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Administrative Compensation for Medical Injuries: Lessons from Three Foreign Systems

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Abstract: The United States requires patients injured by medical negligence to seek compensation through lawsuits, an approach that has drawbacks related to fairness, cost, and impact on medical care. Several countries, including New Zealand, Sweden, and Denmark, have replaced litigation with administrative compensation systems for patients who experience an avoidable medical injury. Sometimes called “no-fault” systems, such schemes enable patients to file claims for compensation without using an attorney. A governmental or private adjudicating organization uses neutral medical experts to evaluate claims of injury and does not require patients to prove that health care providers were negligent in order to receive compensation. Information from claims is used to analyze opportunities for patient safety improvement. The systems have successfully limited liability costs while improving injured patients’ access to compensation. American policymakers may find many of the elements of these countries’ systems to be transferable to demonstration projects in the U.S.

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INTRODUCTION

Medical malpractice reform is a perennial issue for state legislatures and, more recently, for the U.S. Congress. The American medical liability system is widely acknowledged to perform poorly in several important respects.^{1,2} Few patients with injuries due to negligence file claims, in part because of the difficulty of obtaining attorney representation and the arduousness of the litigation process. Many meritorious cases do not result in compensation to the patient, while many non-meritorious cases do lead to settlements or jury awards. The amounts awarded are highly variable across similar injuries, inadequate in some cases and excessive in others. The highly adversarial litigation process destroys physician–patient relationships and involves considerable emotional strain for both plaintiffs and defendants. Fear of litigation chills open discussion about medical errors, resulting in missed opportunities for learning and patient safety improvement, and leads physicians to order extra tests,

referrals, and other services primarily for the purpose of reducing their liability exposure. Such defensive medicine, together with the high cost of malpractice insurance premiums that increases providers' overhead costs and the prices they charge, contributes to the upward growth of health care expenditures. It is estimated that defensive medicine alone accounts for more than \$45 billion in health care spending in the United States annually.³

Conversations about medical liability reform in the U.S. increasingly reflect an acknowledgment that traditional tort reform measures, such as caps on noneconomic damages, have limited effectiveness in solving the system's fundamental problems.⁴ There is also increasing recognition that such reforms do little or nothing to make care safer.

Among the liability reform options that have recently received attention is administrative compensation of medical injuries. Under an administrative model, claims for medical injuries would be referred through a simplified process to an administrative body, sometimes called a "health court," rather than to the regular judicial courts. Proposals for such a model typically suggest that the process be simple enough that claimants would not need the assistance of legal counsel; that cases be reviewed by claims handlers and neutral adjudicators who specialize in the evaluation of such claims; that the adjudicators be assisted by neutral medical experts; that compensation be awarded to patients without regard to whether the physician was negligent; and finally that noneconomic, or "pain and suffering," damages be awarded according to a predetermined schedule based on the severity of the injury. Administrative compensation proposals are often labeled "no-fault" proposals, but in fact, they rarely suggest that compensation should be awarded on a true no-fault basis (meaning that the claimant need only show that the injury was causally related to medical care). Most would require that the injury also have been avoidable—a standard that is easier to meet than the negligence standard but still requires an evaluation of the quality of care that was provided.

Policymakers in the U.S. have raised many questions about how an administrative compensation system would operate here. The American experience with

administrative compensation for medical injuries is quite limited. The federal Vaccine Injury Compensation Program provides compensation on a no-fault basis for a defined set of injuries related to vaccine administration, and Florida and Virginia have long operated no-fault compensation funds for serious birth-related neurological injuries.⁵ There are no precedents, however, for the types of broader schemes operated by Denmark, Finland, Norway, and New Zealand.

Policymakers considering how such schemes might work in the U.S. have raised several questions. How difficult is it to evaluate cases using a compensation standard other than negligence? How does a no-fault system deal with the problem of the doctor who should be sanctioned for gross or repeated deviations from the standard of care? What would such a system cost and how would it be financed? Do no-fault systems have the support of patients and doctors? Real-world experience from several countries that have implemented administrative compensation systems for medical injuries sheds light on the answers to these questions. New Zealand and the Scandinavian countries (Sweden, Denmark, Norway, and Finland) have operated such systems for decades. In this issue brief, we discuss the experiences of New Zealand, Sweden, and Denmark, and consider lessons for reform of medical injury compensation systems in the United States.

ADMINISTRATIVE COMPENSATION SYSTEMS ABROAD

New Zealand

In 1974, New Zealand introduced a comprehensive accidental injury compensation scheme that was not limited to medical injuries. The system, which is managed by the Accident Compensation Corporation (ACC), replaced injured individuals' right to file personal injury lawsuits with an entitlement to rehabilitation and compensation via an administrative process. The change was motivated by a 1967 Report by the Woodhouse Commission that strongly criticized the tort system as an ineffective mechanism for compensating and deterring injuries. There was also a perception that the concept of compensation based on individual fault no longer enjoyed broad support and

should be replaced by a principle of community responsibility for accidental injuries.⁶

The ACC is tax funded, government operated, and accountable to a parliamentary minister (Table 1). It functions alongside a national health care system that provides care to all New Zealanders. Most hospital care is provided through public sector hospitals, although there are many smaller, private facilities as well. Most specialist physicians are employed by hospitals, while general practitioners operate private practices and are merely paid by the government. Hospital care is provided free of charge, while primary care is available with small copayments. About a third of New Zealanders have supplementary private health insurance.⁷ New Zealand maintains a web of other, tax-funded social insurance programs, including sickness and disability benefits, unemployment benefits, and retirement benefits.

Sweden

In 1975, Sweden established a voluntary scheme in which public and private health care providers assumed responsibility for compensating injured patients through a consortium of insurers. The impetus for reform was a perception that compensation was too difficult for patients to obtain in the tort system, which required plaintiffs to meet a higher standard of proof than the “preponderance of the evidence” standard used in personal injury litigation in the U.S. The process was protracted and expensive. As a result, very few claims were brought and even fewer resulted in compensation.

The objective of the new system was to channel compensation more efficiently to injured patients. Disciplining health care providers and deterring medical errors were not among its missions. On the contrary, system designers eschewed these goals because they were regarded as potentially corrosive to the compensation objective.

In 1995, the voluntary system was restructured and a mutual insurance company (Landstingens Ömsesidiga Försäkringsbolag, or LOF) owned by the regional hospital authorities began insuring all public hospitals and physicians, as well as private providers who have a contract with the government. From 1995

to 2009, LOF delegated responsibility for investigating and evaluating injury claims to a private claims handling company (Personskadereglering AB, or PSR), but these functions were integrated into LOF’s operations in 2010.

Legislation in 1997 made it mandatory for all health care providers to carry liability insurance, with most insuring through the LOF as described above. A provider’s insurer pays for claims that arise out of the provider’s care and meet the criteria for compensation. Because some providers do not comply with the requirement to carry insurance, the insurance companies formed the Patient Insurance Association (Patientförsäkringsföreningen, or PFF) for the purpose of making compensation available to patients injured by uninsured providers. The PFF also finances and operates a Patient Claims Panel to which patients can appeal compensation decisions regardless of whether or not the provider was insured.

As in New Zealand, the compensation system in Sweden is part of a larger, tax-funded system of social insurance, including a national health care system with universal access. The National Insurance Act of 1962 set up a system that covers basic medical expenses and wage loss due to illness or injury, regardless of cause, as well as disability and old age pensions. Sweden’s single-payer health care system provides comprehensive medical coverage, with modest cost-sharing by patients. About 5 percent of Swedes carry supplemental private health insurance.⁸ Nearly all hospital care is provided through public sector hospitals and specialist physicians are generally salaried employees of the national health system. Primary care physicians may be either government employees working in public clinics or private practitioners.⁹

Denmark

Denmark’s medical injury compensation system, adopted in the Patient Insurance Act of 1992, is very similar to Sweden’s. It was modeled after Sweden’s 1975 voluntary scheme and motivated by similar concerns about patient access to compensation.¹⁰

By law, Danish regional hospital authorities are required to pay the costs of malpractice claims. Although they have the option to purchase insurance through a

private insurance company, in practice, it has been more cost-effective to self-insure. The insurance companies and self-insuring authorities formed a joint association, the Patient Insurance Association (Patientforsikringen, or PIA) to evaluate all claims in accordance with the law. The PIA is an independent association governed by a board of directors made up primarily of regional council members. Compensation payments to patients are made by the self-insured county councils.

Denmark has a tax-funded national health care system with universal, free access. The counties are legally and financially responsible for all treatment, from primary to tertiary care. There is no cost-sharing by patients for hospital or primary care services, but there is modest cost-sharing for prescription drugs and certain other services. About 30 percent of Danes carry supplemental private health insurance to cover these costs.¹¹ Most hospitals are publicly operated, while most health professionals are self-employed and reimbursed by the government.¹² Denmark also maintains social insurance schemes for sickness and disability, unemployment, and retirement income.

FINDINGS

1. The systems have rejected the notion that compensation should be available only to patients who are injured by negligence.

New Zealand has experimented with several alternatives to a negligence standard. Originally, it compensated all medical “misadventures,” a term that was interpreted by claims handlers, the courts, and eventually a statute to include two kinds of injuries: “medical error” and “medical mishap.” A medical error was an injury due to

negligence, defined as it is in tort law. A medical mishap was a rare and severe adverse consequence of treatment given properly by a registered health professional.

Legislation enacted in 2005 eliminated fault-based negligence determinations from the system, adopting a single “treatment injury” standard. Under this standard, there must be a physical injury causally related to treatment by a registered health professional that is not a necessary part or ordinary consequence of the treatment. This standard comes closest to a true no-fault standard in any of the foreign schemes, although questions of appropriateness still arise in determining the eligibility for compensation of claims relating to failures to provide timely treatment or failures to obtain informed consent.

The 2005 change was motivated by several concerns: the sense that the medical error standard adversely affected physician–patient relationships and reduced physicians’ willingness to participate in the claims process; a desire to put medical injuries on equal footing with other kinds of accidental injuries, which were eligible for ACC compensation without regard to fault; the sense that learning opportunities were lost by focusing on individual error rather than systems of care; and a dissatisfaction with the cost of investigating medical injury cases to determine whether an error occurred.¹³

In Sweden and Denmark, a standard of “avoidability” is applied. Injuries are compensable if they would not have occurred in the hands of a highly skilled and experienced physician in the relevant specialty—a standard quite different from negligence, which compensates only those injuries resulting from care that fell below the customary standard of care that would be rendered by a reasonable practitioner. The avoidability inquiry

Methods

In 2005, we made site visits to Stockholm, Copenhagen, and Wellington to interview administrators and stakeholders of the Swedish, Danish, and New Zealand medical injury compensation systems. We conducted semi-structured interviews with a total of 44 key informants, including heads of the systems, frontline claims handlers, medical expert consultants, legal advisors, judges, and medical professional organization leaders. In addition to interview findings, this issue brief incorporates data and informational materials provided by the system administrators, including updated data from 2009 to 2010, as well as a review of relevant scholarship concerning the systems’ history and operation.

examines not only the skill and conscientiousness of the physician in rendering the treatment but also whether an alternative technique or treatment would have met the patient's needs and been less dangerous. The Danes evaluate avoidability based on what was known at the time care decisions were made, while the Swedes evaluate it retrospectively, incorporating all information available at the time the question of compensation is decided (which is a more permissive standard for patients than Denmark's known-at-the-time standard). Although the avoidability standard governs the payment of most claims, the Swedish and Danish schemes also apply other criteria to compensate certain unavoidable injuries. For example, a wide range of treatment-related injuries that are more rare and severe in nature than what a patient should reasonably be expected to endure are compensated in Denmark; Sweden covers a narrower group of unavoidable injuries caused by equipment failures or severe hospital-acquired infections.

These compensation criteria tend to lead to similar compensation outcomes for the same injury, but through different reasoning. (See [Table 2](#) for an example.) All are more likely to result in compensation to injured patients than is the U.S. standard of negligence. System administrators in each of the three countries reported that their compensation criteria were workable in practice and, in their opinion, were preferable to a negligence standard.

2. The systems have been able to provide a simple, fast, accessible process for obtaining compensation that preserves physician–patient relationships.

In all three systems, claims can be filed free of charge without the need for assistance of legal counsel, although lawyers do participate in filing about 10 percent of claims in Denmark ([Exhibit 1](#)). Sweden allows only patients to submit claims, while Denmark also permits hospitals to file claims on behalf of patients. New Zealand requires that patients initiate a claim through a physician or other recognized health care provider, who need not be the clinician involved in the injury. In Sweden, an estimated 60 percent to 80 percent of claims are facilitated by health care providers on behalf of patients—sometimes by the

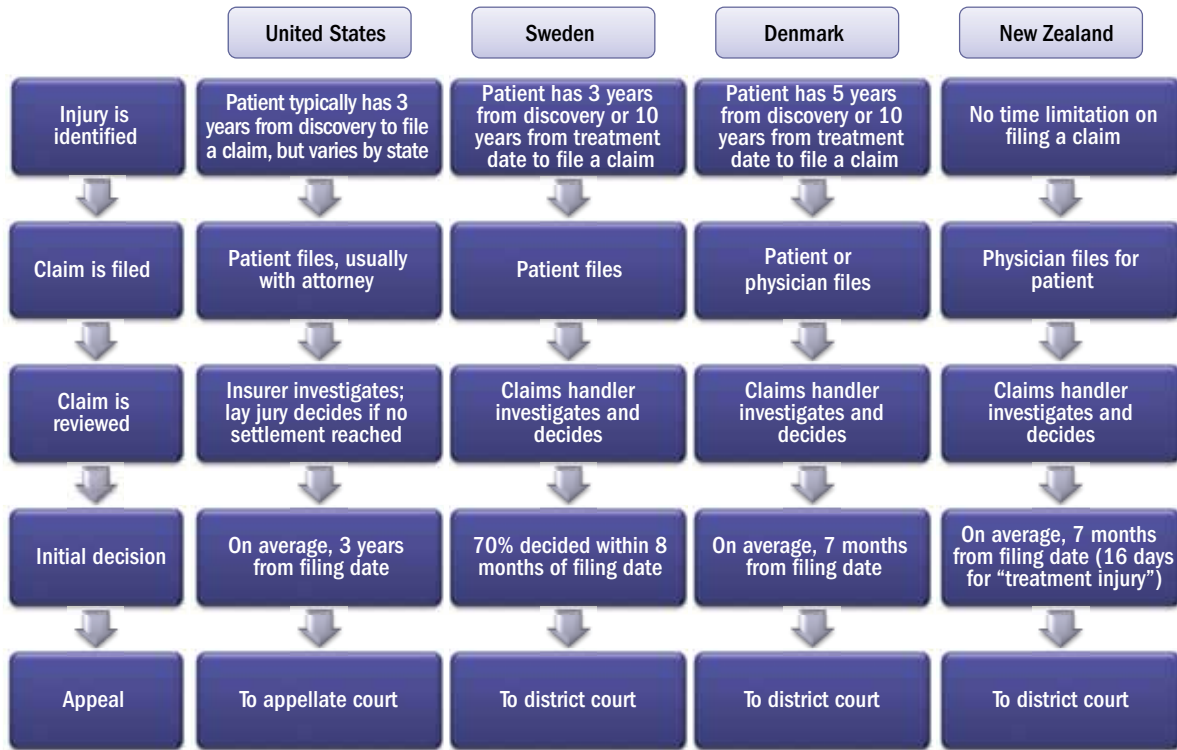
physician involved in the incident, and sometimes by a primary care physician.¹⁴ In Denmark, physicians file about 15 percent of claims and assist in most other cases. In New Zealand, 46 percent of treatment injury claims are lodged by patients' primary care providers, who receive reimbursement for the time they spent filing the claim if the claim is accepted. Of the remaining claims, 44 percent are filed by public or private hospital staff, and 10 percent by other providers, on behalf of patients.

All of the systems report that jettisoning negligence determinations has been effective in enabling clinicians and patients to maintain their therapeutic relationship and cooperate in the pursuit of compensation. Moreover, although the easier claiming process has resulted in higher rates of claims than are seen in the U.S., as seen in [Table 3](#), it has not opened the floodgates to an unmanageable number of claims. System administrators estimate that about 10 percent of injured patients file claims, as compared with 2 percent to 3 percent in the U.S. Finally, the systems are able to process claims expeditiously. Whereas in the U.S., the average time from injury to disposition of a malpractice claim is five years, in Sweden and Denmark it is eight months. In New Zealand it is 16 days, although where there are allegations of failure to treat or delayed treatment, claims may take longer to investigate. Patients infrequently appeal the initial decision and, when they do, generally are not successful.

3. The systems have been able to effectively use neutral medical experts as well as information on previous, similar cases to help render consistent compensation decisions.

In Sweden and Denmark, the frontline claims handlers in the systems typically do not have clinical backgrounds, but are in all cases assisted by a panel of senior physicians in a range of specialties. These physicians are retained by the compensation system through standing contracts, with most serving for an extended period of time and accumulating substantial experience and institutional memory. For decisions that are not clear-cut, the claims handlers and medical experts may also examine past decisions in similar cases, which are available in a searchable

Exhibit 1. The Medical Injury Compensation Process in Four Countries



Adapted from: A. B. Kachalia, M. M. Mello, T. A. Brennan et al., "Beyond Negligence: Avoidability and Medical Injury Compensation," *Social Science & Medicine*, Jan. 2008 66(2):387-402.

database. In addition to fostering consistency in decision-making, review of prior decisions has proved effective in reducing the time and labor necessary to decide cases, as reviewers are not reinventing the appropriate methodology with each new case.

In New Zealand, the claims assessors have clinical backgrounds (often in nursing) and do not necessarily consult specialist clinicians in every case. Approximately two-thirds of claims are decided in house by a peer-review panel comprising these assessors and team managers. Advice may also be sought from one of the in-house medical advisors. Independent experts with the relevant scope of practice are, however, typically consulted in complex cases or where the claim alleges failure to treat or delayed treatment. In such cases, the causal connection between the medical management and the injury tends to be less clear, necessitating greater investigation and expertise to reach a judgment about eligibility for compensation.

4. Although they compensate a broader range of injuries than the U.S. tort system, the foreign systems' costs have not been exorbitant.

Based on medical injury studies conducted in the U.S., about twice as many injuries are eligible for compensation under an avoidability standard than under a negligence standard, and three to four times as many are eligible under a true no-fault standard.¹⁵ However, several factors have kept costs manageable in the systems that employ these alternative standards.¹⁶ First, the availability of other social insurance programs obviates the need for some injured individuals to file injury compensation claims, keeping claiming rates relatively low in comparison to the estimated prevalence of medical injuries. For example, a New Zealand patient who sustained a disabling injury could receive free or very low-cost care through the national health care system as well as disability and unemployment benefits that are generous by U.S. standards. The availability of other sources of support also keeps average claims costs lower because

“collateral-source offset” rules stipulate that the medical injury systems need not pay for lost wages, medical expenses, and other expenses that are covered by the national insurance system.¹⁷

Second, these systems have low overhead costs—around 17 percent of the total cost of the system, compared to an estimated 55 percent to 60 percent in the U.S. Third, Sweden and Denmark impose a cap on the total compensation a patient may receive (Table 1). Fourth, payments for noneconomic losses are much smaller than is typically the case in the U.S.

Because of these features, the average total award size in these systems is much lower than in the U.S. In 2009, the average compensation per paid claim was approximately US\$20,000 in Sweden and US\$40,000 in Denmark, compared to approximately \$324,000 in the U.S.¹⁸ In New Zealand, it was even lower, around US\$4,450.

5. The systems use fixed award amounts, schedules, and caps to make payments for noneconomic loss, provoking controversy about the adequacy of awards.

New Zealand provides lump sum payments for noneconomic loss associated with permanent impairment (the loss, or loss of use, of a bodily part, system, or function). However, the payments historically have generated some controversy because they are relatively modest (currently capped at US\$85,500), have been adjusted only infrequently, and are conditional on permanent impairment, meaning that individuals whose impairment is temporary or whose injuries involve pain but not impairment do not have their noneconomic loss compensated.¹⁹ Sweden and Denmark calculate noneconomic damages in accordance with pre-established tables, or schedules, which are adjusted annually for inflation. In these systems, pain and disfigurement is compensated even if not disabling, but there are sometimes complaints of inadequate compensation for severe injuries, particularly in Denmark, where maximum total awards are capped at about US\$1.7 million.

6. The systems are complemented by strong, independent, parallel systems of physician discipline.

Each of the countries has chosen to delink its patient compensation system from its system of policing physician competence to assure health care quality. Since 1994, New Zealand’s Office of the Health and Disability Commissioner has provided a mechanism for patients to complain about the quality of health care and disability services. By law, all patients who file a compensation claim with ACC must be informed of the availability of the complaints process. The commissioner investigates patient complaints and may pursue a variety of remedies where complaints are found to have merit. These remedies range from facilitating mediation and apology to referring the case to a prosecutorial authority for disciplinary action to recommending that a health care organization improve its care processes.²⁰ Sweden and Denmark also operate separate systems of physician discipline, with boards for patients’ complaints empowered to investigate complaints and refer cases to disciplinary authorities.

None of these countries currently permits routine information sharing between the discipline system and the compensation system, although this has only been the case in New Zealand since 2005. New Zealand also requires the ACC to make a report to the Director General of Health if, based on a pattern of claims, conditions in a facility appear to pose a threat to the public. In rare cases, ACC may make a similar report regarding an individual health professional to the relevant registration authority.

A perceived advantage of the information firewall is that it encourages physicians to make patients aware of their right to seek compensation and to assist them in claiming, which physicians might be reluctant to do if they feared a compensation claim could trigger or facilitate disciplinary action. On the other hand, operating completely separate systems of discipline and compensation has some disadvantages: health care providers may feel besieged by multiple investigations and the lack of information sharing contributes to inefficiency and redundancy in the investigation process.²¹ Some have also criticized the New Zealand and Scandinavian systems

for eliminating any possible deterrent effect of the injury compensation system on medical negligence, while others argue that there is little evidence that deterrence occurs in the U.S. system.

7. The systems utilize claims data for purposes of learning about opportunities for patient safety improvement.

The centralized nature of the compensation schemes confers a huge informational advantage. In contrast, in the U.S., data about medical injuries are fragmented across hundreds of insurance companies that usually do not share or pool the information they control (Table 4). With larger databases, the possibilities for detecting and analyzing patterns of medical injuries are much greater. The country approaches described above make good use of the information at their disposal, although administrators from all three systems believe more could be done. Within the last five years, New Zealand's ACC has integrated treatment injury claim data with its overall claims management database. It shares data obtained from claims analysis with hospitals, health professionals, and professional organizations through presentations, profiling, and publication of injury case studies.

The Danish and Swedish systems also maintain comprehensive databases of injury information. Rather than assign an in-house team to analyze the data, as the ACC does, the Danish PIA partners with external researchers using data-sharing agreements. The Swedish LOF collaborates with external researchers and also conducts descriptive analyses of its own data. Both the Danish and Swedish systems disseminate findings to hospitals through briefs and presentations, provide hospitals with benchmarking information, and encourage hospitals to perform root-cause analyses on serious incidents.

CONCLUSIONS

There is broad agreement within the countries we studied that the medical injury compensation schemes have met their primary objective of improving injured patients' access to compensation. Although controversies have arisen over time about the appropriate compensation standard and the adequacy of compensation awards, the

systems have become firmly entrenched. There has been no discussion of returning to a fault-based system of tort liability for medical injuries. Strong, separate systems of complaints investigation and physician discipline appear to have allayed any concern that injury deterrence may be undermined by a move to a compensation system that does not involve judgments of fault or economic penalties for clinicians. Available data are inadequate to answer the question of whether health care in New Zealand, Denmark and Sweden is safer than in the U.S., but the medical injury compensation schemes do create an environment that is more conducive to transparency and safety improvement.

Lessons for the U.S. from Denmark, New Zealand, and Sweden

In looking at the administrative compensation systems for medical injury in Denmark, New Zealand, and Sweden, one needs to recognize that the context within which these systems operate is very different from that in the United States. These countries are smaller and more sociodemographically homogeneous, their health care systems are government-run and universally accessible, and they maintain a much stronger social insurance safety net. Culturally, there is less of a tradition of litigiousness and of challenging physicians' authority. Given these differences, could an administrative compensation model work in the U.S.?

The available research indicates that, despite differences in health care systems and cultures, most features of these country models are readily applicable to the U.S. system. A private financing scheme, similar to the Swedish model, is likely to be the most feasible for the U.S. The responsibility for initial investigation of an incident would presumably remain where it currently lies, with private insurers, although it should be expedited and take a much less defensive approach—similar to the approach taken in the U.S. in the emerging “disclosure-and-offer” model of early settlement.²² Because of insurers' financial interest in cost control, it would be important to provide a neutral, external panel to investigate and adjudicate claims in the event that the insurer and patient do not reach a satisfactory agreement about

compensation. In some states, constitutional barriers may make it difficult to make an administrative compensation system the exclusive remedy available to injured patients, but there are still possibilities for voluntary systems even in those jurisdictions.²³

Cost control in an injury compensation system would be more of a challenge in the U.S. than in foreign countries. It would be feasible to cap awards, as half of U.S. states currently do. However, it is unlikely that Americans would accept a system that awarded the relatively modest compensation amounts provided in the foreign systems. Average awards would likely be much higher in the U.S. because of public expectations and because private insurance would likely cover a smaller share of medical expenses than the single-payer health systems abroad. The proportion of injured patients who file claims may also be higher in the U.S. There is a strong tradition of seeking compensation for injuries in the U.S., and the skimpier social insurance safety net in the U.S. creates a greater financial necessity for filing claims.

Two factors may serve as countervailing forces to these cost drivers in the U.S. One is the increased prevalence of health insurance coverage that will accompany federal health reform. This should leave fewer patients with unmet medical needs thus driving down the rate of claims in the compensation system, and create greater potential for collateral source offsets by limiting the size of awards from the compensation system. The second is the enormous potential for reducing administrative overhead costs in the U.S. Some analyses suggest that these savings alone would offset the effects of having more claims filed.²⁴

Because many Americans continue to believe that the tort system creates valuable incentives for safe, high-quality care, it would be politically advantageous to improve systems of physician discipline in the U.S. prior to pursuing implementation of an administrative compensation system. Although there is scant evidence that tort liability has had a positive deterrent effect, key stakeholders are more likely to accept a no-fault system if there are other means of identifying incompetent providers and holding clinicians accountable for poor-quality care.

Physician discipline systems in the U.S. are not viewed as robust mechanisms for policing physician quality, and stronger professional regulation and oversight will likely be required to make an alternative injury compensation system palatable. The international experience attests fairly strongly that the injury compensation system itself need not—and probably should not—play a disciplinary role with physicians.

Perhaps the strongest lesson to be learned from the international examples is that replacing the negligence standard with a more liberal, less stigmatizing compensation standard such as avoidability reaps multiple benefits. In addition to easing injured patients' access to compensation for preventable injuries, it preserves physician–patient relationships, encourages transparency about adverse events, and fosters physician participation in the claims process. In this way, an administrative compensation system can help move American health care toward the culture of safety necessary to prevent medical injuries.

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Table 1. Medical Injury Compensation System Overview

	United States	Sweden	Denmark	New Zealand
Administering body	State and federal courts	Insurance companies, primarily the public company (“LOF”)	Public company (“PIA”)	Government agency (“ACC”)
Who pays for awards?	Private insurance companies, using premiums collected from health care providers	Insurance companies. Compensation from LOF is financed by county councils	Self-insured regional hospital authorities, using tax revenue	ACC, using revenue from general and employer taxes
Compensation standard	Injury was caused by negligent medical management	Injury was an avoidable outcome of medical management‡	Injury was an avoidable outcome of medical management‡	Injury was an unexpected outcome of treatment by a registered health professional
Limits on compensation [§]	Varies from state to state [†]	Total awards capped at US\$1.2 million	Total awards capped at US\$1.7 million	No cap on economic loss compensation; noneconomic loss compensation capped at US\$85,500

Sources: A. B. Kachalia, M. M. Mello, T. A. Brennan et al., “Beyond Negligence: Avoidability and Medical Injury Compensation,” *Social Science & Medicine*, Jan. 2008 66(2):387–402; and personal communications with program administrators.

[§] In the foreign schemes, medical care would be provided by the national health care system above and beyond these compensation limits. In the U.S., some states deduct the value of benefits received from other sources, including health insurance coverage, from malpractice awards, while others do not.

[†] State tort reform laws create variation in available compensation. Six states limit total damages, while about half limit noneconomic damages, to amounts ranging from \$250,000 to over \$1 million.

[‡] In addition to avoidable injuries, the system also compensates certain kinds of severe, unavoidable injuries. In evaluating avoidability, Sweden examines all information available at the time of the compensation review, while Denmark examines only the information available at the time of the incident.

Table 2. Case Example: A Surgical Patient Injured by an Allergic Reaction to Latex Gloves

Case Summary	<p><i>An unconscious patient is admitted for emergency surgery after being seen in a hospital's emergency department. The patient has not previously been seen at the hospital and is unaccompanied by friends or family, so hospital staff do not realize that the patient is allergic to latex. The prevalence of latex allergies in the population is less than 1 percent. The surgical team wears latex gloves during the operation, causing a severe anaphylactic reaction in the patient. The patient spends 7 days in the intensive care unit on a ventilator before recovering.</i></p> <p><i>Is this injury eligible for compensation?</i></p>
United States	<p>No. Because latex allergy is rare and the hospital staff had no reason to suspect that the patient had an allergy, and because the use of latex gloves during surgery is the customary standard of care, there is no negligence.</p>
Sweden	<p>Yes. Although the staff did not know about the latex allergy at the time care was rendered, it would be apparent at the time the case was considered for compensation. Applying a "retrospective" analysis, the injury is avoidable in light of all the information available at the time of review. It could have been avoided by not using latex products in the operating room.</p>
Denmark	<p>Yes. Although the staff did not know about the latex allergy at the time care was rendered and no retrospective analysis would be applied, it qualifies for compensation as an unavoidable but rare event that is severe beyond what a patient should reasonably be expected to endure.</p>
New Zealand	<p>Yes. The injury was an unexpected outcome of the treatment received.</p>

Source: A. B. Kachalia, M. M. Mello, T. A. Brennan et al., "Beyond Negligence: Avoidability and Medical Injury Compensation," *Social Science & Medicine*, Jan. 2008 66(2):387–402.

Table 3. Claims Rates and System Overhead Costs

	United States	Sweden	Denmark	New Zealand
Annual claims rate (per million persons)	200	1,000	1,330	2,000
Initial claim success rate	56%	45%	34%	63%
Average amount paid	US\$323,816	US\$20,000	US\$40,000	US\$4,450
Claimant appeal rate	Not available	10%	12%	4%
Appeal success rate	Not available	10%	2%	14%
Overall claim success rate	Not available	45%	34%	68%
Overhead costs	54%	16%	17%	Unknown

Sources: A. B. Kachalia, M. M. Mello, T. A. Brennan et al., "Beyond Negligence: Avoidability and Medical Injury Compensation," *Social Science & Medicine*, Jan. 2008 66(2):387–402; K. Oliphant, "Beyond Misadventure: Compensation for Medical Injuries in New Zealand," *Medical Law Review*, Autumn 2007 15(3):357–91; Public Citizen, "Medical Malpractice Payments Fall Again in 2009," <http://www.citizen.org/documents/NPDBFinal.pdf>, April 14, 2011; H. Johansson, "The Swedish System for Compensation of Patient Injuries," *Upsala Journal of Medical Sciences*, May 2010 115(2): 88–90; D. M. Studdert, M. M. Mello, A. A. Gawande et al., "Claims, Errors, and Compensation Payments in Medical Malpractice Litigation," *New England Journal of Medicine*, May 2006 354(19): 2024–33; Patientforsikringen, "Figures for 2009," <http://www.patientforsikringen.dk/da/Nyheder/Nyhedsarkiv/statistik-2009.aspx> (Sept. 3, 2010); and J. Downie, W. Lahey, D. Ford et al., *Patient Safety Law: From Silos to Systems*, Appendix 2: Country Reports—Denmark (Health Canada, March 2006), http://www.energyk.com/healthlaw/documents/Appendix_2_Denmark.pdf.

Table 4. Relationship of Compensation Systems to Patient Safety Initiatives

	United States	Sweden	Denmark	New Zealand
Use of compensation decisions as data for safety research	No centralized repository for information on all filed claims. Closed-claim databases have limited scope and information.	Details of all claims are logged in a database. Data are available to external researchers.	Details of all claims are logged in a database. Data are available to external researchers. PIA maintains copies of associated medical records to support detailed studies.	Details of all claims are logged in a database. Hospitals may request their own data. Data are not otherwise externally accessible.
Safety analyses performed by compensation system	None	LOF analyzes claims data and prepares presentations on safety issues for hospitals and regions. LOF sends hospitals facility-level comparisons of claims rates, injury types, and other information. LOF does no root-cause analysis, but gives hospitals data and economic incentives to do so.	PIA does no safety analysis itself but partners with external researchers to conduct and publish safety studies. PIA sends hospitals facility-level comparisons of claims rates, injury types, and other information.	ACC performs analyses using the database. ACC writes and shares information with the health sector.
Information sharing with patient safety regulators	None	None	PIA shares information about drug-related claims with the national regulatory body.	If ACC believes there is a risk of harm to the public, it must report it to the relevant regulatory authority.

Source: M. M. Mello, D. M. Studdert, A. B. Kachalia et al., "Health Courts' and Accountability for Patient Safety," *Milbank Quarterly*, 2006 84(3):459-92.

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