all, the best judge of its students' academic performance and their ability to master the required curriculum. The presence of attorneys or the imposition of rigid [procedural] rules ... would serve no useful purpose, notwithstanding that the dismissal in question may be of permanent duration [39].

In conclusion, the process of peer review and discipline during the professional education process, from student to graduate trainee, is similar to the peer review and discipline which occurs during the medical staff credentialing process and the process of state professional licensing body oversight [Chap. 6]. Although litigation by students and trainees is not uncommon; the courts will generally defer to the assessments and evaluations of the educational system as long as polices and due process are followed [40].

Malpractice Liability in Nursing Education and Practice

Nursing students, whether they are nursing or advanced practice nursing students, are pursuing and completing a curriculum of professional study; that study will necessarily include didactic and clinical study in a manner analogous to that of medical education. The issues faced by nursing students with respect to educational evaluations and the risks of malpractice during patient contact in the course of their training are similar to that of medical students or physician assistant students. During the clinical portions of nursing study, student nurses begin to have direct patient contact under the supervision and direction of their nursing educators or preceptors. Preceptor liability is supervisory liability. Preceptor liability is a form of vicarious liability under the doctrine *of respondeat superior* where "even though a nurse has no direct patient contact, provides no direct patient care, or is not involved in direct patient teaching, if that nurse is responsible for another nurse providing

direct care, any act or behavior done by the nurse providing direct care is still the responsibility of the supervising nurse" [41]. Students are held to the same professional standards for individuals in the profession for which they are training. Once again, the student and preceptor can be jointly and severally liable for malpractice arising from patient care.

The Captain of the Ship Doctrine

The "captain of the ship doctrine" was a legal principle created by the Pennsylvania Supreme Court in the 1949 case of *McConnell v. Williams* [42]. Here, Mrs. McConnell, an expectant mother, consulted her physician who determined that she would need a caesarian which was to be performed at the Jewish Hospital in Philadelphia. The Jewish Hospital was not a public hospital in the sense of being owned or operated by government, but it is a nonprofit, charitable institution, with both private-patient and ward service, its facilities being available to everyone in need. The operation was a difficult one, complicated by bleeding that required the physician's complete attention. Once the baby was delivered, it was turned over to the intern for the purpose of tying the cord and applying a solution of silver nitrate to the infant's eyes. Silver nitrate is an extremely caustic drug requiring careful dosage of one or two drops and proper technique; in this case, the intern "filled a syringe and squirted the solution once into the child's left eye and twice into its right eye, putting into the latter 'a great many drops'; moreover, he failed to irrigate the eyes." The eye was so badly burned that it had later to be excised, the child lost her sight and required a glass eye. Suit was brought, although the physician was not personally named since the operation he performed on Mrs. McConnell was entirely satisfactory and not subject to criticism. During trial, testimony substantiated a prima facie case of negligence against the intern, and the court was faced with the question of whether the doctrine of *respondeat superior* would apply. The surgeon testified that "he had complete control of the operating room and of every person within it while the operation was in progress." The court reasoned that:

> If, then, it be true that defendant had supervisory control and the right to give orders to the intern [sic] in regard to the very act in the performance of which the latter was negligent, it would follow, according to the classical test of agency hereinbefore stated, that a jury would be justified in concluding that the temporary relationship between defendant and the intern [sic] was that of master and servant, and that consequently defendant was legally liable for the harm caused by any negligence on the part of the intern [sic]. … Nor is it a tenable argument that defendant should be relieved from legal responsibility because the hospital furnished the services of an intern [sic] just as it furnished the silver nitrate solution and the facilities of its laboratory and just as it furnished Mrs. McConnell with a room and board upon her payment of the hospital charges.

Where one, under the control of another, commits a tort, such as negligence, then the responsibility is imputed to he or she in control; this is *respondeat superior*. Vicarious liability is an indirect legal responsibility for injury; liability arises based

solely within the nature of the relationship between the parties. *Respondeat superior*, or “let the master answer,” holds that an employer or principal may be held legally liable for the negligent acts of an employee or agent who is acting within the scope of their employment. The “borrowed servant doctrine” is a legal principle through which one in control is held liable for the actions of another servant, who is actually in the employ of another, but who becomes temporarily the employee or servant of that person in control. For example, an operating room nurse, under the doctrine, could be in the employ of the hospital; however during an operation, he or she comes under the control of the surgeon who directs the actions of the nurse and thus becomes his or her “special employer.” The “captain of the ship doctrine” was a special form of the “borrowed servant doctrine,” whereby the fact that the surgeon was in fact considered to be in full control of all those in the operating room, any negligence that occurred under his constructive control was his or hers alone, even absolving the hospital of liability. The “captain of the ship doctrine” has now been rejected in whole or part by most contemporary courts [43].

Scope of Practice

The term, “scope of practice” refers to state-specific legislative or state-specific statutory restrictions regarding the types of responsibilities or interventions that a healthcare practitioner may perform within his or her license. Scope-of-practice determinations are made by licensing boards and are generally based upon education, certification, and demonstrated competencies. Within healthcare, “scope of practice” applies to, for example, physician assistants (PAs), nurses, advanced practice nurses (NPs), emergency medical services (EMS), dietitians, respiratory therapists, physical therapists, occupational therapists, pharmacists, and dentists. The scope of practice for physicians is usually defined through an institution-specific privileging process, rather than by law. Most, if not all state laws, allow physicians to perform any of the duties associated with the practice of medicine, including those duties that would otherwise fall to allied health support staff. The “scope of practice” for unlicensed allied health workers is usually defined through a job hospital-specific description.

Scope of practice is important in all aspects of healthcare; however, in a team model of care, such as that found in hospitals, there is a general trend to collaboration within multidisciplinary practice. Thus, arguably the scope of practice may be more relevant in the nonhospital, or independent, practice settings. The scope of practice is a contentious issue wherein the scope of practice for nonphysician providers continues to expand, a change that is sometimes perceived to be threatening by physicians. The public policy aim of increasing access to healthcare is largely supported by scope of practice expansion. Three important recent developments have accelerated scope-of-practice expansion. First, the Triple Aim articulated by the Institute for Health which advocated (1) improvement of the patient experience of care, (2) improvement of the health of populations, and (3) reduction of the per

capita cost of healthcare. Second, the Affordable Care Act which envisioned the transformation of the healthcare system to a patient-centered model based in the goals of (1) higher-quality, (2) safer, (3) more affordable, and (4) more accessible care. Finally, a report by the Institute of Medicine (IOM) published a report entitled "Future of Nursing" which made four recommendations to best align the profession of nursing with the ACA and the Triple Aim, namely, (1) that nurses should practice to the full extent of their education and training; (2) that nurses should achieve higher levels of education and training through a system that promotes seamless academic progression; (3) that nurses should be full partners, with physicians and other health professionals, in redesigning health care; and (4) that there is a need for more effective workforce planning and policy through data collection and information infrastructure. Nursing advocacy to "practice at the top of one's license" has come to mean that a healthcare team member (APRNs, RNs, LPNs, CNAs, and support staff) performs duties commensurate with the full extent of their education, training, and abilities, since the changes to legal scope of practice requires legislative and statutory revisions which are usually time-consuming with respect to legislative process and potentially adversarial [44].

All states require that PAs practice under the directions and supervision of a physician. The manner by which (a) scope of practice, (b) supervision requirements, and (c) prescriptive authority are determined for PAs varies by state and may be determined either (1) by the State Medical Board or (2) defined at the practice level. Most states have accepted that the training and specialization of PAs cannot be universally recognized within scope-of-practice legislation and have shifted to a practice-level determination model. PA practice parameters are also governed by the bylaws, policies, and procedures of licensed healthcare facilities through the privileging process. Anesthesiology Assistants (AAs) also allied health professionals who work within the anesthesia care team (ACT) exclusively under the direction of a licensed anesthesiologist. With respect to scope of practice and other regulations regarding clinical practice, AAs share many similarities to PAs; although AAs are not recognized by all US states. Although AAs and certified Nurse Anesthestists are both members of the ACT; there are numerous and often subtantial, differences with respect to background, training, licensure, and supervision requirements.

Advanced practice nurses (APNs) include nurse practitioners, certified nurse anesthetists, and nurse midwives. Once again, the scope of practice for advanced practice nurses is legislatively defined by each state for each category of advanced practice nurse, also subject to hospital bylaws, policies, and rules.

The scope of practice has a significant impact on liability. Where professionals practice under the direction or supervision of another, supervisory doctrines such as vicarious liability, *respondeat superior*, or agency may apply so that the supervisor is legally responsible for the acts of the supervised. Thus, if an APP (PA or APN) renders professional services outside their scope of practice and there is patient harm stemming from a violation of the standard of care, the medical malpractice liability will depend on whether the practitioner was acting in a supervised relationship; if so, the liability will likely impute to the supervisor, although the practitioner may also be held independently liable. On the other hand, where the practitioner is

Table 7.1 Nurse practitioner claims Analysis 1998–2008 (after CNA HealthPro 2019 [50])

During the 10-year period:
Average indemnity and expense payments increased
Adult/geriatric, family, and pediatric/neonatal specialties had the greatest number of claims
The medical care office was the location with the highest number of claims
Diagnosis-related allegations accounted for 39% of open and closed claims
Scope-of-practice-related allegations were relatively rare but had the highest average severity
Failure to order/obtain appropriate consultation/referral had the highest severity among treatment-related allegations
More than 80% of medication errors were prescription-related
Cardiac condition was associated with 22.1% of the closed claims that resulted in death and indemnity payment
Four closed claims during the time period that settled at the policy limit resulted from allegations of failure to diagnose or failure to properly asses

practicing independently, he or she will be fully liable for any verdict and damages related to the cause of action. Although data are sparse, because of out-of-court settlements and the relative infancy of the claims database, malpractice actions against NPs claims are increasing [Table 7.1].

In 2007, a Tampa, FL jury awarded the second-largest malpractice award in US history, $217 million, including $100 million in punitive damages on behalf of Navarro whose cerebellar stroke was misdiagnosed as sinusitis. The supervising ED physician testified that he assumed the PA who allegedly provided care to Navarro was licensed and credentialed where in actual fact, the “PA” was in effect a scribe, an unlicensed PA who had failed the state PA licensure examination four times [45].

Advance practice providers such as PAs, AA, and APN are also potentially liable for misrepresentation and/or failure to obtain an informed consent to treat if they do not properly identify themselves to a patient; this situation is similar to that of medical students and residents discussed above. Furthermore, misrepresentation and failure to obtain an informed consent have liability implications not only in tort (such as battery and malpractice) but also with respect to professional misconduct under the jurisdiction of state licensing boards [see Chap. 6].

Liability Issues Arising from Preceptorship and Proctoring

Clinical learning at all levels necessarily involves observation, supervised performance, and peer review. Similarly, the policies and bylaws of the medical staff will define each facility’s process for the granting of privileges to a provider for a newly acquired skill requiring the credentialing body of a healthcare facility to review the provider’s training and to document reasonable procedural competence, a process which then begins a continuous process of reevaluation through ongoing peer review. However, the nature of medical practice is such that, at times, skills previously learned but not used over long periods of time or new skills acquired during

the course of practice in order to accommodate evolving developments in technology or procedures into one's practice becomes necessary. In such cases, "mature" practitioners, no longer within a program of training, must learn, demonstrate, competence, and become privileged to incorporate new skills into their practice; this occurs through the processes of preceptorship and/or proctoring.

Two situations arise where a more skilled observer is present during a procedure for the purposes of training and evaluation, respectively: (1) a preceptorship, wherein the preceptor is an instructor or teacher and is therefore responsible for the actions of the trainee, and (2) a proctorship, whereby the proctor is not teaching, but has assumed only the limited responsibility for assessment and documentation of the performance of another for the purposes of credentialing and/or privileging.

It is well settled that the preceptor, in the role of instructor, is fully liable for the actions of his or her trainee; this is analogous to the teaching or training relationships discussed above. However, the issue of the extent to which a proctor is liable for the actions of the provider whose performance is being assessed is more complex. There is little question that a proctor has an ethical duty to a patient in the situation that the procedure being proctored goes awry; some proctoring guidelines recommend that the proctor intervene in the event of a complication or emergency. In theory, Good Samaritan laws could immunize proctoring physicians when they intervene during an emergency; the legal criteria for protection under a Good Samaritan stature are, in general, (1) an action taken in good faith, (2) to provide emergency medical care, and (3) the absence of a preexisting duty to treat or to the affected person. However, it is not clear that an emergency arising during an elective operation will be viewed by the courts as an emergency under the Act. For example, the case of *Bryant v. Bakshandeh* [46] involves a case where a urologist was consulted following multiple attempts by the surgeon to insert a Foley catheter. Here, the patient was asleep but the operation had not started. The urologist was also unable to pass the catheter; the operation was then aborted, but the patient developed complications from the attempted catheterization and the patient sued. Although the urologist invoked the Good Samaritan statute as a defense, the court ruled against the defense holding that there was no "emergency" situation. In general, proctors are not held legally liable for injuries to a patient, by an otherwise qualified provider unless there is evidence that the proctor had established a professional relationship with the patient. Few cases have addressed the liability of proctors.

Liability in negligence is predicated in a legal duty to the patient; absent a legal duty, there can be no breach, and therefore there can be no liability. Proctors has been held to not be liable even if they witness gross malpractice and choose not to intervene. In the case of *Clarke v. Hoek* [47], an orthopedic surgeon who was proctoring an operation witnessed malpractice and chose not to intervene. In *Clarke*, the trial court dismissed on summary judgment finding that the surgeon had no legal duty to intervene. The verdict was appealed, where at trial the plaintiff's expert witness testified that it was a violation of the standard of care to not intervene, but the appellate court sustained the summary judgment holding that the "duty to treat" was not an issue of "standard of care" for expert opinion, rather the "duty to treat" was

an issue of law: "absent a special relationship giving rise to a duty to act, a person is under no duty to take affirmative action to assist or protect another, no matter how great the danger in which the other is placed, or how easily he could be rescued."

In the case of *Zablocki v. Wilkin* [48], a plaintiff suffered a fractured right ankle and was referred to the care of Dr. Wilkin who was recently credentialed in podiatric surgery and was mandated to have a proctor present for his first five surgeries. Another surgeon was appointed to proctor, was not paid for proctoring services, did not scrub in, and was not present for the entire procedure; however he admitted to discussing the proposed procedure with Wilkin before the surgery. The proctor, Dr. Walkovich, testified that his "sole function as a proctor was to observe another doctor for purposes of determining if that doctor has demonstrated the skills necessary to justify an extension of privileges." Zablocki later filed a medical malpractice action against both surgeons, in which she alleged, inter alia, that Dr. Walkovich failed to properly supervise the procedure. The Ohio court dismissed the action as a matter of law, stating that a "physician who, on behalf of a hospital and without compensation, acts as a proctor in observing a surgical operation for the sole and express purpose of assessing and reporting on the competence of a candidate for membership of a hospital medical staff" does not owe a duty to a patient to "intervene in that surgery in order to prevent malpractice by the proctored surgeon."

Therefore, both preceptorship and proctorship create potential legal liabilities. Case law suggests that a physician-patient relationship might be implied if the patient is led to believe that the proctor will be "supervising" the procedure, if the proctor is named as member of the operating team on the consent form, if the proctor meets with the patient and suggests that he or she will be assisting in the procedure, or if the proctor actively participates in the procedure either by offering medical advice or procedural assistance. If the proctor "crosses the line" from observer to "participant," then an argument for co-defendant liability can be more convincingly made. Suggestions of active involvement even indirectly can lead to vicarious liability, active intervention may create liability as a surgical assistant, and offering advice may create liability as a consultant. Where a proctor, without invitation, intervenes on behalf of a patient, there are potential collateral liabilities not predicated in a theory of negligence; these may include a violation of the peer review process, bias, battery, unauthorized practice, or defamation of character. In some situations, out-of-state experts may be retained as proctors specifically for the purpose of attesting to competency; these proctors may neither be licensed to practice in the state nor credentialed to perform that procedure within the institution in which the proctoring occurs; in such cases, the active involvement of the proctor in the procedure may be construed to represent the unlicensed practice of medicine [49].

References

1. Mccullough M. Nearly 1 in 3 US physicians were born abroad. The Philadelphia Inquirer. 2018. Available online at: https://medicalxpress.com/news/2018-12-physicians-born.html.
2. Ranasinghe PD. International medical graduates in the US physician workforce. J Am Osteopath Assoc. 2015;115:236–41.
3. Murphy B. Inside the numbers behind the record-setting 2019 Match. AMA. 3 Mar 2020. Available online at: https://www.ama-assn.org/residents-students/match/inside-numbers-behind-record-setting-2019-match.
4. Rapaport L. U.S. relies heavily on foreign-born healthcare workers. Healthcare & Pharma. Reuters. 4 Dec 2018. Available online at: https://www.reuters.com/article/us-health-professions-us-noncitizens-idUSKBN1O32FR.
5. AMA. Code of Ethics. Code of Medical Ethics Opinion 2.1.1. Informed Consent. Available online at: https://www.ama-assn.org/delivering-care/ethics/informed-consent.
6. Carson-Stevens A, Davies MM, Jones R, Chik AD, Robbé IJ, Fiander AN. Framing patient consent for student involvement in pelvic examination: a dual model of autonomy. J Med Ethics. 2013;39(11):676–80.
7. Silver-Isenstadt A, Ubel PA. Erosion in medical students' attitudes about telling patients they are students. J Gen Intern Med. 1999;14(8):481–7.
8. Cohen DL, McCullough LB, Kessel, et al. J Med Edu. 1987;62:789–98.
9. Santen SA, Hemphill RR, Spanier CM, Fletcher ND. 'Sorry, it's my first time!' Will patients consent to medical students learning procedures? Med Educ. 2005;39(4):365–9.
10. Leung GK, Patil NG. Medical students as observers in theatre: is an explicit consent necessary? Clin Teach. 2011;8(2):122–5.
11. Felice v Valley Lab Inc, 520 So 2d 920 (La Ct App 1988).
12. Rush v Akron General Hospital 171 NE2d 378, 381 (Ohio Ct App 1957).
13. Jenkins v Clark, 454 NE2d 541; Ohio Ct App (1982).
14. McBride v. United States, 462 F.2d 72, 73 (9th Cir. 1972).
15. Centman v Cobb, 581 NE2d 1286 (Ind Ct App 1991).
16. Powers v United States, 589 F Supp 1084, 1099–1101 (D Conn 1984).
17. Wegman B, Stannard JP, Bal BS. Medical liability of the physician in training. Clin Orthop Relat Res. 2012;470(5):1379–85. https://doi.org/10.1007/s11999-012-2244-4.
18. Gonzalez v St John Hospital & Medical Center, 739 NW2d 392 (Mich Ct App 2007).
19. National Bank of Commerce v Quirk; 918 SW2d 138 (Ark 1996).
20. Mercil v Mathers; No C3–93-140, 1994 WL 1114 (Minn Ct App Jan 4, 1994), rev'd on other grounds, 517 NW2d 328 (Minn 1994).
21. McBride v United States , 462 F2d 72 (9th Cir 1972); St. Germain v Pfeifer , 637 NE2d 848 (Mass 1994); Jenkins v Clark, 454 NE2d 541 (Ohio Ct App 1982); Baccari v Donat , 741 A2d 262 (RI 1999).
22. Valentine v Kaiser Foundation Hospital, 15 Cal Rptr 26 (Cal Ct App 1961); Parmelee v Kline , 579 So2d 1008 (La Ct App 1991); Felice v Valleylab, Inc ., 520 So2d 920 (La Ct App 1988).
23. Bailey RA. Resident liability in medical malpractice. Ann Emerg Med. 2013;61(1):114–7.
24. Singh H, Thomas EJ, Petersen LA, Studdert DM. Medical errors involving trainees: a study of closed malpractice claims from 5 insurers. Arch Intern Med. 2007;167(19):2030–6.
25. Thiels CA, Choudhry AJ, Ray-Zack MD, et al. Medical malpractice lawsuits involving surgical residents. JAMA Surg. 2018;153(1):8–13.
26. American Academy of Pediatrics Committee on Medical Liability. Professional liability coverage for residents and fellows. Pediatrics. 2000;106:605–9.
27. Charles SC. Coping with a medical malpractice suit. West J Med. 2001;174(1):55–58.
28. McCullough v Hutzel Hospital, 276 NW2d 569 (Mich Ct App 1979); Morris v Francisco , 708 P2d 498 (Kan 1985); Cole v Tennessee, 1998 Tenn App LEXIS 485 (Tenn Ct App 1998).
29. Kachalia A, Studdert DM. Professional liability issues in graduate medical education. JAMA. 2004;292(9):1051–6.

30. Lownsbury v VanBuren, 762 NE2d 354 (Ohio 2001).
31. Prosise v Foster, 544 SE2d 331 (Va 2001).
32. Mozingo v Pitt County Memorial Hospital, 415 SE2d 341 (NC 1992).
33. Board of Curators of University of Missouri v Horowitz, 435 US 78 (1978).
34. US Constitution. amend V.
35. US Constitution. amend XIV, § 1.
36. Regents of University of Michigan v Ewing, 474 US 214 (1985).
37. Corso v Creighton University, 731 F2d 529 (8th Cir1984); *see also* Lee v University of Michigan-Dearborn, 2007 US LEXIS 72236 (WD Mich 2007).
38. *Hernandez v Overlook Hospital*, 149 NJ 68 (NJ 1997).
39. *Hernandez v Overlook Hospital, citing* [Board of Curators of the Univ. of Mo. v. Horowitz, 435 U.S. 78, 85 n. 2, 98 S.Ct. 948, 953 n. 2, 55 L.Ed.2d 124, 132 n. 2 (1978) (quoting Greenhill v. Bailey, 519 F.2d 5 (8th Cir.1975)).
40. Conran RM, Elzie CA, Knollmann-Ritschel BE, Domen RE, Powell SZ. Due process in medical education: legal considerations. Acad Pathol. 2018;5:2374289518807460. Published 2018 Nov 14. https://doi.org/10.1177/2374289518807460.
41. Ashley RC. The liability of preceptors. Crit Care Nurse. 2004;24(2):98–9.
42. McConnell v. Williams, 65 A.2d 243, 245 (Pa. 1949).
43. *See* Truhitte v. French Hosp., 128 Cal. App. 3d 332, 348, 180 Cal. Rptr. 152, 160 (1982) ("A theory that the surgeon directly controls all activities of whatever nature in the operating room certainly is not realistic in present day medical care.").
44. Szalados JE. Scope of practice in Szalados JE. Smith W., Wright W. Law and ethics in neurocritical care. Neurocritical Care Society. 2019, pp. 200–201.
45. Insurance Journal. Fla. Jury Awards $217M to Misdiagnosed stroke patient. October 10, 2006. Available online at: https://www.insurancejournal.com/news/southeast/2006/10/10/73064.htm.
46. *Bryant v. Bakshandeh* (226 Cal.App.3d 1241(1991)).
47. *Clarke v. Hoek* (California 174 Cal. App. 3d 208 (1985)).
48. Zablocki v. Wilkin (Ohio Com. Pl. 2003).
49. Szalados JE. Preceptorship and proctoring: what is my liability? Western New York Physician (5); 2014: 21–22.
50. CNA HealthPro. Nurse practitioners are at the forefront of a paradigm shift occurring in today's health industry. Understanding nurse practitioner liability. CNA healthpro nurse practitioner claims analysis 1998-2008. CNA. Available online at: https://international.aanp.org/Content/docs/UnderstandingNursePractitionerLiability.pdf.