ON CALL: ISSUES IN GRADUATE MEDICAL EDUCATION

Professional Liability Issues in Graduate Medical Education

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THE LAW HAS BECOME HIGHLY VISIBLE in graduate medical education (GME). Witness the antitrust lawsuit against the Association of American Medical Colleges,1 the threat of federal regulation of resident work hours,2 the Medicare and Medicaid programs’ ever-changing compliance regulations,3 the complexities of the Health Insurance Portability and Accountability Act of 1996 (HIPAA),4 and a host of other contemporary legal encroachments into medical practice. However, the most palpable aspect of the law affecting the day-to-day work of most resident physicians and clinical educators continues to be the risk of being sued.5-11 In this article, while recognizing that laws differ among states, we discuss aspects of professional liability pertinent to the GME setting.

RESIDENT PHYSICIANS

As physicians-in-training, resident physicians are employed by the institution that sponsors their training program. Typically, this institution is either a freestanding community hospital or a hospital in an academic center. This program sponsor may have affiliations with other hospitals or practice sites through which resident physicians rotate as part of their training. Occasionally a medical school, rather than a hospital, may act as sponsor of the training program and technically be the resident physician's employer. Resident physicians must be conditionally or fully licensed to practice medicine and face personal malpractice risk for providing substandard care.

Resident physicians, attending physicians, and graduate medical education (GME) institutions share a collective responsibility to deliver safe and appropriate care to patients. The law does not offer concessions in quality of care to accommodate GME. Resident physicians are generally held to the same standard of care as attending physicians in their respective specialties. This principle encourages resident physicians to seek supervision and attending physicians to provide the same. Attending physicians face malpractice exposure not only for the care they provide but also for the care they direct. In addition, they may be held vicariously liable for the negligence of resident physicians working with them, or directly liable for inadequate supervision. What constitutes adequate supervision is unsettled in the law. As the standards in this area evolve, it is reasonable to expect that the profession's and the public's heightened attention to patient safety will continue to move the courts toward higher standards of supervision. GME institutions and programs bear legal responsibility for both the care they deliver and the negligence of their employees. They also face liability for failing to administer safe systems of care. Work hour restrictions and a growing understanding of the role of organizational factors in contributing to and preventing medical injury may increase the legal expectations imposed on GME programs.

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Claims Experience and Liability Coverage

Federal law requires that any payment of a claim against a physician, including resident physicians, be reported to the National Practitioner Data Bank (NPDB).12,13 Less than 1% of the claims reported to the NPDB between 1991 and 2003 included resident physicians (or fellows) as defendants.12 This proportion declined from 1.5% in 1991 to 0.6% in 2003. The states with the highest proportion of claims involving resident physicians were Colorado (3.8%), Mississippi (2.4%), Texas (2.3%), and New Jersey (2.1%). However, use of NPDB data to gauge the prevalence of GME litigation has several limitations. Only claims that result in payments are reported to the NPDB. Questions have been raised about the accuracy of NPDB reports. In addition, such global data on claims tend to dilute the proportion of claims brought against resident physicians because most malpractice claims relate to care delivered outside of teaching hospitals. When looking at GME settings

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only, resident physicians are much more commonly named as defendants. For example, data from one large malpractice insurer in the Northeast that covers multiple teaching hospitals and more than 8000 physicians indicate that resident physicians were named in 22% of claims between 1994 and 2003, a proportion that has remained fairly constant over the decade (D.M.S. unpublished data, 2004). The Accreditation Council for Graduate Medical Education (ACGME) requires accredited institutions that sponsor training programs to provide resident physicians with professional liability insurance to cover all claims arising from within the scope and duration of training.14 This coverage must be occurrence-based, meaning that it must provide for defense and financial protection against claims pertaining to care delivered during a resident physician’s training activities in the program, regardless of when the claim is actually made. Resident physicians should recognize that ACGME standards do not mandate that the policies extend to medical practice outside of the training program (ie, moonlighting). Hence, resident physicians who moonlight should ensure that the appropriate supplementary insurance coverage is in place.

Resident physicians should recognize that being named in a lawsuit might trigger an arduous and time-consuming process. Psychological stress from litigation may affect relationships at work and home.11,15,16 The impact of lawsuits on training and resident-attending relationships depends heavily on the nature of the allegations at hand. At best, they provide an opportunity to teach and learn; in more trying circumstances, such as when a claim pits trainer against trainee or the process serves as a continual reminder of an unfortunate lapse by a team member, litigation may bring tension to the GME setting.

**What Is the Standard of Care for Resident Physicians?**

Negligence has a specific legal meaning in tort law. To demonstrate negligence, a plaintiff must prove 4 elements under a “more-likely-than-not” standard: the defendant owed the plaintiff a duty of care; the defendant breached this duty—in other words, the conduct in question did not meet the expected standard of care; the plaintiff sustained an injury; and this injury was a direct consequence of the defendant’s breach. Physicians breach their legal duty when their behavior fails to meet standards generally set to equal reasonable behavior for a physician in similar circumstances. A breach may result from active harms to patients, or passive ones such as failures to diagnose and treat.

A question that has periodically arisen in litigation is what standard of care should apply to resident physicians.17,18 Consider the example in which a patient presents to a physician’s office with chest pain and is seen by a first-year resident physician. The resident physician reads the patient’s electrocardiogram (ECG) to the best of his ability—in fact, the interpretation is at least as good as one would expect of a resident physician at this level—but his reading misses a subtle finding that the average attending physician would not have missed. Believing that the patient does not have a cardiac etiology of pain, the resident physician sends the patient home without treatment. He does not consult an attending physician; the ECG reading seems straightforward so that it is not obvious that supervision should be sought in this situation. The patient later dies of a myocardial infarction. In this case, has the resident physician met his duty of due care of appropriately interpreting the ECG?

The classic formulation of the standard of care does not provide an easy answer. If the reasonableness of the resident physician’s behavior is judged according to the level of skill usually exercised by physicians of good standing in the same system or school of practice,19 what is the relevant school of practice? In the past, some courts accepted the argument that resident physicians comprise a discrete practice community and accordingly held that the standard was that of other resident physicians with similar training and experience.20,21 With this view, the resident physician’s reading of the ECG would not constitute a breach of duty.

However, the general view of the law today is that resident physicians must conform at least to the standard of care expected of a general practitioner, which would make the resident physician’s reading of the ECG substandard.18-20,22-24 Courts have held resident physicians in specialty training to the same standard expected of the average specialist in that specific field.23-27 The rationale for insisting on this relatively high standard for resident physicians appears to be grounded in policy considerations. Courts have noted a patient’s right to expect the same high quality of care, regardless of who delivers it, as well as the need to create incentives for resident physicians to seek, and attending physicians to provide, supervision.

Although the reasonable attending standard is the predominant one, state-to-state variation still occurs. For example, Pennsylvania has adopted an intermediate standard of care for resident physicians in specialty training: a standard higher than that expected of the average general practitioner but lower than that expected of the average specialist. An orthopedic resident physician who casts a fractured arm is expected to have a greater degree of skill than a general practitioner, but not the expertise of a fully trained orthopedist.28 Similarly, the intermediate standard would not hold an obstetrics/gynecology resident physician managing shoulder dystocia to the standard of a fully trained obstetrician/gynecologist.29

Nevertheless, Pennsylvania’s position is unusual. Resident physicians should anticipate being held to a standard of care consistent with a reasonably attending physician in their specialty area. Risk management considerations thus bolster patient safety reasons for resident physicians to seek help in situations of uncertainty or when problems first arise.
ATTENDING PHYSICIANS

Attending physicians who supervise and teach resident physicians are sometimes employees of the institution that sponsors the training program (employee attending physicians). Other attending physicians maintain an independent contractor relationship with the sponsor. For example, they may have clinical privileges and act as the physician-of-record for patients receiving care from the resident physicians they supervise (credentialed attending physicians). Another option is that the training program may establish an affiliation agreement with an attending physician that allows resident physicians to rotate through the affiliate’s office as part of the residency program (private attending physicians). The nature of the contractual relationship between the attending physician and the sponsoring institution is significant because it may affect the legal approach used to evaluate the attending physician’s liability for GME-related care.

Attending physicians overseeing resident physicians in the GME setting face the same sort of malpractice liability risk for the care they personally deliver and direct as physicians practicing in non-GME settings; this liability risk is unaffected by the nature of the relationship with the sponsoring institution. Two additional and distinct forms of potential liability spring from their activities in GME: vicarious liability and failure to supervise.

Vicarious Liability

Vicarious liability is a type of indirect legal responsibility for injury. It refers to the imposition of liability on a person or organization for the negligence of another, based solely on the nature of the relationship between the 2 parties. An employment relationship is the classic scenario. An employer may be held liable for the negligent harms caused by employees acting within the scope of their employment, even if the employer acted appropriately. Claims alleging vicarious liability often coexist with claims attempting to hold the actual wrongdoer liable.

Historically, attending surgeons were held vicariously liable regardless of their contractual relationship with the sponsoring institution, through a legal doctrine known as “captain of the ship.” This doctrine, which took root in the operating room, was premised on a fictitious notion that the surgeon-of-record controlled all activities in this environment. Thus, an anesthesia resident physician’s unrecognized esophageal intubation (leading to permanent neurological injury) and an obstetrician/gynecologist resident’s administration of too much silver nitrate (causing damage to a newborn’s eye) were events for which attending surgeons could be held liable in their capacity as team leaders. Outside the operating room, the doctrine never gained much influence. For example, in Shull v Schwartz, when a resident physician followed the attending surgeon’s appropriate directive to perform a postoperative procedure on the ward, but negligently left a needle tip in the patient, the surgeon was not vicariously liable. The court reasoned that in such situations resident physicians, nurses, and other hospital staff were not under the control of the attending physician and were acting primarily for the benefit of the hospital, rather than the physician-of-record; therefore, absent negligent instructions or direct involvement in the procedure (which would lead to a direct basis for liability), the attending physician was not vicariously liable for the resident physician’s negligence.

Today courts have largely rejected the captain-of-the-ship doctrine. However, the potential for an attending physician’s vicarious liability for the actions of resident physicians and others still exists. Rather than determining vicarious liability on the basis of considerations such as professional status, or whether the event occurred inside the operating room, courts have shifted to focus on the nature and extent of the attending physician’s control over the practice environment and the employers for whose benefit the resident physicians are working. Consequently, vicarious liability claims are more likely to be successful against private attending physicians than they are against credentialed or employee attending physicians practicing within the sponsoring institution. In the latter situations, the institution tends to eclipse the attending physician as chief controller and beneficiary of the resident physicians’ work, and thus becomes the main locus of vicarious liability.

Failure to Supervise

Regardless of the nature of their relationship with the sponsoring institution, attending physicians may also be held liable for improper supervision, as supervising resident physicians is an inherent part of their job. This form of liability is direct. In other words, instead of or in addition to the charge that attending physicians are vicariously liable for the negligent acts of their resident physicians, plaintiffs may allege that the attending physicians are themselves liable for negligent oversight of care provided by resident physicians. The precise contours of legal responsibility for supervision are not yet well defined in the case law. This is probably due to a lack of many tried cases, the availability of a more easily proven alternate claim of vicarious liability of the attending physician or hospital (in which a breach of duty by the attending physician or hospital need not be shown), and the evolving expectation of what is the proper level of supervision by the attending physician.

An area of particular uncertainty involves what courts regard as appropriate supervision by on-call attending physicians. The explanation for on-call situations as fertile ground for failure to supervise claims likely relates to litigation strategy; other bases of suit are undercut by the common on-call situation in which the attending physician has no prior relationship or contact with the injured patient (direct malpractice liability requires the existence of a patient-physician relationship) and relatively limited control over resident physician activities (vicarious liability is tenuous due to this lack of control).
Lowensbury v VanBuren involved an expectant mother who was admitted for induction of labor. The on-call resident physicians instead ordered a contraction stress test, inaccurately interpreted the test, and then discharged her. The expectant mother later delivered a newborn with severe brain damage and sued the on-call attending physician for negligent supervision. The on-call attending physician was not an employee of the hospital, but had contracted to provide on-call services. Since the on-call attending physician had neither seen the mother nor been contacted by the on-call resident physicians, he contested liability by arguing that a patient-physician relationship had never existed. He argued that therefore, he could not be held legally responsible on the basis of duty to supervise. Despite the lack of contact, the court found that an on-call agreement may be sufficient to establish a patient-physician relationship and a concomitant duty to supervise.

In contrast, in Prosise v Foster, a 4-year-old girl with chicken pox was brought to an emergency department because of lethargy. A first-year resident physician, who discussed the case with a third-year resident physician, examined and treated the child. The resident physician failed to diagnose the pulmonary complications the child was experiencing, treated her with intravenous fluids, and discharged her home. Neither of the 2 resident physicians contacted the emergency department physician, who was on-call at home. The child later died due to the pulmonary complications. The court found that mere on-call status was not enough to create a patient-physician relationship in this case, and dismissed the family’s claim of failure to supervise.

In Mazingo v Pitt County Memorial Hospital, a pregnant woman presented while experiencing a difficult labor. The resident physicians contacted an attending obstetrician who was on-call at home. The attending physician, who had previously had no contact with the patient, came immediately to the hospital, a distance of 2 miles from his home. By the time he arrived, the newborn had been delivered but had sustained a shoulder dystocia, which led to severe permanent injury. The family sued the attending physician for negligent supervision. In this case, whether a patient-physician relationship and the concomitant duty to supervise existed was not at issue because the attending physician did not dispute that he had such a duty. The plaintiff introduced expert testimony that the average physician on-call in these circumstances 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 introduced expert testimony that customarily the average physician on-call did not do so. The court referred this issue to the jury, but explicitly left open the possibility that merely being available to answer questions from home may not qualify as adequate supervision.

These cases illustrate that in some instances courts are prepared to hold that supervising physicians owe a duty to patients treated by their house staff, including patients with whom they have never had direct contact. Liability hinges on 2 factors. First, a patient-physician relationship must be established. Evidence that supports the existence of a patient-physician relationship includes the attending physician’s acceptance of responsibility for the patient through explicit agreement, or potentially, through some implicit indication; provision of consultation and recommendations regarding the patient’s care; and an on-call agreement between the attending physician and hospital that allocates supervisory responsibility to the attending physician. If a patient-physician relationship is established, liability then depends on whether or not the attending physician has provided adequate supervision under the appropriate standard of care. Precisely what that standard is appears to be unclear. The courts have not stated that passive supervision from home per se rises to level of negligent care, but decisions to date suggest that they are certainly willing to look past customary practice and consider it.

Parallel developments in malpractice law and health policy underscore this as a possibility. Although courts are empowered to look beyond custom to a reasonableness standard that is linked to societal expectations (rather than professional opinions) about what constitutes acceptable clinical behavior, they have traditionally deferred to medical custom as the basis for defining the standard of care. Deference to custom remains the norm, but it does not enjoy the hegemony it once did in setting standards. Societal expectations may also be changing, spurred by the rise of patient safety as a health policy issue and greater public attention to the burden of medical injury. These trends, coupled with the case law, highlight a potential schism between conventional on-call supervisory practices and what courts will be prepared to countenance.

HOSPITALS, MEDICAL SCHOOLS, AND RESIDENCY PROGRAMS

Sponsoring institutions, like attending physicians, face direct and indirect forms of liability. They bear a legal duty to provide services and supervise care and may be directly liable for breaching this duty. As resident physicians’ employers, sponsoring institutions may also be held vicariously liable for the negligent injuries caused by resident physicians acting within the scope of their employment. Sponsors may share this vicarious liability with the attending physician or, when the negligence occurs during a resident physician’s external rotation, with the away site. In the past, hospitals have successfully argued that an attending physician’s direct supervision and control of a resident physician may displace the hospital’s vicarious liability. However, this is the exception rather than the rule. Presence and control by the attending physician tends not to absolve hospitals of vicarious
liability. In fact, displacement of liability is more common in the opposite direction. Hospitals often present a better target for vicarious liability claims than attending physicians. Indeed, hospitals may actively promote themselves as the sole party responsible for the plaintiff’s injury (should liability exist). This “corporate shielding” of attending and resident physicians from liability can circumvent the need to report physicians to the NPDB.

A GME program is not considered a separate legal entity from its sponsor or the clinical department in which it resides. Hence, finding that the GME program is liable is equivalent to finding the sponsoring institution liable. But when GME programs span to include external training sites through affiliation agreements, the program/ sponsoring institution may be considered a separate legal entity from the affiliated site’s department, school, or hospital.

The potential for GME programs to be held liable is best assessed by considering separately their dual functions of education and health care delivery. Published case law provides no grounds for concluding that residency programs or medical schools are exposed to liability for educational malpractice. Programs’ responsibilities for patient care are a different proposition. In keeping with the basic duty of institutions to provide services and supervise care, GME programs are expected to administer delivery systems that provide an acceptable level of care.

On at least one occasion a department chairman has been held legally responsible for the residency program’s administrative structure for delivering patient care. Maxwell v Cole involved a patient who experienced a bladder perforation during an elective tubal ligation. Resident physicians delivering postoperative care failed to diagnose the symptoms caused by the injury and the patient eventually developed septic shock. The patient sued the chairman of the obstetrics/gynecology department (among others), alleging that he had responsibility for developing and enforcing rules around the qualifications and supervision of medical staff. The chairman, who had not personally rendered any care to the plaintiff, argued that liability was impossible because there was no patient-physician relationship. The court disagreed, ruling that “[w]ith a broadened view of a hospital’s role as a provider of health care services comes an expanded notion of its supervisory responsibilities over those who practice medical care on its premises. If the chief of service fails to provide medically acceptable rules and regulations which would insure appropriate supervision of ill patients, then it is reasonable to find that a breach of the standards of medical care by that individual has occurred.” Using similar logic, a Massachusetts court held the director of a pathology laboratory liable for negligent organization of a system for transmitting critical laboratory results to clinicians.

In the influential case of Libby Zion, in which a young woman died after a fatigued resident gave her a contraindicated medication, the patient’s father sued the hospital (which sponsored the residency program) for administering a system that led to fatigued resident physicians delivering care. The jury found the resident physician negligent and the hospital vicariously liable, but did not find the hospital directly negligent for its administration and operation of the residency program.

As the practice of medicine evolves, the extent to which courts will be willing to hold GME programs and their sponsors liable for negligently administering delivery systems remains to be seen. The ACGME’s new work hour restrictions present an interesting example of how such liability may be imposed in the future. A resident physician’s error during a shift that violates the ACGME weekly hour limit may trigger a claim against the program or sponsoring institution. A plaintiff could be expected to argue that the institution agreed to the work hour restrictions as a condition of ACGME accreditation and then violated this agreement, which led to resident fatigue and, ultimately, the error. Courts have previously taken a dim view of institutions that fail to follow their own GME rules. For example, in Siebe v University of Cincinnati, a resident physician supervised the placement of a central venous catheter by a trainee nurse anesthetist. The catheter was incorrectly inserted and the court found the hospital negligent due to violation of its hospital policy that all such catheters are to be inserted under the supervision of an attending physician. In Felice v Valleylab, a resident physician performed a circumcision without an attending physician present in the operating room and injured the patient. The medical school was held liable for permitting the operation in violation of its own policy that all elective procedures be performed with an attending physician present. Thus, failure to implement the administrative structures and personnel arrangements that enable adherence to work hour restrictions may leave institutions highly vulnerable to liability when fatigue-related harms occur.

CONCLUSIONS

Professional liability considerations are prominent in the minds and practices of many physicians today. Liability concerns may affect not only how resident physicians practice, but also in which specialties and locations they choose to practice. Physicians working in GME settings should be aware of the general issues, and also of those specific to GME. The law imposes expectations and standards of conduct on individuals and institutions at all levels of training programs. However, these standards are not static. With changes in medical practice standards and society’s expectations of medical care can come new expectations of both trainees and educators.

Two areas are particularly fluid and deserve close attention. First, a divergence may be opening between customary medical practice and legal per-
REFERENCES

5. Roberts RG. Taming the malpractice wildfire: physicians, patients and the public can cool the flames of medical malpractice crisis. JAMA. 2001;286:2281-2284.
12. Rush v Akron General Hospital, 171 NE2d 378 (Ohio Ct App 1957).
17. Parmelee v Kline, 579 So2d 1008 (La Ct App 1991).
20. Gates v Harris, 29 Phila Co Rptr 94 (Pa CP 1995).
23. Harris v Miller, 438 SE2d 731 (NC 1994).
27. Truittie v French Hospital, 128 Cal App 3d 348 (Cal Ct App 1982).
29. Moeller v Hauser, 54 NW2d 639 (Minn Ct App 1952).
30. McCullough v Hutzel Hospital, 276 NW2d 569 (Mich Ct App 1979).
32. Miller v Hauser, 742 NW2d 639 (Minn Ct App 1952).
34. Valentine v Kaiser Foundation Hospital, 15 Cal Rptr 26 (Cal Ct App 1961).
35. Parmelee v Kline, 579 So2d 1008 (La Ct App 1991).
38. Gates v Harris, 29 Phila Co Rptr 94 (Pa CP 1995).
41. Harris v Miller, 438 SE2d 731 (NC 1994).
42. Oberzan v Smith, 689 P2d 682 (Kan 1994).
43. McConnell v Williams, 65 A2d 243 (Pa 1949).
44. Shull v Schwartz, 73 A2d 402 (Pa 1950).
45. Truittie v French Hospital, 128 Cal App 3d 348 (Cal Ct App 1982).
47. Moeller v Hauser, 54 NW2d 639 (Minn Ct App 1952).
48. McCullough v Hutzel Hospital, 276 NW2d 569 (Mich Ct App 1979).
50. Miller v Hauser, 742 NW2d 639 (Minn Ct App 1952).
52. Valentine v Kaiser Foundation Hospital, 15 Cal Rptr 26 (Cal Ct App 1961).
53. Parmelee v Kline, 579 So2d 1008 (La Ct App 1991).
56. Gates v Harris, 29 Phila Co Rptr 94 (Pa CP 1995).
59. Harris v Miller, 438 SE2d 731 (NC 1994).
60. Oberzan v Smith, 689 P2d 682 (Kan 1994).
63. Truittie v French Hospital, 128 Cal App 3d 348 (Cal Ct App 1982).
64. Brown v Howe, 496 SE2d 830 (NC Ct App 1998).
65. Moeller v Hauser, 54 NW2d 639 (Minn Ct App 1952).
66. McCullough v Hutzel Hospital, 276 NW2d 569 (Mich Ct App 1979).
68. Miller v Hauser, 742 NW2d 639 (Minn Ct App 1952).
70. Valentine v Kaiser Foundation Hospital, 15 Cal Rptr 26 (Cal Ct App 1961).
71. Parmelee v Kline, 579 So2d 1008 (La Ct App 1991).
74. Gates v Harris, 29 Phila Co Rptr 94 (Pa CP 1995).