

Putting the Sleepy Resident Issue to Bed: Federal Legislation is Not the Answer to Excessive Medical Resident Working Hours

A Manhattan doorman was recovering in a New York hospital after a successful heart operation when something went terribly wrong. A surgeon found the man on the verge of death, caused by decisions made the night before by an overextended, underequipped medical resident. The resident was doing the work of three, covering for two other interns who had to leave work in order to comply with New York's resident work hour restrictions. With fifty patients under his care that night and only the doorman's chart to guide him, the resident requested a procedure that a doctor more familiar with the patient would have known was dangerous. When the surgeon tried to find the resident so that he could witness and learn from the results of his decision, the resident had already left the hospital and turned off his beeper, in compliance with state resident working hour regulations.¹

I. INTRODUCTION

Without a doubt, medical residents work very long hours.² Most people would be alarmed to learn that the doctor treating them had been working for thirty-six hours straight or had already worked 100 hours that week.³ Recent studies confirm the common sense notion that sleep deprivation impairs mental functioning.⁴ In October 2004, *The New England Journal of Medicine* (NEJM) released a series of studies indicating that medical interns working fewer than eighty hours per week experienced less than half the rate of attention failures as those working more hours per week.⁵ The studies also found that residents working seventy-seven to eighty-one hours a week and up to thirty-six hours straight made 35.9% more medical errors than those working sixty-three hours a week and less than sixteen consecutive hours.⁶

1. See Craig Horowitz, *The Doctor Is Out*, N.Y. MAG., Nov. 3, 2003, available at http://www.nymag.com/nymetro/health/features/n_9426/index (describing incident in large New York teaching hospital). The incident occurred fourteen years after the passage of state legislation curbing resident work hours. *Id.*

2. See *infra* note 35 and accompanying text (discussing estimated resident working hours).

3. See *infra* notes 35-36 and accompanying text (noting long extended shifts commonly reported).

4. See *infra* notes 5-6 and accompanying text (describing studies on sleep deprivation of interns).

5. Steven W. Lockley et al., *Effect of Reducing Interns' Weekly Work Hours on Sleep and Attentional Failures*, 351 NEW ENG. J. MED. 1829, 1834 (2004) (concluding eliminating extended shifts decreased attentional failures during night work hours).

6. Christopher P. Landrigan et al., *Effect of Reducing Interns' Work Hours on Serious Medical Errors in*

Given the empirical findings linking long working hours to an increased risk of medical errors, it might seem appropriate to regulate the number of hours residents can work. The Patient and Physician Safety and Protection Act of 2001 (PPSPA), reintroduced in 2005, is a bill designed to achieve this purpose.⁷ If enacted, the PPSPA would restrict resident working hours to eighty hours per week, limit shifts to twenty-four consecutive hours (twelve for emergency room shifts), and provide specific time-off requirements.⁸

While the provisions of the PPSPA might seem reasonable or even desirable at first glance, the bill should not be passed for several reasons.⁹ As a preliminary matter, the PPSPA's drafters and its proponents assume that capping resident working hours is inherently desirable without carefully considering the associated risks and consequences.¹⁰ Reducing hours may help decrease fatigue-related attentional failures, but doing so may create other serious problems, such as discontinuity of patient care.¹¹ Having the resident physician involved with the treatment of a specific patient from start to finish is crucial, not only to the resident's education, but also to the patient's welfare.¹² When the resident is required to stop working after a specified period of time, the patient's file is handed off to another physician who is typically less familiar with the case.¹³ In addition, medical professionals express concern that rigid work hour restrictions could exacerbate preexisting staff shortages.¹⁴

Hour restrictions may still prove necessary despite these risks, but they must be designed in a way that takes into account the complexities involved.¹⁵ The PPSPA's narrow focus on reducing hours, while largely ignoring the related issues of education and continuity of care, suggests that Congress has not

Intensive Care Units, 351 NEW ENG. J. MED. 1838, 1847 (2004) (concluding hour reductions can prevent medical errors in intensive care units). The study also found interns made 5.6 times as many serious diagnostic errors during the traditional schedule as those not working extended shifts. *Id.* at 1843.

7. See Patient and Physician Safety and Protection Act of 2001, H.R. 3236, 107th Cong. (2001) (proposing regulation of resident work hours). The stated purpose of the bill is "[t]o amend title XVIII of the Social Security Act to reduce the work hours and increase the supervision of resident-physicians to ensure the safety of patients and resident-physicians themselves." *Id.*

8. See H.R. 3236, § 3 (specifying maximum hours and minimum rest periods).

9. See *infra* notes 10-14 and accompanying text (summarizing arguments against proposed legislation).

10. See Marc Siegel, *Training Rxzzzz: Medical Residents Need Good Supervision, Not More Sleep*, L.A. TIMES, July 1, 2002, at B11 (noting changes in doctor training "not entirely for the better").

11. See *id.* (discussing importance of resident "follow through" with patients); see also Esther B. Fein, *Flouting Law, Hospitals Overwork Novice Doctors*, N.Y. TIMES, Dec. 14, 1997, at A1 (describing inherent flaws in regulations focused solely on reducing hours).

12. See Siegel, *supra* note 10, at B11 (highlighting continuity of patient care issue and relevance to hour restriction debate).

13. See *id.* (explaining "shift mentality" and lack of patient follow through); see also Jennifer Zeigler, *We've Only Just Begun*, HOURSWATCH, <http://www.hourswatch.org/94archivestory.htm> (May 1, 2005) (noting increased risk of error and resident confusion during hand-off period).

14. See Horowitz, *supra* note 1 (arguing hour restrictions potentially cause staff shortages).

15. See *infra* Part III.B.1 (highlighting interrelated issues of resident supervision, institutional culture, and hospital funding).

adequately considered the problem.¹⁶ Similarly, by focusing primarily on hours, the PPSPA overlooks other, arguably more significant threats to patient safety such as inadequate supervision of residents.¹⁷

The PPSPA is modeled after New York state laws that have been largely unsuccessful.¹⁸ In 1989, New York enacted regulations known as the “Bell Laws” after a young woman died when two overworked, unsupervised residents failed to diagnose and treat her condition properly.¹⁹ In the years following their enactment, the Bell Laws have been widely flouted.²⁰ The regulations cost the state an estimated \$200 million per year, while New York hospitals received roughly the same number of duty hour violations as other states.²¹ The fact that PPSPA emulates a state regulatory scheme that is a proven failure is reason enough to resist its passage.²²

To the extent that regulation of medical resident working hours is necessary, the medical community—through the Accreditation Council for Graduate Medical Education (ACGME)—is best positioned to make the reforms, not the federal government.²³ Effective July 1, 2003, the ACGME, which is the institution responsible for hospital accreditation, implemented work hour restrictions similar to the PPSPA, but having additional flexibility.²⁴ Under the ACGME’s version, the eighty hour limit is averaged across four weeks; eighty-eight hours are available for qualified programs and the twenty-four hour requirement may be extended an additional six hours to maintain patient care continuity.²⁵ In the years since its introduction, resident complaints and duty-hour violations have decreased as hospitals slowly bring themselves into compliance.²⁶ While the ACGME program presents some of the same dangers

16. See *infra* Part III.B.2 (comparing PPSPA, Bell Laws, and ACGME scheme regarding flexibility to accommodate education and continuity).

17. See David Abel, *Bill Eyes Guidelines on Work Hours for Medical Residents*, BOSTON GLOBE, Nov. 10, 2001, at B1 (suggesting focus on duty hours neglects supervision problem); see also Fein, *supra* note 11, at A1 (emphasizing problem of inadequate supervision by senior physicians).

18. See Anne Barnard & Liz Kowalczyk, *Medical Resident Workload Curbed, Big Impact Seen on Hub Hospitals*, BOSTON GLOBE, June 13, 2002, at A1 (stating New York hospitals have same work hour abuses as hospitals in other states).

19. See N.Y. COMP. CODES R. & REGS. tit. 10, § 405.4 (2004) (regulating resident work hours at New York hospitals); see also Horowitz, *supra* note 1 (describing Libby Zion’s case).

20. See Fein, *supra* note 11, at A1 (discussing problems enforcing Bell laws and hospitals’ struggle to comply).

21. See Barnard & Kowalczyk, *supra* note 18, at A1 (describing New York’s high funding cost and lack of results).

22. See *infra* Part III.B.1 (analogizing PPSPA to New York laws).

23. See *infra* Part III.B.2 (suggesting ACGME more adaptable to future medical developments and new information).

24. See ACCREDITATION COUNCIL FOR GRADUATE MEDICAL EDUCATION, RESIDENT DUTY HOURS AND THE WORKING ENVIRONMENT, http://www.acgme.org/acWebsite/dutyHours/dh_Lang703.pdf (last visited Apr. 10, 2007) (announcing and summarizing new duty hour restrictions).

25. See *id.* (listing plan’s major provisions).

26. Press Release, Accreditation Council for Graduate Medical Education, High Compliance and Innovative Approaches Mark Second Year of ACGME Duty Hour Standards (Sept. 21, 2005),

inherent to work hour restrictions, its preliminary success in reducing resident working hours suggests government intervention is unnecessary.²⁷ Residents' newly-recognized rights to unionize and collectively bargain over employment issues present yet another reason for the federal government to remain on the sidelines.²⁸

This Note will examine the debate over resident working hours; the lessons learned from New York's statutory scheme; the impact of the new ACGME duty hour standards; and the role of collective bargaining in negotiations for better employment conditions.²⁹ Given the complex relationship between hours, education, and patient care, and the progress of self-imposed reforms, this Note concludes that federal regulation of resident working hours is neither necessary nor advisable.³⁰

II. HISTORY

A. Background

The medical residency program is the period of training that physicians undergo after graduating from medical school in order to learn how to treat patients in their chosen specialty.³¹ Currently, more than 100,000 medical residents work in approximately 8,000 programs throughout the United States.³² Most residencies last between three and seven years, and upon completion, physicians become eligible to take their board examinations and practice without supervision.³³ During this intense period of training, resident physicians work incredibly long hours.³⁴ Although the exact numbers are unknown and vary across specialty, residents frequently work 80 to 100 hours per week, often longer.³⁵ In the years preceding the debate surrounding resident working hours, regularly scheduled on-call shifts frequently exceeded

http://www.acgme.org/acWebsite/newsReleases/newsRel_09_21_05.pdf (describing progress achieving compliance).

27. See *infra* notes 110-112 and accompanying text (citing reported ACGME compliance figures).

28. See *infra* Part III.C. (arguing collective bargaining rights mitigate need for regulation).

29. See *infra* Part II (providing background of work hour debate and outlining prior regulatory efforts).

30. See *infra* Part III.B-C (outlining arguments against enacting the PPSPA).

31. See generally ACCREDITATION COUNCIL FOR GRADUATE MEDICAL EDUCATION, ACGME FACT SHEET, available at, <http://www.acgme.org/acWebsite/newsRoom/ACGMEfactSheet.pdf> (last visited Mar. 8, 2006) (explaining residency process).

32. See *id.* (accounting for number of ACGME accredited residency programs and residents).

33. See *id.* (describing residency program in general).

34. See *infra* note 35 and accompanying text (quantifying resident work hours prior to 2003 implementation of ACGME guidelines).

35. See David M. Gaba & Steven K. Howard, *Fatigue Among Clinicians and the Safety of Patients*, 347 NEW ENG. J. MED. 1249, 1249 (2002) (stating many trainees exceed 80 hours and 100-120 hour weeks are common); see also Sanjay Gupta, *AMA Expected to Take Up Resident Work Hours*, CNN.COM, June 15, 2001, <http://edition.cnn.com/2001/HEALTH/06/15/residents.hours> (stating 80 to 100 hour weeks "not uncommon" and 110 hours typical for surgical residents).

2007] FEDERAL LEGISLATION AND EXCESSIVE MEDICAL RESIDENT WORKING HOURS 749

twenty-four and sometimes even thirty-six hours.³⁶

B. Studies on the Effects of Fatigue

A large body of empirical data conclusively demonstrates that fatigue impairs human performance.³⁷ A report in the British journal *Nature* found that staying awake for twenty-four hours impairs cognitive and motor performance to the same degree as having a blood-alcohol level of 0.10%.³⁸ In addition to psychomotor performance, sleep deprivation negatively affects mood, as measured by increased levels of depression, anxiety, confusion, and anger.³⁹

Some studies and surveys specifically examined the deleterious effects of fatigue on the lives and well-being of medical residents.⁴⁰ In a multi-hospital study conducted in 2001 and 2002, residents perceived that sleep loss and fatigue had a “major impact” on their personal lives during residency, leaving many personal and social activities deferred or postponed.⁴¹ Sleep-deprived residents also report suffering higher rates of depression and pregnancy complications.⁴² The increased risk of auto accidents is perhaps the greatest

36. See Gaba & Howard, *supra* note 35, at 1249 (describing typical length of extended shifts).

37. See Gaba & Howard, *supra* note 35, at 1249 (asserting data shows “beyond a doubt” fatigue impairs performance); see also *infra* note 38 and accompanying text (describing studies linking sleep deprivation to impaired performance).

38. See Drew Dawson & Kathryn Reid, *Fatigue, Alcohol and Performance Impairment*, 388 NATURE 235, 235 (1997) (comparing sleep deprivation to alcohol intoxication). Being awake for seventeen hours produced “a level equivalent to the performance impairment observed at a blood alcohol concentration of 0.05%.” *Id.* Another study found that pediatric residents working a typical schedule of eighty to ninety hours per week had performance impairments comparable to residents with a blood alcohol concentration of 0.04% to 0.05%. See J. Todd Arnedt et al., *Neurobehavioral Performance of Residents After Heavy Night Call vs. After Alcohol Ingestion*, 294 JAMA 1025, 1032 (2005) (concluding effects of sleep deprivation comparable to alcohol impairment). The researchers in this study noted that residents’ ability to judge this impairment may be “limited and task-dependent.” See *id.*

39. See Gaba & Howard, *supra* note 35, at 1249 (chronicling studies showing psychomotor performance impairment in sleep-deprived residents). The study also found that, after on-call duties, levels of daytime sleepiness in residents are comparable with those who suffer from narcolepsy or sleep apnea. *Id.*

40. See *infra* notes 41-43 and accompanying text (citing studies finding sleep deprivation harms residents).

41. See Klara K. Papp et al., *The Effect of Sleep Loss and Fatigue on Resident-Physicians: A Multi-Institutional, Mixed-Method Study*, 79 ACAD. MED. 394, 399-401 (2004) (summarizing effects of sleep on personal relationships and well-being). Residents described “multiple adverse effects of sleep loss on learning and cognition, job performance . . . and personal life . . .” *Id.* at 394. Participants completed a questionnaire designed to assess sleepiness and “workplace sleep attitudes” and only 16% of the sample scored within the “normal range.” *Id.* at 394.

42. See Letter from Anandev Gurjala et al., Members, Public Citizen, to David Layne, Acting Assistant Sec’y for Occupational Safety & Health, U.S. Dep’t of Labor (April 30, 2001) [hereinafter *Petition to OSHA*], available at http://www.citizen.org/publications/print_release.cfm?ID=+6771 (stating dangers of excessive work hours to resident health). According to the petition, depression rates are as high as 32% for residents working in the intensive care unit. *Id.* But see generally D. B. Reuben, *Depressive Symptoms in Medical House Officers. Effects of Level of Training and Work Rotation*, 145 ARCHIVES INTERNAL MED. 286 (1985) (concluding overall prevalence of depressive symptoms approximated general population). Reuben found that first year residents had higher than normal rates of depression, but rates fell with each subsequent year. *Id.* A 1991 study found no significant differences in pregnancy outcomes for female residents and the spouses of

danger to resident safety posed by fatigue.⁴³ One survey revealed that six out of seven residents reported falling asleep while driving home.⁴⁴ Another study found that emergency medical residents are almost seven times more likely to be in auto accidents during their residency than prior to their residency.⁴⁵

While the general effects of sleep deprivation are well documented and widely accepted, it has been more difficult to prove scientifically that sleep deprivation impairs clinical performance when it comes to patient care.⁴⁶ One well known survey published in 1991 in *The Journal of the American Medical Association* (JAMA) reported that 41% of residents cited fatigue as a cause of their most serious mistakes, and in nearly one-third of cases where a mistake was made, the patient died.⁴⁷ A recent study published in the NEJM found that interns working less than eighty hours a week in intensive care units had “less than half the rate of attentional failures” during on-call nights than those working a “traditional” schedule.⁴⁸ Another study published at the same time reported that interns made substantially more errors when working frequent shifts of twenty-four hours or more than when working shorter shifts.⁴⁹

their male colleagues. See generally M. Klebanoff et al., *Spontaneous and Induced Abortion Among Resident Physicians*, 265 JAMA 2821 (1991) (concluding results provide assurance to female residents looking to become pregnant).

43. See Laura K. Barger et al., *Extended Work Shifts and the Risk of Motor Vehicle Crashes Among Interns*, 352 NEW ENG. J. MED. 125, 132-33 (2005) (suggesting extended shifts pose safety hazards for interns). The researchers found that interns working extended shifts of greater than twenty-four hours were 2.3 times more likely to report a vehicle crash and 5.9 times more likely to report a near-miss incident as compared with a nonextended shift. *Id.* at 129. The study concluded that the scheduling of frequent extended shifts “poses a serious and preventable safety hazard for them and other motorists.” *Id.* at 133.

44. See Gupta, *supra* note 35 (citing resident survey indicating residents more likely to fall asleep while driving).

45. See *Petition to OSHA*, *supra* note 42 (noting increased likelihood of resident involvement in auto accidents).

46. See Gaba & Howard, *supra* note 35, at 1249 (discussing limited application of sleep deprivation studies). In this article, the authors note that studies show impaired performance of “clinically relevant, although artificial, tasks.” *Id.* “For example, sleep deprivation affected hand-eye coordination in surgeons . . . but did not impair the performance of surgical residents on written board examinations.” *Id.*

47. See Albert W. Wu et al., *Do House Officers Learn from Their Mistakes?*, 265 JAMA 2089, 2091 (1991) (analyzing causes and outcomes of mistakes). Respondents usually attributed mistakes to more than one cause; in addition to 41% citing fatigue, 54% reported lack of information and 51% reported that “too many other tasks” caused their errors. *Id.*

48. See Lockley et al., *supra* note 5, at 1835 (concluding eliminating extended shifts significantly decreased attentional failures during night work hours). The “traditional schedule” used in the study was 84.9 hours, based on the average hours worked by participating interns. *Id.* at 1831. Data from the traditional schedule was measured against those working a shorter “intervention schedule” of 65.4 hours, or 19.5 fewer hours on average. *Id.* at 1831-32. The study was performed shortly after the introduction of the new ACGME guidelines. *Id.* at 1330. “Subjective reports indicated that, before the new regulations were implemented, some trainees worked up to 140 hours per week, although the validity of such reports has been questioned.” *Id.*

49. See Landrigan et al., *supra* note 6, at 1843-45 (suggesting shorter shifts can reduce serious medical errors in intensive care units). The study found that interns working extended shifts of twenty-four hours or more made 35.9% more serious medical errors than those not working extended shifts. *Id.* at 1842. “The rates of serious procedural errors among interns did not differ significantly between the two schedules.” *Id.* at 1843. Researchers suggested that “[f]urther modifications” of scheduling guidelines might be needed with respect to

Though many researchers stress the need for more evidence to assess the causal relationship between fatigue and medical errors, the large body of available research supports the position that reducing fatigue is generally desirable.⁵⁰

C. Regulation in Other High-Risk Industries

The levels of continuous work hours of physicians are much greater than those permitted in the potentially hazardous transportation and nuclear power industries.⁵¹ In the transportation industry, work hour restrictions and mandatory rest periods are imposed by the federal government.⁵² Under Federal Aviation Administration (FAA) regulations, scheduled flight hours for flight crews may not exceed thirty or thirty-four hours during any seven day period, depending on the type of flight.⁵³ The FAA also prohibits scheduling flights over eight hours in duration between required rest periods.⁵⁴ Similarly, federal law limits the commercial driving hours of truckers to sixty hours per week, with ten consecutive off-duty hours before driving.⁵⁵ Proponents of federal restrictions on medical resident working hours argue that the government should treat health care the same way that it treats other industries where public safety is at risk.⁵⁶

D. The Patient and Physician Safety and Protection Act

On November 6, 2001, Representative John Conyers, Jr. (D-MI) introduced the Patient and Physician Safety and Protection Act of 2001.⁵⁷ The Act's

shift durations. *Id.* at 1847.

50. See Kathlyn E. Fletcher et al., *Systematic Review: Effects of Resident Work Hours on Patient Safety*, 141 ANNALS INTERNAL MED. 851, 855 (2004) (emphasizing complexities and uncertainty regarding relationship between fatigue and patient care); see also Sandra G. Boodman, *Waking Up to the Problem of Fatigue Among Medical Interns*, L.A. TIMES, Apr. 16, 2001, at S1 (noting difficulty establishing causal link between fatigue and medical errors). *But see supra* notes 37-49 and accompanying text (highlighting numerous studies showing broad range of harmful effects associated with fatigue).

51. See Gaba & Howard, *supra* note 35, at 1250 (noting other high risk industries work far fewer hours); see also *Petition to OSHA*, *supra* note 42 (noting federal regulation in other industries); *infra* notes 53-55 and accompanying text (defining federally mandated limits on pilots' and truckers' work hours).

52. See *infra* notes 53-55 and accompanying text (describing federal regulatory provisions applicable to transportation industry).

53. See 14 C.F.R. § 121.471 (2006) (setting thirty hour weekly limit for all flight crewmembers); 14 C.F.R. § 135.265 (2006) (establishing thirty-four hour weekly limit for scheduled commuter flights).

54. See 14 C.F.R. § 135.265 (2006) (creating mandatory rest periods).

55. 49 C.F.R. § 395.3 (2006) (outlining regulations applicable to motor carriers). If a driver operates commercial vehicles for eight consecutive days, commercial driving hours are capped at seventy hours. *Id.* Truckers may not drive more than eleven consecutive hours within a fourteen-hour period. *Id.*

56. See *Petition to OSHA*, *supra* note 42 (arguing strict government work hour restrictions for transportation employees should extend to residents). The PPSPA itself states that "[t]he Federal government has regulated the work hours of other industries when the safety of the public is at risk." H.R. 3236, 107th Cong. § 2(8) (2001).

57. See H.R. 3236 (proposing amendment to Social Security Act). Senator Jon Corzine (D-N.J.) introduced an identical version to the Senate on June 12, 2002. See generally S. 2614, 107th Cong. (2002).

purpose is to reduce resident physician working hours in response to the perceived dangers of resident fatigue.⁵⁸ According to Representative Conyers, implementing resident work hour restrictions on a national level is a “simple way to begin reducing the errors that plague our health care system.”⁵⁹

If enacted, the PPSPA would prohibit residents from working more than eighty hours per week and limit shifts to twenty-four consecutive hours.⁶⁰ Residents would enjoy at least ten hours between scheduled shifts, one day off duty out of every seven, and one full weekend off per month.⁶¹ Those assigned to emergency departments could not work more than twelve consecutive hours and residents could not be on call in the hospital more than once every third night.⁶²

In terms of compliance, oversight, and enforcement, hospitals would have to comply with the guidelines set forth in PPSPA in order to participate in the Medicare program.⁶³ In addition, residency programs violating these restrictions would be subject to a civil monetary penalty of up to \$100,000 for each noncompliant program detected during any six month period.⁶⁴ The government would conduct anonymous surveys of residents, and the Department of Health and Human Services (HHS) would handle complaints from residents about violation of the PPSPA standards.⁶⁵ Under the provisions of the PPSPA, the Department of Health and Human Services would provide funding to hospitals to cover the “reasonable additional, incremental costs incurred in order to comply with the requirements imposed by [the] Act.”⁶⁶ According to Representative Conyers, the extra funding would increase health care costs by only 0.002%.⁶⁷

58. See H.R. 3236, § 2(3) (finding excessive hours endanger patients). Among the findings enumerated in PPSPA are the following: the federal government, via Medicare, spends approximately \$8 billion per year to train medical residents; working excessive hours is inherently dangerous to both patients and residents; scientific literature consistently shows sleep deprivation leads to cognitive impairment; and the federal government regulates the work hours of other industries when the safety of employees or the public is at risk. *Id.* at § 2.

59. See Rep. John Conyers, Jr., *The Patient and Physician Safety and Protection Act of 2001*, www.house.gov/conyers/news_patientsafetyprtectionact.htm (last visited Mar. 8, 2007) (promoting PPSPA as solution to correct ills of resident programs).

60. See H.R. 3236, § 3 (proposing work hour limitations to improve care).

61. *Id.* (offering medical staff hourly guidelines).

62. *Id.* (suggesting limitations to promote quality hospital care).

63. *Id.* (outlining revised conditions for Medicare participation).

64. H.R. 3236, 107th Cong. § 3(b)(3) (2001) (describing civil penalty for failure to comply with regulations).

65. *Id.* at § 3(b)(4)(a) (proposing monitoring compliance through anonymous resident surveys).

66. H.R. 3236, § 4.

67. See Conyers, *supra* note 59 (suggesting federal regulation affordable with minimal increase in overall care costs). Others estimate that the changes could cost billions. See Barnard & Kowalczyk, *supra* note 18, at A1 (citing Boston and New York hospitals' estimated reformation costs); see also Gaba & Howard, *supra* note 35, at 1254 (estimating hour reductions could cost \$1.4 billion to \$1.8 billion per year).

E. The New York State Regulations

In 1989, New York State introduced the nation's only state-mandated limits on resident working hours.⁶⁸ The tragic death of Libby Zion, an eighteen-year-old woman who died at New York Hospital-Cornell Medical Center in 1984 after being admitted with a high fever, prompted the regulatory action.⁶⁹ A grand jury determined that the long hours of unsupervised interns and residents were a contributing factor in her death.⁷⁰ Though the doctors would later be exonerated, the incident led to laws aimed at changing graduate medical education, commonly referred to as the "Bell Laws," named after chief advocate, Dr. Bertrand Bell.⁷¹

The New York Bell Laws served as the template for PPSPA and, aside from a few notable differences, their provisions are virtually identical.⁷² For example, the New York regulations limit resident working hours to eighty hours per week, averaged over a four week period.⁷³ Emergency room shifts are limited to twelve consecutive hours, but the State Commissioner may approve alternative schedules up to fifteen hours upon determining that the hospital has met certain enumerated conditions.⁷⁴ Like the PPSPA, though, New York regulations limit shifts to twenty-four hours and on-call duty to every third night.⁷⁵ Similarly, residents must get at least ten hours between shifts and one day off per week.⁷⁶

By most accounts, the New York Bell Laws have been a failure.⁷⁷ First, the regulations proved ineffective in reducing resident working hours to target levels.⁷⁸ Health officials estimated in 1993 that the added cost of implementing the Bell Laws was around \$220 million per year, yet New York hospitals

68. See N.Y. COMP. CODES R. & REGS. tit. 10, § 405.4(b)(6) (2004) (establishing number of hours residents may work).

69. See Fein, *supra* note 11, at A1 (recounting Libby Zion story). One of the two unsupervised interns had been working about eighteen hours when the incident occurred, the other about nineteen. See Horowitz, *supra* note 1. One of those residents testified that he made mistakes that night but insisted that he was not too tired to exercise sound judgment. See Horowitz, *supra* note 1.

70. See Fein, *supra* note 11, at A1 (summarizing grand jury findings).

71. See Fein, *supra* note 11, at A1 (noting laws passed in wake of Libby Zion tragedy and public response).

72. See Conyers, *supra* note 59 (acknowledging PPSPA of 2001 modeled after New York regulations).

73. tit. 10, § 405.4(b)(6)(ii)(a) (establishing maximum hours per work week).

74. *Id.* at § 405.4(b)(6)(i) (limiting number of consecutive hours during emergency room duty).

75. Compare *id.* at § 405.4(b)(6)(ii) (detailing regulations' prohibition of certain scheduling), with H.R. 3236, 107th Cong. § 3 (2001) (mandating same).

76. Compare N.Y. COMP. CODES R. & REGS. tit. 10, § 405.4(b)(6)(ii)(d) (2005) (setting parameters for on-call duty hours), with H.R. 3236, § 3 (requiring same).

77. See *Petition to OSHA*, *supra* note 42 (stating compliance with New York regulation inadequate); see also Boodman, *supra* note 50, at S1 (asserting "by all indications" New York Bell Laws "widely flouted and poorly enforced").

78. See Fein, *supra* note 11, at A1 (reporting noncompliance according to resident surveys, experts, and health officials). Eight years after the laws' enactment, residents described working an average of 95 to 110 hours per week. *Id.*

received citations for violating duty hour regulations at approximately the same rate as hospitals in other areas of the country.⁷⁹ In 1998, almost a decade after the Bell Laws took effect, the New York Department of Health reported that 37% of residents surveyed were working more hours than the regulatory limits allowed.⁸⁰ Rampant violations continued, with fifty-four out of eighty-two New York hospitals inspected between November 2001 and June 2002 cited for violations.⁸¹ The violations persisted despite significant increases in fines.⁸²

In addition to ineffectively reducing work hours, critics faulted the New York approach for its failure to address the problem of inadequate resident supervision.⁸³ As novice doctors frequently left to make difficult medical decisions, residents expressed concern that senior doctors are simply not available to assist them.⁸⁴ Supervision by attending physicians is required by law, but New York State Health Commissioner, Dr. Barbara DeBuono, reported that noncompliance “was not uncommon,” and investigators often discovered that residents were not properly supervised.⁸⁵ A 1997 report assessing patient injuries and deaths in hospitals cited for noncompliance found that in some cases the harm was directly attributable to poor supervision of residents; in others, poor supervision was a contributing factor.⁸⁶

Critics of the New York regulations also argue that the hour restrictions created serious problems of their own. When residents are forced to leave after a fixed number of hours, hospitals are frequently left without enough medical staff to handle their remaining caseload.⁸⁷ In hospitals that lack the funding necessary to hire additional nurses or physicians’ assistants, senior doctors must make up for the shortfall.⁸⁸ By taking time away from the attending

79. See Barnard & Kowalczyk, *supra* note 18, at A1 (suggesting regulations ineffective in curbing work hour violations).

80. See Robert Steinbrook, *The Debate Over Residents’ Work Hours*, 347 NEW ENG. J. MED. 1296, 1299 (2002) (describing difficulty achieving compliance). The report found 77% of New York City surgical residents worked in excess of ninety-five hours per week. *Id.* The New York Department of Health fined four hospitals up to \$20,000 each after conducting unannounced studies. *Id.*

81. See Press Release, State of New York Department of Health, State Health Department Cites 54 Teaching Hospitals for Resident Working Hour Violations (June 26, 2002), http://www.health.state.ny.us/press/releases/2002/resident_working_hours.htm (announcing hospital violations discovered and publicizing list of offending facilities).

82. See *id.* (describing hefty monetary penalties assessed for noncompliance). In 2000, New York increased maximum fines to \$6,000 for a first offense, \$25,000 for a second offense, and \$50,000 for a third offense. *Id.* Prior to the change, the maximum fine for noncompliance was \$2,000 per violation. *Id.*

83. See Siegel, *supra* note 10, at B11 (stating “adequate supervision, the real problem, was not ensured”). Dr. Bell himself stated that long shifts are only part of the problem, and that the bigger issue is the lack of supervision by senior doctors. See Boodman, *supra* note 50, at S1 (recounting Dr. Bell’s observations and conclusions).

84. See Fein, *supra* note 11, at A1 (describing residents’ concern over lack of supervision).

85. See Fein, *supra* note 11, at A1 (relating Health Commissioner’s concern with lack of compliance).

86. See Fein, *supra* note 11, at A1 (citing investigation finding lack of supervision caused patient injuries).

87. See Horowitz, *supra* note 1 (warning shorter hours can cause dangerous staff shortages).

88. See Horowitz, *supra* note 1 (describing effect of work hour restrictions on senior doctors).

physician's traditional duties, the hour restrictions can threaten patient safety and actually contribute to the problem of inadequate supervision.⁸⁹

Another common criticism of the New York regulations is their threat to continuity of patient care.⁹⁰ When a resident with personal knowledge of a patient's condition is forced to leave the hospital mid-treatment, the patient's file may be handed off to someone less familiar with the patient's condition, creating an opportunity for miscommunication, delays, and mistakes.⁹¹ A 1993 study of the New York regulations found that the work hour restrictions were associated with delayed ordering of tests and increased complication rates.⁹²

Moreover, fewer hours in the hospital means less training and education for residents.⁹³ Some critics of hour restrictions believe that long hours are necessary to expose residents to a sufficiently broad spectrum of cases, observe changes in patient conditions, and prepare them for the rigors of medical practice.⁹⁴ For New York surgery programs, which averaged 105 hours per week when no restrictions existed, an eighty hour work week translates into a 24% reduction in time spent at the hospital.⁹⁵ There may be no way of knowing the extent to which hour restrictions will result in substandard clinical training, but as one commentator suggests, "[l]ogic would indicate that the surgeon who has performed a procedure [fifty] times is better trained and prepared than one who has done it [thirty] times."⁹⁶

F. The New ACGME Guidelines

The Accreditation Council for Graduate Medical Education is the private

89. See Horowitz, *supra* note 1 (suggesting regulations can exacerbate supervision problem).

90. See *infra* notes 91-92 and accompanying text (explaining continuity of patient care issue).

91. See Steinbrook, *supra* note 80, at 1297-98 (describing problems associated with patient hand-offs). In a study assessing the relation between house staff coverage schedules and medical errors, patients that experienced potentially preventable adverse events were more likely—26% versus 12%—to be covered by a physician from another team at the time of the event. See Laura A. Petersen et al., *Does Housestaff Discontinuity of Care Increase the Risk for Preventable Adverse Events?*, 121 ANNALS INTERNAL MED. 866, 866 (1994) (concluding preventable errors "strongly associated" with coverage from another team of physicians). These results, according to the researchers, may reflect physicians' lack of familiarity with patients and suggests that work hour reforms should be carefully scrutinized. *Id.*

92. C. Laine et al., *The Impact of a Regulation Restricting Medical House Staff Working Hours on the Quality of Patient Care*, 269 JAMA 374, 374 (1993) (summarizing findings linking Bell Laws to medical errors). When comparing data from a decade prior to the restrictions, more patients suffered at least one medical complication—35% versus 22%—and experienced at least one delayed diagnostic test due to an insufficient house staff—17% versus 2%. *Id.*

93. See *infra* notes 94-96 and accompanying text (explaining fear that hour restrictions may produce inferior physicians).

94. See Steinbrook, *supra* note 80, at 1298 (summarizing educational value of long hours); see also Siegel, *supra* note 10, at B11 (arguing sleepless nights "form a doctor's mettle" and help prepare for later practice demands).

95. See Horowitz, *supra* note 1 (arguing fewer hours equate to less training); see also Steinbrook, *supra* note 80, at 1298 (estimating eighty hour week causes potential loss of every third day of operative experience).

96. See Horowitz, *supra* note 1 (illustrating value of experience anecdotally).

organization responsible for accrediting the nation's nearly 7,800 residency education programs.⁹⁷ Physicians must complete an ACGME-accredited residency program before they can become board certified in their specialty.⁹⁸ For teaching hospitals, accreditation is required in order to receive Medicare funding for resident education.⁹⁹

In response to the growing concern over excessive resident working hours, The ACGME announced new duty hour standards for all programs, effective July 1, 2003.¹⁰⁰ The new rules are similar to, but less rigid than, both the PPSPA and the New York regulations.¹⁰¹ For example, the new ACGME rules limit work to eighty hours per week averaged over a four week period, but programs may request a 10% increase in weekly hours, provided the program offers a "sound educational rationale."¹⁰² The ACGME also limits shifts to twenty-four hours but allows an additional period of six hours to compensate for continuity of care and educational activities.¹⁰³ Residents get one day off in seven and on-call duty is limited to every third night, but both calculations are averaged over a four week period.¹⁰⁴

The ACGME monitors compliance with the duty-hour standards in a variety of ways, including confidential resident surveys, on-site visits, and interviews with program directors and residents.¹⁰⁵ Once a program has been cited for a violation, the ACGME uses an expedited follow-up process that requires an action plan demonstrating program compliance within six months.¹⁰⁶ Programs that fail to comply face adverse accreditation actions which include probation and potentially even loss of accreditation.¹⁰⁷ Since the federal government pays training programs approximately \$100,000 per resident annually, loss of accreditation could cost a hospital millions of dollars.¹⁰⁸

97. See Accreditation Council for Graduate Medical Education, *The Role of the ACGME*, http://www.acgme.org/acWebsite/about/ab_roleACGME.asp (last visited Mar. 8, 2007) (explaining ACGME's function).

98. See *id.* (describing importance of accreditation to residents' certification).

99. Accreditation Council for Graduate Medical Education, *ACGME Duty Hours Standards Fact Sheet*, http://www.acgme.org/acWebsite/newsRoom/newsRm_dutyHours.asp (last visited Mar. 8, 2006) [hereinafter *ACGME Duty Hours*] (noting accreditation's relationship to Medicare funding).

100. See *id.* (citing changing health care environment and need to protect medical education and patient care). Others suggest the changes were also designed to forestall proposed federal regulation such as the PPSPA. See Steinbrook, *supra* note 80, at 1296.

101. See *infra* text accompanying notes 102-104 (discussing differences between ACGME provisions and statutes).

102. See *ACGME Duty Hours*, *supra* note 99 (mentioning wiggle room in new work hour restrictions). Programs qualifying for an extension may schedule work weeks averaging eighty-eight hours. *Id.*

103. See *ACGME Duty Hours*, *supra* note 99 (providing flexibility to maximize patient care).

104. See *ACGME Duty Hours*, *supra* note 99 (limiting responsibilities while acknowledging practical weekly demands may vary).

105. See *ACGME Duty Hours*, *supra* note 99 (listing monitoring and enforcement procedures).

106. See *ACGME Duty Hours*, *supra* note 99 (stressing significant consequences of noncompliance).

107. See *ACGME Duty Hours*, *supra* note 99 (describing forfeiture of funding for noncompliant programs).

108. See Boodman, *supra* note 50, at S1 (noting accreditation's importance to hospital finances).

2007] FEDERAL LEGISLATION AND EXCESSIVE MEDICAL RESIDENT WORKING HOURS 757

While the new ACGME rules have only been in place for two years, preliminary data suggest that most hospitals are complying.¹⁰⁹ In a survey conducted by the ACGME in 2004, only 3.3% of residents reported working more than the eighty hour limit.¹¹⁰ Of the programs reviewed during the first year of the new duty standards, a small percentage received citations.¹¹¹ In similar surveys conducted one year later in 2005, 3% of residents reported working more than eighty hours a week.¹¹²

The impact of the new ACGME duty standards on resident health, education, and patient care, however, is less clear.¹¹³ One study found that residents in 2004 had less desire to leave medicine due to long hours compared with 2003, and residents perceived no significant difference in attending physicians' availability or observed instances of suboptimal care.¹¹⁴ In another preliminary study, residents approved of work hour restrictions overall but reported negative effects on patient care and education.¹¹⁵ A third study found that residents favored the new ACGME work hour restrictions but felt that the standards diminished the continuity of patient care and increased the likelihood of medical errors.¹¹⁶ Residents in the third study also found attending conferences difficult while opinions regarding the effects on job satisfaction were mixed.¹¹⁷

109. See *infra* notes 110-112 and accompanying text (providing data indicating hospital compliance).

110. Press Release, Accreditation Council for Graduate Medical Education, ACGME Compiles One-Year Data on Duty Hour Standards (July 29, 2004), http://www.acgme.org/acWebsite/newsReleases/newsRel_07_29_04.pdf (elaborating on compliance after one year and follow-up measures upon finding nonconformity).

111. See *id.* (perceiving some improvement in compliance). Of the 2,019 programs reviewed between July 1, 2003 and June 30, 2004, fifty-one were cited for violating the eighty hour weekly limit, followed by twenty-seven citations for violating the one-day-free-in-seven and twenty-four-hour-plus-six rules. *Id.*

112. See Press Release, Accreditation Council for Graduate Medical Education, High Compliance and Innovative Approaches Mark Second Year of ACGME Duty Hour Standards (Sept. 21, 2005), http://www.acgme.org/acWebsite/newsReleases/newsRel_09_21_05.pdf (describing marked progress achieving compliance).

113. See *infra* notes 114-117 and accompanying text (citing studies revealing resident ambivalence toward hour restrictions).

114. See Reshma Jaggi et al., *Perceived Impact of Resident Work Limitations on Medical Clerkships: A Survey Study*, 80 ACAD. MED. 752, 752 (2005) (comparing questionnaires from 2003 and 2004). Researchers concluded that decreasing resident work hours could be implemented without significantly impacting residents' learning experiences; in fact resident work hour limitations create a positive impact for residents. *Id.*

115. See Lara Goitein et al., *The Effects of Work-Hour Limitations on Resident Well-being, Patient Care, and Education in an Internal Medicine Residency Program*, 165 ARCHIVES INTERNAL MED. 2601, 2602-04 (2005) (comparing results of 2001 residents survey with 2005 survey). When compared with a 2001 survey, residents in 2005 reported an increase in job satisfaction (from 66% to 80%), a decrease in emotional exhaustion (53% to 40%), and more 2005 residents reporting negative effects on patient care and education than positive or neutral. *Id.* at 2603. Overall, 65% approved of work hour limitations. *Id.* at 2604.

116. See Grace A. Lin et al., *Residents' Perceptions of the Effects of Work Hour Limitations at a Large Teaching Hospital*, 81 ACAD. MED. 63, 63 (2006) (assessing residents' perception of hour restrictions on patient care, education, and job satisfaction).

117. See *id.* (stating residents enjoyed working less but found compliance difficult when care or education compromised). The researchers concluded that the best ways to balance work hour limitations with the

G. House Staff Collective Bargaining Rights

In addition to legislation or self-regulation as means to reduce resident work hours, a 1999 decision by the National Labor Relations Board (NLRB) may place the issue squarely in the hands of residents themselves.¹¹⁸ In the landmark case, *Boston Medical Center*,¹¹⁹ the NLRB held that interns, residents, and fellows (house staff) are “employees” under the National Labor Relations Act (NLRA), thus granting them the right to organize and bargain collectively.¹²⁰ The decision overturned precedent established twenty years earlier in *Cedars-Sinai Medical Center*,¹²¹ which held that house staff serve primarily as students, not employees.¹²² Since their relationship with the hospital was determined to be predominantly academic rather than economic in nature, the Board in *Cedars-Sinai Medical Center* concluded that the relationship was not readily adaptable to the collective bargaining process.¹²³ By overturning the precedent and recognizing residents’ status as employees, *Boston Medical Center* arguably provides residents a greater influence over decisions affecting employment, which include wages, benefits, and working hours.¹²⁴

In 1997, a group of residents and interns (Petitioners) at Boston Medical Center (the hospital), seeking to improve their working conditions, petitioned the NLRB for recognition as employees under the NLRA.¹²⁵ They argued that such recognition would best promote the national policies of peaceful collective bargaining and effective graduate medical education.¹²⁶ Petitioners contended that adequate working conditions are essential to the relationship between

demands of patient care and resident education have yet to be identified. *Id.*

118. See *infra* note 120 and accompanying text (citing NLRB decision extending rights and protections of NLRA to residents).

119. 330 N.L.R.B. 152 (1999).

120. *Id.* at 152 (holding house staff statutory “employees” subject to protected rights under NLRA).

121. 223 N.L.R.B. 251 (1976).

122. *Id.* at 253 (concluding house staff primarily engaged in medical training thus not “employees” entitled to bargaining rights). While recognizing that house staff received many benefits characteristic of employee status, the *Cedars-Sinai* Board reasoned that residents enter a relationship with the hospital not to earn a living, but rather to fulfill educational board requirements. *Id.* The majority placed little reliance on the fact that house staff spend most of their time providing direct patient care, dismissing such activity as “simply the means by which the learning process is carried out.” *Id.* The Board concluded that the house staff’s salary resembled a payment akin to a living allowance. *Id.* As such, the Board concluded that staff salaries do not constitute compensation for services rendered. *Id.*

123. *Id.* at 253 (ruling student-teacher relationship inconsistent with NLRA objectives of equalizing economic bargaining power); see also *St. Clare’s Hosp. & Health Ctr.*, 229 N.L.R.B. 1000, 1002 (1977) (holding academic relationship not adaptable to collective bargaining).

124. See *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 160-61 (establishing residents’ bargaining rights under NLRA).

125. *Id.* at 152 (describing positions of parties and procedural history). In 1997, NLRB’s Regional Director dismissed the petitioners’ claim, holding that house staff are not employees. *Id.*

126. *Id.* at 156 (arguing policy of promoting stable working conditions favors granting house staff statutory protections).

residents and hospitals, and without the ability to bargain collectively, house staff have no protection against unilaterally imposed increases in work hours or reductions in salary or benefits.¹²⁷ In support of their status as employees, Petitioners emphasized the role of house staff in making important medical decisions and providing direct patient care.¹²⁸ In addition to indicating that they are more than just students, residents' roles as care providers suggest that improvements in their working conditions benefit patients as well.¹²⁹

The hospital asserted that the Board should adhere to the precedent in *Cedars-Sinai Medical Center* and hold that Petitioner is not a labor organization, since its members are not "employees" under the NLRA.¹³⁰ The hospital argued that the student-teacher relationship in graduate medical training is not compatible with the kind of economic relationship contemplated by the Act.¹³¹ In addition to its statutory arguments, the hospital warned that granting resident access to collective bargaining rights would undermine the educational process and threaten academic freedom.¹³² Resident labor organizations, it argued, would have a protected right to participate in setting standards for their own evaluation, promotion, discipline, and dismissal.¹³³

In analyzing the status of house staff as employees under NLRA, the Board first looked to the statutory language of the Act itself.¹³⁴ Under section 2(3) of the Act, "[t]he term 'employee' shall include any employee . . . unless the Act [this subchapter] explicitly states otherwise . . ." ¹³⁵ Emphasizing the breadth of this definition and lack of an explicit exception for students, the Board concluded that, unless there are other statutory or policy reasons for excluding them, residents "literally and plainly come within the meaning of 'employee' as defined in the Act."¹³⁶ The majority added that a broad interpretation of the

127. See *id.* at 157-58 (highlighting threats posed to residents if not afforded employee rights).

128. *Boston Med. Ctr. Corp.*, 330 N.L.R.B. 152, 157 (1999) (noting ability to write medical orders separates house staff from medical students).

129. See *id.* at 158 (arguing quality of patient care and working conditions of care-givers closely related). The American Public Health Association, on behalf of Petitioners, urged the Board to extend collective bargaining rights to residents to help prevent incidents such as the Libby Zion tragedy. *Id.*

130. *Id.* at 152 (referencing earlier determinations finding labor organizations composed of students to be illegitimate).

131. *Id.* at 157 (contending Congress's desire for equality of bargaining power not compatible with collective treatment of residents); see also *supra* notes 122-123 and accompanying text (relaying dated perceptions of working medical residents as students).

132. *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 157 (noting threat to education posed by giving residents voice in determining academic standards). Petitioners responded to this contention by pointing to a thirty-year history of "successful" collective bargaining agreements with the hospital. *Id.* at 157 n.12 (arguing past agreements focused on employment-related issues, not academic prerogatives).

133. *Id.* (arguing relationship between residents and Hospital cannot allow equal participation in determining academic standards).

134. See *id.* at 159 (referencing "key statutory language" in NLRA defining parties covered by Act).

135. National Labor Relations Act, 29 U.S.C. § 152(3) (2000); see also *Boston Med. Ctr. Corp.*, 330 N.L.R.B. 152, 159-60 (1999) (applying NLRA language to case).

136. See *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 160 (noting Act specifically covers "any employee" while exclusions limited and narrow).

statutory definition is consistent with the general purposes of the Act and its common-law underpinnings.¹³⁷

The majority stressed that nothing in the NLRA suggests that persons who are students as well as employees should be excluded from the Act's protections.¹³⁸ The Board looked to the "essential elements" of the house staff's relationship with the hospital in determining the existence of an employer-employee relationship.¹³⁹ First, the Board noted the hospital is an "employer" within the meaning of the Act.¹⁴⁰ Second, house staff are compensated for their services.¹⁴¹ A third indication of employee status is the fact that house staff provide direct patient care.¹⁴² The fact that residents also receive educational benefits and advanced training from their employment is not inconsistent with employee status, but rather complimentary to the services for which they are compensated.¹⁴³ In conclusion, the Board ruled that student status and employee status are not mutually exclusive, and therefore, residents are entitled to the protections of NLRA.¹⁴⁴

The majority found it unnecessary to establish a boundary between acceptable and unacceptable subjects of house staff collective bargaining, leaving such issues to be addressed "if they arise."¹⁴⁵ One of the strongest concerns voiced by the dissent is that granting employee status to house staff without such limitations will improperly permit the intrusion of collective bargaining on academic issues, jeopardizing the historic success of American graduate medical education.¹⁴⁶ The dissent urged that issues such as course

137. See *id.* at 160 (discussing general purposes of NLRA). The majority noted that the basic purpose of the Act is to protect employees' right to organize and encourage collective bargaining. *Id.* At common law, the agency doctrine of "master-servant" defined an employee as one who performed services for another and was subject to their control. *Id.*

138. See *id.* (stating educational component does not preclude employee status).

139. See *id.* (applying facts to assess presence of elements characteristic of employer-employee relationship).

140. *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 160 (proclaiming house staff work for NLRA-defined "employer"). The NLRA defines "employer" as "any person acting as an agent of an employer, directly or indirectly . . ." 29 U.S.C. § 152(2) (2000).

141. See *Boston Med. Ctr. Corp.*, 330 N.L.R.B. 152, 160 (1999) (suggesting salary indicative of employee status). The majority dismissed the notion that house staff salaries are merely stipends, noting that hospitals withhold taxes, provide benefits and medical insurance, and no exclusion exists for stipends under the Internal Revenue Code. *Id.* at 160.

142. *Id.* at 160-61 (stating house staff spend up to 80% of hospital time engaged in direct patient care). In its findings of fact, the Board discussed how residents and interns respond to life-threatening emergencies and are the primary physicians with whom patients' families have contact. *Id.* at 154 (adding responsibilities include writing "do not resuscitate orders").

143. *Id.* at 160-61 (contending advanced training actually enhances value of services received by Hospital).

144. *Id.* (characterizing residents as "employees" entitled to full rights under Act).

145. *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 164 (stating parties free to bargain over subjects that may change in future).

146. See *id.* at 182 (Brame, M., dissenting) (emphasizing threat to medical education). Member Brame stated that, having designated residents employees, the Board cannot then limit their statutory right to demand bargaining over "all terms and conditions of employment." *Id.*

2007] FEDERAL LEGISLATION AND EXCESSIVE MEDICAL RESIDENT WORKING HOURS 761

content, standards for graduation, and hours of work, among other things, would all become mandatory subjects of bargaining under the Act.¹⁴⁷ The majority downplayed the dissent's "forecast of doom" regarding the potential impact on medical education and asserted that the decision would neither render residents less loyal to their hospitals nor interfere with the institutions' educational mission.¹⁴⁸ The majority pointed to the proper role of negotiation and the history of state law in successfully limiting the appropriate scope of bargaining over issues falling within the educational sphere.¹⁴⁹ Regardless of its potential impact on other issues such as academic standards, *Boston Medical Center* enables residents to use collective bargaining as a means of reducing work hours.¹⁵⁰

III. ANALYSIS

A. Are Hour Restrictions A Good Idea?

The relationship between resident working hours and patient safety is controversial and complex.¹⁵¹ Despite the widely held belief that reducing hours will improve patient safety, the data is less than clear.¹⁵² Most scientific studies focus on the general effects of fatigue on human performance, with only

147. See *id.* at 179 (noting wide scope of academic matters which could be considered "terms and conditions of employment"). The dissent further warned that the costs and uncertainty of union elections and collective bargaining may increase the financial burdens on struggling institutions and accelerate the trend of eliminating residency programs. *Id.* at 182 (concluding "[m]edical education can only suffer").

148. *Id.* at 164-65 (stating dissent view "needlessly pessimistic"). To assume house staff would demand concessions of their employers that would harm patients or prevent themselves from obtaining the education necessary to complete their training "gives little credit to the intelligence and ingenuity of the parties." *Id.* at 165.

149. See *Boston Med. Ctr. Corp.*, 330 N.L.R.B. 152, 164-65 (1999) (touting flexibility of collective bargaining). The majority asserted that an employer is always free to persuade a union that it cannot bargain over certain matters due to industry restraints, such as ACGME mandatory guidelines. *Id.* at 164. In response to the argument of possible intrusion on academic freedom, the Michigan Supreme Court held that, because of the unique nature of the teaching hospital, the scope of bargaining "may be limited" if the matter fell "clearly within the educational sphere." See *Regents of the Univ. of Mich. v. Mich. Employment Relations Comm'n*, 204 N.W.2d 218, 224 (Mich. 1973). For example, employees could clearly bargain over salaries but interns could not negotiate working in a particular department because they found certain specialty work distasteful. *Id.* (illustrating economic versus educational issues); see also *Regents of the Univ. of Calif. v. Pub. Employment Relations Bd.*, 715 P.2d 590, 606-07 (Cal. 1986) (implying argument essentially concerns appropriate scope of representation under statute).

150. See *Boston Med. Ctr. Corp.*, 330 N.L.R.B. at 160-61 (granting residents bargaining rights under NLRA). But see Gaba & Howard, *supra* note 35, at 1251 (noting limited growth of resident unionization since NLRB decision). Fear of reprisal from superior doctors and the time and effort needed to organize are among the factors discouraging unionization. See *infra* notes 199-200 and accompanying text (explaining tepid response to landmark decision).

151. See Steinbrook, *supra* note 80, at 1296 (stating debate "far from settled"); see also Gaba & Howard, *supra* note 35, at 1253-54 (emphasizing costs, benefits, and side effects of policy options extremely complicated).

152. See *supra* note 50 (stressing effects of reducing work hours on patient care uncertain).

a few indicating a causal connection between fatigue and impaired clinical performance.¹⁵³ Even data regarding the effects of long hours on resident health is not entirely conclusive.¹⁵⁴ Nonetheless, the large body of general scientific evidence does support the conclusion that reducing hours will improve resident well-being and reduce fatigue-related medical errors.¹⁵⁵

While excessive hours may pose a threat to the safety of residents and patients, hour restrictions can create dangers of their own.¹⁵⁶ Any effort to reduce fatigue must be flexible enough to ensure continuity of care and preserve high educational standards.¹⁵⁷ Additionally, a plan that focuses on hours while ignoring the related problems of supervision, hospital culture, and program resources, will not succeed.¹⁵⁸ The complex relationship between working hours, education, and patient safety must be a central consideration when implementing work hour reforms.¹⁵⁹

B. *Is Federal Regulation the Right Answer?*

1. *PPSPA Treats the Symptoms, Not the Root Causes of the Problem*

While the PPSPA includes “increased supervision” in its stated purpose, the Act primarily focuses on reducing hours, leaving the problem of inadequate supervision largely unaddressed.¹⁶⁰ The bill directs the Secretary of HHS to promulgate regulations “as may be necessary to monitor and supervise postgraduate trainees,” but does not provide any specific recommendations.¹⁶¹ The ACGME, on the other hand, already developed numerous, detailed provisions regarding supervision, including twelve separate standards for internal medicine alone.¹⁶² The experience in New York demonstrates that

153. See *supra* note 46 and accompanying text (noting most studies address fatigue’s effect on task performance, not clinical performance).

154. See Klebanoff et al., *supra* note 42, at 2821 (mentioning certain studies not showing higher levels of depression and pregnancy complications among residents).

155. See *supra* notes 37-45 and accompanying text (describing numerous studies highlighting various dangers of sleep deprivation).

156. See Steinbrook, *supra* note 80, at 1297 (arguing shorter working hours could have deleterious effects).

157. See *infra* notes 176-184 and accompanying text (discussing concerns over education and continuity and citing harm caused by hour restrictions).

158. See *infra* Part III.B.1. (discussing risks of focusing on hours without considering related issues).

159. See Fletcher et al., *supra* note 50, at 855 (stating balance must be central to ongoing work hour reforms).

160. See generally H.R. 3236, 107th Cong. (2001) (stating bill’s purpose of reducing work hours and increasing supervision); see also *supra* note 17 (arguing proposed federal legislation ignores supervision).

161. See H.R. 3236, § 3 (authorizing further supervision regulations without providing specific guidelines).

162. See ACCREDITATION COUNCIL FOR GRADUATE MEDICAL EDUCATION, ACGME’S RESPONSE TO HR 3236 AND SIMILAR CALLS FOR REGULATION TO ADDRESS RESIDENT HOURS, *available at*, http://www.acgme.org/acWebsite/PositionPapers/pp_conyerscom.pdf (last visited Mar. 8, 2007) [hereinafter ACGME’S RESPONSE TO PPSPA] (listing ACGME Program Requirements for Internal Medicine regarding supervision).

regulations which focus on hours without adequately addressing supervision will not improve patient safety.¹⁶³

The PPSPA also fails to address the underlying hospital culture that has historically fostered long working hours.¹⁶⁴ As long as the ability to “handle it” remains a core virtue and fatigue is perceived as a weakness, hospitals will find a way to frustrate regulatory efforts.¹⁶⁵ The New York statute failed to change the culture in its hospitals, and there is little reason to believe that its federal equivalent would have any more success.¹⁶⁶ The recent progress of self-imposed reforms suggests that the ACGME might have more influence over institutional attitudes, though the changes might simply be a response to rising public pressure.¹⁶⁷ Either way, the lessons from New York indicate that increased government regulation is not the best way to improve the culture at teaching hospitals.¹⁶⁸ The institutions and the medical community must take the initiative.¹⁶⁹

Medical institutions must not only be willing, but financially able to make the necessary changes. Already struggling hospitals face significant difficulty adapting to work hour reforms, as they rely heavily on residents as a source of cheap labor.¹⁷⁰ PPSPA would purportedly make funds available to cover the “reasonable additional, incremental costs” of compliance.¹⁷¹ While additional, incremental funding is important, it may not be enough to meet the significant challenges of restructuring.¹⁷² New York State provided hundreds of millions of dollars in aid, yet many of its hospitals still faced staffing shortages.¹⁷³

163. See *supra* notes 83-86 and accompanying text (describing New York regulations’ failure to address resident supervision problem).

164. See Abel, *supra* note 17, at B1 (describing “culture of silence” at teaching hospitals); see also Boodman, *supra* note 50, at S1 (stating medicine’s emphasis on self-sufficiency and refusal to complain).

165. See Fein, *supra* note 11, at A1 (describing hospital culture encouraging residents to work beyond eighty hour limit). New York residents described instances where hospitals used unofficial work schedules or “optional” conferences to circumvent hour restrictions. *Id.* (describing hospital methods undermining Bell Laws).

166. See Fein, *supra* note 11, at A1 (describing New York laws’ failure to change culture). Dr. Bell himself stated, “We wanted these laws to change the culture. They didn’t.” *Id.*

167. See Boodman, *supra* note 50, at S1 (suggesting recent ACGME “crack down” on training programs motivated by public pressure).

168. See *supra* notes 165-166 and accompanying text (asserting New York regulations’ ineffectiveness in changing hospital culture).

169. See Gaba & Howard, *supra* note 35, at 1253 (arguing medical institutions should assume responsibility for changing attitudes on exhaustion); see also Abel, *supra* note 17, at B1 (characterizing pivotal issue as institutions’ ability and willingness to address work hours problem).

170. See *supra* note 67 and accompanying text (discussing high costs of compliance); see also Steinbrook, *supra* note 80, at 1300-01 (stating “huge undertaking” with “serious problem” of immediate costs). Executives at teaching hospitals agree that change is necessary but caution that limiting hours could add millions of dollars annually to their costs when most are already losing money. See Barnard & Kowalczyk, *supra* note 18, at A1.

171. See H.R. 3236, 107th Cong. § 4 (2001) (providing additional funding for hospital costs).

172. See Steinbrook, *supra* note 80, at 1301 (suggesting considerable time needed to change hospital culture and make other improvements).

173. See *supra* text accompanying note 79 (noting failure of New York regulations despite government

Simply shifting the burden from residents to nurses or senior doctors would be counterproductive and short-sighted.¹⁷⁴

2. PPSPA Lacks Flexibility

The PPSPA lacks the flexibility that is critically important for maintaining continuity of care.¹⁷⁵ Under its terms, The PPSPA would authorize HHS to enact regulations “to ensure quality of care is maintained during the transfer of direct patient care from one postgraduate trainee to another” at the end of each twenty-four hour shift.¹⁷⁶ The PPSPA, however, fails to enumerate or suggest any specific safeguards.¹⁷⁷ On the other hand, ACGME standards explicitly provide an additional six hours to ensure smooth patient transfers.¹⁷⁸ Although the full effects of hour restrictions on patient safety remain uncertain, studies do indicate that the New York regulations have negatively impacted continuity of patient care.¹⁷⁹

The PPSPA also lacks the flexibility needed to safeguard the high standards of postgraduate medical education.¹⁸⁰ Though it may be possible to reduce hours without sacrificing education, doctors in New York have expressed concern regarding the educational consequences of the Bell Laws.¹⁸¹ Unlike the PPSPA, the ACGME provides an additional eight hours per week to meet the specific educational demands of certain programs.¹⁸² Critics view this as a loophole, but such flexibility is necessary to prevent hour restrictions from compromising resident education.¹⁸³ As the entity responsible for the content of residency programs, the ACGME is in a better position than Congress to tailor hour restrictions to the educational needs of teaching hospitals.¹⁸⁴

funding).

174. See Gaba & Howard, *supra* note 35, at 1254 (stating shifting work to others results in shortsighted solution); see also *supra* note 88 and accompanying text (arguing Bell Laws have increased the burden of senior doctors).

175. See *infra* notes 176-191 and accompanying text (discussing importance of flexibility and drawbacks to PPSPA design).

176. H.R. 3236, 107th Cong. § 3 (2001).

177. See *id.* (providing no specific procedures exist to ensure safe patient hand-off).

178. See *ACGME Duty Hours*, *supra* note 99 (granting extension to accommodate patient transfer).

179. See *supra* notes 91-92 and accompanying text (noting studies linking Bell Laws to continuity of care problems).

180. See Abel, *supra* note 17, at B1 (declaring legislation “dangerous way to go” if trying to provide best training).

181. See *supra* notes 95-96 and accompanying text (discussing concerns regarding effects of hour restrictions on education).

182. See *ACGME Duty Hours*, *supra* note 99 (providing eight hour extension upon showing of “sound educational rationale”).

183. See Gaba & Howard, *supra* note 35, at 1254 (concluding steps taken by ACGME promising but contain loopholes).

184. See *ACGME’S RESPONSE TO PPSPA*, *supra* note 162 (arguing government regulation not properly structured to meet educational program needs). The Occupational Safety and Health Administration (OSHA) recognized ACGME as well-suited to address duty hour restrictions when it rejected the petition filed by Public

2007] FEDERAL LEGISLATION AND EXCESSIVE MEDICAL RESIDENT WORKING HOURS 765

The PPSPA is inflexible not just in its terms, but in its ability to be modified.¹⁸⁵ In light of all the uncertainty and risks associated with hour restrictions, it is likely that some degree of change will be necessary in the future.¹⁸⁶ Eighty hours might not even be the right number.¹⁸⁷ Once enacted, federal legislation is difficult to change.¹⁸⁸ The ACGME, on the other hand, recognizes that continuing efforts are needed as part of the “refinement process.”¹⁸⁹ The ACGME is more in tune with the changing realities of medical education and better able to adjust duty hour standards to reflect new information and new developments.¹⁹⁰ Regardless of whether current hour restrictions turn out to be too inflexible or too lenient, ACGME duty hour standards are easier to change than federal legislation.¹⁹¹

C. Federal Regulation is Unnecessary in Light of ACGME Success and Collective Bargaining Rights

The original initiative to place federal restrictions on resident working hours was based in large part on the perception that the medical community failed to address the problem adequately.¹⁹² The recent progress of self-imposed reforms, however, indicates that federal intervention is unnecessary.¹⁹³ Even Congressman John Conyers, Jr., who introduced the PPSPA, acknowledged that the ACGME “is doing a satisfactory job.”¹⁹⁴ Accordingly, passage of the

Citizen. See *ACGME Duty Hours*, *supra* note 99 (asserting ACGME’s authority already recognized by federal government).

185. See *infra* notes 187-189 and accompanying text (arguing ACGME standards more adaptable to change than federal legislation).

186. See Fletcher et al., *supra* note 50, at 856 (advocating caution based on inconclusive results of studies).

187. See Steinbrook, *supra* note 80, at 1298 (noting absence of data demonstrating eighty hour workweek optimal). Dr. Paul Friedman, co-chair of ACGME Work Group describes the eighty hour week as “a number with some general acceptance, without much scientific underpinning.” *Id.*

188. See American College of Surgeons, ACS Views on Legislative, Regulatory, and Other Issues (Mar. 7, 2005), <http://www.facs.org/ahp/views/gme.html> (stating congressional statutes rigid and require act of Congress to modify). The ACGME also argues that federal regulations can take a long time to implement. See ACGME’S RESPONSE TO PPSPA, *supra* note 162 (noting ten year delay between passage and implementation of 1990 highway safety legislation).

189. Press Release, Accreditation Council for Graduate Medical Education, New England Journal of Medicine Studies Indicate that Duty Hour Limits Benefit Residents and Reduce Errors (Oct. 28, 2004), http://www.acgme.org/acWebsite/newsReleases/newsRel_10_28_04.pdf (arguing emergence of new studies requires continuing efforts to refine standards).

190. See American College of Surgeons, ACS Views on Legislative, Regulatory, and Other Issues (Mar. 7, 2005), <http://www.facs.org/ahp/views/gme.html> (arguing ACGME appropriate body to lead reform). The American College of Surgeons endorses the view that the ACGME is in “closer contact with emerging clinical reality and could adapt more quickly than Congress.” See *id.*

191. See *supra* notes 188-190 and accompanying text (noting federal statutes less amenable to modification and refinement than private regulation).

192. See H.R. 3236, 107th Cong. § 2 (2001) (finding “medical community has not adequately addressed the issue of excessive resident-physician work hours”).

193. See *supra* notes 110-112 and accompanying text (describing preliminary success of ACGME duty hour standards).

194. See Zeigler, *supra* note 13 (quoting position of Representative Conyers as of March 2005).

bill is no longer among his top priorities in 2005.¹⁹⁵

Residents' ability to unionize and collectively bargain over employment issues, such as work hours, also mitigates the need for federal intervention.¹⁹⁶ In isolated cases, residents have successfully formed unions and reduced work hours through collective bargaining.¹⁹⁷ Widespread unionization and sweeping changes in work hours, however, have not occurred.¹⁹⁸ One explanation for the lack of widespread union activity is that residents' careers depend on the goodwill of senior doctors and program directors.¹⁹⁹ Gaining organizational recognition is also a long and difficult process that can take years to accomplish.²⁰⁰ In addition to the practical impediments facing unionization, there is also the concern that resident collective bargaining rights could diminish the high academic standards of teaching programs.²⁰¹ The ability to bargain collectively may not be the most effective tool for reducing resident working hours, but it presents another reason why federal regulation is not necessary.

IV. CONCLUSION

The long and frequently excessive hours worked by medical residents and interns pose a serious problem. When sleep-deprived doctors administer complex medical care to patients, the danger is obvious. Less obvious, however, are the dangers that inflexible hour restrictions can cause. If improperly conceived, staff shortages and abrupt patient hand-offs can lead to medical errors as surely as fatigue. To be successful, reform efforts must not merely limit hours, but enhance resident supervision and protect high educational standards as well. Otherwise, patient care could actually suffer as a result of hour restrictions. The thought of being treated by an exhausted

195. See Zeigler, *supra* note 13 (indicating congressional concerns allayed by ACGME success). Joel Segal, Legislative Assistant to Representative Conyers, stated that, "We're not going to work it as much as before, when there [were] no restrictions at all . . ." *Id.*

196. See *supra* Part II.G (examining residents' protected right to bargain over employment conditions).

197. See Gaba & Howard, *supra* note 35, at 1251 (noting instances of unionization not widespread but used effectively to reduce hours).

198. See Gaba & Howard, *supra* note 35, at 1251 (observing anticipated groundswell not occurring to date).

199. See Boodman, *supra* note 50, at S1 (suggesting confrontation with supervisors against residents' interests). This fear persists despite the fact that it is a violation of NLRA to discharge an employee for engaging in union activities. See 29 U.S.C. § 158(3) (2006) (establishing violation where discriminatory motive and discouragement of union support shown); see also *Edward G. Budd Mfg. Co. v. N.L.R.B.*, 138 F.2d 86, 90-91 (3d Cir. 1943) (holding employee unlawfully discharged for participating in union activities despite poor work performance).

200. See Tracey Ehlers, *The Patient and Physician Safety and Protection Act: Crucial Federal Legislation to Improve the Lives of Residents and Patients*, 4 CONN. PUB. INT. L.J. 1, 18 (2004) (noting recognition process long and arduous). It took residents at Lutheran General, an Illinois hospital, over three years to enforce their rights under *Boston Medical Center*. *Id.* at 17.

201. See *supra* notes 146-147 and accompanying text (arguing extending bargaining rights to medical residents could undermine academic freedom).

2007] *FEDERAL LEGISLATION AND EXCESSIVE MEDICAL RESIDENT WORKING HOURS* 767

medical resident may be unsettling, but so too is what happened to the Manhattan doorman.

In light of the recent progress of self-imposed reforms, government intervention might not be needed at all. There is still much to be done, but the pace of change appears to be increasing. Teaching hospitals need more time and more resources to make the necessary structural reforms, not more civil penalties. Passing new government restrictions now would be premature and potentially destabilizing. If nothing else, medical resident work hour reform is a complicated issue. A crude legislative cure might be worse than the disease.

James D. Stone