



Understanding Pennsylvania's Medical Malpractice Crisis

Facts about Liability Insurance, the Legal System,
and Health Care in Pennsylvania

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Executive Summary

Medical malpractice is back in the headlines. Physicians and hospitals cite a “crisis of availability and affordability” of malpractice insurance that is driving out practitioners and compromising access to medical services. High-risk specialties are especially hard hit. Medical groups blame the legal system and call for tort reform, primarily limits on very large damage awards. Plaintiffs’ attorneys and consumer groups counter that high premiums are due to insurers’ investment losses and bad business decisions, and that high awards reflect substandard medical practice. They object to limits on tort recoveries and call instead for more regulation of insurers and physicians. This debate is heated, and peppered with advocates’ own statistics.

This report presents objective information about the likely causes and potential consequences of Pennsylvania’s medical malpractice crisis. It provides policy-makers with necessary context for generating and evaluating options for reform. Drawing on published studies, unpublished data, and interviews with stakeholders, the report focuses on the three components of the “malpractice system”:

- Liability insurance markets
- Legal claims and outcomes
- Patients, health insurers, and health care providers

Liability Insurance

The most basic challenge for liability insurance is keeping coverage available. State-specific factors appear to make Pennsylvania’s situation among the worst in the nation. In the late 1990s, four major carriers failed, including Pennsylvania’s largest. Other private insurers have partly filled in, but more hospitals and physicians now rely on risk-retention groups and other alternative mechanisms, as well as the state’s Joint Underwriting Association, a costly insurer of last resort. Medical groups report that almost all remaining insurers are refusing new applicants or underwriting selectively.

The cost of available coverage in Pennsylvania, formerly around the national average, has moved sharply higher. Part of the cost increase is due to Pennsylvania's unusual catastrophic loss fund (MCARE Fund, formerly called CAT Fund), which supplements commercial coverage for health care providers. In recent years, its pay-as-you-go financing necessitated large annual assessments to cover accumulating claims from prior periods. In addition, legislative cutbacks in the extent of the Fund's future obligations have induced rate increases for private insurers. Rising costs of liability insurance also reflect national factors unrelated to the state's malpractice exposure, including a downturn in the competitive insurance cycle, reduced investment returns, and higher prices for reinsurance. But the largest cost component is state-specific—investigating, defending, and paying legal claims.

Malpractice Litigation

Physician surveys and insurance data show that national claims rates rose just before the malpractice crises of the 1970s and 1980s and declined just after. Since the mid-1990s, by contrast, payouts rather than claims rates have turned upward nationally. A decade ago, Philadelphia and Pittsburgh courts already ranked well above national medians for other metropolitan counties in per capita rates of malpractice filings and even higher in rates of malpractice trials. The most current data on physician settlements and awards show that Pennsylvania ranks well above the national average in the rate of paid claims and in average payment amounts. Considering these factors in combination, Pennsylvania's total malpractice payouts adjusted for population (and those of two of its neighboring states) are twice the national average, and are growing faster than average. Malpractice costs per resident in Pennsylvania are roughly four times higher than in California, a state with strict limits on malpractice lawsuits and recoveries.

Judicial data on malpractice litigation are incomplete because most cases are

resolved by private settlement, and even jury verdicts tend to be reported selectively. The Philadelphia Court of Common Pleas tracked cases resolved by jury trials during 1999-2001. Philadelphia plaintiffs were more than twice as likely to win jury trials as the national average, and over half of awards were for \$1 million or more. Philadelphia juries awarded sums of this magnitude 87 times. The number of million-dollar awards plus settlements in all of California during this period was only slightly larger. However, these years may have been atypical in Philadelphia, as courts were catching up on an accumulated backlog of cases.

Effects on Health Care

In terms of population health, Pennsylvania ranks in the middle among states. Pennsylvanians are more likely to have health coverage than the national average and use a lot of medical services, yet health insurance premiums are similar to the national average. The state has high HMO penetration, with sufficient insurer concentration in local markets to hold down medical fees. As yet, little data connects malpractice liability to medical performance. The most urgent concern is whether liability problems might reduce access to medical care. Despite medical malpractice crises in the 1970s and 1980s, the number of physicians and hospital beds grew faster relative to population in Pennsylvania than elsewhere during those decades. Growth slowed for physicians after 1995, possibly reflecting problems in the MCARE fund, constrained physician fees, and other factors. Liability problems have worsened since 2000, but corresponding physician supply data are not yet available. Access problems, should they be detected, may be limited to certain regions, patient subgroups, or physician subspecialties.

Conclusions

Pennsylvania's health care system is important not only to patients' well being but also to the state's economy. While medical malpractice insurance problems are national in scope, Pennsylvania has been especially hard-hit. General economic trends explain part of Pennsylvania's situation, but other factors are state-specific. Pennsylvania physicians and hospitals are uniquely burdened by high assessments for the state's catastrophic loss fund. While cyclical changes within the insurance industry are clearly a factor affecting the affordability of liability coverage in Pennsylvania and elsewhere, the largest component is the rising cost of legal claims. No clear evidence yet exists as to the effects of the malpractice crisis on Pennsylvania's health care system. However, providers, particularly hospitals, are under greater financial strain now than in past crises.

The overhang of unresolved claims and various features of the state's liability insurance market make it very difficult to reduce costs in the short term. Therefore, subsidies that allow health care providers to maintain coverage would seem to be the only practical approach to alleviating the current crisis. In the longer term, a wider range of strategies exists to control costs, improve predictability, and attract insurers to the Pennsylvania market. In addition to conventional tort and insurance reforms, lawmakers should consider systematic changes to the way that injuries caused by medical care are identified, compensated, and prevented.

Introduction

Medical malpractice is back. Since 2000, commercial liability insurance premiums for in Pennsylvania for primary coverage have risen sharply for both physicians and hospitals. A number of liability insurers have become insolvent. Other carriers have withdrawn from Pennsylvania or cut back significantly on their underwriting. Many are not accepting new business. Medical providers, especially hospitals, are turning to alternative risk-bearing mechanisms in place of traditional malpractice insurance.

Excess coverage suffers from additional problems. Since the mid-1990s, the state's own catastrophic protection fund (CAT Fund, now called MCARE Fund) has rapidly increased annual assessments on medical providers even as it reduced coverage by raising its own threshold, leaving ever-larger amounts of liability on primary insurers. Although legislation was passed in 2002 to reconfigure the fund and eventually dissolve it, financing high unfunded liabilities from past incidents remains a source of concern. Commercial coverage above the CAT Fund limits is similarly less available and more expensive than it was a few years ago.

In an era of stringent reimbursement from public and private health plans, many health care providers complain that coverage is unaffordable. Physicians report that they are curtailing their practices, considering retirement or relocation, or engaging in wasteful defensive medicine. Some hospital services have been threatened or actually shut down, either for want of sufficient physician availability in related specialties, to reduce liability exposure, or to offset the higher costs of securing malpractice coverage.

Medical providers and liability insurers perceive the current state of affairs as a crisis and seek "tort reform" to reduce litigation risk and increase access to liability insurance. They claim that liability exposure is unusually high in Pennsylvania, especially in Philadelphia. Plaintiffs attorneys and some consumer advocacy groups counter that the run-up in liability insurance premiums is due to insurers' investment losses and bad busi-

ness decisions, which have triggered an upturn in the “insurance cycle.”

This debate is reminiscent of crises in the mid-1970s and 1980s, which spawned similar calls for tort reform. Emotions run high on both sides, accompanied by heart-wrenching anecdotes of patients unable to obtain care or victims of negligence being denied their day in court. Statistics are frequently offered in support of partisan positions, but are seldom explained thoroughly. Definitive empirical evidence is uncommon. How well supplied is Pennsylvania with physicians and hospitals? Is the state unusually costly for medical care? What has happened in the liability insurance market? How high are premiums? Is the state’s legal system unusually accommodating to plaintiffs? Are Pennsylvanians atypically litigious?

This report provides an overview of the factual basis for medical liability reform in Pennsylvania. Wherever possible, the report draws on government sources of information, which should be reliable. Where privately gathered information is presented, its source is identified. To help assess the current situation, the report attempts to compare Pennsylvania today to the recent past, to neighboring states, and to the nation at large. Information is presented in three sections:

1. Malpractice insurance
2. The legal system and liability claims
3. Pennsylvania’s health care system

Malpractice Insurance

The Most Basic Problem: Availability of Coverage

Pennsylvania requires medical providers to have liability protection in order to practice. So there must be an adequate supply of coverage for physicians, hospitals, and other providers to purchase. Malpractice experts call this the “availability” issue. Since the mid-1990s, however, many malpractice insurance carriers have exited the market. Several left involuntarily, having been liquidated by state insurance regulators after becoming insolvent. Others left voluntarily, either pulling out of Pennsylvania or dropping malpractice as a line of business altogether. Still others have remained in the market but are underwriting selectively rather than accepting all applicants. As a result, many physicians and hospitals were scrambling for coverage by the end of 2001. Lack of malpractice insurance has been a staple of news headlines ever since (Goldstein and Fishman 2001).

Between 1998 and 2001, the greatest threat to availability in the malpractice insurance market was the insolvency of the leading carrier, PHICO (Exhibit 1). A local company begun by the hospital association, PHICO went national in the 1990s. When revenues proved inadequate to meet obligations, the company first contracted, then was taken over by Pennsylvania regulators in mid-2001 and ordered into liquidation in February 2002. Since PHICO’s demise, the top spot has been occupied by PMSLIC, which was founded during the 1970s crisis by the Pennsylvania Medical Society. In the late 1990s, PMSLIC first affiliated with and later was acquired by Norcal, a California physician mutual.

Between 1990 and 1998, three other major carriers failed—PIC of Pennsylvania, PIE of Ohio, and AHSPIC, an “offshore captive” subsidiary of the Allegheny hospital system (AHERF), which covered some 1500 affiliated physicians (Strelec 1999). When licensed companies become insolvent, claims filed against them become the responsibility of the state Guaranty Association, which pays up to the relatively low limit of \$300,000 and assesses still-solvent insurers to cover losses. This raises costs for remaining carriers.

**Exhibit 1. The Market For Physician Malpractice Insurance in Pennsylvania
Shifted in 1998-2001**

Premiums (nominal \$ millions), Market Shares (%), and Rankings by Insurer

Company	1998			2001		
	Rank	Premiums	Share	Premiums	Share	Rank
PHICO Ins Co	1	\$73.1	26.3%	--	--	--
Pennsylvania Med Soc Liab Ins Co	2	\$46.0	16.6%	\$68.8	18.5%	1
Medical Inter-Insurance Exch of NJ	3	\$38.5	13.9%	\$52.0	14.0%	2
Medical Protective Co	4	\$16.4	5.9%	\$30.0	8.1%	3
Princeton Ins Co	5	\$13.3	4.8%	\$18.3	4.9%	7
Steadfast Ins Co	6	\$11.9	4.3%	\$2.1	0.6%	25
Tri Century Ins Co	7	\$7.5	2.7%	\$23.8	6.4%	4
VHA Risk Retention Group Inc	8	\$6.6	2.4%	\$18.8	5.1%	6
Preferred Professional Ins Co	9	\$6.0	2.2%	\$3.9	1.1%	18
American Continental Insurance Co	10	\$6.0	2.2%	\$2.1	0.6%	16
First Specialty Ins Corp	11	\$5.8	2.1%	\$1.7	0.5%	27
St Paul Fire & Marine Ins Co	12	\$5.6	2.0%	\$11.2	3.0%	10
American Casualty Co of Reading PA	13	\$5.1	1.8%	\$4.9	1.3%	16
Commerce & Industry Insurance Co	14	\$4.7	1.7%	\$9.3	2.5%	12
Continental Casualty Co	15	\$3.6	1.3%	\$10.0	2.7%	11
First Professionals Ins Co	--	--	--	\$13.6	3.7%	9
North American Specialty Ins Co	--	--	--	\$3.8	1.0%	19
Chicago Ins Co	--	--	--	\$3.4	0.9%	20
Pennsylvania Professional Liab JUA	33	\$1.2	0.4%	\$5.7	1.5%	13
St Paul Mercury Insurance Co	35	\$1.1		\$1.1	0.3%	37
Lexington Ins Co	38	\$0.8	0.3%	\$19.3	5.2%	5
Pronational Ins Co	41	\$0.6	0.2%	\$5.7	1.5%	14
Clarendon National Ins Co	51	\$0.2	0.1%	\$5.4	1.5%	15
Executive Risk Speciality Ins Co	63	\$0.1	0.0%	\$4.3	1.2%	17
Franklin Casualty Ins Co RRG	--	\$0.0	0.0%	\$17.5	4.7%	8
All Others Combined		\$26.7	9.6%	\$87.5	31.5%	
TOTAL		\$278.1	100.0%	\$371.2	100.0%	

Source: Pennsylvania Insurance Department, market analyses, medical malpractice. Note: lists all companies with over \$3 million of coverage in either year, including all types of malpractice coverage--doctors, hospitals, etc.--but not CAT Fund assessments; several companies listed here are no longer writing or renewing policies in PA

Since 2001, the biggest change nationally has been the complete withdrawal of the St. Paul Group of Companies. For many years the country's number one malpractice insurer, St. Paul announced in December 2001 that it was shifting its capital from malpractice to more profitable lines of coverage (Freudenheim 2001). St. Paul had already left much of the Pennsylvania market. More importantly, Princeton and MIIX, two high-volume companies, "non-renewed" Pennsylvania physicians in 2002. The latter is reorganizing to return exclusively to its roots as an insurer of New Jersey physicians.

Both hospitals and physicians suggest that insurance-market statistics do not tell

the full story because many insurers are not active sellers, even though they may have a substantial book of existing business. According to the Hospital Association of Pennsylvania, only two insurers are underwriting new policies for hospitals (HAP, 2002b). Hospitals also say that carriers still in the market are offering much less coverage. Like physicians, hospitals buy “first dollar” primary coverage, often from the same companies, and must participate in the publicly run Medical Liability Catastrophic Loss Fund (CAT Fund, now called the MCARE Fund) for secondary coverage from \$500,000 to \$1 million per claim. For claims above \$1 million, almost all hospitals seek excess coverage from a reinsurer or other carrier specializing in high-deductible policies. Until recently, a hospital could readily assemble a complete package of coverage, composed of several layers from different sources. In 2002, however, most Pennsylvania hospitals reported that high-end coverage was available only from a few carriers, and only with a substantial corridor of uncovered risk above \$1 million (HAP 2002a, b). Comparing Penn-

Exhibit 2. Hospitals Are Also Facing Coverage Problems

Extent of problems	No. of States	Description
severe	4	liability coverage unaffordable and often unavailable; health care services cut; recruitment limited; physicians move or retire; certain high-risk patients transferred out of state
high	9	coverage available but almost unaffordable, commercial insurers leaving market, captives and other alternatives created; some hospital services cut, eg, ob-Gyn, neurosurgery; physicians begin to leave state
elevated	14	coverage increasingly unavailable and unaffordable; interest in alternative risk mechanism grows; recruitment of new & specialty physicians harder; physicians begin to move to other states
guarded	15	health care service remain available without disruption; price increase force hospitals to trim prevention, other services
low	0	

Source: Am. Hosp. Ass'n, Med. Liability Reform Survey (Aug. 2002)

Notes: 42 responses from survey of AHA constituent state associations

sylvanias hospitals’ responses to the HAP survey with those of a national survey conducted in 2002 by AHA, Pennsylvania appears to have among the worst insurance availability problems in the nation for hospitals (Exhibit 2).

One effect of reductions in commercial coverage has been growth in the market share of the Pennsylvania Professional Liability Joint Underwriting Association. The JUA is the

“insurer of last resort” for practitioners and institutions unable to obtain coverage at affordable rates elsewhere. As such, it intentionally sets rates above those of other carriers. The JUA’s clientele therefore fluctuates greatly even within a year, as policyholders seek more favorable terms elsewhere. Some policyholders leave after as little as 10 days; a few, though, have been JUA-insured since the 1970s. The JUA’s rolls were lowest in October 1999. Enrollment has since risen markedly (Exhibit 3), although it is still nowhere near the thousands of physicians covered during the 1970s crisis.

Exhibit 3. More Pennsylvania Practitioners Are Using the JUA as Insurer of Last Resort, at Higher Prices

	1999	2000	2001	2002
No. of policyholders, year’s end	212	251	351	1,547
Written premium (\$ millions)	\$1.3	\$2.2	\$5.7	\$36.4
Effective premium increase, year’s end for following year	3.7%	20.9%	20.3%	47.7%

Source: PAJUA, PA Ins. Dept.

Total JUA enrollment – mainly physicians but including some other individual practitioners — stood at about 1800 at the end of February 2003. During some periods of 2002, as many as 10 hospitals at a time had JUA coverage, which was unusual. All but two had found other coverage by early 2003, mainly through “risk retention groups” (RRGs), a self-insurance-like mechanism for pooling risk across similar insureds. RRGs operate largely outside of state regulation and without the Guaranty Fund’s protection in the event of insolvency. JUA rates have also increased sharply, although some of the large jump in premiums for 2002 is attributable to coverage lasting well into 2003 as well as to the unusual provision of “tail” coverage to many former PHICO insureds—insurance against potential claims from past years that PHICO’s failure left unprotected.

Ultimately, individuals and institutions unable to find private liability coverage must buy very expensive coverage from the JUA, cease practice, or leave Pennsylvania. The JUA still only covers a sliver of the market. The extent to which practitioners have adopted the latter strategies is unknown, but raises important public policy concerns.

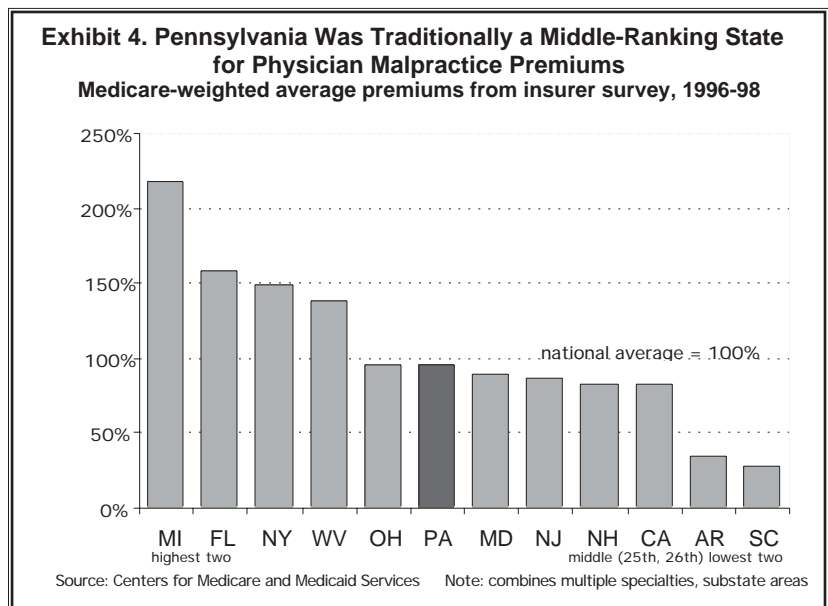
Another Concern: Rising Premiums and Affordability of Coverage

Premium levels can be estimated by surveying insurers, surveying medical providers, or dividing aggregate premiums by the number of physicians. All these methods suggest that Pennsylvania has moved from a mid-level state to a high-level one.

Pre-crisis premium levels

Until recently, Pennsylvania's physicians paid liability premiums roughly typical of the nation at large. In the 1970s crisis, California and New York were the most expensive states and received the most media attention. In the 1980s, Florida and Michigan moved to the top of the state rankings—at 150-220% of the national average—where they remained for a decade. California dropped to a middle position by the mid-1990s—ranked 26th, slightly below Pennsylvania. During 1996-1998, Pennsylvania's weighted average physician malpractice cost as calculated for Medicare was almost exactly the national average (Exhibit 4). The two least costly states, South Carolina and Arkansas, had premiums only about a quarter of the national average, indicating nearly a tenfold difference from the highest state to the lowest.

These data, which derive from a survey done every three years to help determine Medicare payment rates, are the most reliable estimates of the costs of



physician malpractice premiums. The survey obtains “book rates” filed with regulators by the top insurers in each jurisdiction for the level of coverage most commonly purchased, as determined by those regulators. The rates are then weighted to reflect Medicare utilization patterns by geographic area (and therefore omit obstetrics). State averages blend together geographic rates in states like Pennsylvania that have large enough numbers of physicians to support multiple rating areas. CAT Fund assessments are included in the amounts shown for Pennsylvania. Doing the survey and calculations takes considerable time and resources—Exhibit 4’s numbers are the most recent available. Moreover, the Medicare compilation does not track actual prices paid. Book rates overstated actual prices during the “soft” insurance market of the 1990s, when competition led many insurers to offer advance discounts or retrospective dividends to policyholders. They understate premiums in today’s “hard” market, because tighter underwriting standards allow fewer policyholders to qualify for book rates.

A different approach estimates average premiums by dividing company-level aggregate premiums by the number of physicians in a state, lumping together all specialties and locations. Using this approach and adjusting for CAT Fund assessments, Pennsylvania ranked 9th highest in the nation in 2000, about 50% above the national average (Exhibit 5). Pennsylvania’s neighbors (other than Maryland) also ranked well above average. California, which bears mentioning because its experience following comprehensive tort reform in 1975 is frequently invoked in malpractice debates, ranked 33rd — more than 20% below average. Exhibit 5 was tabulated by Norcal, parent company of PMSLIC, the biggest Pennsylvania malpractice insurer. The tabulation improves upon the standard reporting of aggregate premiums by including a special compilation made by A.M. Best, a leading rater of insurers’ creditworthiness. Best calculated the premium attributable only to practicing physicians—omitting retired doctors, hospitals, dentists,

**Exhibit 5. Pennsylvania Physician Premiums Ranked Higher in 2000, by a Different Estimation Method
Estimated Premiums per Practicing Physician, 2000**

Pennsylvania	\$27,494	9
Neighboring states		
Delaware	\$26,345	11
Maryland	\$18,470	20
New Jersey	\$35,301	2
New York	\$27,854	8
Ohio	\$23,122	13
West Virginia	\$39,050	1
California	\$14,248	33
United States	\$18,487	--

Sources: Norcal, Medical Liability Report Card 2000, at 15, based on AM Best Premiums adjusted for CAT Fund, AMA physician survey Notes: premiums adjusted to exclude non-physician insureds

and others whose premiums are typically included in insurers' reports to state regulators. (Even with this adjustment, Norcal's initial calculations yielded implausible figures for DC and a few other jurisdictions not presented in Exhibit 5.) It is unclear how either Best or Norcal treated premiums for doctors of osteopathy, whose presence in Pennsylvania is much

larger than in other states.

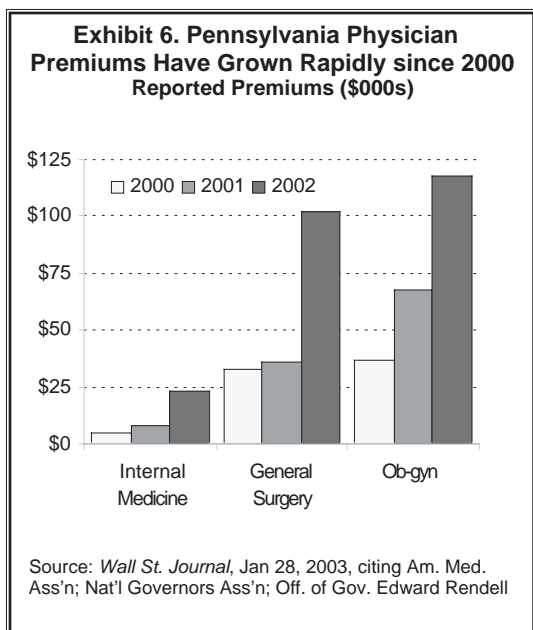
Readers should note that other estimates based on aggregate premiums do not adjust for the premiums of hospitals and other non-physicians (e.g., Hunter and Doroshow 1999, 2002), which affects the numerator in the premium/physician ratio. Other imprecisions can affect the denominator; i.e., the number of physicians. Not all licensed physicians actively see patients and hence need liability coverage. Whether to include non-office-based physicians and federal physicians is another issue, as they may not be covered by the conventional insurance market. The Norcal estimates used AMA data on practicing physicians; other estimates sometimes mix sources, such as by using AMA data for the nation but state government data for California (Hunter, 2002).

Recent Increases

Data from 1996-1998 or 2000 provide a baseline for the recent sharp rises in premiums of concern to public policy today. There is no single authoritative source for recent increases, which began in most states in 2000. However, several indicators suggest that Pennsylvania's rises have been especially pronounced, putting the state well above the

national average in premium costs for physicians. Information on hospitals is sketchier.

In one stark graphic, the *Wall Street Journal* recently headlined 2000-2002 increases of 100% or more for Pennsylvania physicians in three specialties (Exhibit 6). The *Journal's* presentation cited the American Medical Association and other sources, but did not explain how the rates were estimated. The chart usefully illustrates an important feature of malpractice rates—they vary enormously by specialty. Childbirth and surgery are two very large risk factors. Rates also vary significantly by location of practice in states like Pennsylvania that use multiple geographic rating areas, and are typically highest in large urban areas. The highest Pennsylvania rates (usually in Philadelphia) are about



double the lowest rates for any given insurer. Rates also vary by insurer, notwithstanding the single figures sometimes publicized. For example, the *Journal's* graphic suggests that “the” cost of general surgeons’ 2000 coverage was about \$30,000. A widely cited industry newsletter, *Medical Liability Monitor*, illustrates the complexity underlying such summary presentations. MLM lists four Pennsylvania insurers’ rates for 2000 (among many other sources of coverage). General surgeons’ rates ranged from just over \$7,000 for the cheapest company in the lowest-rated

area to almost \$34,000 for another company and geographic area (MLM 2002). These figures are for primary coverage only (in 2000, to a maximum of \$400,000 per occurrence), and do not include CAT Fund assessments or excess coverage purchased above the CAT Fund maximum.

Other premium estimates come from surveys of medical providers. Unlike insur-

er surveys, provider surveys capture actual purchase prices rather than book rates, as well as how much coverage was purchased. Higher coverage naturally costs more. The typical physician nationally buys a \$1 million/\$3 million policy, which covers any one claim up to \$1 million, and aggregate claims in a year up to \$3 million. The American Medical Association periodically conducts the broadest survey of physicians in all states, but has yet to publish information beyond the late 1990s.

Some specialty societies have surveyed their membership more recently. A 2002 survey of orthopedic specialists, for example, showed that Pennsylvania is one of the most expensive states for that specialty and is growing much more rapidly than the national average (Exhibit 7). Premiums increased almost 30% a year over the two prior years, and

Exhibit 7. Pennsylvania Orthopedic Surgeons' Premium Increases Have Been Large
Average Premiums and Rates of Change, 2000-02, from Physician Survey

State	Av. Premiums (\$ 000's)			av. ann. chng. 2000-02	Av. limit per occurrence (\$ 000's)
	2000	2001	2002		
Pennsylvania	\$43.7	\$54.3	\$73.3	29.5%	\$802.8
Neighboring States					
Maryland	\$23.5	\$18.6	\$24.3	1.6%	\$1,346.9
New Jersey	\$28.2	\$29.6	\$30.6	4.1%	\$2,433.3
New York	\$54.0	\$54.8	\$60.0	5.4%	\$1,141.7
Ohio	\$29.5	\$34.2	\$49.5	29.6%	\$2,104.7
California	\$22.7	\$25.5	\$25.5	5.9%	\$1,207.5
United States - Total	\$28.1	\$31.4	\$38.2	16.6%	\$1,471.4

Source: nat'l survey, Schmalz, Heidi. "Medical Malpractice Insurance Concerns: Final Report" American Academy of Orthopaedic Surgeons. April 8, 2002 Note: Delaware and West Virginia omitted because of small sample sizes; others from 27-119 respondents

Pennsylvania's average premium went from 60% to 90% above the national norm, surpassing New York in the process. California, and Pennsylvania's neighbors other than Ohio, ranked well below national norms in terms of premium increase.

Pennsylvania premium costs were high even though responding orthopedists on average said that they bought only about \$800,000 of coverage, well below policy limits

elsewhere. Indeed, including CAT Fund coverage, Pennsylvania practitioners are legally required to have above \$1 million, which suggests that some respondents did not include CAT Fund assessments along with their primary premiums. To the extent this occurred, Exhibit 4 undercounts the cost of malpractice coverage in Pennsylvania.

Less information is available for hospitals. At one time, malpractice exposure was much lower for hospitals than for physicians, who were seen as primarily responsible for care. Hospital responsibilities have grown over time, and the institutional share of total liability insurance costs seems to have risen as well. The Hospital Association of Pennsylvania surveyed hospitals twice during 2002 (HAP 2002a, b). Each time, it found about the same statewide average increase over the prior 12 months, just over 80% (Exhibit 8). The averages appear not to be weighted for size of hospital. Most hospitals' fiscal years begin in July, and most liability coverage is renewed soon thereafter. The

increases reported in the first survey, in spring 2002, therefore reflected mainly 2001 rate

Exhibit 8. PA Hospital Premiums Are Also Reportedly Rising Rapidly Percent Increase in Hospital Liability Premiums, by region, 2002, hospital survey						
	Statewide ave.	South- east	West	Central	North- east	Lehigh
Mean, spring 2002	81%	115%	71%	83%	48%	61%
Mean, fall 2002	86%	78%	87%	62%	132%	84%

Sources: Hosp. & Healthcare Ass'n of PA (May, Dec, 2002) Notes: increases for prior 12 months for primary, CAT Fund, excess layers; 98 responses in spring survey; not noted for fall survey

increases, while most in the fall 2002 survey presumably reflected 2002 rate changes. Median increases were also reported for the spring survey and were uniformly smaller than mean increases, showing that some hospitals reported very large increases.

Over half of the Pennsylvania hospitals surveyed reported that they had accepted higher deductibles or otherwise retained more risk (asked only in the spring survey). Thus, the price rise would be even higher if the shift were calculated for the same "market basket" of coverage, as is done for inflation figures generally. Although book-rate premiums for primary coverage are quoted as dollars per bed for each geographic area, hospitals buy

different packages of insurance. Unlike physicians' rates, hospital premiums are partly experience rated, meaning that they are affected by an institution's past losses. More weight is given to experience for larger hospitals and those staying with an insurer for a longer time. Hospitals also buy an excess layer of protection against very high losses, beyond primary insurance and the CAT Fund layer of coverage. These excess rates are typically institution-specific rather than standard. Finally, a third of Pennsylvania hospitals self-insure through a captive insurer (nearly half in southeast Pennsylvania and Lehigh Valley), so that their premium rates are internal rather than market-mediated. For them, "premiums" equal their loss experience, plus overhead costs of running the captive and hiring a "fronting" insurer licensed in Pennsylvania to assure the state that claims will be paid.

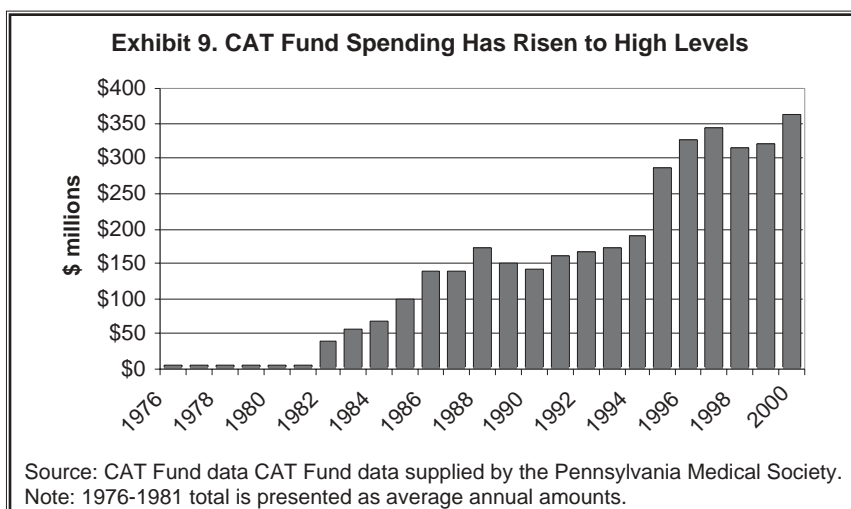
Costs and Complexities Added by Pennsylvania's CAT Fund (now MCARE Fund)

The Medical Liability Catastrophic Loss Fund has contributed to the state's liability insurance woes by increasing annual assessments on health care providers and by reducing its level of excess coverage, forcing providers to pay more for commercial primary coverage. Unlike other states with public compensation funds, such as Indiana, Pennsylvania has committed substantial resources to paying malpractice claims but has not instituted limits on those claims by adopting caps on damages, shorter statutes of limitations, or similar measures.

The CAT Fund was created in 1975 to increase protection for medical providers and compensation for injured victims. In addition to requiring all licensed medical providers to buy primary insurance of \$200,000 per occurrence, Pennsylvania mandated participation in a public fund for "catastrophic" losses. This raised the total available compensation to \$1.2 million, a very high level for the times, and assured availability of excess coverage at a time of rising malpractice fears.

The CAT Fund operated more like social insurance than like private casualty insurance. Enrollment was mandatory and losses were pooled. It was financed by uniform assessments on premiums for primary coverage, unrelated to providers' risk ratings or claims experience. Financing was on a "pay as you go" basis: Current rate payers' assessments covered current payouts from past occurrences, not the risk of future losses, and no significant reserves were maintained against future claims.

Because malpractice claims are slow to be filed and slower to be resolved, payouts and hence assessments in the CAT Fund's early years were very low (Exhibit 9). By the mid-1990s, however, annual assessments exceeded \$200 million, roughly



comparable in magnitude to the total volume of premiums paid to private insurers. This amount did not cover about \$2 billion of unfunded liability relating to incidents that had already occurred, for which private insurers

would have raised premiums further. In 1995, the CAT Fund had to impose a large emergency surcharge, creating a mini-crisis in Pennsylvania that did not occur in other states. Legislative reforms in 1996 increased CAT Fund collections by shifting to JUA rates as the basis of assessment; this meant that commercial discounting of primary coverage did not affect funding. The legislation also reduced future CAT Fund payouts by raising the threshold for coverage from \$200,000 to \$500,000 between 1996 and 2001.

Because assessments rose so fast in the 1990s, when primary premiums were stable, many blamed very high jury awards or CAT Fund mismanagement. However, an academic analysis funded by the Pennsylvania Trial Lawyers Association concluded that CAT Fund payouts followed predictable patterns in light of underlying inflation in medical costs and wages, and attributed the suddenness of the rise mainly to postponing costs from large cases in prior years (Hofflander, Nye, and Nettesheim 2001).

Other concerns relate to how CAT Fund financing distributes the costs of liability payments. Pay-as-you-go assessment shifts burdens from past physicians to current ones. Pennsylvania therefore is disadvantaged in attracting physicians because new doctors pay a high assessment to cover losses generated by their predecessors, a problem that continues under MCARE. The standard statewide assessment regime also shifts costs from high-rated specialties and locations to lower-rated ones, compared to private insurance company practice. Although certain types of physician and certain geographic areas incur a much higher risk of a catastrophic award, they pay the same percentage assessment as others. The biggest gainers from this risk pooling are hospitals and high-risk specialists in Philadelphia; the biggest losers are primary care physicians in rural areas.

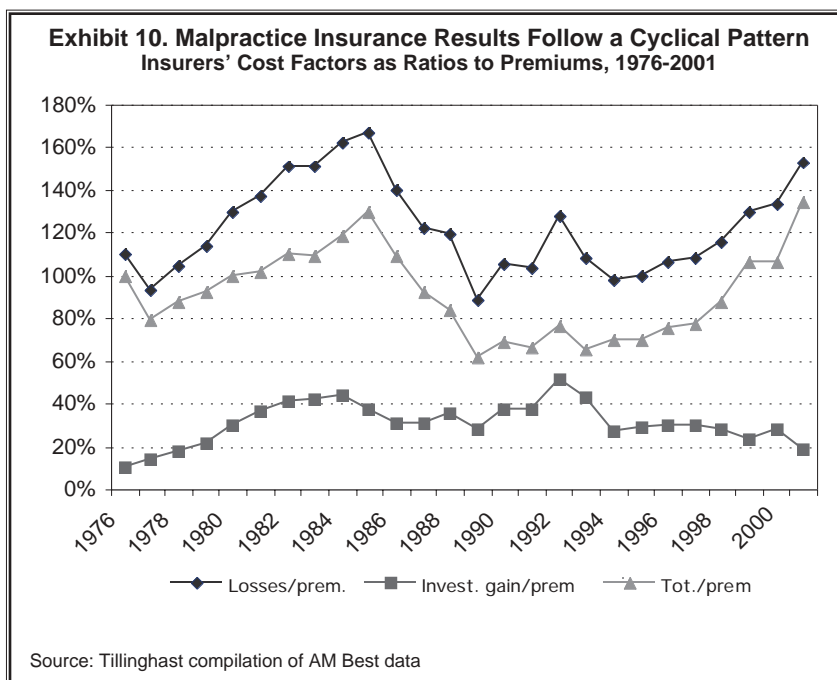
In 2002, the CAT Fund was supplanted by a new Medical Care Availability and Reduction of Error Fund (MCARE Fund), which is scheduled to be phased out over a period of years. The 2002 legislation reduced overall provider responsibility for assessments by transferring to the MCARE Fund an expected \$40 million a year for 10 years from the state's Automobile Insurance Catastrophic Loss Fund. The 2002 reforms also reduced MCARE coverage to a layer between \$500,000 and \$1 million per claim, an upper limit typical for commercial coverage in other states. The lower limit of MCARE Fund coverage will be raised slowly year-by-year until the Fund is dissolved, leaving physicians to procure full coverage in the private market.

Interviews done for this report reveal that both plaintiffs' and defense lawyers criticize the CAT Fund's impact on settlement negotiations. Settling claims requires agreement among the primary carrier, the CAT Fund, and any excess insurer. Plaintiffs' lawyers also complain that the Fund often resists paying meritorious cases, while many providers and primary carriers opine that it is harder to mount a joint defense with the Fund than with another private insurer. These tendencies may help explain why malpractice cases in Pennsylvania are resolved so slowly.

Non-Liability Factors Affecting Liability Insurance

Plaintiffs' lawyers and consumer advocacy groups often assert that insurers themselves are to blame for current problems, not the legal system. In particular, they point to an inverse relationship between premiums and investment earnings, part of a boom-and-bust "insurance cycle." Data from malpractice insurers clearly illustrate cyclical ups and

downs (Exhibit 10). The middle line shows overall operating results for malpractice insurers nationwide, starting in 1976 (before the mid-1970s crisis, malpractice was not separated out from general liability). Insurers' "net costs" – defined as underwriting losses (mainly claim payments but also other costs

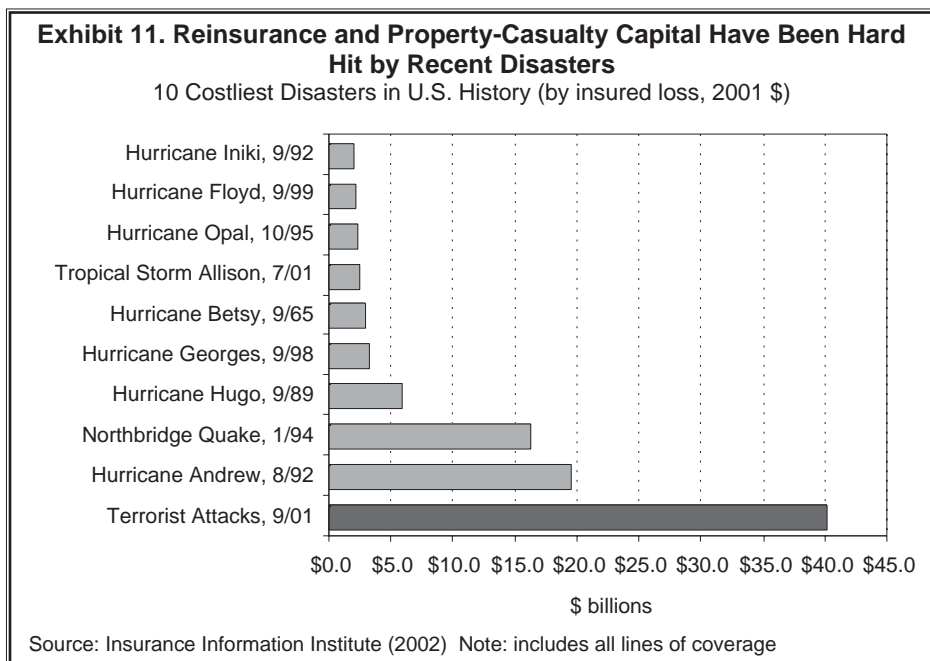


of insurance operations) minus earnings from investments – were at or above 100% of premiums in 1976, in the mid-1980s, and in the early 2000s. Net costs at or above 100% mean that insurers have no profits, as computed under statutory accounting principles.

Exhibit 10 also shows trends in claims losses (top line) and investment earnings (bottom line), the two components of overall operating results. During the period 1976-2001, underwriting losses were larger relative to premiums (60%-160%) than were investment gains (10%-55%), as well as more variable. This suggests that loss trends are more important determinants of overall results than are investment trends.

Another non-legal factor affecting all lines of casualty insurance has been the recent rise in reinsurance premiums. This indirectly raises the cost of physician coverage, as primary insurers buy reinsurance to protect themselves from unusually large losses in a year, and directly affects liability costs for hospitals, which often buy commercial excess coverage. An upturn in reinsurance premiums that began in the 1990s was accelerated by

the terrorist atrocities of September 11, 2001, by far the largest single loss in insurance history (Exhibit 11). The event not only reduced available capital to underwrite reinsurance but also changed attitudes about the



predictability of risk and hence probably increased the “risk premium” investors demand.

Because these effects are common to many lines of property and casualty insurance, some observers argue that the medical malpractice crisis does not warrant special relief.

Exhibit 12. Increases in Casualty Insurance Prices, Malpractice and Other Lines during 3 mos., Oct.-Dec. 2002

	Declines (in % ranges-)				Increases (in % ranges)					
	20-30	10-20	1-10	0%	1-10	10-20	20-30	30-50	50-100	>100
Business Interruption	0.00	0.00	0.00	0.15	0.22	0.41	0.16	0.05	0.00	0.00
Commercial Auto	0.00	0.00	0.01	0.06	0.14	0.43	0.26	0.08	0.01	0.00
Commercial Property	0.00	0.00	0.02	0.08	0.16	0.26	0.26	0.19	0.03	0.00
Construction Risks	0.00	0.00	0.00	0.05	0.10	0.20	0.22	0.28	0.11	0.05
Directors & Officers	0.00	0.00	0.00	0.07	0.05	0.26	0.27	0.21	0.11	0.04
Employment Practices	0.00	0.00	0.00	0.09	0.14	0.31	0.24	0.18	0.05	0.01
General Liability	0.00	0.00	0.00	0.07	0.13	0.30	0.38	0.11	0.00	0.00
Medical Malpractice	0.00	0.00	0.00	0.02	0.09	0.10	0.10	0.21	0.21	0.28
Surety Bonds	0.00	0.00	0.00	0.13	0.26	0.26	0.24	0.10	0.02	0.02
Terrorism	0.04	0.01	0.04	0.23	0.09	0.15	0.23	0.09	0.00	0.11
Umbrella	0.00	0.00	0.01	0.08	0.03	0.22	0.22	0.27	0.11	0.05
Worker's Comp.	0.00	0.00	0.00	0.09	0.19	0.28	0.27	0.11	0.02	0.02

Source: national survey of membership by Council of Insurance Agents & Brokers (Jan. 2003)

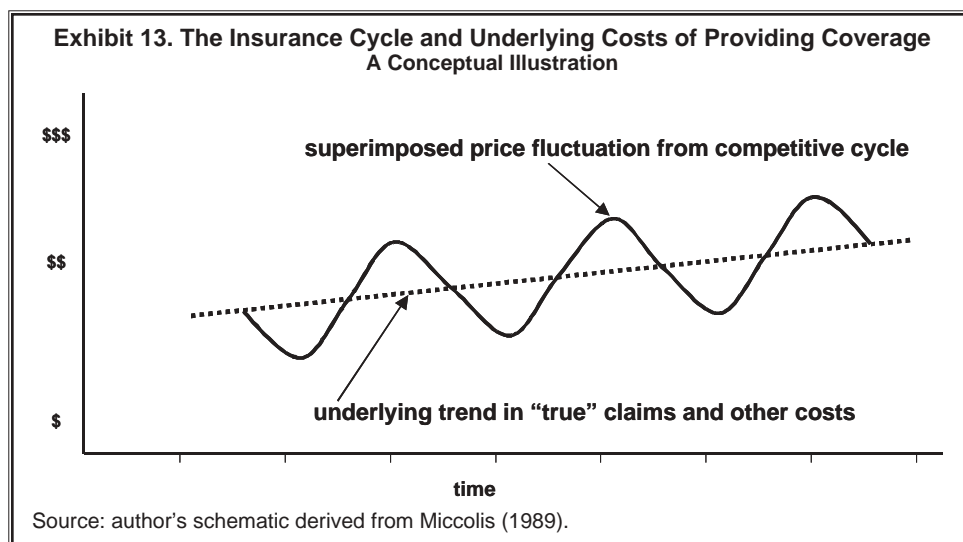
Notes: CIAB members said to place 80%, over \$90 billion, of US insurance products and services; percentages omit respondents not placing particular lines, from 3% for general liability to 47% for terrorism; totals do not add to 100% because of rounding

median rate range
 modal range (most frequent)

Indeed, most lines of coverage have increased in cost by 10-30% (Exhibit 12). Malpractice insurance, however, remains a high outlier, with median increases of 30-50% in price, and 28% of respondents reporting increases of over 100%.

In sum, these data suggest that both insurance factors and underlying costs of coverage are influential, leading premiums to cycle above and below “true” long-run costs of providing insurance, as conceptually illustrated below (Exhibit 13). For liability and other lines of insurance, periods of competitive underpricing are followed by eras of rapidly rising premiums and diminished availability. Unlike most suppliers of products or services, insurers initially respond to higher prices for their product by reducing the amount of cov-

erage they offer because their existing capital can safely underwrite fewer policies at the higher price. When profits are good, existing insurers commit more capital to the market and new ones enter. When times turn bad, insurers leave the market, reducing overall supply and dampening competition. The peak of the current cycle may come soon, as insurer losses relative to premiums are almost at the high point seen in the malpractice crisis of the 1980s (Exhibit 11 above).



The Legal System and Liability Claims

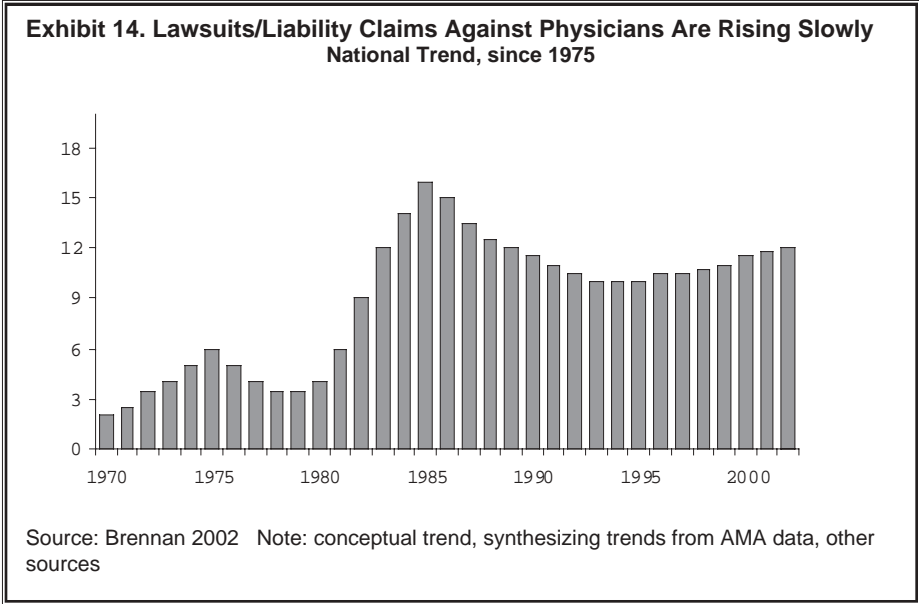
Liability claims are resolved under the rules and processes of tort law, ultimately with a trial if the parties are unable to work out an alternative. Almost all insurance claims of any consequence are associated with lawsuits, although many claims files are opened based on notice of a potential problem that proves inconsequential, and a small number are paid before a lawsuit is filed. Most lawsuits are dropped during pretrial discovery or settled through negotiation between plaintiffs' attorneys and defense counsel hired by liability insurers. Fewer than 10% go to trial. The expense of investigating and defending claims and then paying any settlements or awards constitutes the main cost of underwriting liability insurance.

This section describes the prevalence of malpractice litigation and the amount of payment handled through the legal system—what insurers call “frequency” and “severity” of claims. The legal system is intended to generate *deterrence* of substandard medical care by requiring *compensation* to patients wrongfully injured by health care providers through a dispute resolution process that offers *justice* (Bovbjerg 1985). Assessing the performance of the legal system in achieving these social goals is beyond the scope of this report.

Very little information about legal claims and subsequent outcomes, especially settlements, is available from judicial sources. Data that allow comparisons over time and across states mainly come from special surveys, from insurers' “closed claims” files, and from required reporting of paid claims involving physicians to the National Practitioner Data Bank operated by the federal government

National Trends in Claims Frequency and Severity

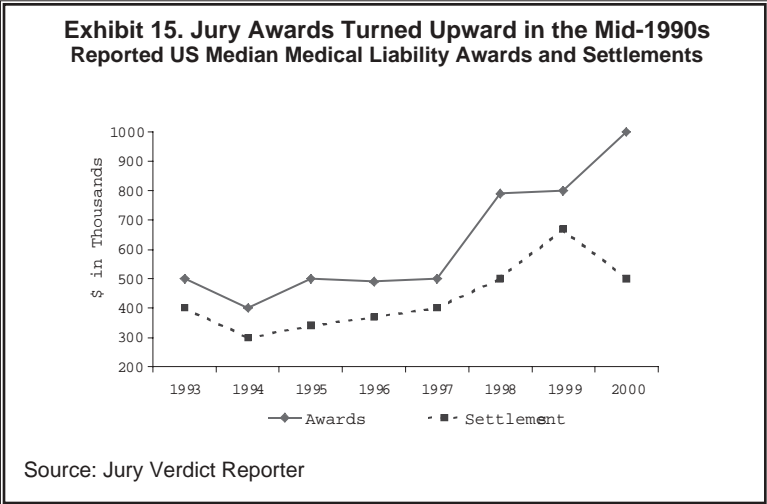
Before the 1960s, malpractice claims were rare. An AMA survey in the late 1950s found that about one in seven physicians could expect to be sued during their course of their careers. The mid-1970s and mid-1980s crises each saw run-ups in claims rates



nationally (Exhibit 14). Analysis of state-to-state variation suggested that both legal and social changes were responsible (Danzon 1985). By the mid-1980s, the average claims rate had risen to one in seven doctors

each year. After each of these crises, claims rates declined for a time, plausibly because of tort reforms in many states and negative publicity about lawsuits.

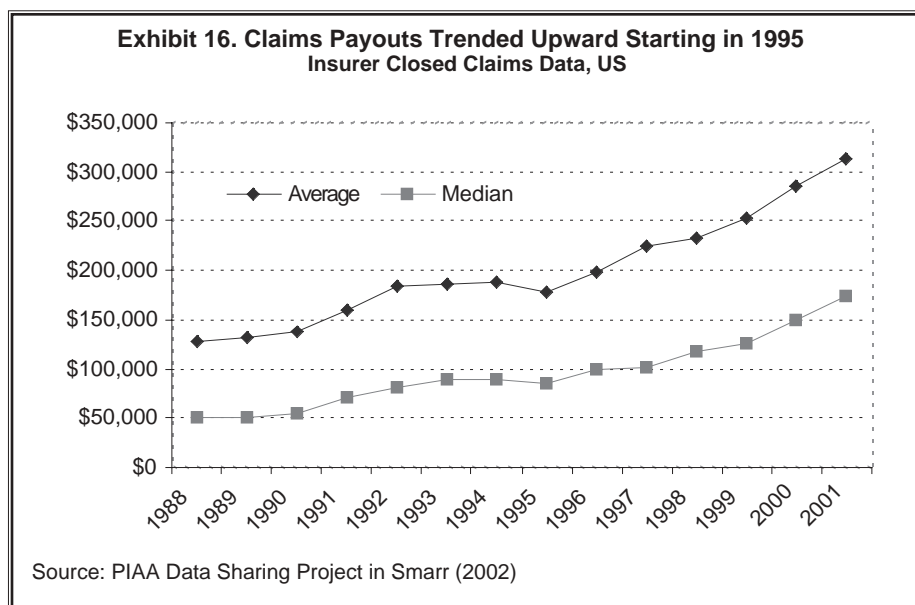
The current crisis seems different. Claims rates have risen little nationally since the mid-1990s, although some states have seen increases. Instead, insurers report that increases in payouts are the key driver of rising claims costs. National data from the *Jury Verdict Reporter* are often cited. These show that the median size of verdicts in cases taken to trial where the jury finds in favor of the patient more than doubled between 1995 and 2000 to about \$1 million per case (Exhibit 15, top line). The mean verdict was even higher. However, *JVR* relies



heavily on voluntary submission of information by trial attorneys and probably overemphasizes large cases that attorneys want to publicize. In recent years, *JVR* has sought reports of out-of-court settlements as well as verdicts, but likely includes only a small share of them (Exhibit 15, bottom line). This may partly explain the divergence in apparent trends for settlements and for verdicts.

More representative data on total payouts come from a census of closed claims reported to the trade association of physician-run insurers by its members (Exhibit 16).

Average payouts in nominal dollars nearly doubled between 1995 and 2001, a period of relatively low inflation. Particularly troubling to insurers is that high-end payouts rose the fastest. Claims payments of \$1 million and above increased



from about 3% of total paid claims in 1995 to almost 8% in 2001.

Claims Frequency and Severity Trends in Pennsylvania

Rates of litigation vary substantially by geographic location. Comparing Pennsylvania to other states, Philadelphia County and Allegheny County (Pittsburgh) ranked quite high in malpractice filings per population among 45 large counties across the country when studied by federal officials in 1992 (Exhibit 17). Pittsburgh's rate was more

Exhibit 17. Pennsylvania Traditionally Had Medium-High Rates of Malpractice Lawsuits and Trials Rates of Tort Filings and Trials, 1992 & 1996, by County

County	All Torts		Auto torts			Medical Malpractice				
	Filing rate	Trial rate	Filing rate	Pct. of tort filings	Trial rate	Pct of tort trials	Filing rate	Pct. of tort filings	Trial rate	Pct. of tort trials
National median	384	11	189.0	55.9%	5.2	48.4%	16.7	4.6%	1.0	12.2%
Allegheny, PA	407	17	229.2	56.3%	6.6	39.5%	25.7	6.3%	3.8	22.8%
Philadelphia, PA	1,178	24	706.6	60.0%	6.0	25.2%	35.5	3.0%	4.5	18.7%
Bergen, NJ	818	16	514.0	62.8%	6.7	42.9%	21.6	2.6%	3.8	24.1%
Essex, NJ	1,363	15	989.2	72.6%	8.6	57.0%	15.5	1.1%	1.9	12.3%
Middlesex, NJ	1,034	26	707.1	68.4%	11.7	44.3%	33.5	3.2%	3.4	13.0%
New York, NY	614	20	216.6	35.2%	4.4	22.4%	70.4	11.5%	3.3	16.8%
Cuyahoga, OH	679	15	415.0	61.1%	8.6	57.6%	47.1	6.9%	2.6	17.1%
Franklin, OH	398	8	219.9	55.2%	4.9	64.9%	19.3	4.8%	1.0	13.0%

Source: Bureau of Justice Statistics Bulletin, Civil Justice Survey of State Courts, "Tort Cases in Large Counties, 1992"; "Tort Trials and Verdicts in Large Counties, 1996" Notes: rates are per 100,000 population; data are from two surveys of 45 large counties, nationwide; case data from 1992, trial data from 1996

than 50% above the national median; Philadelphia's rate was just over double the national median. The Pennsylvania counties included in the sample ranked above two counterparts in New Jersey and one in Ohio, but far below New York County (Manhattan) and Cuyahoga County (Cleveland).

Similar surveys of trials in 1996 found that Pennsylvania's urban counties had about four times the rate of malpractice trials as the national median, above New York and other comparison counties in neighboring states. For all the counties studied, malpractice cases constituted a far higher share of tort trials than of tort filings. For example, in Philadelphia, malpractice accounted for only 3% of tort filings, but 18.7% of tort trials; only about one in 100 automobile accident filings went to trial, but about one in 8 malpractice filings. These ratios are not precise, as survey years differed for filings and trials. In general, the higher trial percentages for malpractice cases reflect their larger stakes and greater complexity, which make them harder to settle out of court. Lower trial percentages in other areas, particularly auto torts, are attributable to no-fault rules in certain states, the availability of small-claims court in appropriate cases, and other factors.

More recent data are available on frequencies of malpractice settlements and awards made on behalf of physicians, which federal law requires to be reported to the National Practitioner Data Bank. NPDB data show that Pennsylvania had 8.5 payments per 100,000 population in 2001 (Exhibit 18). This represents a significant increase over time; the average frequency for the period 1990-2001 was 6.9 (these years constitute the entire history of the Bank). Pennsylvania exceeded the national average both for the whole

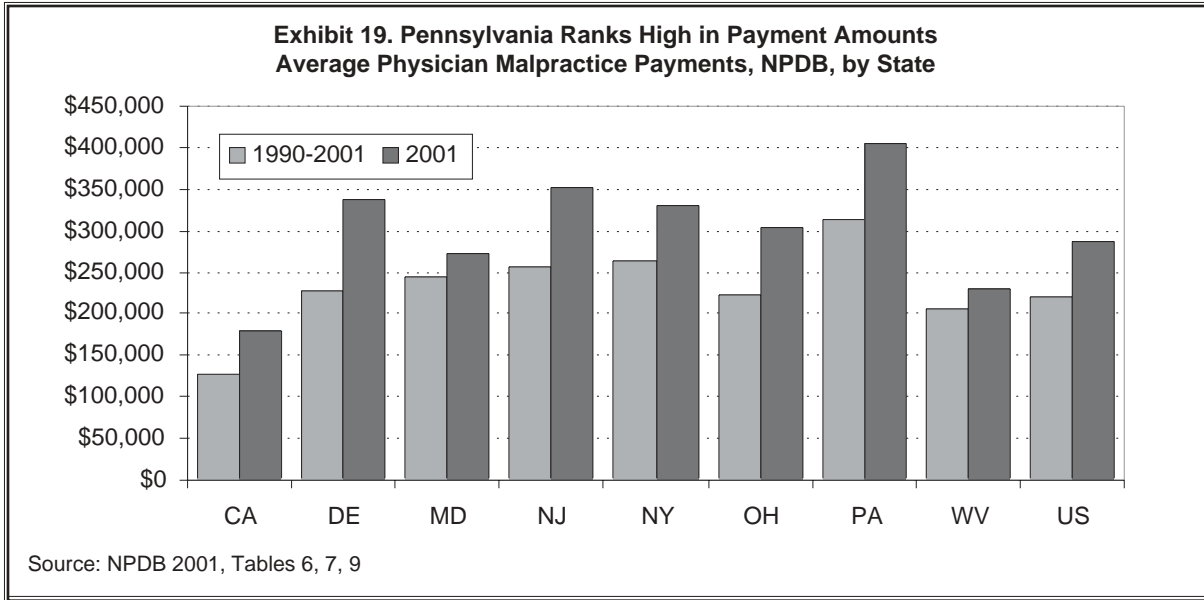
Exhibit 18. Pennsylvania Ranks High in Frequency of Paid Physician Claims

Number of Payments Reported to National Practitioner Data Bank, by Year

State	1990-2001		calendar 2001	
	total payments	rate per 100,000 pop'n (1995)	total payments	rate per 100,000 pop'n (2001)
Pennsylvania	9,993	6.91	1,049	8.53
Neighboring States				
Delaware	382	4.43	52	6.53
Maryland	2,554	4.24	283	5.25
New Jersey	6,496	6.80	940	11.04
New York	21,437	9.84	2,085	10.93
Ohio	7,526	5.62	677	5.94
West Virginia	1,640	7.51	207	11.49
California	17,834	4.72	1,459	4.22
United States	157,720	5.00	15,771	5.53

Sources: NPDB 2001 Annual Report, Tables 6 & 7; U.S. Census Bureau, State Population Estimates: Table ST-99-3, July 1, 1990 to July 1, 1999, Table ST-EST2002-01, April 1, 2000 to July 1, 2002

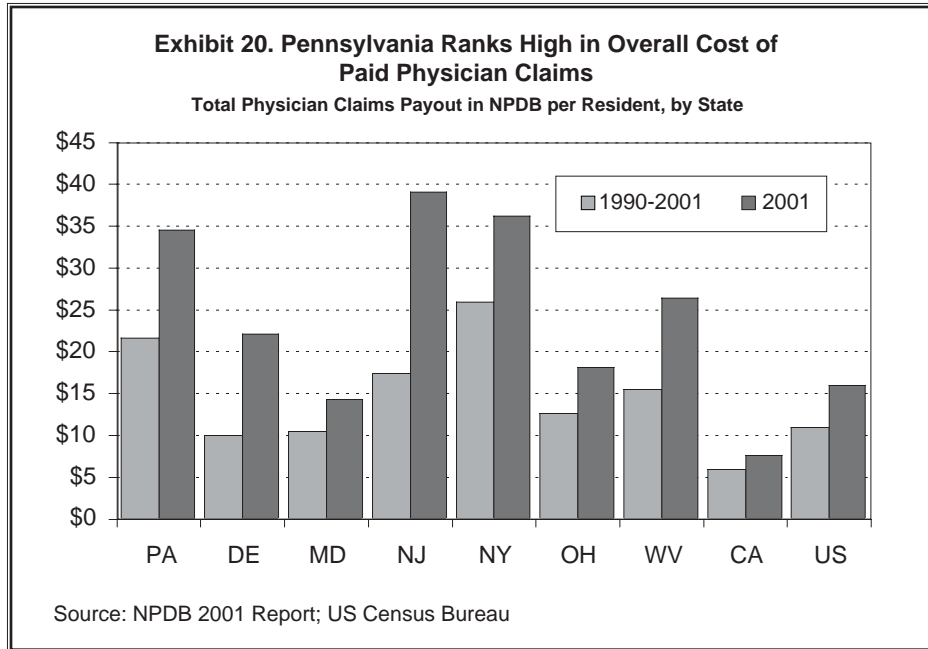
period and for 2001 alone—and its rate of increase was above average as well. Compared with its neighbors, however, Pennsylvania ranks in the middle: West Virginia, New York and New Jersey were more than two percentage points higher, while Delaware, Ohio, and Maryland were more than two percentage points lower. California ranks slightly below the national average over the entire period, and somewhat lower for 2001 cases alone. A caveat with respect to NPDB data is that states differ in physician employment patterns – when a physician works for a hospital or other institution, the institution may settle claims in its name only and therefore not report the physician.



Pennsylvania also ranks higher in payments per paid case, a calculation that combines payouts from primary coverage with those from the CAT Fund. Payouts averaged about \$400,000 in 2001, and averaged just over \$300,000 for the entire period 1990-2001 (Exhibit 19). Pennsylvania payouts were higher than in any neighboring state, and were almost a third above the national average. In contrast, California was more than a third below the national average.

Combining rates with amounts yields total physician payouts per state resident (Exhibit 20). In 2001, Pennsylvania trailed New Jersey and New York by small amounts on total payouts, but all three were more than double the national average. California was about half the national average.

A complaint often made about the legal system is that it resolves cases slowly—more so for malpractice than for other types of injury cases. The NPDB tracks the average time elapsed from incident to payment for malpractice claims against physicians (Exhibit 21). Pennsylvania takes a mean of 5.7 years to deliver payments to claimants



(median 5.2) — over a year slower than in the nation at large. New York was about 10% slower still, New Jersey very similar to Pennsylvania, and other neighbors were faster. California took only about half as long to make payments as Pennsylvania.

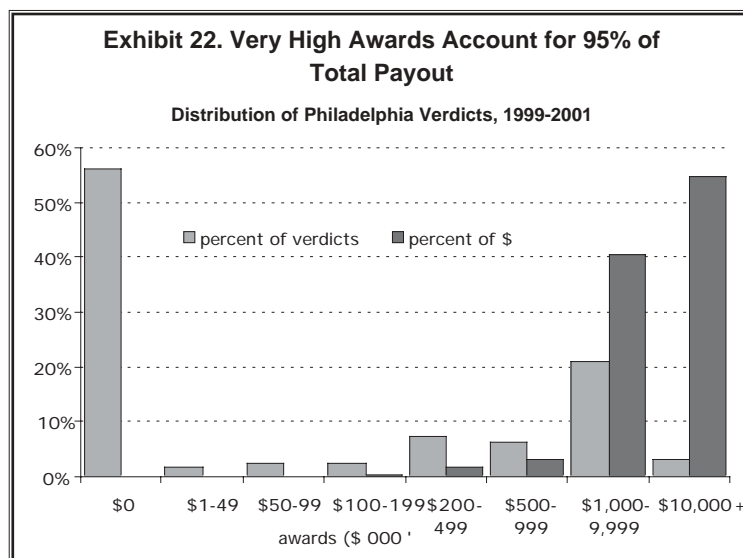
Exhibit 21. Pennsylvania Pays Physician Claims More Slowly than the National Average
Years from Incident to Payment, National Practitioner Data Bank

	2001 calendar year		1990 through 2001	
	mean	median	mean	median
Pennsylvania	5.70	5.22	5.96	5.57
Neighboring States				
Delaware	4.00	3.82	4.48	4.03
Maryland	4.48	4.08	4.71	4.27
New Jersey	5.76	5.24	6.17	5.09
New York	6.22	5.67	6.98	6.08
Ohio	4.39	3.73	4.49	3.56
West Virginia	4.60	4.15	5.54	4.24
California	3.02	2.59	3.39	2.82
United States -Total	4.63	4.08	4.81	4.02

Source: NPDB 2001 Annual Report, Tables 9
Note: PA times may be overstated because NPDB receives additional reports from state "CAT Fund" when it pays upper layer of large claims, and such large claims take longer than average

The Special Case of Philadelphia

Philadelphia is generally believed to have very high jury awards. This reputation is confirmed by available information for 1999-2001 for the Court of Common Pleas, which handles almost all malpractice cases in the county. Most verdicts favored defendants, with no money being awarded in 56% of cases taken all the way to jury verdict (Exhibit 22, left-hand bars). Of the cases decided in favor of plaintiffs, more than half generated awards of over \$1 million. The over \$1 million categories accounted for nearly all the dollars awarded, with



55% deriving from a small number of cases with damages exceeding \$10 million (right-hand bars). Comparable official court statistics are not available for the rest of Pennsylvania.

The plaintiff “win” rate of 44% may not seem high, but it is roughly double the national average. Only about 20% of U.S. jury verdicts in 2000 awarded money to plaintiffs, according to closed-claim information from physician insurers (Smarr 2002). In Philadelphia, 24% of verdicts awarded amounts in excess of \$1 million. Indeed, from 1999 through 2001 the number of verdicts over \$1 million in Philadelphia (87) approached the number of verdicts plus settlements of this magnitude in all of California (101, Neupauer 2002). Win rates in Philadelphia were not constant from year to year: above 50% in 1999 and 2000 but 40% in 2001. Nor were the number of verdicts, which were higher in 1999

than in 2000 and 2001. The Philadelphia tracking effort ended in 2001, without gathering sufficient data to establish a long-term trend in number of verdicts or amount of plaintiff awards.

Philadelphia court data do not present a complete picture. They fail to reveal what types of cases go to trial, or whether jury awards are reduced by judges or settled for lesser amounts to avoid lengthy appeals. It is also possible that 1999-2001 were not typical years. Qualitatively, interviewees reported that Philadelphia courts in the late 1990s were catching up on an accumulated backlog of cases, including some that were unusually large. At least one media account has suggested that verdicts have declined since 2001.

Pennsylvania's Health Care System

The ability to assure access to affordably priced, high-quality health care is an important element in Pennsylvania's relative attractiveness to residents and businesses. The health care system is therefore vital to the state's economic and social well-being, as well as the physical health of its inhabitants. Among other things, teaching hospitals help anchor the state's health care system, producing physicians for a national market as well as health services locally. The state itself is one of the largest purchasers of medical services, a fact reflected in Medicaid's share of Pennsylvania's state budget. The medical malpractice crisis and potential reforms must be assessed in light of these public policy issues. The following data provide background on access to health care in Pennsylvania, its quality, and its cost. As yet, however, there is little information directly connecting malpractice liability to medical performance. Possibly the most urgent question is the extent to which current problems of availability and affordability of liability insurance affect patients' access to care.

Access to and Cost of Health Coverage

Pennsylvania's twelve million residents closely resemble their counterparts across the US (Exhibit 23). Pennsylvanians are slightly older; 14% are age 65 and above, two percentage points above the national average. The state has under half the proportion of non-whites as the US generally (14% versus 30%). Pennsylvania residents are slightly more likely to live in metropolitan areas (85% versus 81%). They enjoy slightly higher than average family incomes (about 4% above the national average) as well as slightly lower rates of poverty and unemployment.

The state's population is heavily concentrated in and around the two biggest cities, Philadelphia and Pittsburgh, in the southeast and southwest (Exhibit 24). Although Pennsylvania is highly metropolitan in percentage terms, it has the nation's largest rural

Exhibit 23. Demographically, Pennsylvania Resembles the US at Large
Recent Population Data

Characteristic	PA	US
Residents, 1999-2000 (millions)	11.8	275.7
Children 18 and under (%)	26	28
Age 65 and above (%)	14	12
Metropolitan residents (%)	85	81
Race/ethnicity (%)		
White	86	70
Black	9	13
Hispanic	3	12
Other	2	5
Economics		
Median Family Income, 1998-2000	\$29,000	\$27,830
Under Federal Poverty Level, 1999-2000 (%)	13	15
Unemployment Rate (Seasonally Adjusted)		
Oct. 2002 (%)	5.3	5.7
Oct. 2001 (%)	5.0	5.4

Source: Kaiser Family Foundation, State Health Facts <<http://www.statehealthfacts.kff.org>>

population because of the state’s overall size and its many well settled farming communities (Pennsylvania Economy League 2002).

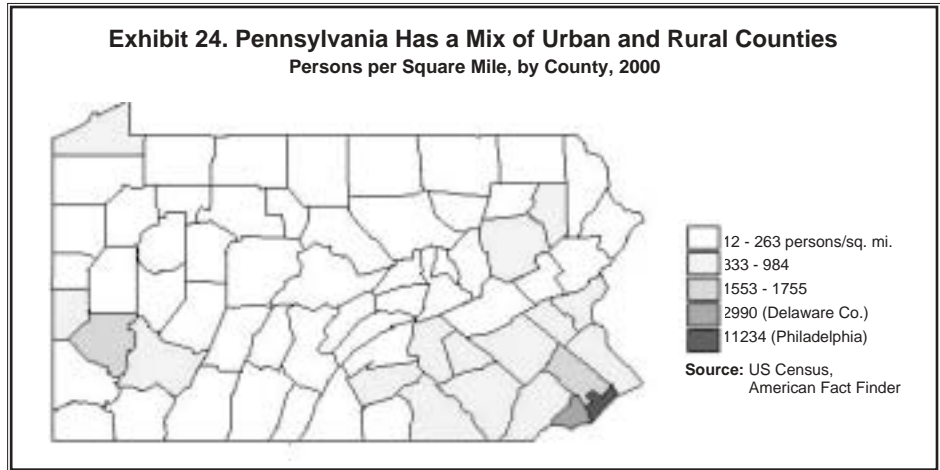
Pennsylvania has high rates of health insurance coverage (Exhibit 25). Only 9% of residents are uninsured, about one third less than the national average

and even below the well-insured neighboring states. Pennsylvania’s advantage mainly comes from employer-sponsored insurance (ESI) — private coverage provided as an employee benefit.

The state’s rates of private insurance coverage are about 3% above the national average both for workers (own ESI) and for depend-

ents (other ESI). Slightly more Pennsylvanians are covered by Medicare because of the state’s relatively elderly population. Medicaid covers slightly less than the national average—not because eligibility standards are low but because fewer people qualify, a result

Exhibit 24. Pennsylvania Has a Mix of Urban and Rural Counties
Persons per Square Mile, by County, 2000



Source: US Census, American Fact Finder

Exhibit 25. A High Share of Pennsylvanians Have Health Insurance Coverage Comparisons with Neighboring States, US (average, 2000 & 2001)

type of insurance	US	PA	MD	NJ	NY	OH
ESI--own	30.4%	32.9%	33.4%	33.4%	28.5%	31.9%
ESI--other	29.0%	32.3%	34.6%	31.5%	27.4%	32.5%
Private Non-Group	4.6%	4.2%	3.8%	2.4%	3.5%	3.9%
Medicaid and Other State	8.1%	7.1%	4.2%	5.3%	11.3%	6.8%
Medicare and other Federal	13.5%	14.5%	12.7%	14.7%	13.4%	13.7%
Uninsured	14.5%	9.0%	11.4%	12.7%	15.9%	11.2%

Source: Urban Institute, 2002. Notes: "ESI" is employer-sponsored insurance; two years of CPS data were used to assure sufficient sample size

of the state's relatively low poverty rate. A relatively high proportion of Pennsylvanians' health insurance coverage is arranged through HMOs, according to national statistics (Exhibit 26). Fully one third of Pennsylvanians are enrolled in HMOs, including Medicare and Medicaid enrollees. Starting from a low baseline, Pennsylvania HMO growth greatly outpaced that of the nation as a whole during the 1980s. By 1990, Pennsylvania had almost reached the national average. HMO enrollment continued to grow at rates one-third higher than the national average until peaking in 1998. HMO enrollment in Pennsylvania and nationally has declined since that time. HMO penetration is higher in urban areas. In 1998,

Exhibit 26. Pennsylvania Ranks High in HMO Coverage

Percentages of population enrolled

State	1980	1985	1990	2000	2001	ave. ann. pct. chg.	
						1980-90	1990-2001
United States	4.0	7.9	13.5	30.0	27.9	12.9%	7.5%
New York	5.5	8.0	15.1	35.8	35.0	10.6%	8.8%
New Jersey	2.0	5.6	12.3	30.9	31.7	19.9%	9.9%
Pennsylvania	1.2	5.0	12.5	33.9	33.4	26.4%	10.3%
Ohio	2.2	6.7	13.3	25.1	23.4	19.7%	5.8%
Delaware	—	3.9	17.5	22.0	22.8	--	2.7%
Maryland	2.0	4.8	14.2	43.9	38.4	21.7%	10.5%
West Virginia	0.7	1.7	3.9	10.3	10.9	18.7%	10.8%

Source: CDC, Health, United States, 2002, Table 146

<<http://www.cdc.gov/nchs/products/pubs/pubd/hus/listables.pdf>>

Note: Includes Medicare & Medicaid HMOs, full population

for example, HMO penetration was more than twice as high in metropolitan Philadelphia as in the Harrisburg-Lebanon-Carlisle metropolitan area (McDonnell and Fronstin 1999).

A few health insurers dominate the market in many communities in Pennsylvania. One late-1990s study found that the top insurer in the six-county Pittsburgh metropolitan statistical area had a 69% market share (Guadagnino 2000). The next three firms accounted for nearly all the remainder. For the nine-county Philadelphia metropolitan area, the top insurer had a 57% market share, the next largest 19%, and no other firm more than 3.5%.

Access to Health Care Practitioners and Institutions

One determinant of access to health care is adequacy of insurance coverage. For Pennsylvania, this is quite good, as noted above. Also vital is adequate supply and distribution of providers, notably hospitals and physicians.

Pennsylvania ranks relatively high in measures of hospital supply and usage (Lewin Group 2001). Hospital beds per population declined from 1980-1997—by 29% nationally, but by 21% in Pennsylvania (HRSA 2000). In 1999, Pennsylvania had almost 20% more beds per thousand people than the nation at large and ranked 18th highest among states (Exhibit 27). Usage of hospitals was even higher; inpatient days per thousand were 25% above the national average and ranked 9th among states. This helped hospitals maintain a higher than average occupancy rate.

Pennsylvania has about 10% more doctors of medicine (MDs) per population than the nation at large (Exhibit 28). Pennsylvania and its surrounding states also exceed national averages for other health professionals

	PA	US ave.	PA rank
Hospital beds/1,000 pop'n	3.59	3.04	18
Admissions/1,000	146.3	118.7	6
Average length of stay	6.1	5.9	19
Inpatient days/1,000	888.2	703.7	9
Occupancy rate	67.9%	63.4%	11

Source: Lewin Group (2001) using Am. Hosp. Ass'n data; note: rank is among 50 states and DC; thus, 17 jurisdictions had more beds/pop'n

per population. Nurse practitioners are the main exception; the state has only about half the national average (HRSA 2000.) The “additional” Pennsylvania physicians relative to the national average are specialists. The state’s supply of primary-care physicians is almost exactly average, about 6 per 10,000 in 1998 (HRSA 2000). In addition, however, the state has substantially more osteopathic physicians (DOs) than most other states.

From 1975-1995, Pennsylvania gained physicians in active patient care, both absolutely and relative to the national average (Exhibit 28). The state’s edge declined marginally during 1995-2000, as growth in physicians per population slowed. That

**Exhibit 28. Pennsylvania Ranks High in Physician-Population Ratio
But Its Rate of Growth Has Slowed in Recent Years**

	Physician-Population Ratio, PA & US, 1975-2000				Ann. Pct. Chg.	
	1975	1985	1995	2000	1975-1995	1995-2000
PA	13.9	19.2	24.6	25.4	2.8%	0.6%
US	13.5	18.0	21.3	22.7	2.2%	1.3%

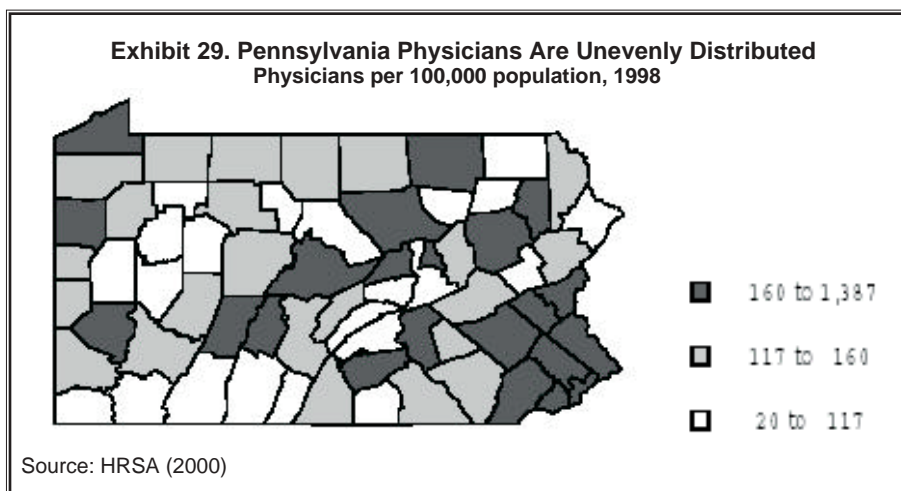
Source: CDC 2002 , Table 100 <<http://www.cdc.gov/nchs/products/pubs/pubd/hus/listables.pdf>>
Note: ratios are doctors of medicine in patient care per 10,000 civilian population

period was also marked by consolidation among health insurers and hospital systems. Furthermore, hospitals affiliated with or acquired physician practices, with related growth in employed physicians.

Physicians are not spread evenly across Pennsylvania. Philadelphia has by far the heaviest concentration of physicians (Exhibit 29). A caveat about mapping physicians’ principal locations is that it does not necessarily reflect their service areas. Patients may see providers in different offices, and physicians may practice in more than one location.

Pennsylvania physicians are slightly younger than average. Of physicians in the state in 1998, 28% were 55 years of age or older, compared to 31% of physicians nationwide. The state’s academic centers produce a substantial portion of the nation’s new physicians. Medical schools in Pennsylvania graduated 1,008 new allopathic and 259 new osteopathic physicians in 1997, ranking second among the 46 states with medical schools.

On a per capita basis, Pennsylvania graduated more new physicians per 100,000 population (10.5) than the national average (6.6), and ranked sixth. Pennsylvania produces a high share of its physicians in its own medical schools: Among active allopathic patient care physicians in Pennsylvania in 1998, 43% graduated from in-state medical schools,



compared with a national average of 32% (HRSA 2000).

Quality of Health Care

Evidence on the overall quality of US medical care is limited. State-specific measures of how well doctors and hospitals perform are even less readily available. General health system performance is partially reflected in state rankings of population health status. These suggest that Pennsylvania is typical of the US at large. One leading compilation of state public health measures ranked Pennsylvania 23rd overall among states in 2002 (Exhibit 30), little changed from 1990. Pennsylvania scored well on extent of insurance coverage as already noted and spending for public health and Medicaid, as discussed below. It scored worse on success in reducing tobacco use, adequacy of prenatal care, and total mortality rates, as well as death rates from specific causes.

Such population-based measures are somewhat distant from the allegations of substandard individual performance contained in medical malpractice claims. Service

**Exhibit 30. Pennsylvania Ranks Near Average in Population Health Status
Specific Public Health Measures, 1990 & 2002**

Health Measure	1990		2002	
	Rate	Rank	Rate	Rank
Prevalence of Smoking (% of pop'n)	29.3	23	24.5	34
Adequacy of Prenatal Care (% of pregnant women)	71.5	21	73.9	31
Lack of Health Insurance (% without health insurance)	7.7	4	9.2	6
Support for Public Health Care (Ratio to nat'l ave.)	0.75	18	2.07	7
Heart Disease (Deaths per 100,000 pop'n)	346.2	43	289.7	36
Cancer Deaths (Deaths per 100,000 pop'n)	212.4	43	220.0	37
Total Mortality (Deaths per 100,000 pop'n)	929.1	43	913.3	35
Infant Mortality (Deaths per 1,000 live births)	10.3	30	7.2	29
Overall		20		23

Source: United Health Foundation

quality is more directly relevant. One very recent analysis tracked national and state-level changes in performance on 22 quality indicators for Medicare services. It ranked Pennsylvania 16th in 1998-99 and 31st in 2000-2001 (Jencks et al. 2003). By comparison, New Jersey ranked 43rd, New York ranked 24th, and Ohio ranked 38th in 2000-2001. The scores were based on process-of-care measures such as prevention and treatment of acute myocardial infarction, breast cancer, diabetes mellitus, heart failure, pneumonia, and stroke. The analysis was performed by the federal Centers for Medicare and Medicaid Services and covered only care delivered to fee-for-service Medicare beneficiaries.

Quality varies by medical provider and by service. Pennsylvania and some other states have measured and publicly reported outcomes of certain hospitals procedures, notably coronary bypass surgery, whose outcomes vary widely by hospital (PHC4 2001). The goal is to effect institutional improvements through performance feedback, which was successful in New York's pioneering program (Chassin 2002). Whether medical liability, which changes from place to place within states, contributes to local practice variation has not been established. Finally, it is worth observing that some Pennsylvania hospitals rank very high nationally in qualitative surveys such as the *US News & World Report* rankings.

Health Care Spending

Spending on medical services is high in Pennsylvania by many measures. Overall, Pennsylvania's per capita personal health care expenditures in 1998 were 11% above the national average, seventh highest among states (Exhibit 31) and totaling some 14% of gross state product compared with a national average of 12% (KFF 2003). The

**Exhibit 31. Pennsylvania Ranks High in Medical Spending
Per Capita Personal Health Care Spending by State, 1991-1998**

State	1991	1998	rank, 1998	As % of US Ave	Ave. Ann. % Growth
US Average	\$2,685	\$3,759	--	100.0%	4.9%
New York	3,288	4,706	2	125.2%	5.3%
Delaware	2,878	4,258	5	113.3%	5.8%
New Jersey	2,966	4,197	6	111.7%	5.1%
Pennsylvania	2,988	4,168	7	110.9%	4.9%
West Virginia	2,568	4,044	9	107.6%	6.7%
Maryland	2,796	3,848	13	102.4%	4.7%
Ohio	2,709	3,747	21	99.7%	4.7%

Source: Centers for Medicare & Medicaid Services, Office of the Actuary, 1998 State Estimates -- per Capita Personal Health Care
<<http://cms.hhs.gov/statistics/nhe/state-estimates-residence/us-per-capita10.asp>>

Note: The highest state is Massachusetts, just above NY at 128%; the lowest is Utah, at 73%; DC excluded because distorted by border-crossing

entire region has high costs for medical care; among neighboring states, only Ohio is near the national average. During 1991-1998, medical spending in Pennsylvania grew at the same rate as in the nation as a whole.

The distribution of personal health care spend-

ing in Pennsylvania is similar to that of the US overall (Exhibit 32). However, the share of spending for physicians is about 10% below the national average. Correspondingly, the institutional share of spending is higher in Pennsylvania, especially for nursing homes.

Nonetheless, in 2000, the average annual cost of employment-based health insurance in Pennsylvania was almost identical to the US average. Individual and family coverage averaged \$2,467.06 and \$6,721.41 in Pennsylvania versus \$2,654.67 and \$6,772.47 nationally (KFF 2003).

Medicare payments per enrollee are high in Pennsylvania (8.6% above the nation

**Exhibit 32. Pennsylvania Medical Spending Patterns
Resemble those of the US
Distribution of Personal Health Care Spending by Service, 1998**

Personal Health Care Spending by Type of Service

Service	PA (%)	US (%)
Hospital Care	38.3	37.4
Nursing Home Care	11.7	8.6
Physician & Other Professional	26.5	29.1
Drugs & Other Medical Nondurables	12.3	12.0
Dental Services	4.3	5.3
Home Health Care	2.2	2.9
Medical Durables	1.4	1.5
Other Personal Health Care	3.2	3.1

Source: Kaiser Family Foundation

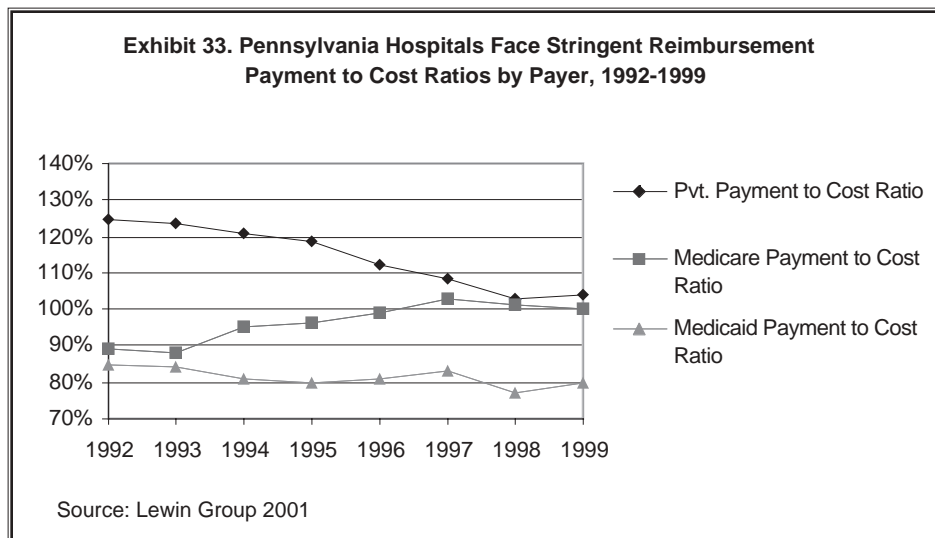
as a whole in 1999), although they grew at only half the national rate from 1994-1999. A marked increase in the managed care share of Medicare may have helped curb spending growth. Between 1994 and 1999, Pennsylvania rose from 3.3% to 27.5% (national average increase=17.8%) (CDC 2002). Medicare is the biggest payer for hospitals,

and has reduced payment growth since the Balanced Budget Act of 1997. Large teaching hospitals have been the hardest hit, which has a significant impact on Pennsylvania because of its many academic medical centers. Medicare also reduced physicians' fees, including a roughly 5% reduction for 2003. Similar cuts are scheduled for the next three years, but Congress may modify the timetable for implementing them.

The Pennsylvania Medical Assistance Program is the fourth largest Medicaid program in the nation. Spending for services and administration increased by 50% from \$6.4 billion in 1994 to \$9.6 billion in 1999. The state spends 27.4% of its budget on Medicaid, half again as much as the national average of 19.6%. Medicaid spending is more moderate on a per enrollee basis; in 1998, Pennsylvania ranked 18th in the nation (36th if long term care is excluded) (Lewin Group 2001).

Private health insurers seem able to hold down physician fees; the largest insurer in Philadelphia unilaterally cut payment rates in 1998 (Guadagnino 1998). According to news accounts, however, this same plan increased physician payments in 2002 and plans to do so again in light of increased malpractice premium burdens on physicians (NEPA News 2002). For hospitals, one analysis suggests that the prices

paid by Pennsylvania health plans declined in the late 1990s and are lower relative to hospital costs than national norms (Lewin Group 2001) (Exhibit 33). Whereas Medicaid payments in 1999 were only 4% below hospital costs nationally, Medicaid payments were 20% below hospital costs in Pennsylvania (ninth lowest among states). Conversely, whereas private payment levels were about 15% above costs nationally, they were only 4% above costs in Pennsylvania



(fourth lowest among states). Medicare payment levels were almost the same in Pennsylvania and the nation at large. According to this analysis, the low payment-to-cost ratios are attributable to low payments, not high costs. Hospital officials assert that Pennsylvania’s hospitals are highly efficient because for a decade they have successfully cut costs, partly in response to constrained payments.

An implication of the Lewin analysis is that hospitals have very limited ability to respond to fiscal shocks—either payer-imposed price cuts or higher costs like those for malpractice coverage. According to Pennsylvania-only data compiled by the Pennsylvania Health Care Cost Containment Council (PHC4 2003), the operating margins of the state’s hospitals dropped in 1998 and 1999, with hospitals in the latter year losing one quarter of a cent on each dollar of patient revenue. Subsequent years have seen a recovery, but only to about a 2% margin, which is lower than national averages.

Conclusion

This report provides policy-makers with necessary context for generating and evaluating options for insurance and legal reform. Health care constitutes a major industrial sector in Pennsylvania. Preventing serious effects on medical services therefore is important to the state's economic health as well as its physical health. Health care providers in Pennsylvania have encountered steep increases in the cost of liability insurance since 2000, as many liability insurers have withdrawn from the market and premiums have risen for available coverage. While the medical malpractice insurance crisis is national in scope, Pennsylvania has been especially hard hit. As a result, Pennsylvania – traditionally in the middle of the pack – is now a high-cost state.

General economic trends explain part of Pennsylvania's situation, but other factors are state-specific. Pennsylvania physicians and hospitals are uniquely burdened by high assessments for the state's catastrophic loss fund. While cyclical changes within the insurance industry are clearly a factor affecting the affordability of liability coverage in Pennsylvania and elsewhere, the largest component is the rising cost of legal claims. Pennsylvania exceeds national averages for legal costs because of high claims rates and payouts. This is particularly the case in Philadelphia, where plaintiffs are twice as likely to win jury trials as in the rest of the country, and where a substantial percentage of cases result in verdicts greater than \$1 million.

No clear evidence yet exists as to the effects of the malpractice crisis on Pennsylvania's health care system. The state's supply of medical providers was little changed by the first medical liability crisis in 1975, and provider-to-population ratios for both hospitals and physicians rose relative to the nation through the mid-1980s liability insurance crisis and well into the 1990s. However, the current crisis presents greater reason for concern. Providers, particularly hospitals, are under greater financial strain now than in past crises. It may be that access problems pertain only to certain regions of the

state (e.g., rural areas, inner cities), certain patient subgroups (e.g., Medicaid patients, the uninsured), or certain medical subspecialties (e.g., obstetrics, orthopedics, neurosurgery).

Because the problems afflicting Pennsylvania's malpractice system have developed over time, they will take time to resolve. The overhang of unresolved claims and various features of the state's liability insurance market make it very difficult to reduce costs in the short term. Therefore, subsidies that allow health care providers to maintain coverage would seem to be the only practical approach to alleviating the current crisis. In the longer term, a wider range of strategies exists to control costs, improve predictability, and attract insurers to the Pennsylvania market. In addition to conventional tort and insurance reforms, lawmakers should consider systematic changes to the way that injuries caused by medical care are identified, compensated, and prevented. Although much is known about the malpractice system, much remains to be learned. The difficult public policy decisions that must be made should be based on detailed, current, and objective information.

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About the Project

The Project on Medical Liability in Pennsylvania (www.medliabilitypa.org) is a two-year program of research, consultation, and communication funded by The Pew Charitable Trusts that seeks to provide decision-makers with objective information about the ways in which medical, legal, and insurance-related issues affect the medical liability system, to broaden participation in the debate to include new constituencies and perspectives, and to focus attention on the relationship between medical liability and the overall health and prosperity of the Commonwealth.

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