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IV. REINSURANCE PROBLEMS

A. Lloyds of London, the dominant reinsurance company with approximately 25% of the world-wide market, has been wracked by scandals in recent years.

For example:

o Between 1973 and 1982, two Lloyd's underwriters, Peter Cameron-Webb and Peter Dixon, siphoned off for their own use $55 million belonging to 1,500 Lloyd's members. Investigators say they used the money for yachts, corporate aircraft, a French orange juice company and a pornographic movie entitled "Let's Do It." see Chicago Tribune, Oct. 20, 1985, at 5; Business Week, Aug. 5, at 57.

o Many of the 1,500 swindled by Cameron-Webb and Dixon are suing Lloyds (although Parliament immunized Lloyds from lawsuits in 1982, the 1.500 are claiming that the immunity doesn't apply to events occurring before 1982). Lloyds, on the other hand, is claiming that the 1.500 owe Lloyds another $180 million. 100 members face bankruptcy and 200 have been suspended for failing to meet Lloyds' solvency test. See Chicago Tribune, Oct. 20, 1985; Business Week, Aug. 5, 1985.

o Lloyds has grown too fast. In the last decade the number of Lloyds' members has more than tripled to 26,050. Chicago Tribune, Oct. 20, 1985. Since 1981 alone, Lloyds has added 7,000 new members, including "newly rich doctors, lawyers, accountants and rock musicians . . . lured by the hope of annual returns to members that topped 100% some years." Business Week,. Aug. 5, 1985. Its total premium writing capacity rose from $3.4 billion to $9.4 billion. Id.

B. In 1982, Lloyds was granted immunity from lawsuits by the British Parliament. Business Week, Aug. 5, 1985, at 58.

C. Lloyds has threatened, coerced and intimidated both insurers and insureds -- such as states -- in order to keep insurance rates high, as the following statements indicate:

o You may recall this statement:

> "If you change your tort laws in Alaska, you will have a market here when the rest of the United States will not. Lloyds is pulling out of the United States as a reinsurer -- they have already pulled out of Connecticut, New York and New Jersey
>
> -- and they're continuing to pull out of more states."
>
> Statement of Jeff Johnson, Partner, LeBoeuf, Lamb, Lieby and McCrae (U.S. counsel for Lloyds), at the Casualty Insurance Colloquium, Anchorage, Alaska, Sept. 17, 1985.

Alaska is not alone:

o ". . . in order to keep [Lloyds] participation on cover we had to accede to some strong suggestions from the reinsurers to beef up the rate charged to the OB's."

> Statement of John Spinella, President, Medical Mutual Liability Insurance Society of Maryland, before the Governor's Task Force on Medical Malpractice, Oct. 22, 1985.

o "[reinsurance brokerage head Thomas A.] Green said that beginning in 1986, Lloyd's syndicate would 'simply not write reinsurance for the American casualty industry.'"

> Journal of commerce, June 18, 1985.

o "Mr. Wakefield conceded that Lloyds cannot dictate to American regulators on Policy approval, but he wryly

said that if the new form is not approved, Lloyds will not reinsure American liability underwriters."

Journal of Commerce, July 26, 1985, citing C.T. Bowing & Co. Chief Executive Gerald Wakefield, presenting Lloyds' views to 17 insurance commissioners.

- "A Lloyd's of London delegate who flew over expressly for the [insurance commissioner's] meeting added that unless the U.S. industry was permitted to adopt the new form, the lloyds reinsurance market would discontinue backing American underwriters forthwith."

Journal of Commerce, July 27, 1985.

D. Neither the U.S. government, the states, or the British Parliament regulate Lloyds.

E. The British pound, which was worth $2.80 in the mid-1960's has been worth less than half that for most of the last two years and fell to $1.05 in February 1985. Thus, whereas Lloyds would need to pay only 10,000 pounds to satisfy a $28,000 claim in 1963, today it must pay 20,000 pounds to satisfy the same claim and in February 1985 -- when the pressure first started to build for tort reform -- it had to pay 26,600 pounds.

V. SOLUTIONS

A. How to Solve the Insurance Crisis -- What Alaska Should Do

1. Repeal Alaska's Anti-trust Exemption
2. Repeal statutes that prohibit businesses and consumers from joining together to buy insurance in groups. Today, in most states, group health and life insurance is available, but group liability insurance is illegal. If laws prohibiting such group insurance were repealed, the price of liability insurance would fall.

3. Prohibit rate increased from taking effect until such increases are approved by the insurance commission. Today, in most states, increases automatically take effect unless disapproved within a certain number of days; because the burden is on the insurance commission to disapprove a rate, and because insurance commissions do not have the staff to analyze even a fraction of rate filings, most increases automatically take effect. Shifting the burden of proof to the insurance company to demonstrate that a rate increase is justified would limit such increases.

4. Allow greater consumer representation before regulatory bodies. Typically, only regulators and insurance companies participate in rate cases. to increase citizen participation in the ratemaking process, states should authorize Citizens' Insurance Boards, groups of insurance consumers who would intervene on their own behalf. In the alternative, states could establish Offices of Public Advocates to intervene in rate cases, as new Jersey and some other states have. In New Jersey when the Public Advocate intervenes in a rate case the cost of that intervention is billed back to the insurance company seeking the rate increase, thus discouraging insurers from seeking exorbitant increases.

5. Require that insurance rates be based on experience. Because insurance companies today often lump all insureds in a category together, regardless of how often any individual insured has been sued, good risks currently subsidize bad risks. Experience rating would go along way toward bringing down premiums for medical malpractice insurance, in which experience rating is now virtually non-existent.

6. Enact tough conflict-of-interest statutes to close the "revolving door." As the U.S. General Accounting Office has found, 50% of state regulators come from and return to the industry; the relationship between the industry and the regulators is not an arms-length relationship.

7. Require that insurance companies disclose their loss data on a line-by-line basis. Such disclosure would enable regulators to better discern whether rates are excessive, inadequate or unfairly discriminatory.

8. Establish state reinsurance programs.

9. Beef up the Insurance Department both authoritatively and with resources.

10. Repeal the state anti-rebate law.

11. Publish buyers guides with price and service information.

B. Medical Malpractice

Render the above:

1. Lessen the number of classes.

2. Let hospitals bear part of the cost for adverse procedures in the hospital. Consider channeling doctors malpractice costs through hospitals.

3. Consider a specific subsidy in rural areas for physicians consider additn a malpractice charge on all health insurance premium as a subsidy dollar base.

4. Attract more physicians to Alaska to normalize the patient/doctor ratio.

VI. WHY CONSUMERS OPPOSE HOUSE BILL NO. 166

Generally:

1. We lose rights.
2. We get nothing in return (such as a victim's reparations regime).
3. It treats us like a fender, not a person.
4. It won't work to lower rates and make insurance more available.
5. It lowers deterrance.
6. There is no study showing need for change.

It specifically has these problems, among others.:

1. Lets faulty product manufacturers or bad surgeons off the hook if six years go by before the product blows up or the sponge works its way into someone's heart.

2. Fixes the possibly real problem of collateral source in exactly the opposite (and wrong) way. While no one should collect twice for the same injury, the wrong doer should pay, not our policies. Our rate should go down, not drunk drivers.

   mandate subrogation and order lower health insurance rates.

3. Creates inter-family problems by limiting a baby's right to sue to two years ending special treatment for minors.

4. It limits our freedom to choose the sort of settlement we want, lump sum or structured.

5. It creates a disincentive for insurers to pay (as if they needed any more) by charging them below market interest if they delay.

6. It caps non-economic damages in wrongful death cases at a pitiful $50,000.

VI. CONCLUSION

Alaska needs reform that works -- Alaska needs insurance reform. Like other smaller population states, large multi-national insurers can hold you hostage. You may well need consider working for interstate compacts with larger states to avoid the kind of under pressure Lloyds and others have brought to bear here. And other states are moving. Almost every state has insurance reform bills before the legislature. Little New Mexico voted to repeal that state's anti-trust exemption, but the governor vetoed it under intense pressure from the insurers. Arizona has many reform bills before it. South Carolina is moving a bill. Maryland returned to prior approval. The Texas Senate late last week voted to repeal that state's anti-trust exemption. The Chairs of the U.S. Senate and House Judiciary Committees have introduced bills to end McCarran's broad anti-trust immunity.

Now is the time for insurance reform. I pledge NICO's assistance to you in achieving such real reform.

Thank you. I would be happy to answer your questions when that is appropriate.

Schwarze

LAW

F: 101(e)

HOUSING / LAND / PROPERTY - BUILDING LAWS

The scope and legality of statutes of repose

Most courts uphold laws cutting off actions against designers and contractors, but split on the issue of their application to products

By Milton F. Lunch

For more than 25 years the design profession, jointly with contractors, has acted to secure state laws which effectively cut off rights of action by plaintiffs for alleged negligence after a reasonable period of time following completion of a project.

These efforts have been largely successful through enactment of what were originally called "statutes of limitation," but now are more properly designated as "statutes of repose." Only two state legislatures (Arizona and Iowa) have failed to pass any kind of legislation along this line.

With few exceptions, these laws cutting off a right of action against A/Es and contractors after the established period of time have been attacked on constitutional grounds. The score stands at 30 states finding them constitutional and 10 holding them unconstitutional. In the remaining 10 states there has been no definitive decision.

The basic legal issue on which the courts have ruled one way or the other on the constitutional question is in reality more of a social or policy issue. Courts which have come down against such statutes argue that they are contrary to the "open court" provisions in the state constitution to bar an action for injury before the injury has occured. Thus, where there was a defect in design or construction which was not manifest until years after substantial completion of the project, and beyond the statutory cutoff period, it would be an injustice to dismiss the suit for damages before the injured party had a chance to prove negligence.

The contrary, and majority, view of courts which have passed on the issue is that it may be equally unfair to the designer or contractor to face a negligence claim indefinitely. At some reasonable point in time, a person should not have to face a never-ending possibility of a suit based on work done many years earlier.

Factors favoring a limitation

The courts finding in favor of the constitutionality of statutes of repose also note the problem of proof of fault years after the project is completed. Documents have disappeared and witnesses, if still available, have faulty memories of the facts. Favorable decisions often note that, unlike products, the design and construction of projects are not subject to testing. Finally, the majority view is that the issue is properly one for legislative policy determination, rather than judicial fiat.

What is a reasonable cutoff period following substantial completion? This varies considerably among the state laws, ranging from a low of four years to a high of 15 years, with an average of seven or eight years. Some attempts are being made to lower the cutoff to five years, but there is a danger that the courts may consider this unduly short.

Now that the basic concept is well established in the majority of states, a series of court decisions have dealt with the question of interpretation of the specific language. Still a current question is whether the statute of repose applies to products incorporated into a structure. The courts are split, depending on the particular facts of the case, and it may be some time before a consensus emerges on the issue.

In a recent Pennsylvania case, for instance, a federal court applying Pennsylvania law in an action against the manufacturer of an oven that had been installed in an industrial building held that the statute did not apply because the oven was not "an improvement to real property." This is language common to all the state statutes of repose.

Contrary to the conclusion in the Pennsylvania case, the Texas Court of Appeals has held that the statute did apply to the manufacturer of a wall heater that allegedly caused carbon monoxide poisoning. The heater, the court said, was an "improvement to real property," and not just a fixture because it was actually built into the wall.

Therein may lie the distinction to guide the courts in subsequent cases: Was the product an integral part of the building, thereby being an "improvement to real property"? Or was the product installed in such a way that it was readily movable, thereby being a fixture? A dissenting justice in the Pennsylvania case said the answer "should turn upon whether their component parts were specifically designed for this purpose or were shelf items intended for many purposes . . . ."

The Supreme Judicial Court of Massachusetts recently held that the statute of repose did not protect the supplier of a circuit breaker which had been incorporated into the structure on a permanent basis, but applied only to those who " . . . render particularized services for the design and construction of particular improvements to particular pieces of real property."

As is always the case, each decision turns on its own facts. But the most likely test should be whether the product in question becomes a permanent part of the structure, thereby losing its character as a separate product, just as the bricks and steel in a building are absorbed into and become an integral part of the building. However, as usual, the courts will have the last word. △

Milton F. Lunch is former general counsel of the National Society of Professional Engineers, and presently serves as a consultant on architectural and engineering legal matters. No statement in this article should be acted upon until your attorney assures you that it applies to your situation.

HOUSING, LAND, PROPERTY
FILE (C)
BUILDING LAWS

EXHIBIT "A"

State	Statute of Repose	Constitutional/ Unconstitutional	Citation
Alabama		Unconstitutional	Jackson v. Mannessman Corp., 435 So.2d 725 (1983).
Alaska	$09.10.055	Undecided	
Arizona	None		
Arkansas	§37-239	Constitutional	Carter v. Hartenstein 455 S.W.2d 918 (1970)
California	§337.1, 337.15	Constitutional	Barnhouse v. City of Pinole, App., 183 Cal.Rptr.881 (Ct.App 1982)
Colorado	§13-80-127	Constitutional	Criswell v. M.J. Brock & Sons, Inc. 681 P.2d 495 (1984)
Connecticut	§52-584a	Constitutional	Patricia O. Ecker v. Town of West Hartford 205 A.2d 219 (1987)
Delaware	§8127	Constitutional	Cheswold Vol. Fire Co. v. Lambertson Const., 489 A.2d 413 (1984)
Dist of Columbia	§12-310	Constitutional	Westerman v. Firemans Fund Ins Co.,499 A.2d 116 (Ct.App. 1985)
Florida	§95.11	Constitutional	American Liberty Ins Co. v. West & Conyers 491 So.2d 573 (Ct.App 1986)

HOUSING, LAND, PROPERTY
BUILDING LAWS

State	Statute of Repose	Constitutional/ Unconstitutional	Citation
Georgia	§3-1006	Constitutional	Mullis v. Southern Co Services, Inc., 296 SE.2d 579 (1982)
Hawaii	§657-8	Undecided*	Shibuya v. Architects Hawaii Ltd., 647 P.2d 276 (1982)
Idaho	§5-241	Constitutional	Twin Falls Clinic & Hospital Bldg v. Hamill, 644 P.2d 341 (1982)
Illinois	§22.3	Constitutional	Mateyka v. Melia, 456 N.E.2d 353 (Ill.App. 1983)
Indiana	§34-4-20-1	Constitutional	Beecher v. White, 447 N.E.2d 622 (Ind.App.1983)
Iowa	None		
Kansas	None		
Kentucky	§413.135	Constitutional	Carney v. Moody, 646 S.W.2d 40 (1982)
Louisiana	§9:2772	Constitutional	Burmaster v. Gravity 366 So.2d 1381 (1978)
Maine	§752-A	Undecided	
Maryland	§5-108	Constitutional	Whiting-Turner Contracting Co. v. Coupard, 499 A.2d 178 (Ct.App. 1985)

H/OUSING, LAND BUILDING LAWS

State	Statute of Repose	Constitutional/ Unconstitutional	Citation
Massachusetts	$2B	Constitutional	Klein v. Catalano, 437 N.E.2d 514 (S.Jud.Ct. 1982)
Michigan	$27A.5839	Constitutional	O'Brien v. Hazelet & Erdal, 299 N.W.2d 336 (1980)
Minnesota	$541.051	Constitutional	Calder v. City of Crystal, 318 N.W.2d 838 (1982)
Mississippi	$15-1-41	Constitutional	Anderson v. Fred Wagner, Etc., 402 So.2d 320 (1981)
Missouri	$516.097	Undecided	
Montana	$93-2619	Constitutional	Reeves v. Ille Electric Company, 551 P.2d 647 (1976)
Nebraska	$25-222,223	Constitutional	Williams v. Kingery Const Co, 404 N.W.2d 32 (1987)
Nevada	$1	Unconstitutional	State Farm Fire and Cas v. All Elec., In 660 P.2d 995 (1983)
New Hampshire	None	Unconstitutional	Henderson Clay Products v. Edgar Wood, Etc., 451 A.2d 174 (1982)
New Jersey	$2A:14-1.1	Constitutional	Rosenberg v. Town of North Bergen, 293 A.2d 662 (1972)

HOUSING, LAND, PROPERTY
BUILDING LAWS

State	Statute of Repose	Constitutional/ Unconstitutional	Citation
New Mexico	§37-1-27	Constitutional	Howell v. Burk, 568 P.2d 214 (Ct.App. (1977)
New York	None		
North Carolina	§1-46	Constitutional	Lamb v. Wedgewood South Corp., 302 S.E.2d 868 (1983)
North Dakota	§28-01-44	Undecided	
Ohio	§2305.131	Constitutional	Elizabeth Gamble Deaconess Home v. Turner Const., 470 N.E.2d 950 (Ct.App. 1984)
Oregon	§12.135	Constitutional	Joseph v. Burns, 491 P.2d 203 (1971)
Pennsylvania	§5536	Constitutional	Freezer Storage, Inc. v. Armstrong Cork Co. 382 A.2d 715 (1978)
Rhode Island	§9-1-29	Constitutional	Walsh v. Gowing, 494 A.2d 543 (1985)
South Carolina		Unconstitutional	Broome v. Truluck, 241 S.E.2d 739 (1978)
South Dakota		Unconstitutional	Daugaard v. Baltic Co-Op. Bldg. Supply Ass'n., 349 N.W.2d 419 (1984)

BUILDING LAWS

State	Statute of Repose	Constitutional/ Unconstitutional	Citation
Tennessee	§28-314	Constitutional	Harmon v. Angus R. Jessup Associates, Inc., 619 S.W.2d 522 (1981)
Texas	§5536a	Constitutional	McCulloch v. Fox & Jacobs, Inc., 696 S.W.2d 918 (Ct.App. 1985)
Utah	§78-12-25.5	Constitutional	Good v. Christensen 527 P.2d 223 (1974)
Vermont	§511	Undecided	
Virginia	§8.01-250	Constitutional	Smith v. Allen Bradley Co., 371 F.Supp. 698 (1974)
Washington	§4.16.310	Constitutional	Jones v. Weyerhaeuser Co., 741 P.2d 75 (Ct. App. 1987)
West Virginia	None		
Wisconsin	§893.155	Constitutional	United States Fire Ins Co v. E.D. Wesley Co., 301 N.W.2d 271 (1980)
Wyoming	§1-3-111	Undecided*	Phillips v. ABC Bldrs' 611 P.2d 821 (1980)

* Previous statute declared unconstitutional. New statute has been adopted by the Legislature, but not ruled upon by the Court.

HOUSING, LAND, PROPERTY
BUILDING LAW 101 (E)
11/20/86

STATUTES OF REPOSE FOR DESIGN PROFESSIONALS

Held Constitutional

ARKANSAS	Carter v. Hartenstein, 455 S.W. 2d 918 (Ark. 1970); app. dismissed for want of substantial federal question, 401 U.S. 901 (1971)
CALIFORNIA	Regents of the University of California v. Hartford Accident & Indemnity Co., 131 Cal. Rptr. 112 (Cal. App. 1976)
COLORADO	Yarbro v. Hilton Hotels Corp., 655 P. 2d 822 (Colo. 1982)
DELAWARE	Cheswold Volunteer Fire Co. v. Lambert & Sons Constr. Co., 462 A 2d 416 (Del. 1983)
D. C.	Britt v. Schindler Elevator Corp., 637 F. Supp. 734 (D.D.C. 1986)
FLORIDA	American Liberty Insurance Company v. West & Conyers, Architects and Engineers, 491 So. 2d 573 (Fla. App. 1986)
GEORGIA	Mullis, et al. v. Southern Services Co.,296 So. 2d 579 (Ga. 1982)
IDAHO	Twin Falls Clinic & Hospital Bldg. Corp. v. Hammill, 644 P. 2d 347 (Ida. 1982)
LOUISIANA	Burmaster v. Gravity Drainage District No. 2, 366 So. 2d 1381 (La. 1978)
MARYLAND	Whiting-Turner Contracting Co. v. Coupard, 499 A. 2d 178 (Md. 1985)
MASSACHUSETTS	Klein v. Catalano, 437 N.E. 2d 514 (Mass. 1982)
MICHIGAN	O'Brien v. Hazelet & Erdal, 299 N.W. 2d 336 (Mich. 1980)
MINNESOTA	Calder v. City of Crystal, 318 N.W. 2d 838 (Minn. 1982)
MISSISSIPPI	Anderson v. Fred Wagner & Roy Anderson, Jr., 402 So. 2d 320 (Miss. 1982)
MONTANA	Reeves v. Ille Electric Co., 551 P. 2d 647 (Mont. 1976)
NEW JERSEY	Rosenberg V. Town of North Bergen, 293 A. 2d 662 (N.J. 1972)
NEW MEXICO	Terry v. New Mexico State Highway Commission, 645 P. 2d 1375 (N.M. 1982)
NORTH CAROLINA	Lamb v. Wedgewood, 286 S.E. 2d 876 (N.C. App. 1982)
OHIO	Hartford Fire Ins. Co. v. Lawrence, Dykes, Goodenberger, Bower & Clancy, 740 F. 2d 1362 (6th Cir. 1984)
OREGON	Joseph v. Burns, 491 P. 2d 203 (Ore. 1971)
PENNSYLVANIA	Freezer Storage Inc. v. Armstrong Cork Co., 382 A. 2d 715 (Pa. 1978)
TENNESSEE	Harmon V. Angus R. Jessup Associates, Inc., 619 S.W. 2d 522 (Tenn. 1981)
TEXAS	Hill v. Forrest & Cotton, Inc., 555 S.W. 2d 145 (Tex. Civ. App. 1977)
UTAH	Good v. Christensen, 527 P. 2d 223 (Utah 1974)
VIRGINIA	Smith v. Allen-Bradley Co., 371 F. Supp. 698 (W.D. Va. 1974)
WASHINGTON	Yakima Fruit & Cold Storage Co. v. Central Heating & Plumbing Co., 503 P. 2d 108 (Wash. 1972)

STATUTES OF REPOSE FOR DESIGN PROFESSIONALS

Unconstitutional

HAWAII	Fujioka v. Kam, 514 P. 2d 568 (Hawaii 1973)
ILLINOIS	Skinner v. Anderson, 231 N.E. 2d 588 (Ill. 1967) *
KENTUCKY	Tabler v. Wallace, 704 S.W. 2d 179 (Ky. 1986)
NEVADA	State Farm Fire & Casualty Co. v. All Electric, Inc., 660 P. 2d 995 (Nev. 1983)
NEW HAMPSHIRE	Henderson Clay Products, Inc. v. Edgar Wood & Associates, Inc., 451 A. 2d 174 (N.H. 1982)
OKLAHOMA	Loyal Order of Moose Lodge 1785 v. Cavaness, 563 P. 2d 143 (Okla. 1977)
SOUTH CAROLINA	Broome v. Truluck, 241 S.E. 2d 739 (S.C. 1978)
SOUTH DAKOTA	Daugaard v. Baltic Cooperative Bldg. Supply Assn., 349 N.W. 2d 419 (S.D. 1984)
WISCONSIN	Kallas Millwork Corp. v. Square D. Co., 225 N.W. 2d 454 (Wis. 1974)

* But see, Skinner v. Hellmuth, Obata & Kassabaum, Inc., Oct. 17, 1986, upholding separate classification of A/Es for purpose of two-year cut-off period not related to substantial completion issue (copy enclosed).

Guidelines for Improving Practice
architects and engineers professional liability

Volume XVIII, No. 8
(Replaces Volume IX, No. 6)

STATUTES OF LIMITATION AND REPOSE

Almost thirty years have passed since the enactment in 1961 of the first special statute of limitation for lawsuits against architects, engineers and others who design and build construction projects. During this period, much interest has been focused on the legislative programs that led to the enactment of such statutes and their interpretation by the courts once enacted.

This issue of *Guidelines for Improving Practice* updates Volume IX, Number 6; it will review some of that history and provide an update on the current status of statutes of limitation and repose for architects and engineers. It should be recognized, however, that new court decisions interpreting these statutes are being handed down with increasing frequency and some of the following information could quickly become out of date. Therefore, if the need arises, an attorney should be consulted to determine the precise status of the statutes of limitation or repose in any given jurisdiction.

The earlier Guideline reports on this subject have been identified as statutes of limitation, whereas in more recent years the courts have generally identified these statutes as statutes of repose. The essential difference between the two is that a statute of limitation refers to a limited period of time during which a plaintiff must file an action after the cause of action accrues; that is from the time the injury or damage was first discovered or reasonably should have been discovered. This limited period of time is usually in the two to three year range. A statute of repose, on the other hand, bars an action for injury or damage after a stated period of time following substantial completion of the project. Thus, injury or damage flowing from a constructed facility more than the number of years stated in the law (on the average between seven and eight years) is barred and the question of the alleged negligence of the design professional is not subject to legal procedures.

Statutes of repose have been challenged on constitutional grounds in almost every state which has enacted such a law. Most of these challenges have failed, but as shown in the following tabulation, some courts have rejected the statute of repose in cases where the injury or damage occurred after the statute had run out, and the plaintiff was denied the opportunity to present evidence of alleged negligence. Those courts which have rejected the constitutional challenges have noted that in striking a balance between the interests of potential plaintiffs and the interests of potential defendants who have a right to be free from suit after the passage of a reasonable period of time, the plaintiff is still free to pursue a claim against the owner or tenant in possession of the building; therefore the plaintiff is not left without a remedy.

In addition to the constitutional issue, the courts in many cases have had occasion to interpret the statutes in terms of those protected by it, the precise language as to scope of coverage by types of projects, and, in some cases, differences between patent (obvious) and latent (hidden) alleged defects. The following tabulation is summarized from a detailed review of the reference to the state codes and the pertinent court decisions. This comprehensive information is available to those architects and engineers, as well as to their attorneys, who may need such detail.

STATE BY STATE STATUS OF STATUTES OF LIMITATION AND REPOSE

Alabama—Seven year statute enacted in 1975 ruled unconstitutional in 1983.

Alaska—Six year statute enacted in 1967 held unconstitutional in 1988.

Arizona—No special statute has been enacted.

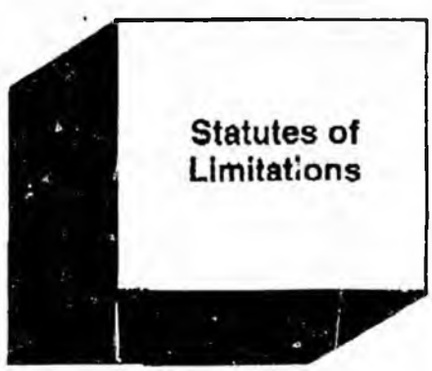
Arkansas—Five year (contract) and four year (tort) statute enacted in 1967 upheld in 1970, and U.S. Supreme Court dismissed further challenge because no federal question was involved.

California—Four year (patent defects) and ten year (latent defects) statutes enacted in 1967 and 1971 upheld in 1976 and 1982.

Connecticut—Seven year statute enacted in 1969 upheld in 1988.

Delaware—Six year statute enacted in 1970 upheld in 1984.

District of Columbia—Ten year statute



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enacted in 1972 upheld in 1986.

Florida—Fifteen year statute for patent defects and four years for latent defects enacted in 1980 upheld in 1986.

Georgia—Eight year statute enacted in 1968 upheld in 1982.

Hawaii—Ten year statute enacted in 1983. No cases to date on validity of the statute; previous statutes held unconstitutional in 1973 and 1982.

Idaho—Six year statute enacted in 1965 upheld in 1982.

Illinois—Two year statute of limitations for architects and engineers enacted in 1983 upheld in 1986; four year statute of repose held unconstitutional in 1967.

Indiana—Ten year statute enacted in 1967 upheld in 1983.

Iowa—No special statute enacted.

Kansas—Two year (patent defects) and ten year (latent defects) enacted in 1963. No reported cases, but held by trial court to bar malpractice action against an architect in 1977.

Kentucky—Five year statute enacted in 1966 held unconstitutional in 1985.

Louisiana—Ten year statute enacted in 1964 upheld in 1978.

Maine—Ten year statute enacted in 1975. No reported cases.

Maryland—Ten year statute enacted in 1979 upheld in 1985.

Massachusetts—Six year statute enacted in 1968 upheld in 1982.

Michigan—Six year statute enacted in 1967 upheld in 1980.

Minnesota—Ten year statute enacted in 1980 upheld in 1982.

Mississippi—Ten year statute enacted in 1966 upheld in 1982.

Missouri—The year statute enacted in 1976. No reported cases.

Montana—Ten year statute enacted in 1971 upheld in 1976.

Nebraska—Ten year statute enacted in 1972 upheld in 1987.

Nevada—Twelve year statute enacted in 1985 following 1965 statute being held unconstitutional in 1983. No reported cases on 1985 statute.

New Hampshire—Six year statute enacted in 1965 held unconstitutional in 1982.

New Jersey—Ten year statute enacted in 1967 upheld in 1972.

New Mexico—Ten year statute enacted in 1967 upheld in 1977.

New York—No separate statute for design professionals, but general malpractice law applied to cut off actions against design professionals on contract claims after six years following issuance of certificate of completion, and three years for claims based on negligence. Personal injury action by person with no prior relationship to design professional not covered by three year limit for negligence claim.

North Carolina—Six year statute enacted in 1963 upheld in 1983.

North Dakota—Ten year statute enacted in 1967 upheld in 1988.

Ohio—Ten year statute for negligence enacted in 1963 upheld in 1984; contract actions governed by fifteen year statute of limitations.

Oklahoma—Ten year statute enacted in 1978 held unconstitutional in 1987; appeal pending before state supreme court.

Oregon—Ten year statute enacted in 1971 upheld in 1971.

Pennsylvania—Twelve year statute enacted in 1965 upheld in 1978.

Puerto Rico—Ten year statute under ancient Spanish "plazo decenal" concept (imposing presumption of liability by design professionals if damage occurs within ten years of substantial completion, but absolute immunity after ten years) upheld in 1988.

Rhode Island—Ten year statute enacted in 1975 upheld in 1985.

South Carolina—Thirteen year statute enacted in 1986 after ten year statute enacted in 1970 was held unconstitutional in 1978. No reported cases under 1986 statute.

South Dakota—Ten year statute enacted in 1966 held unconstitutional in 1984.

Tennessee—Four year statute enacted in 1965 upheld in 1981.

Texas—Ten year statute enacted in 1975 upheld in 1987.

Utah—Seven year statute enacted in 1967 upheld in 1974.

Vermont—Eight year statute under general tort law enacted in 1959 applied to dismiss action against design professional in 1976.

Virginia—Five year statute enacted in 1964 upheld in 1974.

Washington—Six year statute enacted in 1967 upheld in 1972.

West Virginia—Ten year statute enacted in 1983. No reported cases.

Wisconsin—Six year statute enacted in 1979 following 1976 statute being held unconstitutional in 1975. No reported cases under 1979 statute.

Wyoming—Ten year statute enacted in 1973 held unconstitutional in 1980.

R-3554-ICJ

Assessing the Effects of Tort Reforms

Stephen J. Carroll
With Nicholas Pace

1987

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CORRECTION

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Contents

I. INTRODUCTION

Liability insurance availability and affordability problems became widespread in the early 1980s. These problems touched off extensive debate over the need for changes to the body of laws governing compensation for personal injury or property damage—the tort system. By 1986, most state legislatures were considering modifications to their tort systems. In at least 41 states, the debate over what has come to be known as tort reform led to changes in the law.[1]

The debates, and resulting changes in the law, have given rise to widespread concern about how we should go about measuring the effects of tort reforms. These concerns have been accompanied by confusing, and sometimes conflicting, claims for what it is we want or need to know in order to assess the effects of changes in a state's tort system, how we might go about developing that knowledge, and what data we need to perform the required research.

This report offers a framework for assessing the effects of tort reforms. It provides a coherent structure for systematically thinking about how research can contribute to the policy debate over tort reform. Specifically, the report has three purposes:

- To alert policymakers to the issues that need to be considered when assessing tort reform.
- To suggest the kinds of research that would illuminate the major policy issues.
- To offer some guidance to data collection efforts by identifying the generic kinds of data needed.

This report does not provide step-by-step instructions for assessing the effects of reforms. Nor does it provide a list of specific research projects to be performed. Research designs will be needed to translate the general guidance provided here into specific research projects.

We do not suggest that all the studies discussed here are worth undertaking. Research and data collection efforts can be extremely costly; it is possible that the value of the information obtained in any particular study will be less than the cost of obtaining the information. Both public officials and private interests concerned with tort reform

[1]Some proponents of reform argue that relatively few states have undertaken significant reform and that many of the so-called reform states made changes to their tort systems so minor as to be negligible. The Appendix summarizes the tort reforms enacted in 1986.

issues will have to evaluate the likely benefits of each project, relative to its costs, to decide if the effort is worthwhile.

LIMITATIONS OF THE TORT REFORM DEBATE

While the nature of the debate varies from place to place, depending upon a variety of local factors and circumstances, certain limitations characterize the debate almost everywhere.

The debate focuses almost exclusively on the questions of whether, and if so, how much, the tort system affects the increasing cost and declining availability of liability insurance. Reform proponents argue that liability insurance is increasingly costly and sometimes unavailable because the tort system is increasingly expensive. In their view, the only way to control insurance costs is to modify the tort system to make it less expensive.[2] Their opponents counter that malfunctions in the operation and regulation of the insurance system are the cause of the problems, and reform would disadvantage injured claimants while having little effect on insurance premiums or availability.[3] Other issues affecting the tort system and questions of how reform might affect it are raised from time to time, and seriously considered on occasion. But, by and large, concern over insurance costs overshadows other considerations.

In fact, however, effects on insurance costs and availability are no more than byproducts of the tort system's operations. The system serves fundamental social purposes: It provides basic forms of protection, encouraging or discouraging certain kinds of behavior; it establishes the rules for compensating those who have suffered losses through the actions of others; and it offers the context for resolving civil disputes arising out of injuries or property damage. Significant changes, for better or worse, to the system's ability to deter unduly risky behavior, to fairly compensate injured parties, or to encourage rapid and decisive dispute resolution are arguably as important as changes in insurance rates and, in any event, cannot be disregarded in any evaluation of reform.

Second, the debates tend to focus on the performance of some individual segment of the tort system, disregarding its relationship with the entire system. But a change in any one part of such a complex system can reverberate throughout the system. We cannot understand

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[2]See, for example, "The Need for Legislative Reform of the Tort System: A Report on the Liability Crisis from Affected Organizations," Sidley & Austin, May 1986.

[3]See, for example, Thomas G. Goddard, "Testimony before the Liability Insurance Commission of the Iowa Legislature," Tucson, AZ, September 2, 1986.

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observations of any one part without considering how it affects and is affected by what is going on elsewhere in the system.

Reform proponents, for example, argue that the growing use of the legal system contributes to increasing costs.[4] Their opponents respond with a barrage of statistics indicating that the number of lawsuits is growing slowly, if at all. Throughout this debate, all sides tend to focus on the number of lawsuits, paying little attention to the behavior of parties in negotiating claims prior to the filing of a suit.[5] But any change in the general patterns of those pre-suit negotiations can have dramatic impact on the relationship between the frequency of lawsuits and the costs of the system.[6] Again, the interpretation of data on events in one part of the system (e.g., court filings) depends on events in other parts of the system (e.g., the resolution of claims before suits are filed).

Third, the debates are severely constrained by data limitations. Proponents of reform would insist that some particular change in the tort system is needed to bring about certain improvements, but they generally lack the data to estimate the amount of improvement if the change were made. Opponents, adamantly predicting that the change would result in disastrous consequences, are equally unable to provide estimates of the magnitude of the disaster.

Many public and private institutions collect data relevant to the tort and insurance systems. However, their data collection systems focus on information needed to inform and manage their own affairs; they rarely capture the kinds of data needed to address the debate issues. The extensive data collected by state insurance regulators, for example, are relevant to rate-making and solvency concerns[7] and do not include

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[4]See, for example, Robert D. Kilpatrick, "Solving the Lawsuit Crisis," address to the Rotary Club of Chicago, June 17, 1986. The "litigation explosion" thesis as initially put forth by commentators concerned with the long-term viability of the courts is reviewed in Marc Galanter, "Reading the Landscape of Disputes: What We Know and Don't Know (and Think We Know) About Our Allegedly Contentious and Litigious Society," *UCLA Law Review*, Vol. 31, No. 1, October 1983, pp. 4–71.

[5]See, for example, "Are Caseloads Really Increasing?, Yes . . . Thomas B. Marvell, Not Necessarily . . . Stephen Daniels," *The Judges Journal*, Summer 1986, p. 35.

[6]If defendants generally become less forthcoming in dealing with claimants, perhaps to discourage growth in claims or to ease cash flow pressures, there could be an increase in the frequency of lawsuits even though claims are neither more prevalent nor larger than in the past. Conversely, if defendants frequently make more attractive settlement offers, perhaps because the legal system seems increasingly sympathetic to the plaintiff, an increasing fraction of claims could be disposed before they reach suit; therefore, the rate at which suits are filed could be unchanged even if people are, in fact, increasingly likely to perceive themselves as having been injured and to seek compensation.

[7]Commissioner Fletcher Bell (Kansas), chair of the National Association of Insurance Commissioners' Legal Liability Insurance Task Force, NAIC News Release, Kansas City, MO, June 12, 1986.

the information needed to determine how any particular change to the tort law might affect the number and sizes of claims, the amounts paid to claimants, or any of the other concerns that lie at the heart of the reform debate. Similarly, few courts collect data in sufficient detail to identify particular types of civil cases. The caseload information they have generally lumps tort and other types of civil cases together and cannot be used to examine tort reform issues.[8]

Finally, the debate gives rise to widespread demands, particularly by various public authorities, for additional data. For the most part, these demands come from persons primarily concerned with their own state's tort or insurance system and focus on data for their state. Demands for data on tort and insurance affairs in one state are seldom coordinated with demands in other states. There is little recognition that comparing the outcomes of claims across states is critical to assessing the effects of tort reform. However, data for an individual state may prove to be of some value.

Moreover, the demands for data have not emerged from systematic research plans. Once collected, the data may prove to be useless to address the concerns of policymakers. Even worse, if the data collected omit elements essential to a critical analysis, the entire database will be unable to support the analyses policymakers require.

ASSESSING THE EFFECTS OF REFORMS

The tort reform debate is likely to continue. Proponents of reform express dissatisfaction with the extent of reform in many states, suggesting that the changes are inadequate. It is likely they will seek additional changes in subsequent legislative sessions. At the same time, opponents of reform are going to seek rollbacks of what they consider to be the more onerous changes in tort law.

Aside from the ongoing political debate on the need for tort reform, a dispassionate view of the system suggests another critical issue: In our ignorance of how these reforms will affect the system, we have almost certainly made some mistakes. Even when the reforms were adopted with general agreement, other parts of the system may be affected with undesirable consequences; and where the effects of reform were anticipated, their magnitude may be either greater or less than intended. The debate over how to fine-tune the system could prove to be as heated as the debate over whether reform was needed in the first place.

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[8]See National Center for State Courts, *State Court Caseload Statistics: Annual Report 1984*, Williamsburg, VA, 1986, for a discussion of the data maintained by state court systems.

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Future debates over tort reform will lead to demands for evaluations of the past reforms. States contemplating tort law changes will want to learn from the experiences of others.

Public officials and private parties have made it clear that they expect results to follow reform. States that enacted reforms will be pressured to examine the results of those reforms. ("Have we gotten what we thought we were going to get when we went along with reform in the first place?")[9]

Further complicating the situation, the demands for evaluation and data are sometimes maneuvers among political adversaries rather than serious requests for policy-relevant information. This contributes to the problem of identifying the research that would illuminate the policy debate and the data needed to conduct that research.

Thus, the debate continues, with many demands for information but little regard for the data and research needed to provide it. At the same time, new or enhanced data systems are in demand, and some are being put into place without much regard for the kinds of research they might support or the ways in which that research is linked to policy concerns. Conflicting demands have led to a system of data collection and research requirements that can fairly be described as chaotic.

More fundamentally, there is no coherent framework for evaluation. To our knowledge, no one has tried to make clear what we need to know: how information on one subject relates to information on another, what kinds of approaches are appropriate for trying to get which kinds of information, and so forth.

CLAIMANTS AND DEFENDANTS

We use the word "claimant" to refer to the person, organization, or institution pursuing a claim whether or not they have filed suit. Similarly, we use the word "defendant" in reference to the person, organization, or institution against whom a claim is brought, again without regard to the filing of a lawsuit. In general, we do not distinguish between the defendant and, if there is one, the insurer. In discussing the effects of reform on settlement negotiations, for example, we would refer to the "defendant's offer" rather than to the "offer made by the defendant or insurer."

[9]See, for example, William D. Hager "The Commissioner Comments," in *Iowa Insurance Quarterly*, Vol. II, Fall 1986.

OVERVIEW OF THIS REPORT

Section II begins with an overview of the connections between tort reform and the societal outcomes of policy interest. The overview suggests four basic kinds of policy questions in assessing the effects of tort reform. Subsequent sections focus on each of these questions in turn, discussing the kinds of research needed to illuminate the question, the strategies that might be used to do the work, and the kinds of data needed to conduct the research. Section VII presents our suggestions for what can be done now.

Analyses of the effects of tort reforms ultimately involve comparisons of states that have enacted the reforms of interest to states that have not. The Appendix lists the reforms that were enacted in each state in 1986.

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II. WHAT DO WE NEED TO KNOW?

Much of the reform debate focuses on the relationship between the tort system and the costs and availability of insurance. Most demands for tort reform evaluations and the data needed to conduct them concentrate on information presumed relevant to the connection, if any, between the tort and insurance systems. But analyses concerned exclusively with this relationship would be grossly inadequate and could be misleading. This section discusses the information policymakers need to assess the effects of reforms.

AN OVERVIEW OF THE TORT SYSTEM

The objectives of the tort system are numerous and conflicting, and not all are explicit. The balance among them is subject to continual change as social perceptions and preferences change. Nevertheless, the objectives can be defined in terms of the system's effects on three major areas of social concern:

- The economic and social well-being of the society at large.
- The injuries and grievances suffered by individuals and groups within the society.
- The prompt, efficient, and just resolution of disputes.

The tort system can affect these areas indirectly through legal rules. The rules influence the behavior of people and institutions and, to the extent that they modify behavior, influence our economic and social well-being, the injuries we suffer, and the outcomes of resulting disputes. Figure 1 depicts one view of the connections among legal rules and the social purposes served by the tort system.

Productive behavior refers to the everyday activities of businesses, organizations, and individuals producing the goods and services we all enjoy: for example, the activities of manufacturers producing goods, the actions of health professionals providing medical services, the behavior of drivers providing private or public transportation, and the activities of insurers providing insurance. But as Fig. 1 indicates, productive behavior sometimes results in injuries or grievances, which, if not informally resolved by the parties, become disputes.

Disputes are resolved through interactions among people—claimants and defendants, their legal representatives, judges, jurors, mediators,

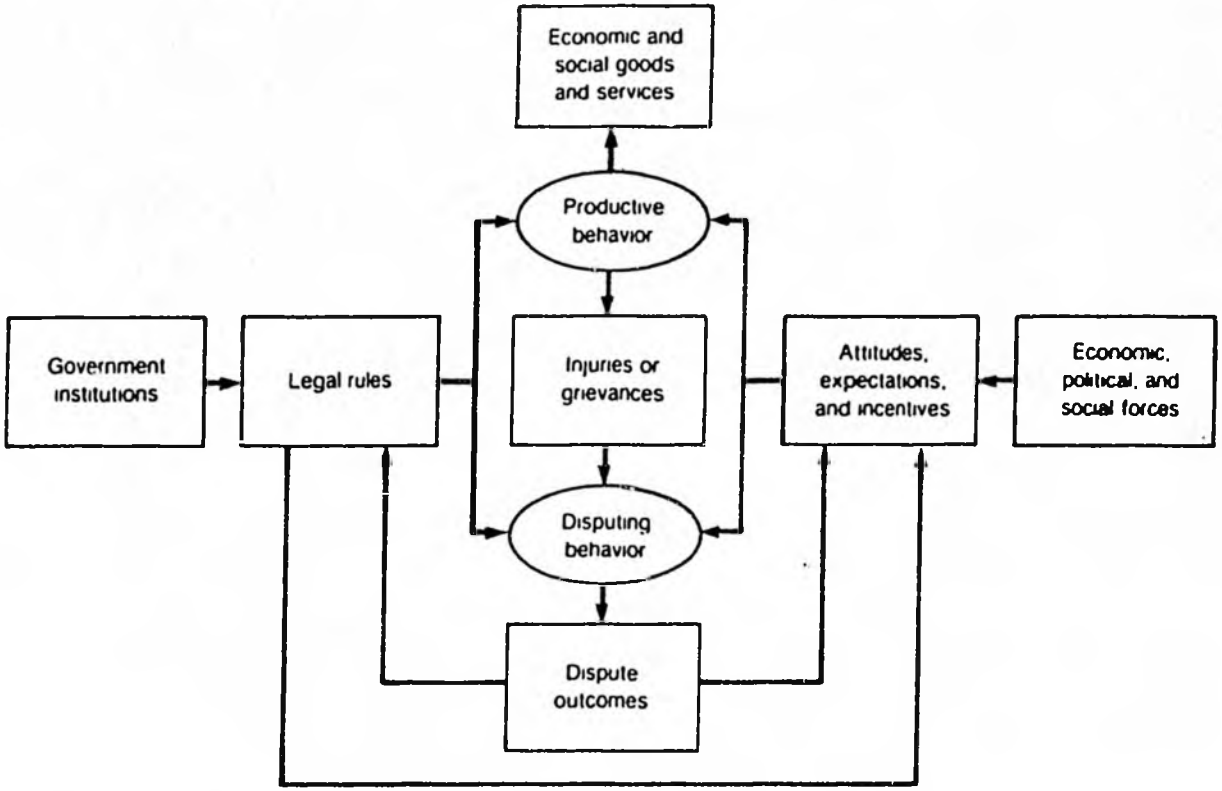

Fig. 1—A conceptual view of the tort system

arbitrators and so forth. The behavior of those involved in dispute resolution are affected by legal rules; but they are also affected by the parties' attitudes, expectations, and incentives, which, in turn, are shaped by numerous economic, political, and social forces.

Parties' disputing behaviors determine the outcomes of disputes. Dispute outcomes, in turn, influence attitudes, expectations, and incentives of individuals and institutions. Finally, productive behavior is affected by both legal rules and individuals' and institutions' attitudes, expectations, and incentives.

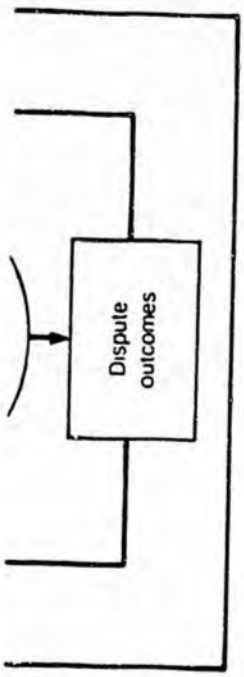

Fig. 1—A conceptual view of the tort system

Consider the relationship between tort reform and insurance costs. Assume some change in legal rules. For that change to have any effect, it must stimulate a change in someone's disputing behavior. If those involved in resolving disputes are unaware of the change in the law, or simply choose to disregard the change, dispute outcomes will remain the same. Unless there is some change in dispute outcomes, the losses insurers expect to incur are unaffected and insurers have no incentive to modify underwriting practices or premiums.

Suppose, on the other hand, that the change in the law induces some change in the disputing behavior of those resolving claims. A cap on awards for pain and suffering, for example, might lead defendants confronted with substantial claims to offer less in settlement than they would if the potential trial award were unlimited. Similarly, plaintiff attorneys might scale down their demands in cases where potential verdicts are constrained by the cap. The changes in disputing behavior may, in turn, result in different dispute outcomes. Large claims, for example, might settle for less when awards for pain and suffering are capped than if there been no cap. Underwriters and others forecasting the outcomes of future disputes may observe that some types of disputes are now being resolved at lower cost than used to be the case and revise their expectations of future costs accordingly. To the extent that premiums reflect expected future costs, they will then decrease.

Thus, dispute outcomes are the signals sent by the system to those engaged in productive activities (e.g., insurers). To bring about changes in those activities (e.g., lower insurance premiums), dispute outcomes must be changed. But, outcomes will change only when dispute resolution behavior is modified.

BASIC POLICY QUESTIONS

The view of the system offered above suggests four basic policy questions needed to assess the effects of reforms.

How Soon Can We Expect to See the Effects of Reforms?

Reforms will not affect dispute outcomes until dispute resolution behavior changes. Behavioral changes will not occur overnight; some reforms may never affect anyone's behavior. Time must pass before a new law takes full or even measurable effect because it takes time for participants in the disputing process to adjust their behavior.

The implementation of laws has received surprisingly little study. Therefore, we need to study the ways laws are implemented, the amount of time necessary for behavioral changes, if any, to occur, and the ways disputes are resolved during these transition periods as behavior responds to changes in the law.

Have Reforms Affected the Outcomes of Disputes?

The effects of reform on the costs of the system are clearly a major policy concern. But a number of other outcomes are also worthy of study. Filing patterns can be affected by changes in the law: Reform can affect litigants' perceptions of the rate of return to litigation, and thus, the incentive to litigate. Reform can also affect whether litigants perceive the law in a jurisdiction as sympathetic to their position and thus, their interest in pursuing the dispute there rather than some other forum.

Reforms that affect either the costs of litigation or litigants' perceptions of the rate of return can affect disposition patterns. More or fewer cases might be settled rather than pursued to trial; cases might be encouraged to settle earlier or later.

Reforms can directly affect litigation costs. Additionally, changes in either disposition patterns or in filing patterns or both are likely to affect the public and private costs of litigation.

We need analyses of the effects of reform on costs, including the amounts paid injured parties in compensation and the transactions costs incurred. To place those results in their proper context, we need analyses of the effects of reforms on filing and disposition patterns.

Who Won? Who Lost? How Much?

If reform affects the outcomes of any dispute, someone must pay, and someone else be paid more or less than would have been paid without reform. The winners in reform are those who pay less, or are paid more; the losers are those who pay more, or are paid less.

Regardless of the concerns that motivated any particular reform, effects on the equity of the system cannot be neglected. Who won? Who lost? How much? Who paid the price of reform?

Did Reform Affect Economic Outcomes or Injuries?

Finally, while the debate has focused on the costs of the system, the indemnification of injured parties is only one of the tort system's purposes. The system also shapes our basic obligations to each other and influences the structure and policies of our social and economic institutions. Modifications to the tort system, whether or not they have cost or equity effects, may affect producers' and service providers' decisions regarding the kinds, characteristics, and prices of the goods and services they make available to society. Changes in these decisions can result in changes in the constellation of goods and services consumed by society and, consequently, in society's well-being.

At the same time, changes in the kinds and characteristics of available goods and services can generate changes in the frequency and severity of the injuries incurred by the use of goods or services.

More generally, tort reforms can affect pressures on manufacturers and service providers to keep goods and services associated with liability claims off the market or to make them safer. Whether society gains or loses when products or services are withdrawn from markets or are modified depends on value judgments regarding the usefulness of the product or service, the costs of modification, the costs of injuries, and related issues. Whatever those judgments might be, policymakers need to assess the effects of reforms on the deterrence function of the system.

III. HOW SOON CAN WE EXPECT TO SEE THE EFFECTS OF REFORM?

IMPLEMENTATION PROBLEMS

Validity and Interpretation

Changes in the law are rarely implemented immediately, and, in fact, may never be fully implemented. Whether, and to what extent, a law of uncertain validity affects the outcomes of disputes is an open question. It is possible that a reform will not be fully effective so long as its status is uncertain.

California's medical malpractice tort reform package, enacted in 1975, is an example of implementation delay due to sequential constitutional challenges to each of its provisions. It took more than a decade of litigation to finally determine the legitimacy of the law. The degree to which the outcomes of medical malpractice cases resolved during the transitional period were affected by the reform package is unknown. If the law did not become fully effective until the mid-1980s, analyses of its effects based on earlier data may be misleading.

The implementation of a reform can also be delayed by questions of interpretation and application. Consider, for example, a cap on damages for pain and suffering. The wording of the statute may not be clear as to whether the cap applies to the award assessed against each defendant in a multiple-defendant case or to the aggregate award provided to the plaintiff. It may not be clear whether the cap applies to cases in the system at the time the law was passed or only to cases filed after its effective date. Independent of the intentions of those who framed the law, there may be disputes as to the legitimacy of those intentions.

Operational Procedures

Even when the meaning of a reform is clear, its effect remains problematic until it is put into operation. A law becomes more than words on paper when it causes someone to do something. It must specify who must do what, what measures are to be used to discover whether they have done it, and what should be done if they haven't.

Consider, again, the example of a cap on awards. Assuming constitutional and interpretative issues have been resolved, the cap must still

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be enforced. One possibility is to instruct the jury not to award more than the specified amount for pain and suffering. Appropriate jury instructions, possibly requiring itemization of the components of the award, must be developed.

What if the judge believes that the jury has disregarded the cap, returning an award that includes an excessive amount for pain and suffering? Rules are needed to establish the judge's responsibility and the factors he must consider.

Alternatively, enforcement of the cap might be left to the judge, leaving the jury free to return any award it deems appropriate. Here, too, rules establishing the judge's responsibility and authority in enforcing the cap are needed.

California's medical malpractice reform package illustrates the problem of operational procedures. The package includes a limitation on contingent fees in the form of a fee schedule. In California, however, contingent fees are not reported. There is no reason to suppose that plaintiff attorneys are charging fees other than those specified by the reform,[1] but there is no way to systematically examine how that provision of the law operates nor is there a way to systematically enforce the law.

Recognizing the Effects of the Law

The vast majority of civil cases are resolved in settlement negotiations. Because parties are free to settle a dispute on any mutually acceptable terms, settlement negotiations are affected by changes in the law that alter parties' bargaining positions and strategies. These strategies, in turn, reflect expectations of the likely outcome of the claim if pursued to verdict and the costs of litigation.

But expectations of verdicts and litigation costs may not change the instant a reform is enacted. Attorneys, claims adjusters, and others involved in the negotiating process may require time to learn what difference a change will make. Will the first verdict returned under the new legal regime change expectations? Or will it take two verdicts, or ten verdicts, or ten years of verdicts before the settlement negotiation process is changed? The effects of reform will be realized only after people become aware of the change in bargaining strength brought about by the change in the law.

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[1]The California State Bar Association is investigating an allegation that an attorney collected an excessive fee in a medical malpractice suit. See John Kendall, "Trial Lawyer Chief's Fee Dispute Will Go to Bar," *Los Angeles Times*, October 7, 1987, p. 21.

RESEARCH REQUIREMENTS

To learn more about the nature and effect of implementation problems, three kinds of analyses are needed to focus on the timing of reform activities, the behavior of participants in disputes pending complete implementation of a reform, and the differential effects of alternative implementation strategies.

The Timing of Reform Activities

Conducting studies before fundamental questions are resolved may misconstrue the effects the law will have once it is fully in place. Policymakers and researchers need to know the timing of activities that influence the implementation process. When were constitutional challenges resolved? When were questions regarding the interpretation of key terms and phrases finally answered? More generally, when did the law become certain? The answers to these questions govern both the timing of future research and the interpretation of research results.

Behavior Pending Implementation

Policymakers and researchers need to know how parties involved in dispute resolution—judges, jurors, attorneys, claims adjusters, and so forth—behave during the implementation process when the status of a reform is uncertain. Do they conduct themselves as though the reform had not been enacted, as though its validity or interpretation was unquestioned, or somewhere in between? How long does it take to learn the practical consequences of a new law? How do people behave when the status of a new law is certain but its practical consequences are still unknown because cases to which it applies have not yet gone to trial? The answers to these questions determine how much we can rely on analyses of reforms conducted before reforms are fully implemented; they also provide guidance on interpreting analysis results to anticipate the likely effects of the reforms once fully implemented.

Alternative Implementation Strategies

Depending on the nature of the reform, there may be several ways of going about implementation, each with its own implications for the speed and magnitude of the reform's effects. Policymakers need to know the differential effects of alternative implementation strategies.

For example, a reform requiring compensation from collateral sources to be offset could be implemented by instructing the jury to adjust for such sources in arriving at its award. Alternatively, the jury

might award whatever it deems appropriate, and the judge would deduct collateral source compensation. The method used may affect both the speed of implementation and the effects of the reform itself. Developing jury instructions may take more or less time than developing rules for judges. Having juries account for collateral source payments may result in awards that differ from adjustments made by judges.

STRATEGIES FOR STUDYING IMPLEMENTATION

General Approach

Case studies of the behavior of people involved in dispute resolution are an appropriate strategy for studying tort reform implementation. We need to examine their actions when the law is uncertain, and after the law is certain but its effects are still unknown. In either case, research needs to probe the expectations and perceptions of the parties and their reasons for acting as they did.

We can initiate studies now to examine how people today are negotiating in the new environments created by the reforms enacted last year. Consider for example, California's Proposition 51, modifying the doctrine of joint and several liability. Researchers can investigate the settlement policies of presumably affected institutions, such as government agencies, to identify how they are responding to the change in the law. By studying other states that have similarly modified their tort systems, researchers can identify the common themes that run through different implementation experiences.

Retrospective studies of implementation are also possible. During the mid-1970s, a number of states modified their laws relevant to medical malpractice. Researchers can examine the experiences of those involved in medical malpractice disputes to develop an understanding of how people behaved during the transition period.

An Example: Implementing California's Judicial Arbitration Program

In 1978, the California State Legislature enacted mandatory judicial arbitration to alleviate increasing civil caseloads, stabilize court costs, and reduce time to disposition and other burdens on litigants. An analysis of implementation by the local courts demonstrates both the

methods of implementation analysis and the kinds of results that can be obtained.[2]

The analysis was primarily based on interviews with court officials and practicing attorneys in courts representing different-sized jurisdictions and different sections of the state. In each court, the researchers interviewed the judge responsible for directing the arbitration program, the court executive officer or the deputy or both, the arbitration administrator, and attorneys who were familiar with the program.

The study found that local courts made very different implementation decisions in adopting a series of rules or policies to establish their program's operating procedures. In doing so, some of the courts consciously deviated from statutory provisions and Judicial Council rules. And where local discretion was permitted, local courts opted for different approaches. For example, although Judicial Council rules set forth a detailed timetable for the sequence of steps in the arbitration process, some courts deviated from those rules: Some adopted special practices to accelerate the process; others deliberately pursued a "no-monitoring" policy once an arbitrator was assigned to a case.

It may be that each court's implementation decisions resulted in the arbitration program best suited to its needs, given the resources available to it and the demands on it. Nonetheless, these decisions profoundly affected the degree to which each court's program achieved the stated goals. Failing to take account of local courts' implementation decisions would result in very misleading conclusions. For example, some courts required that all litigants whose cases were assigned to arbitration appear at a settlement conference prior to arbitration. In these courts, the arbitration program actually increased pressures on court resources, not because arbitration programs necessarily burden courts, but rather because these courts chose to expend judicial resources to ease burdens on the arbitration program.[3]

Data Requirements

The most basic data requirement is information on the timing of implementation activities: when reforms were enacted, what their

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[2]Deborah R. Hensler, Albert J. Lipson, and Elizabeth S. Rolph, *Judicial Arbitration in California: The First Year*, The RAND Corporation, R-2733-ICJ, 1981.

[3]These courts offer an intriguing example of the ways in which means and ends can become inverted in the implementation process: They were expending approximately 30 minutes of judicial time per case to avoid overburdening a program that was meant to relieve pressure on the judicial system.

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To study the implementation process, we need data on the experiences, activities, and perceptions of attorneys and claims managers. Researchers need to interview and observe people involved in dispute resolution to understand what they are doing and why; their objectives and goals; and how changes in the law have affected their objectives, perceptions, and disputing strategies.

Consider, again, the study of California's judicial arbitration program. The researchers interviewed executive, legislative, and judicial personnel involved in the design of the program. They interviewed local court officials who decided how the program would be implemented at the local level or were responsible for its subsequent operation, or both. They interviewed attorneys who served as arbitrators and attorneys whose cases had gone before arbitrators. The interviews included representatives of all those involved, except litigants, in the resolution of disputes applicable to the program.

In addition to interviewing representatives of different perspectives, the researchers purposely selected study sites that span the range of the jurisdictions involved in the program. This allowed them to examine whether the formal rules and statutory provisions were being implemented in a uniform manner and, if not, how differences in implementation decisions were linked to differences among the sites. They could thus identify the factors affecting implementation and the features of the law that, if changed, might induce the originally desired behavior.

Studies of the implementation of reforms can be conducted while the implementation process is under way. In fact, implementation studies would probably yield more accurate results if undertaken while those involved are still engaged in the process. Studies deferred to some future date will suffer the problems of recall and rationalization that often plague retrospective studies.

Initiating studies now of how those involved in dispute resolution are behaving and how their behavior changes in response to reform could inform the current policy debate. Policymakers are pressed to make judgments on the need for further reforms, or on the need to undo past reforms, on the basis of what seem to be the effects of reforms, whether or not the reforms have had sufficient time to influence behavior. Implementation studies can suggest how much we can base policy on what is happening in the tort system now. For example, implementation studies may find that important players in the system

[4]The Appendix is a step toward the creation of this database.

have not yet adapted to the reforms, and we cannot base policy on the assumption that their current behavior will continue.

Implementation studies will also guide the timing of studies of the effects of reforms. We need to know the degree to which reforms have been implemented before we can decide when to study their effects.

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IV. HAVE REFORMS AFFECTED THE OUTCOMES OF DISPUTES?

The policy debate centers on the effects of reform on "costs," meaning defendants' and insurers' aggregate outlays—the sum of indemnity payments to injured parties and legal defense costs. But there are several other types of dispute outcomes that could be affected by reform. While these are less directly related to insurance costs—they are nonetheless important and need to be considered.

DISPUTE OUTCOMES

Aggregate Outlays

The basic question is: How have defendants' and insurers' aggregate outlays been affected by reform? In considering how research can help answer this question, it is important to recognize that aggregate outlays include several different components. Outlays comprise indemnity plus defense costs. Indemnity, in turn, is the product of the frequency of claims, the percentage of claims closed with payment, and the average size of paid claims.

Reforms can impinge on different components of outlays in different ways, affecting one but not another, or affecting two or more components in the same or in different directions. To fully appreciate effects of reforms, we need to identify effects on outlays and on components of outlays. We want to know whether changes in aggregate outlays came about because of changes in the amount of indemnity paid or because of changes in defense costs or both. To the extent that indemnity was affected by reform, we also want to know whether those effects resulted from changes in claim frequency, or in the fraction of claims closed with payment, or in the size of payments, or in a combination of the three.

Patricia Danzon's study of the effects of medical malpractice reforms on the frequency and magnitude of claims illustrates the importance of analyzing separately the components of outlays.[1] She found that the introduction of arbitration of medical malpractice cases increased outlays. Does this imply that arbitration resulted in larger

[1]Patricia M. Danzon, *New Evidence on the Frequency and Severity of Medical Malpractice Claims*, The RAND Corporation, R-3410-ICJ, 1986.

indemnity payments? No: She also found that arbitration contributed to increased claim frequency. (Presumably arbitration offered a less expensive means for resolving disputes, encouraging parties to make claims otherwise too small to warrant pursuing when only the more expensive, traditional means were available.) Because the frequency of smaller claims grew, the size of the average paid claim declined. But because there were more claims overall, total outlays increased.

Disposition Patterns

Changes in the law can affect the point at which a dispute is resolved (before suit was filed, filing, just before trial, etc.). Litigants' decisions about whether to make an offer, how much, or whether to accept an offer made by the other side partially depend on their expectations of the financial consequences of pursuing the matter. Legal changes that affect either the expected recovery or the costs of litigation can influence negotiating strategies on both sides. And if either side's negotiating strategy changes, the dispute may settle earlier (or later) in the process.

Reforms that reduce either the odds that the plaintiff will prevail at trial or the likely size of the award will reduce both sides' expectations of the expected recovery. A settlement offer that would have appeared inadequate to the claimant prior to the reform may be acceptable after the reform. On the other hand, the defendant might be more willing to risk trial after the reform and, consequently, be less forthcoming in settlement negotiations. The net effect on disposition patterns will depend on how much claimants' expectations change relative to the changes in defendants' expectations.[2]

Reforms that affect the uncertainty of dispute outcomes can also affect disposition patterns. Reforms that reduce the uncertainty of dispute outcomes will encourage settlement and reduce the need for protracted litigation. Caps on awards, for example, can reduce the difference between plaintiff's and defendant's expectations as to the value of a case and lead to more rapid resolution. Conversely, reforms

[2]Suppose a reform generally reduces claimants' expectations more than defendants' expectations. While defendants may now make lower settlement offers (because they are a little *more optimistic* about their chances at trial should the offer be declined), claimants will be relatively more willing to accept defendants' offers (because they are, comparatively, a lot *more pessimistic* about their trial prospects). Both the fraction of claims resolved before a suit was filed and the fraction of suits resolved before trial will likely increase. Conversely, if defendants generally believe the reform had a comparatively large effect on trial prospects while claimants see the effect as being much smaller, defendants may substantially reduce their settlement offers while claimants' settlement demands decline only a little. If so, fewer claims will be resolved before suit and fewer lawsuits settled before trial than without reform.

that increase the uncertainty of dispute outcomes can widen the gap between claimants' and defendants' expectations, reducing the prospects for settlement and, where settlement is still feasible, increasing the amount of time and effort to reach settlement.

Changes in disposition patterns are important in themselves; the time to disposition is obviously of interest to the parties. Disposition patterns are also a key factor in interpreting changes in the frequency of lawsuits and signal the effects of reforms on parties' negotiating strategies. Disposition patterns can be a significant factor in the costs of litigation: Reforms that lead to disposition at an earlier stage in the process can reduce the amounts of public and private resources expended to resolve the dispute.

Filing Patterns

In many cases, claimants have some flexibility as to when and where a suit is filed. Attorneys might rush to the courthouse prior to the effective date of a reform they consider unfavorable to their position, or they might delay filing until after the effective date of one they deem favorable to their position.[3]

Similarly, tort reforms can affect the desirability of pursuing a claim in one jurisdiction compared to another (e.g., in federal rather than state court or in one state rather than another).

These choices are of concern on their own merits: Does it serve society's interest to shift the location of disputes from this jurisdiction to that? Does the creation of incentives to file lawsuits early or late generate unnecessary litigation?

Moreover, these choices affect the interpretation of information on the effects of reform. A surge in litigation following on the heels of reform could result from significantly enhanced plaintiffs' expectations of recovery, inducing claims by parties who, before reform, found the rate of return to litigation so low that they did not bother pursuing their claim. Alternatively, the surge could result from a rush to the courthouse as claimants who deemed the reform prejudicial to their position sought to pursue their claim before the reform took effect. These are very different interpretations of the same observation; to sort out the real effects, policymakers need information on how reform affected filing patterns. Similarly, policymakers need to distinguish a

[3]An extreme example of the reform effects on the timing of litigation is the commentator who argues that Florida plaintiffs should delay filing suit for three years in the hope that a reform law favorable to the defense with a three-year sunset provision would not affect their case. George L. Priest, "Tort Reform Legislation . . . Is Only Smart," *The Wall Street Journal*, February 11, 1987, p. 26.

change in a jurisdiction's litigation rate due to a change in the law from a *shift* in litigation from one jurisdiction to another.

Transactions Costs

The transactions costs of litigation are the sum of plaintiffs' costs, defense costs, and public costs. They are the "overhead" costs of the system in the sense that the services purchased are not desired for themselves. Rather, they are means to ends: the deterrence of injurious behavior, the compensation of injured parties, and the resolution of disputes. To the extent that reform increases (decreases) transactions costs, society must expend more (fewer) resources to achieve those ends.

Reform can affect the transactions costs of litigation in a number of ways. On the plaintiffs' side, any reform that reduces the plaintiff's recovery will reduce the amount (but not the share) paid the plaintiff attorney on a contingent fee basis. Limits on contingent fees can reduce both the amount of plaintiff's costs and the share of recovery paid in legal fees. To the extent that defendants are represented on an hourly fee basis, any reform that reduces (increases) the amount of litigation activity will reduce (increase) defendants' costs. Because the public costs of litigation are related to the stage at which a case is disposed, any reform that affects disposition patterns can affect public costs.

STRATEGIES FOR STUDYING THE OUTCOMES OF DISPUTES

General Approach

In studying the effects of reforms on dispute outcomes, policymakers can concentrate on aggregate outcomes and need not be concerned with individual claims. The question at hand is not how John Doe's claim was affected by reform, but rather, how reform influenced all claims.

Because all the claims resolved in a state at about the same time were resolved in the same legal environment, differences among their outcomes cannot cast light on how reform affected the outcomes of claims. This suggests a research approach based on comparing aggregate outcomes across states to see if a dispute outcome—say, aggregate outlays—systematically differs from one legal environment to another. Alternatively, we could compare aggregate outcomes in a state in years

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before and after reform. An even more powerful approach would be to combine both approaches in an analysis across states over time.[4]

Because outcomes can be affected by a variety of factors other than the legal environment, other factors need to be taken into account. Suppose, for example, that the population of State 1 tends to be more sympathetic toward the plaintiffs' perspective than the population of State 2. If these states had identical systems of tort law, we would expect the average size of paid claims (magnitude) in State 1 to exceed the average size of paid claims in State 2. If State 1 enacted a reform that tended to reduce magnitude, the average size of paid claims thereafter would be less than if the reform had not been introduced. But the magnitude of paid claims in State 1 might still exceed the magnitude in the State 2, despite this reform, if the effect of the population differences was greater than the effect of the reform. And even if the reform had an effect sufficient to outweigh the effect of the population differences, the effect of the reform would be greater than the observed difference in magnitude between the two states.

Multivariate statistical analyses are an effective method for controlling the effects of other factors in comparing the aggregate outcomes of claims across states, over time, or both. Figure 2 suggests the nature of the statistical analysis. Suppose the solid lines indicate the claim frequency in each of six hypothetical states over the 1974–1984 period. Neglect the dashed lines for the present. Assume the following:

- States A, B, C, and D are highly urbanized while states E and F are generally rural;
- States A, B, D, and E had adopted pro-plaintiff common law doctrines prior to 1974, while States C and F had not adopted these doctrines by 1984;
- States A and D adopted mandatory collateral source offset in 1975, effective as of 1976; and
- States B, C, E, and F made no changes to their tort rules over the 1974–1984 period.

The data presented in Fig. 2 show that claim frequency is generally higher in States A through D than in States E and F, suggesting that highly urbanized states have greater claim frequencies than do less urbanized states. The slopes of the lines for States B and E and, before enactment of collateral source offset in 1976, in States A and D are generally steeper than are the slopes of the lines for States C and F. This pattern suggests that the growth rate of claim frequency is

[4]Research on the effects of any particular type of reform is limited by the opportunities to observe that type of reform. The Appendix lists the reforms enacted in 1986.

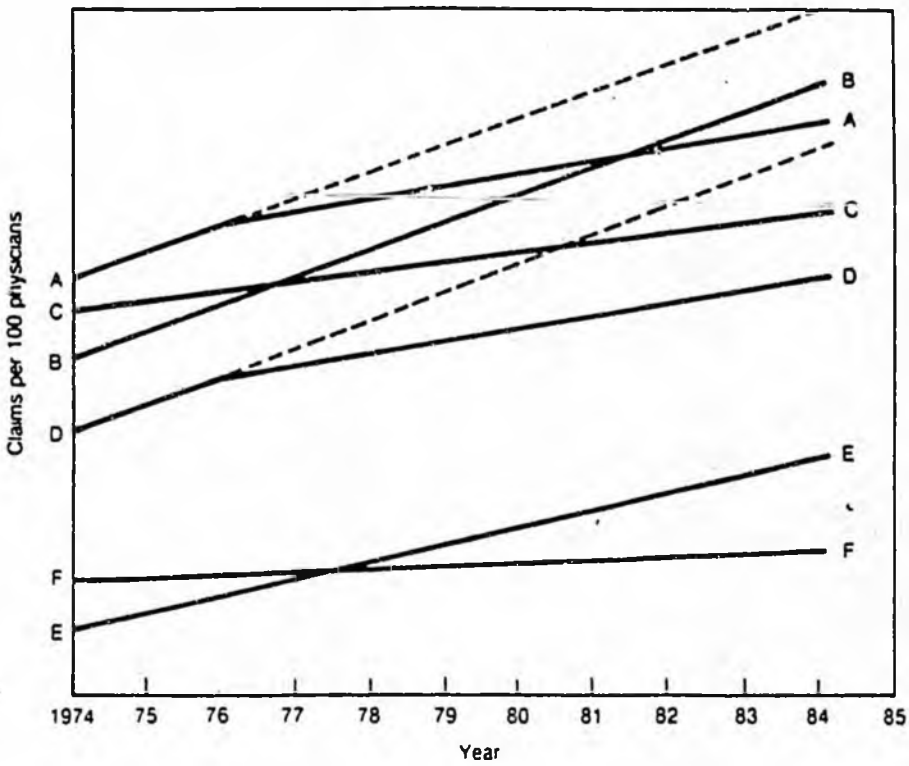
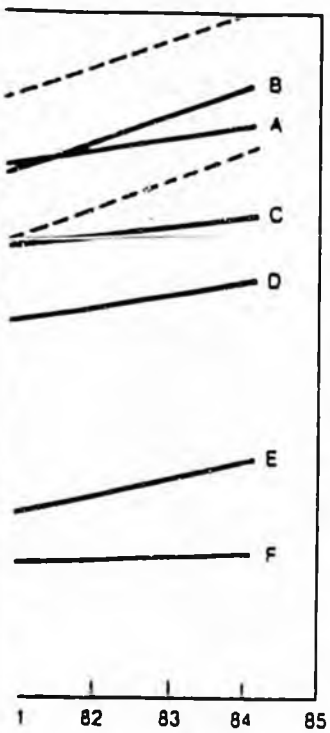


Fig. 2—Hypothetical comparisons of aggregate outcomes of claims

generally greater in states that had adopted pro-plaintiff common law doctrines. Finally, the slopes of the lines for States A and D are less steep after 1976 than before. The adoption of mandatory collateral source offset slowed the growth in claim frequency in the two states that enacted that reform.

Note that the lines for the states that did not enact reforms—States B, C, E, and F—are straight over the entire period. Because there are no "kinks" in those lines, we conclude that the growth rate of claim frequency was constant over the entire period in all four states. The dashed lines indicate what claim frequencies would have been in States A and D if each state's claim frequency had grown over the 1976–1984 period at the same rate as the 1974–1975 period. The vertical distance between the dashed line and the solid line for State A and for State D shows the effect of reform on claim frequency in each state.



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This stylized example neglects the complexities encountered in analyzing real data. Growth rates, for example, are rarely constant and so do not result in straight lines like those shown in Fig. 2. Year-to-year fluctuations in growth rates generate zig-zag lines over time that are far more difficult to interpret. The analyst, on the other hand, is not dependent on visual inspection of graphs but can employ powerful statistical methods to search out the patterns and relationships in the data.

An Example: Assessing the Effects of Reforms on the Frequency and Magnitude of Medical Malpractice Claims

Patricia Danzon used multivariate statistical methods to assess the effects of tort reforms on the frequency and average size of medical malpractice claims closed in 1970 and 1975–1978.[5] She subsequently updated her results using data on claim frequency and size for 1974–1984.[6] The units of observation were not individual claims, but individual states in each year. Each study attempted to explain claim frequency per 100 physicians and the average size of paid claims, by state and year.

The first study examined the effects of legal rules present in a state, such as the number of pro-plaintiff common law doctrines the state had adopted by 1970, and whether the state had adopted a cap on total awards or on pain and suffering awards. To control for other influential factors, the analysis controlled for aspects of each state's medical environment and demographic composition such as the percentage of the population over age 65, the percentage of physicians belonging to a state or local medical society, and the number of lawyers per 100,000 population. The second study employed basically the same kinds of variables.

Danzon was able to estimate the effects of caps on awards (a 19 percent reduction in the average size of paid claims according to the initial study, a 23 percent reduction according to the follow-up study). Similarly, she showed that statutes permitting or mandating the offset of collateral benefits reduced both the frequency of claims (by 14 percent) and the average size of paid claims (by 11–18 percent) relative to comparable states without collateral source offset. Among the other factors

[5]Patricia M. Danzon, *The Frequency and Severity of Medical Malpractice Claims*, The RAND Corporation, R-2870-ICJ/HCFA, 1982. Danzon uses the word "severity" in reference to the average size of paid claims.

[6]Patricia M. Danzon, *New Evidence on the Frequency and Severity of Medical Malpractice Claims*, The RAND Corporation, R-3410-ICJ, 1986.

affecting claims, Danzon found urbanization a highly significant factor that explains much of the observed difference among states in claim frequency and magnitude. Per capita income, the unemployment rate, and the number of attorneys per capita had no statistically significant effect after controlling for urbanization.

Data Requirements

The research approach suggested above requires information, by state and year, on the outcomes of disputes, the legal environments, and the other factors that might have affected outcomes. The outcomes of interest include the following: claim frequency; the percentage of claims closed with payment; the average size of paid claims; disposition patterns or the fraction of claims closed before suit, after suit but before trial, and after trial; filing patterns; plaintiffs' and defendants' costs of litigation; and public costs of litigation. Note that data on individual claims are not required to address these issues; statewide aggregate measures of dispute outcomes will suffice.

Construction of the legal variables poses few conceptual problems. However, the number of variables that can be included depends on the number of states that have adopted the laws of interest. If only one state enacts some reform, there is no way to distinguish that reform's effects from those of any other factor unique to that state. Even if several states enact the same type of reform, but opt for different variants of the reform (*e.g.*, a cap on awards for pain and suffering at $500,000 in one state, at $250,000 in another state), it may be impossible to estimate the differential effect of each variant. In such cases, it is necessary to define a legal variable for the type of reform and use the same variable for every state that adopted a reform of that type, regardless of differences among the variants. This approach essentially estimates the average effect for each type of change in the law.

The identification of the "other factors" that might influence dispute outcomes can be difficult. Theory, the experiences of practitioners, and the results of previous research are the major guides to identifying factors that need to be controlled to separate out the effects of legal variables. For example, Danzon observes that hospital admission rates for the elderly are roughly twice as high as those for persons under 65 and that a previous study had found a higher rate of negligent injury per admission for the elderly. Her theory suggests that claims will be more frequent when injuries are more frequent. This combination of theory, observation, and the results of research led her to control for the fraction of a state's population over 65. However, there is no simple formula or certain guide to the selection process and no list of all

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the "right" factors to include in the analysis; different analyses require that different factors be controlled. "Other" factors expected to influence one dispute outcome will not necessarily be the same as "other" factors expected to influence another dispute outcome.

The measurement of "other factors" can also present difficulties. For example, Danzon argues that the number of malpractice incidents in any period depends on the frequency, types, and quality of medical treatment among other factors, but these data are not readily available. Accordingly, she used "proxy" variables such as the number of non-federal physicians in patient care per 100,000 population and the percentage of physicians belonging to a state or local medical society.

The interpretation of the results for other factors can be problematic. For example, Danzon's first study found that urbanization had a significant effect on claim frequency. Why? We can speculate, but the fact is that we do not know.

To provide variance in the legal environment (which differs from state to state but not within states), the analyses must include states with and without reform. And because of the need to control for other factors, a number of states must be included. This, in turn, requires the collection of data for most, if not all, states. Data for a single state or even a small number of states is not sufficient to accurately assess the effects of reform. In addition, data for each state are needed for a number of years before and after reform. Studying the years before reform means researchers can control better for whatever trends existed beforehand.

Finally, to make meaningful statements about the effects of reform, policymakers must be able to apply specific research results to disputes in general. That means data must pertain to the universe of claims or to a representative sample of claims.

V. WHO WON? WHO LOST? HOW MUCH?

Regardless of the concerns that motivated any particular reform, effects on the equity of the system cannot be neglected. Who won? Who lost? How much? Who paid the price of reform?

THE EFFECTS OF REFORM ON INDIVIDUAL CLAIMS

Recovery

Any change in the outcomes of claims resulting from reform raises questions regarding the adequacy and equity of compensation. To address these questions policymakers need to know how patterns of recovery among various types of claimants and against various types of defendants are affected by reform. More specifically, policymakers need information on how changes in the law affect the probability of recovery, the amount successful claimants recover, and claimants' net recoveries, by type of claimant and type of defendant.

Consistency/Predictability

We have few value-free standards as to what anyone ought to be awarded for an injury, but we do have some basic standards of equity: Similarly situated people ought to be treated alike; dissimilarly situated people ought to be treated differently in ways consistent with the dissimilarity. Translated into the concerns of the tort system, similarly injured people ought to recover about the same amount and more seriously injured people ought to recover more than less seriously injured people.

Consistency, a fundamental equity issue, is intimately related to another issue of some concern in this area: predictability. The legal system is more consistent as the amount recovered is more closely related to the seriousness of a claimant's injuries; that is, when the variance of outcomes, given the characteristics of claims, is smaller. A reduction in the variance of recovery, other things equal, increases the predictability of outcomes. Insurers have argued that a growing lack of predictability is a major contributing factor to the availability and affordability problem. They maintain that they are unable to offer insurance when the likely outcomes of future claims are so unpredictable that they cannot "price" their product. Reforms that increase the

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Disposition Patterns, Filing Patterns, and Transactions Costs

The issues of the effects of reform on aggregate disposition patterns, filing patterns, and transactions costs also arise with respect to individual claims. For example, both claimants and defendants have an interest in the effects of reform on disposition patterns. Both care when the defendant must pay, and the claimant must be paid, whatever compensation is agreed to or awarded by the court. And the stage of disposition and, possibly, the time to disposition might affect the parties' legal costs. But there is no reason to believe that reform will affect all claims in exactly the same way; equity considerations thus make the question of which kinds of claims are affected in what ways an important policy concern.

STRATEGIES FOR STUDYING THE OUTCOMES OF INDIVIDUAL CLAIMS

General Approach

Statistical analyses of the relationship between legal rules and the outcomes of individual claims, controlling for the claims' characteristics and for other influential factors, are needed. The approach is similar to that taken to analyze reform effects on aggregate claims. Here, however, the focus is how reforms have affected the outcomes of particular kinds of claims: How did reform affect small claims? Or large claims? Or claims against some type of defendant? Or claims brought by some type of claimant? And so forth.

Here, too, differences among the outcomes of disputes resolved in a single state at about the same time cannot result from differences in legal environments and, so, cannot cast light on the issue of how reform affected the outcomes of claims. The analysis must, therefore, compare the outcomes of individual claims across states, over time, or preferably both.[1]

The analysis must take account of claims' characteristics: the severity of the claimant's injury, the medical costs and lost income, whether the claimant was disabled and, if so, how much and for how long. The

[1]The Appendix lists the reforms enacted in 1986, implying the states in which analyses of various types of reforms can be conducted.

characteristics of the parties to the dispute might also affect the claim's outcomes. For example, juries might return larger awards to plaintiffs when the defendant is an institution than when the defendant is an individual. Institutional defendants might offer more in their settlement than individual defendants, other things equal, because the potential consequences of failing to settle are relatively greater for them. The net effect of these patterns is consistently greater recovery by claimants against institutional defendants compared to individual defendants.

Again, characteristics of the social and economic environment within which a claim is pursued can affect its outcomes. These factors must be considered.

An Example: Assessing the Effects of Parties' and Claims' Characteristics on Jury Verdicts

Audrey Chin and Mark Peterson examined how parties' and claims' characteristics affect jury verdicts, using data for all civil jury trials reaching verdict in cases for money damages in Cook County (Chicago), Illinois, between 1960 and 1979.[2] Because the data pertain to a single legal environment, they do not address the effects of the law on the outcomes of trials.

Chin and Peterson examine four sets of factors affecting jury awards: (1) case type (e.g., automobile accident, malpractice, intentional tort); (2) the type of plaintiff—individual, corporation, government and, if the plaintiff was an individual, his or her characteristics, (3) the defendant's type and characteristics; and (4) the type, number, and severity of the plaintiff's injuries and losses.

Parties' characteristics explained some of the differences in awards. For example, after accounting for the type of lawsuit and the plaintiffs' injuries and losses, black plaintiffs received, on average, 25 percent less than whites with the same injury, and corporate defendants paid more than individual defendants, with the premium increasing from 23 percent in the 1960s to 40 percent in the 1970s.

If similar data were available for several other jurisdictions that had enacted reforms, the analysis could be replicated for each jurisdiction and the results compared to determine whether the results were systematically related to the presence or absence of particular laws. We could see, for example, if the premium paid by institutional defendants is affected by the presence of caps on awards.

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[2]Audrey Chin and Mark A. Peterson, *Deep Pockets, Empty Pockets: Who Wins in Cook County Jury Trials*, The RAND Corporation, R-3249-ICJ, 1985.

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An Example: Assessing the Effects of Reforms on the Outcomes of Medical Malpractice Claims

Patricia Danzon and Lee Lillard used a cross-sectional, time-series approach to estimate the effects of reforms on the outcomes of individual medical malpractice claims.[3] Their objective was to estimate the total effect of reform; they did not attempt to understand who won or lost as a result of reform. Nonetheless, their study used data on individual claims and, thus, provides an example of the approach suggested above.

Danzon and Lillard drew on individual claims' data from two surveys of insurance companies' claim files closed in 1974 and 1976. Both surveys were broadly representative of claims against physicians and hospitals. They also used data from other sources on the legal environment of a state (e.g., whether the state had limited contingent fees or modified the collateral source rule) to examine two claim outcomes: the stage of disposition and the amount of payment, if any. The researchers introduced variables to control for the severity of the injury, the claimant's characteristics and economic loss, the defendants' characteristics, and the ease of proving negligence.

Danzon and Lillard used multivariate statistical techniques to estimate the effects of tort reforms. For example, they found that imposing limits on contingent fees reduced settlement amounts (by 9 percent), the proportion of cases dropped (by 5 percent), and the share of cases going to trial (from 6.1 percent to 4.6 percent).

If Danzon and Lillard had performed a separate analysis of, say, severe injury claims, the results would have shown how those claimants were affected by reform. Similarly, they could have performed separate studies of the effects of reform on claimants with a specific income or separate analyses of claims brought against physicians. The data and general approach used in their study could have been used to study reform's winners and losers.

Data Requirements

To analyze the effects of reform on the outcomes of individual claims, researchers will need detailed data on individual claims of the sort generally obtained through "closed-claim" studies. The data must identify the outcomes and other characteristics of individual claims.

[3]Patricia M. Danzon and Lee A. Lillard, *The Resolution of Medical Malpractice Claims: Modeling the Bargaining Process*, The RAND Corporation, R-2792-ICJ, 1982, and Patricia M. Danzon and Lee A. Lillard, *The Resolution of Medical Malpractice Claims: Research Results and Policy Implications*, The RAND Corporation, R-2793-ICJ, 1982.

Researchers will also require indicators of the legal rules that applied to each claim. While the data for this type of study are reasonably straightforward, they tend to be very expensive and difficult to obtain.

Studies of the effects of reform on the outcomes of individual claims can be conducted with data on particular types of claims. The data need not describe the universe of claims or even a representative sample of all claims. For example, if policymakers are concerned with the impact of reform on severely injured claimants, research requires samples of severe-injury claims in states with and without reforms, for years before and after reforms. These data would suffice for an analysis that indicates whether reform has resulted in severely injured people receiving X percent more or Y percent less, recovering Z percent more frequently or Q percent less frequently, and so on. If we do not know how the number of severe-injury claims compares to the number of less-severe injury claims, we cannot then inflate the findings to a statewide aggregate; but that is not the primary concern of this type of study.

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VI. DID REFORM AFFECT ECONOMIC BEHAVIOR?

Producers of goods and providers of services run the risk that someone will claim to have been injured by their goods or services. The costs of defending against such claims and compensating claimants, either directly (self-insurance) or through insurance, presumably enter into decisions as to the types and prices of products and services that will be offered. Reforms that affect the frequency and severity of claims can change these decisions and, consequently, the kinds and prices of the goods and services available to society. These changes, in turn, could result in changes in the frequency and severity of injuries.

ECONOMIC OUTCOMES

The Availability of Goods and Services

Producers and service providers must decide what products or services they will offer, on what terms, and in which markets. They may choose not to enter, or to withdraw from, markets in which the potential liability costs added to the other costs of doing business exceed the perceived benefits of entering, or remaining in, the market. Asbestos is an example of a product once used widely but now withdrawn because of mounting liability costs. Potential liability costs are claimed to threaten the availability of both existing and promising new vaccines,[1] severely constrain birth-control options in the United States,[2] have virtually ended the production of light piston-engined aircraft,[3] and have caused manufacturers of child car safety seats to refuse to place new products on the market.[4]

Insurance is the most apparent example of a service withdrawn from some of its markets in response to concerns over liability-related costs.

Reforms that reduce potential liability costs, reduce pressures on producers of "risky" goods and services to cease production. Reform

[1]Edmund W. Kitch, "Vaccines and Product Liability: A Case of Contagious Litigation," *Regulation*, May/June 1985, pp. 11-18.

[2]Michele Galen, "Birth-Control Options Limited by Litigation," *The National Law Journal*, October 20, 1986.

[3]Jack Cox, "The Christen Hurky," *Sport Aviation*, August 16, 1986.

[4]Malcolm Baldrige, "Product Liability Woes Hurting U.S. Industries," *Journal of Commerce*, April 28, 1987.

may result in the continued availability of a product or service that otherwise would have been withdrawn from the market.

Whether or not it is in the social interest to "save" a product from being withdrawn depends on the value of the product relative to its risks. It has been argued that the value of vaccines to society so greatly exceeds their risks that the current system for compensating for vaccine-related injury needs to be changed to reduce deterrent effects.[5] Similarly, much of the current tort reform debate is concerned for the social consequences of insurance withdrawals. On the other hand, despite the many disputes over who was responsible for what in the asbestos arena, there seems to be general agreement that our society is better off for asbestos being withdrawn from some of its past applications.

Whether or not society is better off when a product or service is withdrawn from a market depends on a combination of facts and value judgments. The factual questions, in principle amenable to research, address the product's uses and dangers: Who uses the product for what purposes? What substitutes are available? What would those who use the product do if it were not available? What injuries are likely to occur from its use or the use of substitutes if the product is not available?

The Costs and Characteristics of Goods and Services

Producers and service providers may respond to increases in their liability (or liability insurance) costs by increasing the prices of their products and services, passing a part of the increase on to their customers. Some will continue to purchase the product while others find the product no longer attractive. Consumers thus bear part of the costs of the liability system. Reforms that reduce, or limit increases in, producers' and service providers' liability costs can reduce the costs borne by consumers.

The price of liability insurance is a prominent example of a service whose price reflects the costs of the liability system. In fact, the primary argument put forth in support of tort reform is that reducing the costs of the tort system will result in lower insurance prices.

Producers and service providers may attempt to reduce their liability exposure and, hence, liability costs by modifying their products and services. Modifications might involve changes that reduce the risk of a product-related injury or the severity of injuries that may occur. Or

[5]Committee on Public-Private Sector Relations in Vaccine Innovation, Institute of Medicine, National Academy of Sciences, "Vaccine Supply and Innovation," National Academy Press, Washington, D.C., 1985.

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they might involve changes primarily designed to enhance their defense in the event of a liability claim, such as doctors ordering unnecessary tests as a hedge against malpractice claims.[6]

Modifications that affect the safety of a product or service may also affect its ease of use or its suitability for certain tasks. Safety devices on power tools reduce both the risk of injury and the ease with which they can be used. Modifications can also change the cost of producing the product or providing the service. Some consumers may consider the modifications unnecessary or unwarranted; increased costs resulting from what consumers consider to be unnecessary changes are losses.

If reform reduces producers' and service providers' liability exposure, they will be less inclined to engage in liability-driven modifications to their products. Whether or not this is socially desirable depends upon the same kinds of evaluations that arise in considering the availability of products and services. How much does the modification reduce the danger of the product? Does it limit the usefulness of the product? What does the modification cost and who pays the bill?

Development of Innovative Products and Services

Research and development is inherently risky because there is no assurance that something of value will result. Potential liability must be included in the cost side of the equation for a new product or service to justify the R&D effort. For example, researchers are slowing efforts to test and market computers with artificial intelligence because they fear potential lawsuits.[7] Reforms that reduce the potential liability costs of products or services might stimulate research efforts and the rate of technical innovation.

Macroeconomic Outcomes

If tort reforms bring products to market that otherwise would have been withheld, or change the characteristics or prices of the products, the economy as a whole is influenced. Some say that the high costs of our liability system have impaired U.S. competitiveness.[8] Reducing those costs would improve U.S. firms' ability to compete with foreign firms, increasing their sales both here and abroad. If these claims are

[6]Roger A. Reynolds et al., "The Cost of Medical Professional Liability," *Journal of the American Medical Association*, Vol. 257, January 1987, pp. 2776-2781.

[7]William J. Broad, "Does the Fear of Litigation Dampen the Drive to Innovate?" *The New York Times*, May 12, 1987, p. 17.

[8]Malcolm Baldrige, "Product Liability Woes Hurting US Industries," 1976.

valid, tort reforms that reduce liability costs could result in improvements in the U.S. trade balance, increased employment, and a higher rate of overall economic growth.

THE FREQUENCY AND SEVERITY OF INJURIES

Liability concerns can lead producers and service providers to withdraw "risky" products and services from the market or to modify them to reduce their risks. Reforms that reduce liability concerns may ease these pressures, resulting in more, and more serious, injuries.

STRATEGIES FOR STUDYING ECONOMIC OUTCOMES AND THE FREQUENCY AND SEVERITY OF INJURIES

General Approach

In principle, the statistical approaches described in previous sections could be used to analyze the effects of reform on economic outcomes and the frequency and severity of injuries. In practice, however, these approaches are frequently, though not invariably, infeasible.

The statistical approach can be used to study the reform effects on the availability, characteristics, and prices of products or services sold only on local markets. Suppose that we wanted to study the effects of reform on the frequency of a medical test. We might assume that most doctors are sensitive to their state's legal environment, but not to other states' legal environments. If so, doctors in states that undertook reforms might be under less pressure to "build a file" in anticipation of a possible claim and, therefore, less frequently administer tests they consider unnecessary. Assuming sufficient data on test frequency and other variables could be obtained, we could see whether there was a systematic relationship between the enactment of a reform and the rate at which some tests were given.

However, products and services are frequently sold on national markets. If producers do not develop and distribute different versions of their products in states with different liability standards, the availability, characteristics, and prices of products will not vary across states with different tort laws. If some states introduce reforms, producers will either modify their products or they will not. If they do, the changes will affect the products sold in all states. Thus, the effects of reform cannot be estimated by relating economic outcomes in different states to their legal environments.

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An Example: Assessing the Effects of Reforms on Medical Malpractice Insurance Premiums

Frank Sloan used the multivariate statistical approach to assess the effects of tort reforms on medical malpractice insurance premiums.[9] The analysis was based on premium data for a standardized policy paid annually by physicians in three fields in each state between 1974 and 1978.

Sloan characterized a state's legal environment by variables such as whether there was a cap on recovery. To control for other factors that might influence premiums, he used real per capita income and the numbers of surgical operations, lawyers, and patient-care physicians, respectively, per capita. These variables were selected on the basis of theory (the number of surgeries per capita, because injury is more likely when a surgical procedure is performed) and the results of previous research (per capita income, because an earlier study found it related to malpractice premiums).

The empirical results gave no indication that the reforms considered had any significant effect on premiums. Sloan suggests that insurers probably base premiums on expected outlays which, in turn, reflect the frequency and severity of claims. Because state-specific data on claim frequency and severity are not available for 1974 and thereafter, he could not control for these important factors. This result demonstrates the importance of adequately controlling for influential factors other than legal rules.

An Example: Assessing the Effects of Product Liability Standards on Product Safety

George Eads and Peter Reuter wanted to analyze the effects of product liability laws and other factors on the safety of consumer products.[10] Because there was no reason to believe that firms respond in different ways to the differences among states in their product liability laws, they could not statistically relate measures of product safety to legal environments. In any event, there were no comprehensive data on the frequency of injuries arising from defective products. Even if there were, their interpretation would be problematic. The mix of products and users changes over time in ways that affect the injury

[9]Frank A. Sloan, "State Responses to the Malpractice Insurance 'Crisis' of the 1970s: An Empirical Assessment," *Journal of Health Politics, Policy and Law*, Vol. 9, No. 4, Winter 1985, pp. 629-646.

[10]George Eads and Peter Reuter, *Designing Safer Products: Corporate Responses to Product Liability Law and Regulation*, The RAND Corporation, R-3022-ICJ, 1983.

rate, even when firms act with equal care at all times. Hence, the efficacy of changes aimed at increasing product safety could not be judged by analyzing accident data. These problems are typical difficulties encountered in assessing the effects of reforms on economic behavior.

Because statistical approaches were not feasible and direct measurement of outcomes (product safety) was impossible, Eads and Reuter conducted a series of case studies of how firms organized their efforts to ensure that the design of products was not unsafe. They interviewed officials of nine large manufacturing firms, one large retailer, and several other organizations with an interest in product safety.

Of all the various external social and economic pressures, product liability had the greatest influence on product design decisions. But because the linkage between good design and a firm's liability exposure remains tenuous, product liability sends an extremely vague signal: It tells the firm that it must be careful or it will be sued, but it does not say how to be careful or how careful to be. Eads and Reuter felt that the connection between the law and product design is weak and even major changes in the law would have little effect on consumer product safety except when significant changes occurred in the overall costs of product claims.

Data Requirements

Data requirements are uncertain because, at this point, we cannot identify clear research strategies; but the requirements will surely be highly specialized. We cannot simply invent a single data collection system to conduct research on all of these issues; rather, we will have to tailor data collection systems on a case-by-case basis.

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VII. WHERE DO WE GO FROM HERE?

The available data are generally not sufficient to assess the effects of tort reforms. We do not systematically collect information on the behavior of participants in the system, on the outcomes of claims—either aggregate or individual—on economic outcomes, or on injuries. Nor do we systematically collect information on the factors that influence behavior or outcomes. Improved data systems are needed to assess the effects of tort reforms.

While the need for better data is clear, data collection efforts are expensive in terms of the direct costs of collecting the data and the indirect costs of diverting the attention and energies of those from whom the data are collected. Data collection efforts are warranted only when their benefits, measured by the value of the research they make possible, outweigh their costs. Both the benefits and costs of a data collection effort depend on which data are collected, in what amounts, from whom, and how. The next step toward assessing the effects of tort reform is to develop detailed designs for data collection efforts. These designs can then be evaluated to determine whether their benefits outweigh their costs.

We sketch out the conceptual issues that must be addressed in designing the data collection efforts needed for research on tort reform; the design of data collection systems is beyond the scope of this report.[1]

WHAT DATA SHOULD BE COLLECTED?

A data collection effort that is not focused on specific questions may overlook elements essential to the analysis. At the extreme, a database missing critical data elements can turn out to be largely worthless in terms of its ability to support the analyses policymakers require. At the same time, data collection undertaken without regard to the eventual use of the data may waste resources on efforts that eventually prove useless.

Analyses of the implementation of tort reforms will require data on the behaviors, expectations, and perceptions of participants in the

[1]The design of a data collection effort also involves a number of operational issues—developing a sampling frame, designing and testing instruments and procedures, and so forth—that cannot be addressed until detailed research specifications have been developed.

resolution of claims. Precisely what information will be needed from which participants depends on the reforms being studied.

The data needed to assess the effects of reforms on dispute outcomes include:

- the aggregate outcomes of disputes, by state and year,
- relevant characteristics of each state's legal environment, by year, and
- the other factors that influence the outcomes of disputes, by state and year.

We discussed several specific aggregate outcomes of policy concern: claim frequency, the percentage of claims closed with payment, the average size of paid claims, disposition patterns, filing patterns, plaintiffs' and defendants' costs of litigation, and public costs of litigation. Data collection and analysis efforts can focus on one, a few, or all of them, depending on policymakers' concerns relative to the costs of collecting and analyzing the data.

Detailed data on the characteristics of individual claims are needed to assess reform's winners and losers, or, alternatively, the effects of reform on various kinds of claims. Specifically, we need data on:

- the outcomes and characteristics of individual claims, for claims resolved in reform versus nonreform states or differences in states before and after reform, or both;
- relevant characteristics of each state's legal environment; and
- other factors that can affect the claims' outcomes.

Several outcomes of individual claims are relevant to the policy debate: the probability of recovery, the amount of recovery, net recovery, the consistency/predictability of outcomes, disposition patterns, filing patterns, and transactions costs. Here, too, data collection and analysis efforts can focus on one, a few, or all of them, depending on policymakers' concerns relative to the costs of collecting and analyzing the data.

Analysis of economic outcomes and injuries will require information on the availability, characteristics, and costs of goods and services of particular policy interest and on the frequency and severity of injuries.

Theory, the experiences of practitioners, and the results of previous research will help identify the other factors that need to be controlled to separate out the effects of the legal variables. There is no simple formula for the selection process and no list of all the "right" factors to include in the analysis. For that matter, different analyses require control of different factors. The factors expected to influence one dispute

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IN WHAT AMOUNTS?

The degree to which research can provide useful information is limited by the quantity and quality of the available data. More elaborate data collection systems can provide more accurate, more detailed data that enhance the accuracy of research and its relevance to policymakers' needs. But the cost of data collection efforts increases with their scope. Those involved in the design process must weigh the costs of an expanded effort against the benefits of more accurate results.

Analysis of reform requires data on outcomes and the factors that affect them, by state and year. Analysis of who won or lost from reform requires data on the outcomes and other characteristics of individual claims. The numbers of states and years or the number of claims for which data are required depend on the tradeoff between the costs of collecting and analyzing data and the need for accuracy in the results. At a minimum, research will need data for several states that have implemented each type of reform of interest. As the number of states and years or claims for which data are collected increase, analysis can more accurately estimate reform effects, but at greater cost.

Similarly, policy debates sometimes focus on particular types of claims and hinge on the issue of how reform affects those types of claims. For example, the problems child care centers or municipalities encounter in obtaining insurance are the focus of particular concern in the tort reform debate. Participants in the debate might find assessments of the effects of reform on those institutions particularly relevant; estimates of the effects of reform on all institutions or on the availability of insurance in general would be inadequate.

If existing data systems happen to maintain data in a form that permits identification of particular claims, it may be possible to collect the data needed to perform separate analyses of the effects of reform on them. If not, new data systems will have to be developed and put into operation before separate analyses can be conducted. The development and implementation of new data systems can dramatically increase the costs of the data collection effort. Here, too, design efforts must address the tradeoffs between the increased value of data collection systems that obtain a high level of detail and their higher price tags.

The availability of "baseline data" is an important factor in the design of data collection efforts: To estimate the effects of any reform,

it is necessary to compare "what is" after reform with "what would have been" had the reform not occurred. Data on the value of some outcome after reform are not sufficient in themselves to assess the effects of reform. At a minimum, data on the values of an outcome prior to reform will be needed to compare to that outcome's postreform values.[2]

Baseline data sufficient to estimate how outcomes would have changed over time without reform will be needed to accurately assess the effects of reforms. These data will generally include information on the outcomes of interest and on the other relevant variables before reform. Data collection efforts that capture detailed data "from now on" are not going to provide data from the past; baseline data on past performance will have to be collected.

The need for appropriate baseline data, in turn, implies that the feasibility and costs of collecting retrospective information must be considered in deciding on the level of detail.

FROM WHOM?

The insurance industry is the obvious source of data on the aggregate outcomes of claims. Aside from claims against self-insured individuals and organizations, the insurance industry is the one place where all claims eventually appear. The kinds of information insurance companies record for management purposes include much of the data needed to assess the aggregate performance of the tort system; a variety of reporting systems that capture data from insurers exists. In principle, data on the outcomes of closed claims (e.g., indemnity paid, mode of and time to disposition, and the jurisdiction in which the claim was brought or a lawsuit filed) could be routinely compiled to generate an ongoing database that would suffice for studies of aggregate outcomes.

The insurance industry may seem like an obvious source of data on the outcomes and characteristics of individual claims. However, the information it collects may not include some of the data needed to assess the effects of reforms on various kinds of claims or claimants. For that matter, some relevant information may not even be known to

[2]However, most of the issues of the current policy debate have dynamic patterns of their own: They are changing over time and would have changed from the prereform year even without reform. Research cannot simply attribute all differences between the value of an outcome this year and some earlier year to reform. Rather, research must somehow account for the dynamics of the process—estimating where the system would have been this year in the absence of reform—and compare that estimate to where the system is given the presence of reform.

insurers. Insurance companies, for example, may not routinely obtain information on claimants' wealth; their data, therefore, would not suffice for a study of the effects of reform on relatively poor claimants.

Claimants and defendants tend to be "one-time" participants in the system and the involvement of any particular claimant or defendant is generally unanticipated. We have no means of predicting in advance who will be claimants or defendants, and there are no centralized systems to which claimants or defendants must report. But if the policy debate raises questions regarding the effects of reforms on particular types of parties or claims, and if insurance companies do not routinely obtain the information needed to distinguish them, then special surveys of claimants or defendants or both will be needed.

In principle, all the information required to assess the effects of reforms on aggregate outcomes and on the outcomes of individual claims (winners and losers) could be obtained from lawyers. However, there are no data systems that routinely collect information from lawyers; obtaining such data would require the creation of entirely new systems and the development of monitoring techniques to ensure that the proper data are provided in a timely manner for all cases. Because of the large number of lawyers from whom information would be needed, these systems would be extremely cumbersome and expensive. Attorney-client privilege issues might also limit the data that could be obtained through attorneys. Nonetheless, there may be particular policy questions that hinge on data available only from attorneys. Special surveys of attorneys might be needed to obtain these data.[3]

The courts routinely collect significant amounts of information. But they generally collect data for their own administrative needs, and the data tend not to be useful for assessing the effects of tort reforms. It may be possible for the courts to provide more useful information on an ongoing basis. In particular, data on the aggregate numbers of cases filed and disposed and on the means of and time to disposition, by case type, could be very helpful.

The courts obtain information on such matters as the type of suit and the alleged injuries indirectly in a variety of documents—complaints, answers, motions, and so forth—designed for purposes other than data collection. Using court personnel to review these documents and extract information would undoubtedly strain court resources; but it may be possible to devise forms that plaintiffs and defendants, or their representatives, could fill out and submit to the court.

[3]Because claims can be resolved before a lawyer is involved, the litigants known to the bar are self-selected samples of all litigants. And because the basis for self-selection is likely to be related to outcomes of interest, the sample would be inappropriate for many kinds of analyses.

Although the insurance industry seems an appropriate source for much of the requisite data, several problems must be addressed. Insurance companies may not have access to important information such as collateral source payments. Differences occur among companies in the kinds of information they obtain for a claim, the definitions of various characteristics of a claim, and the coding systems they use. Data on claims against self-insureds would have to be collected separately. "Double counting" is a problem in claims against two or more defendants because, except by chance, the defendants will have different insurers and there would be duplicate reports of the same claim.

The Insurance Services Office (ISO), a nonprofit corporation that makes available advisory rating and other services to the insurance industry, is now collecting information on at least 12,000 individual claims in 27 states that have modified their tort systems.[4] These will include a sample of large claims (over $25,000) arising out of policy year 1983 and closed after July 1, 1985, or still open, a sample of all claims closed during the month of May 1987, and a sample of all governmental claims from policy year 1983. These data will provide a first step toward the development of a database sufficient to assess the effects of reform.

Because almost all the claims in the database will have closed soon after reforms were enacted, their outcomes may not reflect the full impact of reform.[5] However, these data should suffice to establish a baseline with which the outcomes of future claims can be compared.

In collecting these data, ISO will presumably have worked through the problems of obtaining compatible information from different insurance companies. Their procedures should provide guidelines to such issues as consistent definitions of data elements.

NEXT STEPS

The next step in assessing the effects of reform is to design and evaluate data collection systems that could be used in the future to capture data on the performance of the tort system. We suggest

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[4]Insurance Services Office, *Insurance Data: A Close Look*, 1987.

[5]ISO intends to have experienced claims managers estimate the values of each claim in its new legal environment. This approach is the only way to obtain an early estimate of the impact of reform. Nonetheless, because the claims managers will have had relatively little experience with the new legal environments, their estimates may not fully reflect the impact of tort reforms. Pending analyses of the implementation process, there is no way to determine the degree to which they, or anyone else, are able to anticipate the eventual effect of reform on claims' outcomes.

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consideration of three types of new data collection systems. One comprises systematic efforts to obtain data from insurers and self-insured defendants on the aggregate outcomes of liability claims. Ideally, these efforts would result in systems for collecting these data on an ongoing basis to support continuing analyses and monitoring of the overall effects of reform. The second type of system would involve the design of special surveys of claimants, the bar, and insurers to obtain the detailed individual claim information needed to identify reform's winners and losers. Finally, we need to explore the feasibility of systems for collecting information on the other factors that influence participants in the tort system and must, therefore, be included in analyses, and on economic outcomes and injuries.

Once feasible designs are constructed, they need to be evaluated to determine whether the research they will support is sufficiently important to warrant the costs of the data collection and analysis efforts.

Appendix

STATE TORT REFORM ENACTMENTS, 1986

Table A.1 summarizes the principal tort reforms enacted during 1986. The remainder of this appendix describes the provisions of those reforms.

A. COMPARATIVE/CONTRIBUTORY NEGLIGENCE (CN)

CONNECTICUT	HB 6134—Damages will be diminished by the plaintiff's percentage of fault.
ILLINOIS	SB 1200—Plaintiffs who are more than 50 percent at fault are barred from recovery, and the jury would be instructed as to 15 possible barring effects. The law applies to negligence actions and product liability actions brought under a strict liability theory.

B. JOINT AND SEVERAL LIABILITY (JSL)

1. All Tort Suits

ALASKA	SB 377—The application of joint and several liability is now limited for low fault defendents (less than 50 percent at fault) as they cannot be held jointly liable for more than two times the apportioned percentage of damages.
CALIFORNIA	Prop 51—Joint and several liability has been abolished for all noneconomic damages.
COLORADO	SB 70—Outright abolition of joint and several liability has been approved.
CONNECTICUT	HB 6134—A measure abolishing joint and several liability has been enacted; each defendant is liable only for their attributed share of damages; Orphan Share Clause: Defendants are liable for that portion of an uncollectible sum that is proportionate to their share of the entire judgment but may not be forced to pay the entire uncollectible amount.

Table A.1

STATE TORT REFORM ENACTMENTS, 1986

STATE	CN	JSL	DAM	PUNI	AFMS	CSR	PPJ	INTX	DRAM	GOV	MMPL	MISC
Alabama										2		
Alaska		1	1	1		1	1	1			2	1
Arizona					1				2			1
California		1										
Colorado		1	3	1		1			2	2	2	3
Connecticut	1	1			1	1	1		2	2	2	
Delaware											2	
Florida		1	1	1		1	1					
Georgia					1					2		
Hawaii		1	1	1	3	1	2			2	2	1
Idaho					1				2			
Indiana					1	1		1	2		2	2
Illinois	1	1		1	1	1				2	2	
Iowa				3	1		1		2	2	2	3
Kansas			2		3		2				2	2
Louisiana									2			2
Maine					2		2		2	2	2	
Maryland			1				1				2	
Massachusetts			2		2	2					2	
Michigan		1	2		1	3	1	1	2	2	2	1
Minnesota			1	1	1	1		1				
Mississippi										2		
Missouri			2							2	2	
Montana			2							2		
Nebraska					1			1				
New Hampshire		3	3	1	1				2	2	2	1

.....				2		2		2	2	2		
Maryland		1				1				2		
Massachusetts		2		2	2					2		
Michigan	1	2		1	3	1	1	2	2	2	1	
Minnesota		1	1	1	1		1					
Mississippi									2			
Missouri		2							2	2		
Montana		2							2			
Nebraska				1			1					
New Hampshire	3	3	1	3				2	2	2	1	

Table A.1—continued

STATE	CN	JSL	DAM	PUNI	AFMS	CSR	PPJ	INTX	DRAM	GOV	MMPL	MISC
New Mexico			2		2				2			
New York		1			1	1	1				2	1
New Jersey												2
Ohio											2	2
Oklahoma				1	1			1				
Rhode Island					2	2					2	
South Carolina			2							2		
South Dakota		2	2	1			1			2	2	
Tennessee									2	2	2	2
Utah		1	2				2		2		2	
Virginia			2	2				2		2		
Washington		1	1		1		1			2	2	1
West Virginia		3	2		2					2	2	
Wisconsin			2		3						2	
Wyoming		1			1				2	2	2	2

NOTE: 1 = Applicable to most tort suits; 2 = applicable only to particular case types or parties; 3 = applicable to most tort suits and specifically to particular case types or parties.

ABBREVIATIONS:

CN = Comparative/Contributory Negligence
JSL = Joint and Several Liability
DAM = Limits on Damage Awards
PUNI = Punitive Damages
AFMS = Attorney's Fees/ Miscellaneous Sanctions
CSR = Collateral Source Rule Changes
PPJ = Periodic Payment of Judgments
INTX = Interest and Taxes on Judgments
DRAM = Dram Shop Liability Reform Legislation
GOV = Government Liability
MMPL = Medical Malpractice and Professional & Director's/ Officer's Liability
MISC = Miscellaneous Provisions

FLORIDA	SB 465—Joint and several liability has been severely restricted in cases involving over $25,000 in damages: No joint and several liability for noneconomic damages in negligence actions and likewise for economic damages for those defendants less at fault than the plaintiff. Itemization of damage awards is also required. No modification of the rule for: (a) action seeking economic damages for pollution incidents (b) intentional torts (c) actions governed by a specific statute providing for joint and several liability
HAWAII	SB S1(SS)—Joint and several has been eliminated for low fault defendants (less than 25 percent); this limit on joint and several does not apply to (1) economic damages, (2) automobile accident cases, (3) product liability cases, (4) property damage cases, or (5) environmental pollution cases.
ILLINOIS	SB 1200—Joint and several liability has been eliminated in negligence and strict liability product liability actions for low fault defendants (less than 25 percent). This does not apply to (1) medical malpractice cases, (2) environmental liability cases, and (3) medical expenses specifically awarded as damages in any action.
MICHIGAN	HB 5154—Joint and several liability is now limited, except in (1) product liability actions, (2) actions involving a blame-free plaintiff. Defendants are only severally liable for damages, but Michigan has the Orphan Share Clause, (i.e., any uncollectible shares of a judgment can be proportionately reallocated between solvent codefendants). Joint and several liability is now abolished for municipalities.

NEW HAMPSHIRE	HB 513—Apportionment of damages between codefendants is now allowed.
NEW YORK	SB 9391—Joint and several liability is now eliminated for noneconomic damages for low fault defendants (50 percent or less at fault). The limitation does not apply for: (a) contract cases (b) indemnification by public employee claims (c) administrative proceedings (d) workers' compensation claims (e) intentional torts on actions alleging reckless disregard for rights of others (f) motor vehicles or motorcycle accident cases (g) actions involving absolute liability resulting from construction (h) toxic tort cases (i) product liability actions where the manufacturer could not be joined (j) and certain other actions The law also requires the itemization of verdicts for personal injury, property damages, and wrongful death.
UTAH	SB 64—Outright abolition of joint and several liability has been approved.
WASHINGTON	SB 4630--Except as follows, joint and several liability has been abolished. The exceptions include: (a) where defendants act in concert or a servant acts for a master (b) where a plaintiff is entirely fault-free (c) where toxic substances or solid waste disposal is involved (d) tortious interference with contract or business relations (e) where specified types of fungible products are involved
WEST VIRGINIA	HB 149—Joint and several liability has been abolished for defendants less than 25 percent at fault.

WYOMING — SB 17—The doctrine of joint and several liability is abolished; a party may request or a court may require apportionment of damages, and a defendant's liability is then limited to that share apportioned to him, her, or it.

2. Particular Suits or Parties

NEW HAMPSHIRE — HB 513—Just and several liability only applies to municipality when they are over 50 percent at fault.

SOUTH DAKOTA — SB 216—Joint and several liability is now modified in respect to actions against local governments.

WEST VIRGINIA — SB 714, HB 149X—Joint and several liability has been eliminated in medical malpractice actions for low fault defendants (less than 25 percent negligent).

C. LIMITS ON DAMAGE AWARDS (DAM)

1. All Tort Suits

ALASKA — SB 377—A cap on noneconomic damages of $500,000 is now provided. However, the cap does not apply to damages resulting from severe physical impairment or disfigurement. Also provided for the itemization of damages between economic and noneconomic losses.

COLORADO — SB 67—$250,000 cap on noneconomic damages, unless a court finds clear and convincing evidence that the damages exceed the cap raising the ceiling to $500,000. Eliminates awards for derivative noneconomic loss except when the court finds "clear and convincing evidence."

FLORIDA — SB 465—A cap of $450,000 on noneconomic damages in all personal injury, wrongful death, and property damage actions.

HAWAII — SB S1(SS)—A $375,000 cap has been provided on damages awarded for pain and suffering (but not other types of noneconomic losses such as loss of consortium or emotional distress) in certain tort actions. Additionally, awards for mental anguish

	are unavailable in actions seeking recovery for property damage only; provides standard for determination of loss or impairment of earning capacity.
MARYLAND	SB 558—A cap of $350,000 on all noneconomic damage.
MINNESOTA	SB 2078—A cap has been enacted on "intangible losses," (embarrassment, emotional distress, and loss of consortium) exclusive of pain and suffering and disfigurement; the cap is set at $400,000.
NEW HAMPSHIRE	HB 513—A cap on noneconomic damages has been set at $875,000.
WASHINGTON	SB 4630—All noneconomic damages are capped based upon a measure of economic damages and the Washington average annual wage; a portion of this amount (.43) is used as a base figure and is adjusted to reflect life expectancy of a plaintiff (estimated to be somewhere between $177,000 and $493,000).

2. Particular Suits or Parties

COLORADO	SB 86—A $50,000 cap on damages in dram shop actions has been passed.
KANSAS	HB 2661—Noneconomic damages have been capped at $250,000 and all damages at $1,000,000 in medical malpractice actions; the cap on noneconomic damages will be annually adjusted to reflect the consumer price index. Mandatory itemization of noneconomic damage awards has been instated in such cases. "Pinhole" provision to allow courts to award supplementary medical benefits up to $3 million also instated.
MASSACHUSETTS	HB 5700—Unless special circumstances are demonstrated indicating a plaintiff will not be justly compensated, noneconomic damages in medical malpractice actions are now capped at $500,000.
MICHIGAN	HB 5154—A cap of $225,000 on noneconomic damages in medical malpractice actions that

	will be adjusted to reflect the C.P.I. has been enacted. (This cap does not apply in wrongful death actions, actions involving reproductive system injuries, and actions for loss of a vital bodily function.)
MISSOURI	SB 663—Noneconomic loss in medical malpractice actions has been capped at $350,000; the cap amount is the limit that may be awarded against each individual health care provider.
MONTANA	SB 22XX—The liability of the state and its political subdivisions has been capped at $750,000 per claimant and $1,500,000 per incident.
NEW HAMPSHIRE	HB 513—The liability of governmental subdivisions is now limited to a cap on all civil damages that has been set at $150,000/$500,000.
NEW MEXICO	NM HB 244—A $50,000/person, $100,000/incident, cap on personal injury/death damages in dram shop actions has been passed, $20,000 for property damage.
SOUTH CAROLINA	HB 2266—Limits liability of state and its subdivisions to $250,000/incident and $500,000/occurrence.
SOUTH DAKOTA	SB 282—The existing cap on noneconomic damages in medical malpractice actions has been changed to a cap of $1,000,000 covering all damages. Additionally, the cap was broadened to include actions against all health care providers.
UTAH	SB 111—Noneconomic damages in medical malpractice actions are capped at $250,000, but specifically included are damages for pain and suffering and inconvenience; punitive damages are specifically excluded.
UTAH	SB 182—A cap on damages in dram shop actions has been enacted; liability is limited to $100,000/$300,000.
VIRGINIA	HB 624—A cap of $25,000 or the amount of insurance coverage carried is provided in actions against transportation districts.

WEST VIRGINIA	SB 714, HB 149X—A $1,000,000 cap on noneconomic damages has been enacted on medical malpractice damages.
WEST VIRGINIA	SB 3—Noneconomic damages are limited to $500,000 when involving political subdivisions.
WISCONSIN	AB 4—Damages in medical malpractice actions have been capped at $1,000,000.

D. PUNITIVE DAMAGES (PUNI)

1. All Tort Suits

ALASKA	SB 377—Clear and convincing evidence is required before punitive damages can be awarded.
COLORADO	HB 1197—Punitive awards may not exceed the amount of compensatory damage award; one-third of a punitive damage award goes to the State General Fund; proof of malice, fraud, or willful and wanton conduct is required; court has ability to reduce punitive awards if deterrent effect is accomplished, or to increase them up to three times the amount of actual damages if misbehavior continues during trial.
FLORIDA	SB 465—Punitives cannot exceed three times the compensatory damage award unless clear and convincing evidence is shown; 60 percent of any punitive damage award goes to the Public Medical Assistance Trust Fund or the State's General Fund.
HAWAII	SB S1(SS)—Punitive damages are now uninsurable unless an inclusion is specifically provided by an insurer.
ILLINOIS	SB 1200—Plaintiffs would no longer be able to plead for punitive damages in their original complaint; subsequent motion to amend is granted only following a hearing where the plaintiff stands a chance to win the punitive award at trial. Defendant must be shown to have acted in a willful and wanton manner. Court has discretion to distribute punitive award among the plaintiff, his or her attorney, and the State's Department of Rehabilitation Services; applies to negligence actions and product liability actions based on a strict liability theory.

IOWA	SB 2265—Willful and wanton disregard for the rights and safety of another must be proven prior to an award of punitive damages. 75 percent or more of a punitive award must be paid to the State's Civil Reparations Trust Fund, except where the action resulted from a tort specifically directed at the particular plaintiff; no discovery of a defendant's wealth is permitted prior to establishment of a prima facie case.
MINNESOTA	SB 2078, HF 1950—Pleas for punitive damages are no longer permitted in their complaint; a prima facie showing of defendant's liability is required before an amendment of pleadings.
NEW HAMPSHIRE	HB 513—Punitive damage awards are now prohibited.
OKLAHOMA	SB 488—Punitive damage awards have been capped; no punitive award may exceed the amount of actual damages awarded; the level of proof required raised also.
SOUTH DAKOTA	SB 280—Punitive damages must be proved by clear and convincing evidence of willful, wanton, or malicious conduct on the part of the defendants.

2. Particular Suits or Parties

IOWA	SB 2265—Limits liability of municipal officers and employees for punitive damages.
VIRGINIA	HB 624—Punitive damage awards are prohibited in actions against transportation districts.

E. ATTORNEY'S FEES/MISCELLANEOUS SANCTIONS (AFMS)

1. All Tort Suits

ARIZONA	HB 2377—Establishes penalties for unjustified actions.
CONNECTICUT	HB 6134—A contingent fee scale limiting attorney's fees is now required (1/3 of 1st $300K, 1/4 of next $300K, 20 percent of next $300k, 15 percent of next $300K, and 10 percent of rest). Also creates sanctions (which could include defense costs) for frivolous behavior for filing in absence of probable cause.

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GEORGIA	HB 1146 HB 1185—Parties filing frivolous suits to pay defendants fees and cost; dismissals of action for frivolous suits.
HAWAII	SB S1(SS)—Any party may request court review or their attorney's fees; compensation is limited to a "reasonable amount"; attorneys' fees are now available as a sanction for frivolous defenses as well as frivolous actions (not to exceed 25 percent of prayer).
IDAHO	HB 1460—Places limits on attorney contingent fees.
ILLINOIS	SB 1200—Sanctions may be assessed against parties, attorneys, and insurers for frivolous pleadings, defenses, and motions; attorneys' fees would be available as a sanction.
INDIANA	SB 393—Courts may impose attorneys' fees as a sanction against parties who bring frivolous actions or defenses.
IOWA	HB 2265—Authorizes the court to stay actions if past actions by the party have been frivolous. Requires certification of pleadings and motions and provides sanctions for violation.
KANSAS	HB 266—Modification of civil procedures for determination of frivolous suits.
MICHIGAN	HB 5154—Awards of attorneys' fees are now available as sanctions for frivolous suits and defenses.
MINNESOTA	HF 1950—Allows the award of costs in frivolous suits.
NEBRASKA	LB 298—Allows the award of prejudgment interest as a sanction for unreasonable failure to settle (offers of settlement are compared to the judgment to determine reasonableness).
NEW HAMPSHIRE	HB 513—All contingent fee arrangements must be filed with the court and those in actions where the damage award is over $200,000 are subject to court review. Allows the court to assess costs and attorneys' fees from frivolous suits and defenses.

NEW YORK	SB 9351—Attorneys' fees and costs are now available as sanctions for frivolous suits and defenses.
OKLAHOMA	SB 488—Attorneys' fees are now available as sanctions for frivolous suits and defenses up to an aggregate of $10,000.
WASHINGTON	SB 4630—New law provides for the discretionary review of contingent fee contracts by courts; also, attorneys' fees are now available as sanctions for frivolous suits and defenses.
WYOMING	HB 14, HB 15—Courts authorized to determine frivolous suits and make plaintiffs liable for sanctions.

2. Particular Suits or Parties

HAWAII	SS S1—All fees in medical malpractice cases are subject to court approval.
KANSAS	HB 2661—Courts are now able to review attorneys' fee arrangements in medical malpractice cases.
MAINE	SB 958—Establishes an attorneys' contingent fee scale in medical malpractice actions.
MASSACHUSETTS	HB 5700—Establishes fee limits in medical malpractice cases.
NEW MEXICO	SB 1110—Caps fees for workers' compensation cases according to a sliding scale.
RHODE ISLAND	SB 2891—Attorneys' fees and costs are now available as sanctions in frivolous medical malpractice actions.
WEST VIRGINIA	SB 714—Frivolous suit sanctions are provided in medical malpractice actions.
WISCONSIN	AB 4—Attorney's fees have been regulated in malpractice actions.

F. COLLATERAL SOURCE RULE CHANGES (CSR)

1. All Tort Suits

ALASKA	SB 377—Introduction and limited offset are now provided for collateral sources that do not have statutory or contractual rights of subrogation.

COLORADO	SB 67—Admissibility and offset with broad exclusions or sources with subrogation rights.
CONNECTICUT	HB 6134—Expansion of application of the collateral source rule modifications for malpractice actions to all civil actions; admission and offset are provided, but sources having rights of subrogation are excepted from offset.
FLORIDA	SB 465—The traditional collateral source rule to allow admission of evidence of collateral source benefits; offset is provided, but benefits having a right of subrogation are not offset; those seeking subrogation are required to share the attorneys' fees and costs incurred by the plaintiff.
HAWAII	SB S1(SS)—Court is required to determine the validity of liens and rights of subrogation; such valid liens are to be paid from special damages recovered.
ILLINOIS	SB 1200—The collateral source rule is modified in that only benefits in excess of $25,000 can be offset and no more than 50 percent of a tort judgment can be reduced by offset of duplicative sources, but sources having rights of subrogation cannot be offset.
INDIANA	SB 394—The traditional collateral source rule has been abolished; evidence of collateral sources of payment is now admissible; a court may reduce excessive awards to reflect collateral sources at its discretion as well as reducing subrogation liens under certain circumstances.
MICHIGAN	HB 5154—The traditional collateral source rule has been abolished; the court may consider evidence of collateral benefits; offset of collateral sources is provided, but such offset cannot reduce a plaintiff's damages by more than the amount awarded for economic losses, and the offset is first reduced by the sum of any premiums paid for their benefit by either plaintiff, his or her family or employer. Sources having statutory liens cannot be offset; sources with contractual liens are required to act to assert the lien or lose it.

MINNESOTA	SB 2078, HR 1950—The traditional collateral source rule has been abolished; while evidence of collateral source payments is now admissible, only the court may review such evidence; offset is provided for, but all collateral sources having rights of subrogation are excluded.
NEW YORK	SB 9351—Abolition or traditional collateral source rule; admission of evidence and offset of collateral benefits are now provided; offsets are reduced by last two years premiums and future premiums necessary to secure collateral payments; sources with mandatory liens and workers' compensation, life insurance, and certain social security benefits may not be offset.

2. Particular Suits or Parties

MASSACHUSETTS	HB 5700—Rule on collateral source modified in medical malpractice cases.
MICHIGAN	HB 5154—Admission of collateral sources and offsets by court in medical malpractice cases.
RHODE ISLAND	SB 2891—In malpractice cases, collateral source rule has been modified to provide for introduction of evidence of additional sources of a recovery and an offset of such sources.

G. PERIODIC PAYMENT OF JUDGMENTS (PPJ)

1. All Tort Suits

ALASKA	SB 377—Periodic payment of judgments for future damages is now permitted in certain circumstances.
CONNECTICUT	HB 6134—Mandatory provisions for periodic payment of judgments have been enacted when noneconomic damages exceed $200,000, unless the parties agree otherwise.
FLORIDA	SB 465—Periodic payments are now mandated where a party requests such a plan and where future damages for economic losses exceed $250,000.

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IOWA	SB 2265—Periodic payment of awards is permitted at the court's discretion following petition of a party.
MARYLAND	SB 558—Periodic payments of awards are permitted at the discretion of the court.
MICHIGAN	HB 5154—Periodic payment of judgments for future damages over $250,000 is now mandated.
NEW YORK	SB 9391—Periodic payment of future damages over $250,000 is mandated if a party requests them.
SOUTH DAKOTA	SB 281—Periodic payment of future damages in bodily injury actions is permitted where a good faith claim for such damages of $100,000 or more is shown; provisions for election and objection have been enacted.
WASHINGTON	SB 4630—The court is required to order the payment of judgments by means of a periodic payment plan upon a party's request.

2. Particular Suits or Parties

HAWAII	SB S1(SS)—The state and its subdivisions now have the option of paying judgments against them in excess of $1,000,000 by means of periodic payments.
KANSAS	HB 2661—All medical malpractice settlements are to be paid periodically.
MAINE	SB 958—Mandates periodic payments of future medical malpractice awards in excess of $250,000.
UTAH	SB 155—Periodic payment of damages in medical malpractice actions is now mandated where either party so requests.

H. INTEREST AND TAXES ON JUDGMENTS (INTX)

1. All Tort Suits

ALASKA	SB 377—Establishes prejudgment interest accrual principle.
INDIANA	SB 394—Upon the request of any party, an instruction to jury that it may not consider tax consequences of its verdict is available.

MICHIGAN	HB 5154—Prejudgment interest on awards for future damages is now prohibited; the rate of interest on judgments has been changed to 1 percent above the yield on five-year U.S. Treasury bills.
MINNESOTA	SB 2078—Any award of interest on damages for future loss is prohibited.
NEBRASKA	LB 298—The rate of interest on judgments is now tied to the rate of return on 52-week U.S. Treasury obligations plus 1 percent; the award of prejudgment interest as a sanction for unreasonable failure to settle is now available (offers of settlement made are compared to the judgment to determine reasonableness).
OKLAHOMA	OK SB 488—Prejudgment interest on awards for punitive damages is now prohibited; the rate of interest on judgments has been changed to 4 percent above the U.S. Treasury bill rate.

2. Particular Suits or Parties

VIRGINIA	HB 624—Awards of prejudgment interest damages are prohibited in actions against transportation dist .cts.

I. DRAM SHOP LIABILITY REFORM LEGISLATION (DRAM)

ARIZONA	HB 2170—Liability may be imposed only where the liquor licensee serves an obviously intoxicated person; liability of servers is several only.
COLORADO	SB 86—Dram shop actions are now capped at $150,000; liability for servers is limited to circumstances where a licensee or social host serves a visibly intoxicated person or minor.
CONNECTICUT	HB 6134—Sellers to intoxicated persons are liable up to $20,000/party, $50,000/incident. Rebuttable presumption of such sole liability is established.
IDAHO	SD 1439—Limits dram shop and social host liability.