Defensive Medicine
In Oregon:

Estimating Prevalence & Costs

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Context

This Report was commissioned by the State of Oregon, Oregon Health Authority (OHA). The commission was pursuant to a legislative mandate in Section 16 of House Bill 3650 (2011), also known as the Health Care Transformation bill, requiring OHA to study and develop recommendations for medical liability reforms.

About the Authors

Bill J Wright, PhD is Senior Research Scientist at the Center for Outcomes Research & Education at Providence Health & Services in Portland, Oregon. Dr. Wright is a survey research expert whose work focuses on assessing the impacts of health policy. Dr. Wright has led or co-led several large health policy studies in Oregon, including an evaluation of the 2003 launch of the OHP Standard program and The Oregon Health Study, a major research program investigating the impacts of Oregon’s recent expansions of the OHP Standard program.

Katherine Baicker, PhD is Professor of Health Economics in the Department of Health Policy and Health Management at the Harvard School of Public Health and an elected member of the Institute of Medicine. One of the nation’s leading health economists, Dr. Baicker has served as a Senate-confirmed member of the President’s Council of Economic Advisors, the Congressional Budget Office’s panel of Health Advisors, and on the Medicare Payment Advisory Commission, and has authored numerous peer-reviewed papers in the area of health economics.
OVERVIEW

This report summarizes results from a study of defensive medicine in Oregon commissioned by the Oregon Health Authority (OHA), pursuant to a legislative mandate in Section 16 of House Bill 3650 (2011), also known as the Health Care Transformation bill. The study’s purpose was to estimate the costs of defensive medicine in Oregon, and to estimate the prevalence and costs associated with overutilization and unnecessary care.

APPROACH

Two distinct approaches were taken to meet the project’s objectives.

- **MEDICAL EXPENDITURES DATA:** To estimate total defensive medicine costs, we took the best estimates from the health economics literature about how much of different types of healthcare spending might be attributable to defensive medicine and applied them to Oregon healthcare expenditures data.

- **PHYSICIAN SURVEYS:** We fielded a statewide survey of 2,600 actively practicing physicians in Oregon. We used survey results to produce estimates on the prevalence of unnecessary care within different types of healthcare services, then generated estimates of the cost associated with that unnecessary care.

KEY FINDING #1: COSTS OF DEFENSIVE MEDICINE IN OREGON

Our analysis of Oregon health expenditures data suggests that annually, approximately **$650 million** in healthcare spending – or about 2.6% of total healthcare spending in Oregon – may be attributable to defensive medicine. Just under half ($310 million) is through public programs, with most of that accounted for by Federal spending through Medicare and the Federal share of CHIP and Medicaid. The direct impact on Oregon’s budget is about **$31 million**. We also estimated the likely savings of “direct reform” options, such as caps on non-economic damages, and estimate that such reforms might save the Oregon budget about **$20 million**.

<table>
<thead>
<tr>
<th>Public</th>
<th>Private</th>
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<tbody>
<tr>
<td><strong>PUBLIC</strong></td>
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<tr>
<td><strong>ALL HEALTHCARE SPENDING</strong></td>
<td><strong>ALL HEALTHCARE SPENDING</strong></td>
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<tr>
<td><strong>$24,648,500,000</strong></td>
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<td><strong>$646.3 Million (2.6%)</strong></td>
<td><strong>$264.2 Million (3.0%)</strong></td>
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<tr>
<td><strong>MEDICAID</strong></td>
<td><strong>PRIVATE COVERAGE</strong></td>
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<td><strong>$3,677,100,000</strong></td>
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<td><strong>Due to Defensive Medicine</strong></td>
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<td><strong>OTHER PUBLIC</strong></td>
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<td><strong>$162.2 Million (3.2%)</strong></td>
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<td><strong>$3.1 Million (2.7%)</strong></td>
<td><strong>$72.2 Million (1.5%)</strong></td>
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<td><strong>Due to Defensive Medicine</strong></td>
<td><strong>Due to Defensive Medicine</strong></td>
</tr>
<tr>
<td><strong>TOTAL PUBLIC SHARE</strong></td>
<td><strong>TOTAL PRIVATE SHARE</strong></td>
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<tr>
<td><strong>$13,510,250,000</strong></td>
<td><strong>$336.5 Million (2.5%)</strong></td>
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<tr>
<td><strong>$30.6 Million (2.1%)</strong></td>
<td><strong>Attributable to Defensive Medicine</strong></td>
</tr>
<tr>
<td><strong>TOTAL FEDERAL SHARE</strong></td>
<td><strong>TOTAL STATE SHARE</strong></td>
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<tr>
<td><strong>$9,723,340,000</strong></td>
<td><strong>$1,414,900,000</strong></td>
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<tr>
<td><strong>Attributable to Defensive Medicine</strong></td>
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</tr>
</tbody>
</table>

**BOTTOM LINE:** Defensive medicine costs are about $646 Million across the entire Oregon economy. Direct costs to the Oregon budget are about $30 million.
KEY FINDING #2: PREVALENCE & COST_DRIVERS OF DEFENSIVE MEDICINE

Our analysis of the prevalence of defensive medicine in Oregon relied on a survey of 2,600 active Oregon physicians. We used a “count based” approach to assessing prevalence – physicians were given a list of procedures often associated with defensive practice and asked to count how many had they ordered in their last full month of work, then estimate how many of the orders were for medically unnecessary care. We used those results to estimate the total annual number of “unnecessary” orders for each type of care, and then multiplied the result by the average cost of each procedure to estimate the total costs associated with each type of overutilization. We combined similar procedures into broad categories and produced the following overutilization estimates:

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Overutilization Rate</th>
<th>Associated Costs</th>
<th>Percent of Associated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging (X-Rays, CT scans, MRI, Ultrasounds)</td>
<td>16.2%</td>
<td>$141.0 M</td>
<td>19%</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>13.9%</td>
<td>$24.5 M</td>
<td>3%</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>17.2%</td>
<td>$27.3 M</td>
<td>4%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>8.2%</td>
<td>$552.7 M</td>
<td>74%</td>
</tr>
<tr>
<td><strong>TOTAL OVERUTILIZATION &amp; COSTS</strong></td>
<td><strong>13.9%</strong></td>
<td><strong>$745.6 M</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The total cost estimates we produced using our survey data differed slightly from our estimates based on health expenditures data ($745 million vs. 646 million). The two approaches are not directly comparable because they use fundamentally different methodologies; however, they actually yield quite complementary results: as a percentage of total healthcare spending, the estimates fall within less than .05% of each other (2.6% vs. 3.0% of total spending).

ASSESSING THE SUBJECTIVITY OF DATA

Our analysis of the total costs of defensive medicine used objective data on Oregon healthcare expenditures. However, we used surveys to produce our overutilization estimates, and survey responses can be notoriously subjective depending on the context within which questions are asked. We wanted to ensure our estimates of overutilization were as scientifically valid as possible, so we embedded an experimental design into our assessment of overutilization rates in Oregon. This experiment, described on page 12 of the report, allowed us to assess the degree to which the salience of defensive medicine as an issue influenced physicians’ survey-based estimates of overutilization. We ultimately found that our “count-based” approach to estimating overutilization rates yielded highly reliable results.

KEY TAKEAWAYS

We approached estimating the costs and prevalence of defensive medicine in Oregon using two distinct methods that yielded complementary results. Our surveys of Oregon physicians suggest that, within the most common categories of care usually associated with defensive practice, as many as 14% of physician orders may be medically unnecessary. Our analysis of expenditures data suggests that an estimated $650 million in total costs of care may be attributable to defensive medicine statewide, though most of these costs flow through private insurers or federal payments; the Oregon state budget’s share is about $31 million. Both analyses agree that unnecessary care in hospital settings is the most important driver of defensive medicine costs, accounting for 74% of costs associated with overutilization.

The costs of defensive medicine should probably not be seen as entirely “recapturable.” Not all unnecessary care can be attributed to the malpractice environment, and no known malpractice reform scenario would reduce defensive medicine to zero. Applying the best available estimates on the likely savings of direct malpractice reforms (such as damage caps) to Oregon expenditures data suggests that such reforms might reduce total healthcare expenditures by $345 million across the entire Oregon economy. However, most of this reduction would be fall under federal or private expenditures – direct savings to Oregon’s budget would be an estimated $20 million.
OVERVIEW
This report summarizes results from a study of defensive medicine in Oregon. The study was designed with three specific goals:

1. Estimate the costs of defensive medicine in Oregon and the likely impacts on Oregon’s budget;
2. Identify the rates and key drivers of unnecessary care and utilization due to defensive medicine; and
3. Recommend criteria for the evaluation of reductions in unnecessary care and utilization.

DEFINITIONS
Studying “defensive medicine” is complicated by the fact that there is no universally accepted, standard definition of what defensive medicine actually means. Broadly, defensive medicine has been described as any deviation from sound medical practice induced primarily by the threat of liability.1 A more precise definition from the defunct U.S. Congress Office of Technology Assessment (OTA), conceptualizes defensive medicine as occurring “when doctors order tests, procedures, or visits, or avoid certain high-risk patients or procedures, primarily (but not solely) because of concern about malpractice liability.”2 This report is primarily informed by the latter definition, but we recognize that there is no single, universally accepted agreement about what defensive medicine really means.

APPROACH
We took two approaches to accomplish the project’s goals:

MEDICAL EXPENDITURES DATA: We used National Health Expenditures (NHE) data to obtain estimates of total health care spending in Oregon in a variety of categories. We then reviewed research that had applied statistical modeling to national health expenditures data in order to estimate the proportion of spending attributable to defensive medicine, and applied those “best estimates” against the Oregon-specific health care spending data. This approach, along with our principal findings from this analysis, is further explored beginning on page 5.

PHYSICIAN SURVEYS: We also fielded a statewide survey of actively practicing physicians in Oregon. We sent a representative random sample of 2,600 physicians across the state surveys designed to assess specific types of clinical decision making that have been associated with defensive practice in other studies; data were used to produce estimates of overutilization due to defensive practice and associated costs. We embedded an experimental approach into our design to assess the potential “subjectivity” of these survey-produced estimates. Additional information about our approach and findings is available beginning on page 11.

KEY FINDINGS
Our report is organized into three distinct parts:

- **Part 1** presents our estimates of the cost of defensive medicine in Oregon and potential savings from reform.
- **Part 2** presents our estimates of overutilization and the key drivers of costs associated with overutilization. Here, we also explore Oregon physicians’ subjective assessments of the likely impact of various reform options.
- **Part 3** presents our recommendations for monitoring and evaluating changes in defensive medicine practices in the context of any potential changes to Oregon’s malpractice environment.

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Part 1.

Cost Estimates

KEY QUESTIONS

We wanted to estimate the costs of defensive medicine in Oregon’s health care delivery system and understand the degree of impact defensive medicine costs have on Oregon’s health care budget and the health care market in general.

OVERALL APPROACH

We used a two-step approach to estimating the cost of defensive medicine in Oregon. First, we reviewed existing research to find the best estimates of the fraction of spending within distinct categories of health care attributable to defensive medicine. We focused on estimates that deployed persuasive strategies to isolate the effect of the medical malpractice environment on health care spending, rather than looking at simple trends that might be confounded by other factors driving spending growth. Second, we applied those estimates to Oregon-specific health care expenditures data, and then aggregated the resulting costs across health care expenditure categories to produce a global estimate of the cost of defensive medicine in Oregon. We drew on National Health Expenditures (NHE) data to produce these Oregon-specific cost estimates. It is important to note that these results are inherently subject to substantial uncertainty: the share of health care use that is “because of” the malpractice liability system cannot be directly observed.

FINDING GOOD ESTIMATES OF DEFENSIVE MEDICINE COSTS

It is difficult to ascertain directly how much health care can be attributed to medical malpractice pressures: tests do not come labeled as “primarily to avert a potential lawsuit.” Studies have taken many approaches to isolating defensive medicine costs within the larger framework of health expenditures data.

The most basic approach would be to simply look at variation in health care expenditures across states, comparing those with and without reforms like damage caps and assessing whether physicians in the states without damage caps tended to order more tests. The fundamental problem with such a comparison is that many other things might differ between the states (including the characteristics of patients and physicians), so attributing differences in care patterns to the damage caps themselves could be misleading. Furthermore, states with higher health care costs might be more likely to enact damage caps - leading to reverse causation.

Several studies have taken a more sophisticated statistical approach to isolating the effect of the legal environment on the practice of medicine. For our estimates of defensive medicine costs, we drew on studies that utilized multivariate regression models look at how variation in the growth of health care expenditures across states are related to characteristics of the malpractice environment while controlling for potentially different characteristics of patients and doctors in those states. These studies also include state and time fixed effects (to sweep out anything that makes, say, California different from Texas or 1982 different from 1995) to isolate the effects of the malpractice system on defensive medicine. Mello, Chandra, and Gawande⁴ synthesize the best of this research to provide estimates of the degree of defensive medicine in hospitals and physician services.

Hospital spending estimates: The most relied-upon study on defensive medicine in this area suggests that about 5.4% of hospital costs can be attributed to defensive medicine. The study’s authors, Kessler and McClellan, examined spending on Medicare beneficiaries (for whom comprehensive claims data are available) hospitalized for cardiac conditions and evaluated how that spending changed over time in states that adopted direct and indirect tort reforms. The authors concluded that direct reforms reduced hospital spending by 5-9%, but that indirect reforms had little effect. The key methodological strength of this study is that it takes into account patient characteristics and persistent differences between states in other confounding factors, helping to isolate the effect of the liability system itself.

Physician services spending estimates: A reliable study on defensive medicine as a portion of physician services spending estimates that about 1.4% of expenditures in this category can be attributed to medical malpractice. Baicker, Fisher, and Chandra examined the relationship between Medicare spending on physicians for different services and malpractice liability pressures. They focused on growth in spending in the 1990s and malpractice payments or premiums, again taking into account state characteristics that might influence both, and found that the 11% increase in malpractice payments was associated with a 1.1% increase in Medicare reimbursements. Mello et al. then used these figures to estimate that $5.4-8.2 billion in physician services in 2008 could be attributed to defensive medicine.

Weaknesses of existing studies: While these studies represent the state of the art approach to quantifying defensive medicine costs, it is still important to note that even the authors of the studies acknowledge they cannot be absolutely certain they have successfully isolated defensive medicine. These studies also rely on assumptions about the growth of malpractice pressures, are focused primarily on a Medicare population that may have different underlying litigiousness from other populations, and rely on data largely from an earlier time period.

OREGON EXPENDITURES DATA

We used data on health expenditures in Oregon by service type and payer compiled by the Centers for Medicare and Medicaid Services’ National Health Expenditures (NHE) (https://www.cms.gov/nationalhealthexpenddata). Spending in Oregon broken down by broad service categories was available through 2009; this breakdown is available for total spending, spending by Medicaid, and spending by Medicare. National health expenditures were available through 2010, and are further broken down into more detailed payer types.

To produce expenditures estimates for Oregon in 2010, we took the available figures for Oregon (based on state of provider) for 2009 spending overall and by Medicare and Medicaid and inflated them to 2010 dollars using the growth rate of national health expenditures within each category of care. We then divided up the spending attributable to "other" (non-Medicaid, non-Medicare) payers using the shares attributed to those payers in the National Health Expenditures.

PARAMETERS: Our estimates of total expenditures in Oregon may look somewhat different than others. There are several reasons for this. First, we excluded dental spending from total healthcare expenditures – including dental would have increased total spending in Oregon by about $1.5 billion, but would not have impacted our resulting estimates of the total cost of defensive medicine in Oregon. Little is known about defensive practice in dental care, so we have not attempted to estimate those costs.

When constructing costs estimates, we also based our cost estimates for Oregon based on the location of the provider (which makes the most sense for assessing a local malpractice environment). Other estimates of total spending that rely on NHE data often use the location of patients (which makes sense for assessing, for example, total spending within a program). In reality the differences in totals produced by the two approaches are fairly small.

OVERALL COSTS OF DEFENSIVE MEDICINE

To estimate the global costs of defensive medicine in Oregon, we applied the best studies’ estimates about the fraction of health care expenditures attributable to defensive medicine in various spending categories to health expenditure data for Oregon, broken out by comparable categories. Overall, we estimate that annually, approximately $650 million in healthcare spending – or about 2.6% of total spending – may be attributable to defensive medicine in Oregon, with just under half that ($310 million) through public programs and the remainder from private payers (Exhibit 1). Of the share of spending through public programs, the vast majority is Federal spending through Medicare and the Federal share of CHIP and Medicaid; Oregon’s share of Medicaid and SCHIP accounts for about $30 million.

Exhibit 1. Defensive Medicine in Oregon: Estimated Total Costs and State Share

**TOTAL ALL HEALTHCARE SPENDING**

$24,648,500,000

$646.3 Million (2.6%)

Attributable to Defensive Medicine

**MEDICAID**

$3,677,100,000

$78.8 Million (2.1%)

Due to Defensive Medicine

**SCHIP**

$116,300,000

$3.1 Million (2.7%)

Due to Defensive Medicine

**PRIVATE COVERAGE**

$8,731,900,000

$264.2 Million (3.0%)

Due to Defensive Medicine

**TOTAL PRIVATE SHARE**

$13,510,250,000

$336.5 Million (2.5%)

Attributable to Defensive Medicine

**TOTAL FEDERAL SHARE**

$9,723,340,000

$279.2 Million (2.9%)

Attributable to Defensive Medicine

**TOTAL STATE SHARE**

$1,414,900,000

$30.6 Million (2.1%)

Attributable to Defensive Medicine

**PUBLIC**

**PRIVATE**

**MEDICARE**

$5,146,900,000

$162.2 Million (3.2%)

Due to Defensive Medicine

**OTHER PUBLIC***

$2,197,900

$65.9 Million (3.0%)

Due to Defensive Medicine

**OTHER PRIVATE**

$4,778,400,000

$72.2 Million (1.5%)

Due to Defensive Medicine

**TOTAL PRIVATE SHARE**

$13,510,250,000

$336.5 Million (2.5%)

Attributable to Defensive Medicine

**MEDICAL**

$5,146,900,000

$162.2 Million (3.2%)

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**TOTAL PRIVATE SHARE**

$13,510,250,000

$336.5 Million (2.5%)

Attributable to Defensive Medicine

**public***

**Private Coverage** includes ESI & individual market coverage. “Other Private” includes all other private expenditures.

IMPACT ON OREGON BUDGET

Of the roughly half of health care spending (and defensive medicine) attributable to public programs, 46% is through the federally-funded Medicare program. Medicaid and CHIP are jointly financed by Oregon and the Federal government, with Oregon’s share of the programs accounting for 37.3% of their total cost (Exhibit 2)6. Thus, defensive medicine accounts for $30.6 million spent by the state. Only reductions in this portion of defensive medicine could accrue to state budgets; the remainder would reduce federal and private health care spending.

Exhibit 2. Estimated Costs of Defensive Medicine for Oregon’s State Healthcare Budget

**MEDICAID**

$78.8 Million

Due to Defensive Medicine

**SCHIP**

$3.1 Million

Due to Defensive Medicine

**BLENDED FEDERAL MATCH RATE:**

37.3% State Funds

62.7% Federal Funds

**ACTUAL IMPACT ON STATE SPENDING:**

$30.6 Million

Due to Defensive Medicine

6 We used Oregon’s blended match rate for Medicaid and CHIP for this calculation. Oregon’s share of program costs is actually lower under the ARRA, which increased the federal share of Medicaid and CHIP to 72.87% and 73.92%, respectively.
Different types of health care services are likely to be driven by defensive medicine to different degrees: the literature suggests, for example, that 5.4% of hospital expenditures are attributable to defensive medicine, compared to 1.4% of outpatient expenditures. To better understand where defensive medicine costs occur in Oregon, we computed total defensive medicine costs in Oregon within each of four major types of services, then computed the total share of defensive medicine spending accounted for by each service type (Exhibit 3). The mix of spending by payer and across types of service in Oregon is not substantially different from national averages.

**Exhibit 3. Distribution of Defensive Medicine Spending in Oregon across Four Service Types**

By applying the best available estimates of fractional costs attributable to defensive medicine within distinct categories of health care expenditures, we were also able to break down defensive medicine costs within each type of service separately for private spending and for public programs like Medicare, Medicaid, SCHIP, and other programs (Exhibit 4).

**Exhibit 4. Estimated Costs of Defensive Medicine in Oregon by Service Type**

All figures in millions of 2010 dollars

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Public Share</th>
<th>Private Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Medicare</td>
</tr>
<tr>
<td>Hospital Care</td>
<td>8,876.7</td>
<td>2,363.2</td>
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<tr>
<td></td>
<td>--Def Med Share (5.40%)</td>
<td>479.3</td>
</tr>
<tr>
<td>Outpatient Care</td>
<td>6,946.5</td>
<td>1,324.0</td>
</tr>
<tr>
<td></td>
<td>--Def Med Share (1.39%)</td>
<td>96.6</td>
</tr>
<tr>
<td>Professional Services</td>
<td>1,040.0</td>
<td>177.9</td>
</tr>
<tr>
<td></td>
<td>--Def Med Share (1.98%)</td>
<td>20.6</td>
</tr>
<tr>
<td>Prescription Drugs</td>
<td>2,513.3</td>
<td>649.6</td>
</tr>
<tr>
<td></td>
<td>--Def Med Share (1.98%)</td>
<td>49.8</td>
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<tr>
<td>Other Types of Spending*</td>
<td>5,772.0</td>
<td>632.1</td>
</tr>
<tr>
<td></td>
<td>--Def Med Share*</td>
<td>n/a</td>
</tr>
<tr>
<td>Total Spending</td>
<td>24,648.5</td>
<td>5,146.9</td>
</tr>
<tr>
<td></td>
<td>--Def Med Share</td>
<td>646.3</td>
</tr>
</tbody>
</table>

*“Other types of spending” includes nursing home care, home health, and durable and non-durable equipment.*
Note on Estimates for Prescription Drugs & Other Spending: There is little existing evidence on how responsive prescription drug spending and other types of spending are to malpractice pressures. We have assumed here that prescription drug spending is more closely related to hospital and outpatient spending, so have attributed the average share of those two to this category. The relationship between hospital/outpatient spending and other categories is less clear, so we have not attributed any share of them to defensive medicine. If we had assumed that there was no defensive medicine in drug use, our estimates would be $50 million lower, whereas if we had assumed that 1.98% of other spending was also attributable to defensive medicine our estimates would be $105 million higher.

WHAT DO WE KNOW ABOUT POTENTIAL SAVINGS FROM REFORM?

While many researchers have sought to identify the likely effects of changes to the malpractice liability system on the practice of defensive medicine – and on overall health care costs – such efforts are inherently subject to a great deal of uncertainty. Indeed, different studies produce very different estimates. Overall, the Congressional Budget Office’s (CBO) current judgment about the association between tort reforms like damage caps and the use of health care services is that “the weight of the empirical evidence now demonstrates a link.”\(^7\)

The CBO has also estimated that direct reforms such as tort caps might decrease per-capita health spending by as much 1.4%, which would equate to an overall reduction of over $300 million in health care spending in Oregon. However, since most of this spending occurs through private insurers or Medicare, the state would realize a much smaller savings: an estimated $20 million (exhibit 5).

Exhibit 5. Likely Impacts of Reform on Healthcare Expenditures in Oregon

The best evidence on specific reforms is presented below:

NON-ECONOMIC DAMAGE CAPS:
Oregon already has some “direct” tort reforms, including a partial ban on punitive damages, no mandatory pre-judgment interest, and collateral source reform, but for the most part does not cap non-economic damages (a previously established $500,000 cap was ruled unconstitutional, but with several broad exceptions).

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\(^7\) Congressional Budget Office. Medical Malpractice Tort Limits and Health Care Spending; 2006.
The best known study on the potential impacts of damage caps used Medicare expenditure data and found that states with damage caps (and other “direct reforms”) had 5.4% lower Medicare hospital payments. However, the research is not uniform -- a more recent analysis of Medicare expenditures found that these reforms had no significant effect on hospital expenditures. CBO (2007) analysis suggested that caps on non-economic damages could decrease overall spending per capita by 1.4%.

ATTORNEY FEE LIMITS:
Oregon does not currently have a statutory cap on attorney’s fees. Overall, the existing evidence - including CBO estimates - does not support a relationship between fee limits and defensive medicine.

JOINT & SEVERAL LIABILITY REFORM:
Joint-and-several liability reforms increase physicians' liability relative to hospitals, so could in theory increase defensive medicine practice by physicians. However, the empirical evidence for this effect is tenuous. The CBO estimated that joint-and-several liability reform was associated with an increase in general and Medicare health care spending per capita, as well as hospital spending per capita. However, a second study found no such relationship.10

OTHER REFORMS:
There is little empirical evidence on the likely impacts of other reform options such as collateral source-rule reform, pre-trial screening periods, periodic payments, or statute of limitations reforms.

**Exhibit 6. Summary of Oregon’s Current Malpractice Environment**

<table>
<thead>
<tr>
<th>Statute of Limitations</th>
<th>Two years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint &amp; Several Liability</td>
<td>Oregon has a limited form of JSL</td>
</tr>
<tr>
<td>Non-Economic Damage Caps</td>
<td>A $500,000 cap was established by the legislature but ruled unconstitutional (with broad exceptions).</td>
</tr>
<tr>
<td>Statutory Cap on Attorney’s Fees</td>
<td>No cap</td>
</tr>
<tr>
<td>Periodic Payments</td>
<td>OR does not require the periodic payment of future damages.</td>
</tr>
<tr>
<td>Collateral Source</td>
<td>Trial court can deduct from a verdict benefits received from third parties for the injury or death, but these cannot include life insurance or insurance benefits.</td>
</tr>
<tr>
<td>Pre-Judgment Interest</td>
<td>Not available in tort actions when damages cannot be easily ascertained until litigation.</td>
</tr>
<tr>
<td>Punitive Damages</td>
<td>Cannot be awarded against physicians and nurses, but can be awarded against hospitals.</td>
</tr>
</tbody>
</table>

**COST ANALYSIS: FINAL CONCLUSIONS**

Applying the best available estimates about the share of healthcare spending attributable to defensive medicine to Oregon expenditures data suggests that defensive medicine may drive a sizeable amount of spending—over $600 million; or 2.6% of annual healthcare spending in Oregon. However, the vast majority of that spending occurs through private insurers, Medicare, or other programs outside the state’s budget – our estimate of the “impact” of defensive spending on Oregon’s budget is around $30 million per year.

No package of reforms will reduce defensive medicine to zero, so this $30 million is best not seen as entirely “recapturable.” The CBO estimates that a package of direct reforms such as damage caps might reduce expenditures; applying their estimates to Oregon data suggests around $20 million in potential savings to Oregon’s budget. However, even this estimate may prove too high given that Oregon already has some direct reforms in place.

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Part 2. Prevalance & Key Drivers of Defensive Medicine

KEY QUESTIONS

Defensive medicine can impact health care in two major ways: overutilization and avoidance. Overutilization (sometimes called “assurance behavior”) occurs when physicians supply services with no medical value because they are concerned about malpractice, resulting in increased costs to the system. Avoidance effects occur when physicians avoid taking on certain types of procedures or patients because of malpractice concerns, and can result in impeded access to certain types of care or for certain populations.11

We wanted to capture both the overutilization and avoidance effects of defensive medicine. Our approach was designed to answer three broad types of questions:

- How common is defensive medicine in Oregon?
- What are the key cost drivers around overutilization in Oregon?
- Among Oregon physicians, what specific factors act as the principle drivers of defensive practice?

OVERALL APPROACH

We used surveys of physicians to assess the prevalence and impacts of defensive medicine in Oregon. Other studies have used physician surveys for similar assessments outside of Oregon; where possible we replicated measures to provide comparability and a benchmark for physician experience in Oregon.

SAMPLING: We used physician licensing data to draw a representative random sample of 2,600 physicians from all practicing physicians in Oregon. Previous studies have done good work identifying the types of physicians most susceptible to defensive practice; we oversampled these high-risk specialties (including emergency medicine, OB/GYN, Radiology, Orthopedic surgery, and Neurological surgery). Blended results were then weighted back to reflect the actual distribution of specialties among practicing Oregon physicians.

MEASURES: We designed questions to capture four broad types of information:

- Clinical decision making: We asked a series of questions about physicians’ clinical decision making, designed to directly assess potential overutilization and avoidance effects of defensive practice.
- Malpractice vulnerability: We asked physicians if they had been the subject of a malpractice claim, and also to assess their malpractice coverage along several dimensions.
- Assessment of potential reforms: We asked physicians to assess potential malpractice reforms.
- Other information: We assessed physicians’ overall job satisfaction and other key descriptive information about their practice, including employment status, years practicing medicine, and practice setting characteristics.

RESPONSE RATES: After excluding retired, inactive, or non-Oregon resident physicians, we sent out 2,372 surveys and had received 1,182 back at the time of this report, a 50% response rate.

Surveys are often criticized as “subjective,” and indeed, a broad methodological literature makes it clear that variations in wording, response options, question order, or the context within which questions are asked can affect responses.\(^\text{12}\) The impact of context on survey responses is sometimes referred to as a “framing effect.”

Although understanding the subjective concerns of physicians in regard to defensive medicine is a worthy goal in its own right, we were also interested in producing high-quality, reliable estimates on the prevalence of overutilization in Oregon. To assess how much subjectivity was introduced into our data by “framing” effects, we embedded an experimental design into our research wherein we asked multiple types of questions about overutilization and presented those questions within two distinct contexts:

- **A “Defensive Medicine” Survey**: Some physicians in our sample received a “defensive medicine” survey, and were asked to provide data on overutilization within the specific context of a survey about defensive medicine and medical liability concerns. This approach maps to that taken by several other national surveys of defensive medicine practice among physicians, providing comparable results for OR physicians.

- **A “Cost Effective Care” Survey**: Other physicians in our sample received a “cost effective health care” survey, and answered the same questions about overutilization in that more general context, without an explicit defensive medicine framing.

Within our sample of 2,600 physicians, we randomized which survey each individual physician received. Because of this randomization, any systematic differences in responses between the two groups of physicians should be attributable to the framing effects of the survey. Other possible explanations for different responses between the two groups (such as the particular characteristics of physicians and their practices) should be equally distributed across both groups.

### Exhibit 7. Experimental Approach to Assessing Subjectivity and Framing Effects in Estimates of Overutilization

This approach essentially allowed us to assess the role subjectivity and framing effects play in our estimates of overutilization. If, on average, physicians report similar rates of overutilization across both versions of the survey, we gain greater confidence in the resulting estimates of overutilization in the Oregon health care system — there would be little reason to think, for example, that the salience of defensive medicine as an issue may have resulted in inflated estimates of overutilization. If, on the other hand, we see substantial differences in responses between the two survey versions, we gain some insight into how much uncertainty may be present in estimates of overutilization.

Our assessment of how framing effects impacted our overutilization estimates is presented on page 15. Copies of each survey form are available in the Appendix.

QUESTION #1:
HOW PREVALENT IS DEFENSIVE MEDICINE & OVERUTILIZATION IN OREGON?

We wanted to assess Oregon physicians’ self-reported rates of defensive practice and overutilization along a number of common dimensions, then benchmark those results against similar surveys of non-Oregon physicians. We used two distinct approaches to determine the prevalence of defensive practice and overutilization among Oregon physicians.

- First, we asked physicians for **subjective assessments** of how often different types of defensive practice and overutilization occurred, and compared results to similar assessments from the literature.
- Second, we asked physicians to actually provide **counts** of specific types of over-utilization, computed rates of “non-necessary” care for each type, and compared those rates to findings from other literature.

**FIRST APPROACH: SUBJECTIVE ASSESSMENTS OF DEFENSIVE PRACTICE**

Our first approach was to select six general measures of defensive practice – four “overutilization” measures and two “avoidance” measures – common to the literature and ask respondents to tell us how often concerns about medical liability caused them to engage in each of the listed behaviors. We benchmarked Oregon results against findings from a similar survey of high-risk specialty physicians in PA.

These measures are subjective, in that they ask physicians to rank defensive practice along a continuum without anchoring the assessment to any objectively measurable events. However, they do provide a useful gauge of the overall incidence of defensive practice from physicians’ perspective, as well as the opportunity to benchmark Oregon physicians’ assessments against other national research (Exhibit 8, below).

**Exhibit 8. Subjective Physician Assessments of Defensive Practice in Oregon**

| Percent of respondents who “sometimes” or “often” engage in the indicated behavior |
|---------------------------------|---------------------------------|---------------------------------|
|                                  | ALL Oregon Physicians (n=1182)  | High-Risk Oregon Specialists* (n=562) | Comparison Study 13 (High-Risk Physicians in PA) |
| OVER-UTILIZATION                |                                 |                                 |                                                 |
| --Order more tests than medically needed? | 59%                             | 67%                             | 59%                                             |
| --Prescribe more medications than needed? | 32%                             | 37%                             | 33%                                             |
| --Refer to specialists more often than needed? | 45%                             | 43%                             | 52%                                             |
| --Use invasive procedures more than needed? | 19%                             | 21%                             | 32%                                             |
| AVOIDANCE                       |                                 |                                 |                                                 |
| --Avoid conducting certain procedures? | 34%                             | 45%                             | 32%                                             |
| --Avoid caring for high risk patients? | 25%                             | 31%                             | 39%                                             |

*High risk specialties included emergency medicine, OB/GYN, Radiology, Orthopedic surgery, and Neurology.

Overall, we found that 94% of Oregon physicians reported engaging in at least some defensive practice, compared to 92% in our comparison study of PA physicians that used the same question set. According to OR physicians, the most common type of defensive practice was ordering more tests than medically needed (62% of physicians) or referring patients to specialists when it was not medically necessary to do so (48% of physicians). Avoidance effects (such as not caring for certain types of patients) were less common, though still fairly prevalent.

SECOND APPROACH: COUNTS OF OVERUTILIZATION

Our second approach to estimating overutilization was to ask physicians to actually count specific, measurable incidents of overutilization. To accomplish this, we reviewed the literature to find types of care that were most commonly identified with defensive practice, then asked physicians to tell us several things about each one:

- First, we asked physicians to actually count many of each procedure they ordered in their most recent full month of practice.
- Second, for each procedure, we asked physicians to tell us how many of those they ordered were not, in their best judgment, medically necessary.
- Finally, for each procedure, we computed the percentage of total orders that were not medically necessary according to the physicians who ordered them – an “overutilization” rate for each type of care.

We wanted to assess overutilization of specific procedures in Oregon and benchmark results against other studies, so we used methods comparable to a study of high-risk specialists in Massachusetts. While this approach is still based on physician self-report and does include subjective elements, it offers a key advantage over other approaches because it is underpinned by actual, countable events rather than an abstract continuum of choices about frequency.

GLOBAL OVERUTILIZATION RATE: In addition to understanding overutilization of each individual test, we computed a global “overutilization” summary score for each physician. This score represents the percentage of all orders in the last month (among the types we asked about) that were not, according to the physicians’ own judgment, clinically necessary. We computed this rate by dividing the total number of “non-necessary” orders by the total number of orders across all the types listed in the table (Exhibit 9).

Exhibit 9. Physician Assessments of Overutilization in Oregon
Percent of Orders Deemed Unnecessary by the Ordering Physician

<table>
<thead>
<tr>
<th>Procedure</th>
<th>ALL Oregon Physicians (n=1182)</th>
<th>Hi-Risk Oregon Specialists* (n=562)</th>
<th>Comparison Study** (High-Risk Physicians in MA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
<td>15%</td>
<td>17%</td>
<td>22%</td>
</tr>
<tr>
<td>CT Scan</td>
<td>18%</td>
<td>21%</td>
<td>28%</td>
</tr>
<tr>
<td>MRI Studies</td>
<td>19%</td>
<td>20%</td>
<td>27%</td>
</tr>
<tr>
<td>Ultrasound Studies</td>
<td>14%</td>
<td>15%</td>
<td>24%</td>
</tr>
<tr>
<td>Lab Tests (CBC, Chem Profile)</td>
<td>14%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Specialist referrals</td>
<td>16%</td>
<td>16%</td>
<td>28%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>8%</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Global Overutilization Rate</strong> (% of all above orders that were not medically necessary)</td>
<td>14%</td>
<td>16%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

*High risk specialties included emergency medicine, OB/GYN, Radiology, Orthopedic surgery, and Neurology.

We found that Oregon physicians generally reported less over-utilization than those in our comparison study of Massachusetts physicians, even when analysis is limited to comparable “high risk” specialist groups. However, overutilization of these procedures was still far from rare in Oregon: nearly one in five diagnostic tests and specialist visits, and one in ten hospital admissions, were not medically necessary according to the physicians who ordered them. Overall, 14% of Oregon physicians’ orders across these seven specific types of care were identified as not medically necessary by the physician who ordered them.

MINI-EXPERIMENT TO ASSESS SUBJECTIVITY IN RESPONSES

Given the subjectivity inherent in survey data and the salience of defensive medicine as an issue, we were concerned about the limitations of survey data to produce accurate prevalence estimates of defensive medicine in Oregon. To test the degree of subjectivity in our data, we embedded an experimental design into our study, asking identical questions about overutilization of health care services within two distinct contexts:

- One group of randomly selected physicians received a “defensive medicine” survey, and were asked to provide data on overutilization within the specific context of defensive medicine and medical liability concerns. Physicians were specifically asked about how often “concerns about medical liability” caused them to engage in specific behaviors.

- A second random subset of physicians received a “cost effective care” survey, and answered questions about overutilization in that more general context, without a defensive medicine framing. Physicians were asked how often they engaged in the same set of behaviors, but medical liability concerns were not specifically mentioned.

FIRST APPROACH: SUBJECTIVE ASSESSMENTS

When we asked physicians to subjectively rate how often different overutilization behaviors occurred using a non-anchored scale (with responses of never, rarely, sometimes, or often), we found significant framing effects: physicians responding to our defensive medicine survey reported different rates of overutilization than physicians responding to a cost effective care survey on three of four measures (Exhibit 10).

![Exhibit 10. Subjective Estimates of Overutilization from Two Different Surveys](image)

<table>
<thead>
<tr>
<th>PERCENT who “Sometimes” or “Often”....</th>
<th>OR Physicians responding to a DEFENSIVE MEDICINE survey</th>
<th>OR Physicians responding to a COST EFFECTIVENESS survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order more tests than medically needed?</td>
<td>62%</td>
<td>50%</td>
</tr>
<tr>
<td>Prescribe more medications than medically needed?</td>
<td>30%</td>
<td>36%</td>
</tr>
<tr>
<td>Refer to specialists more often than needed?</td>
<td>49%</td>
<td>36%</td>
</tr>
<tr>
<td>Use invasive procedures to confirm a Dx more often than needed?</td>
<td>21%</td>
<td>13%</td>
</tr>
</tbody>
</table>

★ Indicates a statistically meaningful difference between the two survey results (p<.05, two-tailed chi-square test)

This method of assessing the prevalence of defensive medicine was almost certainly subject to framing effects, with results varying significantly depending on the context within which overutilization was being assessed. It is important to note that neither estimate should be viewed as a “better” measure of actual overutilization - there is no objective, observable standard by which to choose one set of estimates over the other. In that light, these results are perhaps best viewed as a range of potential estimates about the prevalence of overutilization in Oregon.

SECOND APPROACH: SUBJECTIVE ASSESSMENTS

Our second approach to estimating overutilization was more successful in avoiding framing effects. In this approach, we asked physicians to produce actual counts of overutilization. By anchoring responses against countable events rather than a subjective rating system, we hoped to reduce the influence of framing effects and produce estimates of overutilization that were more reliable regardless of context. And indeed, our second approach yielded estimates of overutilization that were comparable regardless of which survey a physician filled out (Exhibit 11).
Exhibit 11. Count-based Estimates of Overutilization from Two Different Physician Surveys

<table>
<thead>
<tr>
<th>TYPE OF PROCEDURE</th>
<th>OR Physicians on a COST EFFECTIVENESS survey</th>
<th>OR Physicians on a DEFENSIVE MEDICINE survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>CT Scans</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>MRI Studies</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Ultrasound studies</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>GLOBAL OVERUTILIZATION RATE (includes all of the above)</strong></td>
<td><strong>14%</strong></td>
<td><strong>14%</strong></td>
</tr>
</tbody>
</table>

Differences in results were not statistically significant (p<.05, two-tailed chi-square tests)

Given that we found significant framing effects in our first set of measures, we are reasonably confident that our experiment was sensitive to capturing such effects. The fact that we did not find similar effects in the count-based measures, then, suggests that such an approach may produce good, stable estimates of overutilization that are relatively free from subjectivity and framing effects -- at least to the extent possible for any survey-based measure.

**FINAL ESTIMATES OF OVERUTILIZATION DUE TO DEFENSIVE PRACTICE IN OREGON**

We recommend using the count-based results from our defensive medicine survey as the final estimates of overutilization in Oregon. Although these data only capture overutilization within seven specific types of health care, they speak directly to overutilization due to medical liability concerns and offered reliable estimates even when presented to physicians in a context free of the defensive medicine issue.

Overall, we estimate that, across the seven categories of care for which we were able to attain estimates, **14% of physician orders are for care that was not medically necessary**. These estimates may not capture all overutilization in Oregon – we were unable to estimate overutilization of prescription medications using the count-based method, for example – but they do cover the care most often identified as susceptible to defensive practice in existing studies.

Exhibit 12. Final Estimates of Overutilization due to Defensive Medicine in Oregon

<table>
<thead>
<tr>
<th>Percent of Orders Deemed Unnecessary by the Ordering Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
</tr>
<tr>
<td>CT Scans</td>
</tr>
<tr>
<td>MRI Studies</td>
</tr>
<tr>
<td>Ultrasound studies</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
</tr>
<tr>
<td>Hospital admissions</td>
</tr>
<tr>
<td><strong>GLOBAL OVERUTILIZATION RATE</strong></td>
</tr>
</tbody>
</table>
QUESTION #2: WHAT ARE THE KEY DRIVERS OF OVERUTILIZATION COSTS?

We estimated the overall costs of defensive medicine in our analysis of expenditures data, finding that $646 million in total expenditures ($31 million in actual state spending) were attributable to defensive medicine. However, we wanted to assess the financial impacts of over-utilization within specific types of care, so we used our survey results to independently produce estimates of costs associated with each type of overutilization. To accomplish this, we:

- Used our survey results (on a representative sample of actively practicing Oregon physicians) to estimate the total number of each procedure ordered annually by practicing physicians in Oregon;
- Used MEPS (Medical Expenditure Panel Study) data to estimate the average cost of each event;\(^{15}\)
- Multiplied the number of orders times the average cost to approximate total spending within that category;
- Applied our final overutilization estimates to these cost numbers to estimate the total number of dollars spent annually on procedures and tests deemed medically unnecessary by the ordering physicians.

We had two goals with this approach. First, we wanted to understand which types of overutilization were driving most of the costs of unnecessary care. Second, we hoped that applying an independent method of estimating the total costs of overutilization would yield results that could substantiate those from our analysis of expenditures data. Results are summarized in Exhibit 13, below.

### Exhibit 13. Estimated Costs of Overutilization by Type of Healthcare Service

<table>
<thead>
<tr>
<th></th>
<th>% of Orders Not Necessary</th>
<th>Est. Annual Orders*</th>
<th>Average Per-Unit Cost **</th>
<th>Financial Impact of Overutilization (in millions)</th>
<th>Percent of Overutilization Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
<td>15.1%</td>
<td>2,906,492</td>
<td>$63</td>
<td>$27.8 M</td>
<td>4%</td>
</tr>
<tr>
<td>CT Scan</td>
<td>19.1%</td>
<td>919,337</td>
<td>$243</td>
<td>$42.6 M</td>
<td>6%</td>
</tr>
<tr>
<td>MRI Studies</td>
<td>19.5%</td>
<td>486,410</td>
<td>$506</td>
<td>$48.0 M</td>
<td>6%</td>
</tr>
<tr>
<td>Ultrasound Studies</td>
<td>15.1%</td>
<td>1,094,506</td>
<td>$137</td>
<td>$22.6 M</td>
<td>3%</td>
</tr>
<tr>
<td>Lab Tests (CBC, Chem Profile)</td>
<td>13.9%</td>
<td>11,222,475</td>
<td>$16</td>
<td>$24.5 M</td>
<td>3%</td>
</tr>
<tr>
<td>Specialist referrals</td>
<td>17.2%</td>
<td>1,598,159</td>
<td>$99</td>
<td>$27.3 M</td>
<td>4%</td>
</tr>
<tr>
<td>Hospital admissions (short stay)</td>
<td>8.2%</td>
<td>1,034,762</td>
<td>$6,479</td>
<td>$552.7M</td>
<td>74%</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$745.6M</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* Computed based on physician reporting of number of orders on our survey, with results weighted to represent all active OR physicians.

** We used Oregon’s APAC database and national MEPS data\(^{15}\) to estimate the average cost of procedures. For hospital stays, we assumed that “unnecessary” hospitalizations would be relatively short, and used the MEPS average cost for shorter stays (1-2 days) rather than applying the average cost for ALL hospitalizations regardless of length of stay.

LIMITATIONS OF OUR SURVEY-BASED APPROACH TO ESTIMATING COSTS

Using survey data to estimate costs in this way relies on certain assumptions and bears with it certain limitations. Most importantly, we had to estimate the average cost of hospital care for “unnecessary” hospitalizations. Because there is no objective way to capture the cost of an “unnecessary” admission, we had to select a “best available” estimate for these costs. An overall average of hospital stay costs would include the sort of very long, high-cost stays that drive up an average, but are probably unlikely to result from an unnecessary admission. Therefore, we assumed unnecessary hospital admissions tended to result in short stays and used the average cost for short (1-2 day) stays from the most recently available MEPS (Medical Expenditure Panel Survey) data. The overall average cost of stay for all hospital admissions is considerably higher and would result in much larger cost estimates.

\(^{15}\) MEPS is a large-scale ongoing survey of families, individuals, providers, and employers across the United States designed to capture complete data on health care utilization and costs. Data are available http://meps.ahrq.gov/mepsweb/index.jsp
A second limitation of using survey data to estimate costs is that we have to rely on point estimates from survey responses to get an overutilization rate for each type of service. In addition to the potentially subjective nature of such responses, all point estimates produced by surveys have margins of error around them -- thus, for example, the “true” number for unnecessary hospital admissions may be somewhat lower or higher than the 8.2% indicated on our survey. Particularly with high-cost items like hospital admissions, even relatively small changes within the survey’s margin of error can result in substantially different cost numbers.

KEY COST DRIVERS

With these limitations in mind, we found that, based on what physicians told us in our survey, unnecessary hospital admissions were responsible for 74% of estimated total overutilization costs across these categories of health care. Various types of diagnostic imaging accounted for another 19% of total costs, while excess laboratory testing and specialist referrals represented only a relatively small fraction of overutilization costs. This finding is broadly consistent with the results of our analysis of expenditures data (page 8), which found that 74% of the costs attributable to defensive medicine occurred in hospitals. Taken together, these findings suggest that reform focused on preventing unnecessary hospital care may have the greatest potential to make significant cost impacts.

COMPARING ESTIMATES OF OVERUTILIZATION COSTS

We ultimately approached estimating the costs of overutilization in two ways:

- First, we took the best estimates from the economics literature about the fractional costs of various types of care attributable to defensive medicine and applied them to Oregon-specific expenditures data (page 7).
- Second, we used survey data to estimate total orders and unnecessary utilization among seven of the most common types of overutilization, applied data on the average costs of that care, and estimated the total “cost” associated with overutilization within each type of care (page 17).

The two methods should not necessarily be directly comparable, since they rely on fundamentally different approaches, categorize costs into different bins, and don’t always include the same types of things. For example, while our survey estimates include most of the biggest “bins” of overutilization identified in previous research, we were unable to estimate the costs of prescription drug overutilization; the expenditures data did apply some estimates of overutilization to prescription drug spending.

Despite this, however, it is broadly reassuring that the estimates produced via the two methods are roughly comparable (Exhibit 14) – within one-half of one percent as a fraction of total healthcare spending in Oregon. We would recommend using the expenditures data as the “official” cost estimate, while the survey estimates are perhaps more useful as a means to understand the distribution of defensive medicine costs across specific types of care.

Exhibit 14. Estimates of Defensive Medicine & Overutilization Costs using Two Distinct Methods
Because their prevalence and cost estimates are so similar, we recommend combining our four distinct imaging components into a single item to create a more parsimonious picture of overutilization and associated costs. By combining our prevalence and cost estimates, we are able to produce the following “snapshot” of the degree of utilization associated with defensive practice in Oregon and the costs associated with that overutilization (Exhibit 15).

**Exhibit 15. Final Estimates of Overutilization Rates & Associated Costs**

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Overutilization Rate</th>
<th>Associated Costs</th>
<th>Percent of Associated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging (X-Rays, CT scans, MRI, Ultrasounds)</td>
<td>16.2%</td>
<td>$141.0 M</td>
<td>19%</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>13.9%</td>
<td>$24.5 M</td>
<td>3%</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>17.2%</td>
<td>$27.3 M</td>
<td>4%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>8.2%</td>
<td>$552.7 M</td>
<td>74%</td>
</tr>
<tr>
<td><strong>TOTAL OVERUTILIZATION &amp; COSTS</strong></td>
<td><strong>13.9%</strong></td>
<td><strong>$745.6 M</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

These estimates represent the best data we can produce with our survey-based approach to estimating overutilization and associated costs.

**QUALITY OF ESTIMATES**

**Prevalence:** A common critique of survey-based attempts to measure defensive medicine effects is that rates of overutilization may be over reported because of subjectivity and framing effects. We took a “count based” approach to measuring overutilization and used an experimental design to calibrate our estimates against another survey that did not present the questions in a defensive medicine context. We did not see systematic variation between responses in the two surveys, giving us good confidence that we have produced reliable estimates of overutilization within the limits of a survey methodology.

**Cost:** Our cost estimates represent the best data we can produce given our approach, but there are several limitations that should be acknowledged. Most notably, we had to make some assumptions about what the average cost of care for an “unnecessary” hospital admission might look like. And second, the point-based prevalence estimates we used to compute the costs associated with unnecessary care are based on survey responses, and, like any survey response, they carry an inherent “margin of error.” Variation in these responses, even within the survey’s margin of error, can impact our estimates. However, we still believe they are useful as a general gauge of how the costs of defensive practice are allocated across different types of care.
QUESTION #3: WHAT ARE THE KEY DRIVERS OF OVERUTILIZATION AMONG PHYSICIANS?

In addition to understanding the prevalence and cost of overutilization in Oregon, we wanted to understand what types of factors were statistically associated with high rates of over-ordering among physicians. We took two approaches to answering this question.

- First, we examined the relationship between various physician or practice characteristics and our measures of overutilization. We wanted to understand whether there were clear patterns of overutilization, perhaps representing a greater susceptibility or sensitivity to defensive practice among certain types of physicians.

- Second, we used multivariate regression analysis to understand the statistical relationship between physician and practice characteristics and defensive medicine. This method allows us to understand which specific characteristics best predict whether physicians engage in defensive practice while controlling for the influence of other factors.

PHYSICIAN SPECIALTY & OVERUTILIZATION

The existing literature on defensive medicine has largely focused on a relatively small number of high-risk specialties, including emergency medicine physicians, OB/GYNs, Radiologists, Orthopedic surgeons, and Neurological surgeons. We compared rate of overutilization among physicians within those high risk specialties to other physicians, but did not observe statistically meaningful differences in defensive practice (Exhibit 16).

Exhibit 16. Comparative Overutilization among Physicians in High-Risk Specialties

<table>
<thead>
<tr>
<th>TYPE OF PROCEDURE</th>
<th>Physicians in high risk specialties* (n=240)</th>
<th>Other physicians (n=942)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>CT Scans</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>MRI Studies</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Ultrasound studies</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>GLOBAL OVERUTILIZATION RATE (includes all of above)</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Differences in results were not statistically significant (p<.05, two-tailed chi-square tests)

* High risk specialties included emergency medicine, OB/GYN, Radiology, Orthopedic surgery, and Neurology.
TORT CLAIMS ACT COVERAGE & OVERUTILIZATION

We wanted to assess whether physicians subject to the tort claims act had different overutilization rates than those who were not. We had no perfect way to test this idea. The closest proxy available to us was to identify physicians whose primary practice setting included some tort claims coverage (essentially, affiliations with OHSU and the VA) and compared their overutilization rates to those of physicians in other settings.

We did find some differences in overutilization among physicians practicing in settings with tort claims coverage – a markedly reduced tendency to order unnecessary specialist referrals and hospital admissions. This propensity did not carry over to the use of diagnostic imaging or lab tests (Exhibit 17).

Significant caution should be taken in interpreting this data: since the number of settings with tort claims coverage is limited to, essentially, two institutions, results could represent place effects -- something specific about working at those institutions – rather than reflecting a specific effect of tort claims coverage. Given that unnecessary hospital admissions drove nearly 3/4 of defensive medicine costs in Oregon, additional work in this area may be warranted. However, we would recommend development of a new study that is more deliberately designed to isolate the effects of tort claims act coverage.

Exhibit 17. Overutilization Among Physicians With and Without Tort Claims Act Coverage

<table>
<thead>
<tr>
<th>Service</th>
<th>Physicians with some tort claims act coverage (n=171)</th>
<th>Physicians with no tort claims act coverage (n=1011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Rays</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>CT Scans</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>MRI Studies</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Ultrasound studies</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>GLOBAL OVERUTILIZATION RATE (includes all of above)</strong></td>
<td><strong>15%</strong></td>
<td><strong>14%</strong></td>
</tr>
</tbody>
</table>

★ Indicates a statistically meaningful difference between the two survey results (p<.05, two-tailed chi-square test)

MALPRACTICE COVERAGE & OVERUTILIZATION

We wanted to know whether the characteristics of physicians’ malpractice coverage were associated with their overutilization rates. In each case, we looked at whether our global overutilization measure (the percent of all orders that were deemed medically unnecessary) varied significantly according to characteristics of a physicians’ malpractice coverage. We found little evidence of large differences, though there was a moderately significant association between physicians’ confidence in their malpractice coverage and their overutilization rates (Exhibit 18).
Exhibit 18. Rates of Overutilization by Malpractice Coverage Characteristics
*Scores represent the percent of all orders deemed medically unnecessary by the ordering physician*

<table>
<thead>
<tr>
<th>Source of Malpractice Coverage</th>
<th>Confidence in Malpractice Coverage</th>
<th>Financial Burden of Malpractice Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through hospital as an employee</td>
<td>Very confident in malpractice coverage</td>
<td>Premiums are heavy burden</td>
</tr>
<tr>
<td>Through hospital as an affiliate</td>
<td>Somewhat confident in coverage</td>
<td>12.8%</td>
</tr>
<tr>
<td>Through a carrier as part of a practice</td>
<td>Not confident in coverage</td>
<td>Premiums are somewhat of a burden</td>
</tr>
<tr>
<td>Through a carrier as an individual</td>
<td></td>
<td>Premiums are not much of a burden</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Statistically significant, p&lt;.10, two tailed ANOVA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No statistically significant differences</td>
</tr>
</tbody>
</table>

No statistically significant differences

PRACTICE CHARACTERISTICS & OVER-UTILIZATION

We wanted to assess whether characteristics of a physicians’ practice environment might be associated with rates of overutilization. We found that overutilization did vary significantly by type of practice, with physicians in hospitals most likely to overutilize and physicians at public safety net clinics reporting the lowest rates of overutilization. We also found that physicians who spend less time in direct patient care also reported lower rates of overutilization (Exhibit 19).

Exhibit 19. Rates of Overutilization by Malpractice Coverage Characteristics
*Scores represent the percent of all orders deemed medically unnecessary by the ordering physician*

<table>
<thead>
<tr>
<th>Type of Practice</th>
<th>Size of Practice</th>
<th>Time Spent in Direct Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Owned Solo Practice</td>
<td>Solo or Partnership</td>
<td>0-20 hrs/week spent in patient care</td>
</tr>
<tr>
<td>Physician Owned Group Practice</td>
<td>9.6%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Staff Model HMO</td>
<td>11.0%</td>
<td>21-40 hrs/week spent in patient care</td>
</tr>
<tr>
<td>Public Clinic</td>
<td>6.1%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Hospital or Hospital Clinic</td>
<td>12.7%</td>
<td>41+ hrs/week spent in patient care</td>
</tr>
<tr>
<td>Other Settings (nursing home, etc)</td>
<td>8.1%</td>
<td>Statistically significant, p&lt;.05, two tailed ANOVA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No statistically significant differences</td>
</tr>
</tbody>
</table>

Statistically significant, p<.05, two tailed ANOVA

PATIENT INSURANCE & OVERUTILIZATION

We wanted to know whether the insurance makeup of a physicians’ patient load was associated with his or her overutilization rates. To determine this, we asked physicians to estimate the approximate mix of their cases across four major types of insurance – commercial, Medicare, Medicaid, and other – as well as the percent of patients in their practice who were uninsured. We then examined variation in our global overutilization score (representing overutilization across all types of care we measured) by the mix of patients’ insurance types to assess whether patient insurance had any impact on overutilization. If physicians tended to, for example, practice more defensively with Medicaid or uninsured patients (perhaps because they perceived those patients as more litigious, or for some other reason) , we would expect to see more overutilization among physicians with a heavy load of those patients.

We found relatively little systematic variation in overutilization based on patient panel mix, with one key exception: uninsured patients. Physicians with a heavy load of uninsured patients reported less overutilization than physicians with fewer uninsured patients (Exhibit 20). This is consistent with our finding above (in exhibit 16) that physicians practicing in public safety net clinics reported the lowest rates of overutilization.
Exhibit 20. Overutilization by Patient Insurance Mix

Scores represent the percent of all orders deemed medically unnecessary by the ordering physician

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>0-25%</th>
<th>26-50%</th>
<th>51% or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICAID PATIENTS</td>
<td>11%</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>UNINSURED PATIENTS</td>
<td>12%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>MEDICARE PATIENTS</td>
<td>12%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>COMMERCIAL PATIENTS</td>
<td>12%</td>
<td>12%</td>
<td>11%</td>
</tr>
</tbody>
</table>

☆ Indicates statistically significant variation in overutilization based on percent of patients of this type (p<.10, two tailed ANOVA)

PHYSICIAN SATISFACTION & OVERUTILIZATION

We also examined the relationship between physician job satisfaction and defensive practice, and found a significant relationship between overutilization rates and career satisfaction among OR physicians. Doctors who tended to report high rates of overutilization also tended to report lower career satisfaction (Exhibit 21).

Exhibit 21. Overutilization & Physician Career Satisfaction

Scores represent the percent of all orders deemed medically unnecessary by the ordering physician

<table>
<thead>
<tr>
<th>Overall Satisfaction with Medical Career</th>
<th>Very or Somewhat Satisfied</th>
<th>10.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neither satisfied nor dissatisfied</td>
<td>11.7%</td>
</tr>
<tr>
<td></td>
<td>Somewhat or Very Dissatisfied</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

Statistically significant, p<.05 (two tailed ANOVA test)

<table>
<thead>
<tr>
<th>Satisfaction with Patient Relationships</th>
<th>Very or Somewhat Satisfied</th>
<th>10.8%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neither satisfied nor dissatisfied</td>
<td>17.2%</td>
</tr>
<tr>
<td></td>
<td>Somewhat or Very Dissatisfied</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

Statistically significant, p<.05 (two tailed ANOVA test)

<table>
<thead>
<tr>
<th>Satisfaction with Ability to Give The Best Care Possible</th>
<th>Very or Somewhat Satisfied</th>
<th>10.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neither satisfied nor dissatisfied</td>
<td>13.3%</td>
</tr>
<tr>
<td></td>
<td>Somewhat or Very Dissatisfied</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

Statistically significant, p<.05 (two tailed ANOVA test)

MULTIVARIATE ANALYSIS:
PREDICTORS OF DEFENSIVE PRACTICE AMONG OREGON PHYSICIANS

We wanted to determine which factors were the most strongly associated with defensive practice in Oregon. To accomplish this, we classified physicians into two categories – those who reported any overutilization due to medical liability concerns and those reported none (using our count-based approach). We then used logistic regression analysis to construct a multivariate model identifying the factors that best predict with whether or not a physician engaged in defensive medicine.

POTENTIAL PREDICTORS OF DEFENSIVE PRACTICE: We tested a wide variety of factors for inclusion in our statistical model, including membership in a high risk specialty, percent of patients with Medicaid insurance, whether the physician has ever been named in a malpractice suit, the physicians’ level of confidence in their liability insurance, the physicians’ perceived financial burden of their liability insurance, the source of a physician’s the primary layer of liability insurance, years in practice, hours per week involved in direct patient care, type of primary practice setting, employment status at primary practice, size of primary practice, number of patients seen per week, and career satisfaction.
At least one key potential driver of overutilization is not accounted for in our models: the malpractice environment. Because all physicians in our sample live in Oregon, they are subject to the same general malpractice environment.

**MODEL BUILDING:** Each variable was tested in univariate logistic regression model as an independent variable predicting defensive practice, and were subsequently considered for inclusion in a multivariate regression if the univariate models were considered significant with a p-value less than 0.10. The univariate predictors that reached this threshold of significance were history of malpractice suits, confidence in liability insurance, financial burden of liability insurance, source of the primary layer of liability insurance, years in practice, hours per week involved in direct patient care, primary practice setting, employment status at primary practice, size of primary practice, and number of patients seen per week.

Using these variables as a starting point, we created a multivariate logistic regression model predicting defensive medicine practice. Variables that were not significant in the multivariate model were iteratively removed until only variables with significant predictive power with a p-value less than 0.10 were included. A model was also created using an information-based stepwise model selection algorithm that confirmed the results of this process. A final stepwise model selection was carried out to identify the specific categorical responses to the survey questions included in the model best predicting defensive medicine practice, and these were used to set the baseline and measured effects in the model. The resulting model represents the factors that best predict defensive practice among Oregon physicians:

**Exhibit 22. Predictors of Defensive Medicine Practice among Oregon Physicians
Results of Multivariate Logistic Regression Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Odds Ratio</th>
<th>Confidence Interval</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (Intercept)</td>
<td>-</td>
<td>4.0188</td>
<td>2.05-7.89</td>
<td>0.0000</td>
</tr>
<tr>
<td>Financial Burden of Liability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Premiums</td>
<td>Little to None</td>
<td>referent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Some or More</td>
<td>2.2192</td>
<td>1.28-3.86</td>
<td>0.0047</td>
</tr>
<tr>
<td>Patients Seen Per Week</td>
<td>0-50</td>
<td>referent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>51+</td>
<td>1.9775</td>
<td>1.18-3.33</td>
<td>0.0103</td>
</tr>
<tr>
<td>Source of Primary Liability</td>
<td>Hospital or Practice</td>
<td>referent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insurance</td>
<td>Purchased Individually</td>
<td>0.3476</td>
<td>0.17-0.70</td>
<td>0.0034</td>
</tr>
<tr>
<td>Years in Practice</td>
<td>0-5</td>
<td>referent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>6+</td>
<td>0.4903</td>
<td>0.24-0.99</td>
<td>0.0495</td>
</tr>
</tbody>
</table>

**INTERPRETATION:** We found that four distinct factors predict defensive practice in OR physicians:

- **Financial Burden of Malpractice Premiums:** Physicians whose premiums are burdensome to pay were **12% more** likely (OR=2.22, p=.005) to engage in defensive practice than baseline physicians who did not find their premiums burdensome.
- **Patient Workload:** Physicians who saw 50 or more patients per week were **10% more likely** (OR=1.98, p=.010) to engage in defensive practice than baseline physicians who saw fewer patients per week.
- **Source of Liability Insurance:** Physicians who purchased their liability insurance individually were **22% less** likely (OR=0.35, p=0.003) to engage in defensive practice than baseline physicians whose insurance was through a hospital or practice.
- **Years of Practice:** Physicians who had 6+ years in practice were **14% less** likely (OR=0.49, p=0.049) to engage in defensive practice than baseline physicians who had been in practice for 5 or less years.
QUESTION #4:
WHAT TYPES OF REFORMS DO PHYSICIANS THINK WILL WORK?

We wanted to capture Oregon physicians’ assessments of how likely different malpractice reform options were to reduce the role malpractice concerns play in their clinical decision making. To accomplish this, we included some questions about potential reform options in our defensive medicine survey.

Because we were primarily interested in whether reform would impact defensive practice (as opposed to any other potential impacts of savings from reform), we asked physicians to tell us how likely it was that each of the following reform options would reduce the impact of medical liability on their clinical decision making:

- A safe harbor rule with medical guidelines as the standard of care
- Caps on medical liability across all types of patients
- Caps on medical liability for subsets types of patients (such as those enrolling in a CCO)
- Changes in how joint and several liability is handled
- Binding or non-binding medical panels
- An administrative compensation system

OVERALL PHYSICIAN SUPPORT FOR VARIOUS REFORM OPTIONS

Overall, we found the broadest support for damage caps and safe harbor rules. Physicians were less optimistic that medical panels or administrative compensation systems would reduce the impact of medical liability concerns on their decision making, though support for those options was still relatively high (Exhibit 23).

Exhibit 23. Physician Assessments of Various Reform Options
Percent Indicating that the reform would be somewhat or very likely to reduce medical liability concerns

<table>
<thead>
<tr>
<th>Reform Option</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage Caps for All Patients</td>
<td>75%</td>
</tr>
<tr>
<td>Safe Harbor Rule</td>
<td>72%</td>
</tr>
<tr>
<td>Damage Caps For Some Patients</td>
<td>66%</td>
</tr>
<tr>
<td>Joint &amp; Several Liability Reforms</td>
<td>61%</td>
</tr>
<tr>
<td>Medical panels</td>
<td>59%</td>
</tr>
<tr>
<td>Administrative compensation</td>
<td>52%</td>
</tr>
</tbody>
</table>

VARIATION IN SUPPORT AMONG DIFFERENT TYPES OF PHYSICIANS

We found that physicians’ reform preferences were not monolithic. We looked at statistically meaningful variation in support for reform along a wide range of physician characteristics, including:

- **PRACTICE CHARACTERISTICS** including type and location of practice, size of practice, insurance mix of patients, and whether the physician was an owner (or partial owner) of the practice;
- **PERSONAL CHARACTERISTICS**, including how long the physician had been practicing medicine;
- **PATIENT WORKLOAD**, including how many patients the physician sees in a typical week and how many hours per week he or she spends in direct patient care;
- **MALPRACTICE HISTORY**, including whether the physician has ever been named in a suit;
- **COVERAGE CHARACTERISTICS**, including how the physician gets their liability coverage and their assessment of how well their coverage protects them.
SAFE HARBOR LAWS

First, we explored physician support for safe harbor laws more deeply with a set of additional questions about the specific impacts on adherence to clinical guidelines and patient safety (Exhibit 24).

Exhibit 24. Physician Support for Safe Harbor Laws

<table>
<thead>
<tr>
<th>How likely is it that a safe harbor rule with clinical guidelines as the standard of care would...</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not too Likely</th>
<th>Not at all Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the impact of medical liability concerns on your clinical decision making? (n=793)</td>
<td>28%</td>
<td>44%</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Increase your adherence to clinical guidelines? (n=785)</td>
<td>33%</td>
<td>49%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Result in improved patient safety due to better guideline adherence? (n=786)</td>
<td>24%</td>
<td>45%</td>
<td>24%</td>
<td>6%</td>
</tr>
<tr>
<td>Be an effective approach to medical liability reform? (n=784)</td>
<td>24%</td>
<td>47%</td>
<td>23%</td>
<td>5%</td>
</tr>
</tbody>
</table>

We then examined whether support for safe harbor laws varied according to the types of characteristics identified above. We did find an underlying pattern of variation: newer physicians and those who were employees or contractors were far more optimistic about safe harbor laws than more tenured physicians or those who were owners of their own practices (Exhibit 25).

Exhibit 25. Support for Safe Harbor Laws by Physician Employment Status

- **Overall Support:** 71% of physicians said safe harbor rules would be an effective reform. Statistically significant, p<.05 (two tailed chi-square test).
- **Support BY Years in Practice:**
  - 5 years or fewer: 82%
  - 6-10 years: 77%
  - 11 or more years: 68%
- **Support BY Malpractice Coverage:**
  - Through a hospital: 78%
  - Through a practice: 70%
  - Individually: 60%
- **Support BY Employment Status:**
  - Full or part owner: 62%
  - Employee: 78%
  - Contractor/Volunteer: 76%

VARIATION IN SUPPORT FOR OTHER REFORMS

We explored variation in physician support for each of the reform ideas presented in our survey. Overall, support was high across the board for all potential reform options, and we found only a few consistent patterns of variation worth exploring further.

- **Malpractice Insurance:** Physicians’ malpractice coverage was a key driver of support for all types of reform. For example, physicians with low confidence in their malpractice coverage were much more likely to report that damage caps would reduce the role of malpractice concerns in their clinical decisions (89%) than those with high confidence (68%). Likewise, physicians whose premiums were seen as a heavy financial burden exhibited much higher levels of support for caps (91%) than those who did not feel their premiums were particularly burdensome (67%). These patterns held true across all potential types of reform.

- **Patient Workload:** Physicians who spent more of their time in direct care or who see more patients exhibited much stronger support for reform options than those who see fewer patients. For example, physicians who see 50 or more patients per week, 81% supported damage caps. Among physicians who see fewer than 50 patients in a typical week, support was lower (69%).

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OTHER REFORM IDEAS

We presented a number of potential reform options to physicians, but we also wanted to hear about any other ideas they might have. Each survey included an open-ended question where physicians were asked to write a free-form response offering their best ideas.

- On our **defensive medicine survey**, physicians were asked for their best ideas about how best to reduce the impact of medical liability concerns on their clinical decision making.
- On our **cost effective care** survey, physicians were asked a more general question about their best ideas for reducing unnecessary procedures, without medical liability concerns being specifically called out.

We loaded the verbatim text of these answers into a qualitative data analysis program and analyzed them to identify key patterns, themes, and common responses.

MEDICAL LIABILITY

When asked to offer “other” ideas on reforms that would reduce the impact of medical liability concerns, the majority of respondents simply underscored specific aspects of medical malpractice liability reform. The most prevalent suggestions were:

- Holding lawyers and plaintiffs accountable for lawsuits deemed frivolous (28%)
- Panels or professional juries in legal proceedings (22%)
- Tort Reform/caps on damages (13%)
- Liability Protection (5%)
- Using legally binding arbitration (3%)

A small percentage of respondents offered other suggestions unrelated to legal reform, including:

- Educating physicians on best practices to improve care (4%)
- Implementing a single payer system/universal healthcare (3%)

All other responses were too specific to be effectively categorized.

COST EFFECTIVE CARE

When respondents were given the “Cost Effective Care” version of the survey and simply asked to identify ideas to reduce unnecessary procedures, only 12% specifically mentioned malpractice liability reform. Instead, participants commonly offered the following suggestions unrelated to legal reform:

- Malpractice liability reform (12%)
- Building better relationships between doctors and patients (8%)
- Making the price of procedures more transparent (7%)
- Increased education for both doctors and patients on outcomes and best practices (7%)
- Reducing physician profit motives - i.e. doctors should not make referrals for tests on machines they own (7%)
- Better reimbursement (6%)
- Clearer, evidence based guidelines/standards of care (6%)
Part 3.

Recommendations for Monitoring Defensive Medicine

Since defensive medicine cannot be directly observed, monitoring the effects of any reforms will be challenging. Any reform agenda that seeks to impact defensive practice will necessarily have two major goals:

- Reduce the rate of medically unnecessary utilization; and
- Reduce the costs of care associated with unnecessary utilization.

The best approach to monitoring the impacts of reform is to repeatedly measure these two outcomes as directly as possible over time, comparing changes to the baseline (pre-reform) data produced in this report.

RECOMMENDED APPROACH:
COLLECT ONGOING DATA THROUGH PHYSICIAN WORKFORCE SURVEY

Of the approaches we employed in this report, survey data hold the most promise as a means to evaluate the impacts of malpractice reform on an ongoing basis. Using a count-based approach, this report identified seven specific types of overutilization and provided prevalence and cost estimates associated with each. Because this data was collected from a representative panel of active physicians and showed good reliability even when presented in different contexts, we recommend using our estimates of overutilization as a “baseline” against which future change can be measured.

We assessed overutilization of four types of diagnostic imaging distinctly, but each revealed roughly comparable levels of overutilization. A more parsimonious set of measures for ongoing evaluation might combine these into a single diagnostic imaging measure, then track overutilization and associated costs across four domains over time (Exhibit 26).

<table>
<thead>
<tr>
<th>Overutilization Rate</th>
<th>Associated Costs</th>
<th>Overutilization Rate</th>
<th>Associated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging (X-Rays, CT scans, MRI, Ultrasounds)</td>
<td>16.2%</td>
<td>$141.0 M</td>
<td>?</td>
</tr>
<tr>
<td>Laboratory Tests (CBC, Chem profile, etc)</td>
<td>13.9%</td>
<td>$24.5 M</td>
<td>?</td>
</tr>
<tr>
<td>Specialist referrals or consults</td>
<td>17.2%</td>
<td>$27.3 M</td>
<td>?</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>8.2%</td>
<td>$552.7 M</td>
<td>?</td>
</tr>
<tr>
<td>TOTAL OVERUTILIZATION &amp; COSTS</td>
<td>13.9%</td>
<td>$745.6 M</td>
<td>?</td>
</tr>
</tbody>
</table>

COLLECTING DATA: Rather than field a dedicated survey every year or two, we recommend that data on overutilization be collected as part of the existing physician workforce survey. The count-based approach to assessing overutilization (whereby respondents estimate their total number of orders within each category of service during a month, and then estimate how many of those orders were not medically necessary) yielded consistent answers without strong framing...
effects. If four comparable questions were added to the physician workforce survey using the same approach as our survey, it would be possible to examine trends in overutilization over time and detect the effects of any reform package Oregon implements by comparing scores before and after the reforms.

COST ESTIMATES: Our approach to quantifying the “cost” of overutilization relies on using survey responses to estimate the percent of orders within each service category that are unnecessary, and then multiplying that number by the average cost of the services to yield the total overutilization expenditures associated with that type of service. Since costs of services change over time, it would be necessary (and relatively simple) to normalize costs by accounting for inflation when assessing changes in defensive medicine related expenditures over time.

We also used national MEPS (Medical Expenditure Panel Study) data to estimate the average cost of services. Better, more Oregon-specific data might come from Oregon’s All Payer, All claims (APAC) database in future years, but the APAC data was not quite ready for analysis at the time of this report.

ADVANTAGES OF THE PROPOSED APPROACH

BEST AVAILABLE MEASURES: Although survey data are not perfect, there are no known ways to observe overutilization and “defensive practice” that offer a superior approach. Our analysis of claims/expenditures data is more objective, but cannot easily be repeated within the context of an ongoing evaluation: it relies on taking the best estimates from existing literature about how much healthcare spending within different categories may attributable to defensive medicine. Those estimates are themselves based on previous studies that examined variation in healthcare spending over time and across settings with different malpractice environments.

It is possible that total expenditures could be tracked before and after the implementation of reform to see if expected reductions in expenditures appear. However, with the health care system undergoing rapid change along many dimensions, it would be very difficult to confidently attribute any changes in expenditures to malpractice reform as opposed to, say, Medicaid expansions, the implementation of a health insurance exchange, or the adoption of a CCO-focused model of care. Survey measures, on the other hand, can directly assess overutilization of specific types of health care, and if the questions are asked correctly, seem to avoid significant survey framing effects. We were also able to use our survey data to produce cost estimates that were very similar to those drawn from our objective analysis of expenditures data.

GOOD PRE-POST MEASURES: A survey-based approach has the advantage of allowing for a true pre-post assessment, with the baseline results (from this report) compared to results from annual or semi-annual updates that occur after any implementation of malpractice reform.

INEXPENSIVE: Although good survey data can be expensive to collect, the state already has an existing survey of physicians it can leverage – the Physician Workforce Survey. If four questions comparable to those used in this project were added to that existing survey, data collection costs could be largely defrayed and it might be possible to evaluate changes in overutilization (and reductions in associated costs) quite inexpensively.

LIMITATIONS OF THE PROPOSED APPROACH

SUBJECTIVITY OF SURVEYS: Even though our “count-based” approach to estimating overutilization showed relatively limited susceptibility to framing effects, it is still based on self-reported data from physicians. If some physicians over-report defensive practice and others underreport it, the average estimate for the population can still be valid as long as there are no systematic patterns underlying those reporting tendencies. However, it is also possible that as a population, physicians tend to systematically misestimate how often they “over-order” certain tests in a direction that skews population-level results. Since the “true” rate of overutilization cannot be directly observed, there is no way to be completely certain that this doesn’t happen. However, it is important to note that even if the baseline assessments we collected in this project are too high or low, an evaluation would be assessing change in those scores over time.
Conclusions

KEY TAKEAWAYS

We approached estimating the costs and prevalence of defensive medicine in Oregon using two distinct methods that yielded complementary results. Our surveys of Oregon physicians suggest that, within the most common categories of care usually associated with defensive practice, as many as 14% of physician orders may be medically unnecessary. Our analysis of expenditures data suggests that an estimated $650 million in total costs of care may be attributable to defensive medicine statewide, though most of these costs flow through private insurers or federal payments; the Oregon state budget’s share is about $31 million.

Our distinct approaches showed a high level of agreement in several areas. First, estimates of the total cost of defensive medicine produced independently by the two methods showed roughly comparable results – $650 million from the expenditures data analysis (2.6% of healthcare spending) compared to $745 million (3.0% of healthcare spending) for the survey-based estimates. Both analyses also agreed that unnecessary care in hospital settings is the most important driver of defensive medicine costs, accounting for 74% of costs associated with overutilization. With this in mind, reform aimed at preventing or reducing medically unnecessary hospital care stands the best chance of making significant cost impacts.

The costs of defensive medicine should probably not be seen as entirely “recapturable.” Not all unnecessary care can be attributed to the malpractice environment, and no known malpractice reform scenario would reduce defensive medicine to zero. Applying the best available estimates on the likely savings of direct malpractice reforms (such as damage caps) to Oregon expenditures data suggests that such reforms might reduce total healthcare expenditures by $345 million across the entire Oregon economy. However, most of this reduction would be fall under federal or private expenditures – direct savings to Oregon’s budget would be an estimated $20 million.

FURTHER QUESTIONS

The authors of this report are available to answer questions or respond to requests for additional analysis. Please contact Bill J Wright (bill.wright@providence.org; 503-215-7184) with any such requests.
APPENDIX A: METHODOLOGICAL NOTES

Sample

Our survey sampling frame came from the Oregon Medical Association (OMA) and was made up of a list of all physicians licensed in Oregon (16,345 physicians total). We limited the sampling frame to only physicians who 1) have a medical or osteopathic license, 2) had a practice address in Oregon, and 3) had a mailing address of Oregon or an adjoining state. After these modifications, the sampling frame consisted of 10,847 physicians. The OMA reviewed this list and removed deceased physicians to create a final sampling frame of 10,818 physicians.

The remaining 10,818 physicians were coded into high-risk and non high-risk specialty groups based on their “board certification” specialties as reported by the OMA. Those flagged as high-risk included the specialties of: Emergency Medicine, General Surgery, Obstetrics/Gynecology, Radiology, Orthopedic Surgery, and Neurological Surgery. A simple random sample of 1,200 was drawn from the 8,293 physicians in the not high-risk group and an additional simple random sample of 1,200 was drawn from the 2,525 physicians from the high-risk specialty group.

We also identified physicians with a practice address of a VA hospital/center/clinic and any OHSU address, including affiliated clinics. Physicians with these practice addresses were flagged as our tort coverage group, which consisted of 1,305 of 10,818 physicians, 1050 of which were not in our initial sample. We drew an additional simple random sample of 200 from this subpopulation, bringing our total stratified sample to 2,600 physicians practicing in Oregon.

Weights were computed based on a study participants’ probability of inclusion within their respective subsample. For the samples drawn from not-high risk and high-risk specialties these probabilities were 1200/8293 and 1200/2525 respectively. For the additional tort coverage group subsample the probabilities of inclusion were the probability of not being drawn in the initial sample, 7093/8293 and 1325/2525 above respectively, multiplied by the probability of being drawn in the second sample which was 200/1050. The weights were computed by taking the inverse of the final probability of inclusion in the sample (1/[probability of inclusion in sample]) and scaled to sum to the population size or sample size depending on the estimates required.

Survey Fielding and Outreach Protocol

Pre-Survey Communications: Before we began our survey mailings, we sent a blue postcard to alert our sample that they should expect a blue envelope in the mail containing our survey and compensation for their time. The postcard, along with all of our other outreach materials, was designed for our two different survey groups and contained slightly different language depending on which survey group the participant was in. Additionally, we included a brief project overview in the OMA monthly electronic newsletter that was circulated December 1st to encourage participation in the survey and again, alert participants to watch for a blue envelope in the mail.

Mail and Online Survey: The survey fielding and outreach portion of the study was carried out in a 5-week period. We mailed two waves of paper surveys to our sample. The first mailing contained twenty dollars compensation and was mailed the first week of December 2011. The final reminder survey was mailed to all non-respondents the third week of December and did not contain an incentive. At the same time that paper surveys were mailed, all respondents with email addresses in the OMA database were contacted by the OMA with a message to encourage participation and a link
to take the survey online. A final email with the online survey link was sent the first week in January 2012 to encourage any last responses.

**Tracking and Outreach:** Our tracking and outreach team is responsible for finding participants with bad contact info and for recruiting non-responders. Mail that was returned was sent to tracking to find an updated address. Beginning one week after the first survey mailing, our outreach team members contacted non-responders via phone, email, and fax. When appropriate, they sent online survey links through email and offered to complete the survey over the phone with the physician. They also spoke to clinic managers and physicians’ assistants to clarify the project and answer and questions. The outreach team was directed to only seek work and professional contact information for physicians.
The Oregon Medical Liability Survey

This survey has been commissioned by the Oregon Health Authority (OHA) to help policy makers understand how concerns about medical liability may impact physicians' clinical decision-making and job satisfaction. Results will be used to inform decisions about health reform in 2012, so your response is critically important.

The survey only takes a few minutes to complete, and results are completely confidential. We understand that your time is valuable. Enclosed, please find $20 as compensation for your time. We will also provide a summary of the survey’s findings to each physician who completes the survey.

If you have questions, please contact the study's lead investigator at 1-877-215-0686 or bill.wright@providence.org.

PART 1: YOUR SATISFACTION PRACTICING MEDICINE
These first questions help us understand how happy you are in your medical career.

1. Thinking very generally, how satisfied are you with your career in medicine?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Somewhat dissatisfied
   - Very dissatisfied

2. How satisfied are with each of the following specific aspects of your medical career?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Your overall income</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>B. Your relationships with patients</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. Your relationships with co-workers</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. The balance between work and personal life</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>E. The amount of time you have with patients</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>F. Your ability to provide patients with the best possible care</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

3. In the last year, has your satisfaction with your medical career increased, stayed about the same, or declined?
   - It's increased in the past year
   - It's stayed about the same
   - It's declined in the past year
4. In a typical month, about how often do patients ask you for unnecessary or cost-ineffective tests or treatments?

- Never
- Seldom (once or twice a month)
- Occasionally (about once a week)
- Often (several times a week)
- Very often (several times a day)

5. Thinking of the past year, how often have concerns about MEDICAL LIABILITY caused you to....

A. Order more tests than you otherwise would based on your judgment of what is medically needed?

B. Prescribe more medications than you otherwise would based on your judgment of what is medically needed?

C. Refer to specialists more often than you would based on your judgment of what is medically needed?

D. Use invasive procedures, such as biopsies, to confirm a diagnosis more often than was medically needed?

E. Avoid personally conducting certain procedures or interventions?

F. Avoid caring for high risk patients?

6. The next set of questions help us understand how often concerns about MEDICAL LIABILITY cause you to order more tests or care than you otherwise would based solely on medical need.

- First, tell us about how many of each you ordered in your last FULL MONTH of work (your best guess is fine). Just put zero for anything you don’t order at all.
- Second, give your best estimate as to how many of the ones you ordered were NOT medically necessary, according to your clinical judgment. IN YOUR MOST RECENT FULL MONTH OF WORK...

   - About how many of each did you order?
   - Of those, about how many were NOT medically necessary?
7. In general, when you make clinical decisions in your practice, how important are each of the following things?

<table>
<thead>
<tr>
<th></th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not too Important</th>
<th>Not at all Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The likely out of pocket cost for the patient? ..................</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>B. The overall cost effectiveness of the treatment or test? ...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. How strongly the patient asks for a test or treatment? ......</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. The threat of a possible malpractice suit? ......................</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

8. Have you ever been named in a malpractice suit?

- □ Yes, in the past 3 years
- □ Yes, but not in the past 3 years
- □ No, never

9. How much confidence do you have that your current liability insurance will cover all situations for which you might need coverage?

- □ A great deal
- □ Some
- □ Not much
- □ None at all

10. How much of a financial burden are your professional liability insurance premiums?

- □ A great deal
- □ Some
- □ Not much
- □ None at all

11. How do you currently get your primary layer professional liability insurance?

- □ Through a hospital you are employed by
- □ Through a hospital you are affiliated with
- □ Directly from an insurance carrier, as part of your practice/group
- □ Directly from an insurance carrier, individually

12. From which insurance carrier do you currently get your primary layer professional liability insurance?

- □ NPMIC (Northwest Physicians Mutual Insurance Company)
- □ CNA (Continental Casualty Company ) through the OMA Risk Purchasing Group
- □ The Doctors’ Company
- □ Physicians Insurance
- □ Someone else (tell us: ____________________________________________)

12. How likely is it that each of the following reforms would reduce the impact of medical liability concerns on your clinical decision making?

<table>
<thead>
<tr>
<th>Reform</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not too Likely</th>
<th>Not at all Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. A safe harbor rule with medical guidelines as the standard of care</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>B. Caps on medical liability across all types of patients.............</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. Caps on medical liability for subsets of patients.................</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. Changes in how joint and several liability is handled.............</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>E. Binding or non-binding medical panels...............................</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>F. An administrative compensation system...............................</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>G. Other ideas (please tell us): ____________________________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. How likely is it that a safe harbor rule with clinical guidelines as a standard of care would...

A. Increase your adherence to clinical guidelines? ..................
   Very Likely ☐   Somewhat Likely ☐   Not too Likely ☐   Not at all Likely ☐

B. Result in improved patient safety due to better guideline adherence? .................................................................
   Very Likely ☐   Somewhat Likely ☐   Not too Likely ☐   Not at all Likely ☐

C. Be an effective approach to medical liability reform? ......
   Very Likely ☐   Somewhat Likely ☐   Not too Likely ☐   Not at all Likely ☐

---

PART 3. ABOUT YOU & YOUR PRACTICE

These questions help us understand more about who you are and the type of environment you practice in.

15. About how many years have you been practicing medicine?
   - Less than 2 years ☐
   - 2 to 5 years ☐
   - 6 to 10 years ☐
   - 11 to 20 years ☐
   - More than 20 years ☐

16. About how many hours per week are you involved in direct patient care activities?
   - None ☐
   - 1-20 hours ☐
   - More than 40 hours ☐
   - 21-40 hours ☐

17. Which of the following best describes your **primary practice setting** (where you see most of your patients)?
   - A physician owned solo practice ☐
   - Hospital-based (a hospital employee) ☐
   - A physician owned group practice ☐
   - A hospital-owned outpatient clinic ☐
   - A staff-model HMO (HMO employee) ☐
   - A nursing facility ☐
   - A public clinic ☐
   - Other (tell us: _____________________________)

18. What is your employment status at your primary practice?
   - Full owner ☐
   - Independent Contractor ☐
   - Part owner ☐
   - Volunteer ☐
   - Employee ☐
   - Other (tell us: _____________________________)

19. About how many physicians are in your primary practice?
   - Solo practice ☐
   - 3-10 physicians ☐
   - Partnership (2 physicians) ☐
   - 11-50 physicians ☐
   - More than 50 physicians ☐

20. In a typical week, about how many patients do **YOU** see at your primary practice?
   - 1 to 50 patients ☐
   - 100 to 200 patients ☐
   - 50 to 100 patients ☐
   - More than 200 patients ☐
   - Does not apply ☐

21. About what percent of the patients you see have the following types of insurance? Your best guess is fine.
   \[
   \text{Commercial Insurance} + \text{Medicaid Insurance} + \text{Medicare Insurance} + \text{Other Insurance} + \text{No Insurance} = 100\% 
   \]

---

That's all the questions we have!

Thank you for participating in this survey. Please place it in the postage-paid envelope and drop it in the mail.

We will send a summary of results from this survey to you in early 2012.
The Oregon
Cost Effective Care Survey

This survey has been commissioned by the Oregon Health Authority (OHA) to help policy makers understand how concerns about cost effectiveness may impact physicians' clinical decision-making and job satisfaction. Results will be used to inform decisions about health reform in 2012, so your response is critically important.

The survey only takes a few minutes to complete, and results are completely confidential. We understand that your time is valuable. Enclosed, please find $20 as compensation for your time. We will also provide a summary of the survey's findings to each physician who completes the survey.

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1. Thinking very generally, how satisfied are you with your career in medicine?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Somewhat dissatisfied
   - Very dissatisfied

2. How satisfied are with each of the following specific aspects of your medical career?
   - A. Your overall income
   - B. Your relationships with patients
   - C. Your relationships with co-workers
   - D. The balance between work and personal life
   - E. The amount of time you have with patients
   - F. Your ability to provide patients with the best possible care

3. In the last year, has your satisfaction with your medical career increased, stayed about the same, or declined?
   - It's increased in the past year
   - It's stayed about the same
   - It's declined in the past year
PART 2. COST EFFECTIVE CLINICAL DECISION MAKING

These next questions help us understand clinical decision making in the face of potential patient requests, complaints, or other pressures. Remember, your results are completely confidential.

4. In a typical month, about how often do patients ask you for unnecessary or cost-ineffective tests or treatments?
   - q Never
   - q Seldom (once or twice a month)
   - q Occasionally (about once a week)
   - q Often (several times a week)
   - q Very often (several times a day)

5. Thinking of the past year, how often have patient requests or other pressures caused you to....
   A. Order more tests than you otherwise would based on your judgment of what is medically needed? ..............
   B. Prescribe more medications than you otherwise would based on your judgment of what is medically needed? ....
   C. Refer to specialists more often than you would based on your judgment of what is medically needed? ........
   D. Use invasive procedures, such as biopsies, to confirm a diagnosis more often than was medically needed? ........

6. The next few questions help us understand how often patient requests or other pressures caused you to order more tests or care than you otherwise would based solely on medical need.
   • First, tell us about how many of each you ordered in your last FULL MONTH of work (your best guess is fine). Just put zero for anything you don’t order at all.
   • Second, give your best estimate as to how many of the ones you ordered were NOT medically necessary, according to your clinical judgment.

   IN YOUR MOST RECENT FULL MONTH OF WORK....

<table>
<thead>
<tr>
<th>Test or Procedure</th>
<th>About how many of each did you order?</th>
<th>Of those, about how many were NOT medically necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. X-Rays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. CT Scans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. MRI studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Ultrasound studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Laboratory tests (e.g., CBC or chem profile)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Specialist referrals or consultations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Hospital admissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Biopsies or similar invasive procedures to confirm a diagnosis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. In general, when you make clinical decisions in your practice, how important are each of the following things?

<table>
<thead>
<tr>
<th></th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not too Important</th>
<th>Not at all Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The likely out of pocket cost for the patient?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>B. The overall cost effectiveness of the treatment or test?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. How strongly the patient asks for a test or treatment?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. The threat of a possible malpractice suit?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

8. How much of a role do you believe individual physicians should play in helping control health care costs?

☐ A great deal ☐ Some ☐ Not much ☐ None at all

9. How likely is it that each of the following would help reduce unnecessary procedures?

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not too Likely</th>
<th>Not at all Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. More patient education by health plan</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>B. Reductions in administrative burdens</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. Medical liability reforms</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. Other ideas (please tell us):_______________________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PART 3. ABOUT YOU & YOUR PRACTICE**  
*These questions help us understand more about who you are and the type of environment you practice in.*

10. About how many years have you been practicing medicine?

☐ Less than 2 years ☐ 11 to 20 years
☐ 2 to 5 years       ☐ More than 20 years
☐ 6 to 10 years

11. About how many hours per week are you involved in direct patient care activities?

☐ None             ☐ 21-40 hours
☐ 1-20 hours       ☐ More than 40 hours

12. Which of the following best describes your **primary practice setting** (where you see most of your patients)?

☐ A physician owned solo practice  ☐ Hospital-based (a hospital employee)
☐ A physician owned group practice  ☐ A hospital-owned outpatient clinic
☐ A staff-model HMO (HMO employee)  ☐ A nursing facility
☐ A public clinic                  ☐ Other (tell us: ____________________________)

13. What is your employment status at your primary practice?

☐ Full owner          ☐ Independent Contractor
☐ Part owner          ☐ Volunteer
☐ Employee            ☐ Other (tell us: ____________________________)
14. What is the size of your primary practice?

- Solo practice
- Partnership (2 physicians)
- 3-10 physicians
- 11-50 physicians
- More than 50 physicians

15. In a typical week, about how many patients do YOU see at your primary practice?

- 1 to 50 patients
- 50 to 100 patients
- 100 to 200 patients
- More than 200 patients
- Does not apply

16. About what percent of the patients you see suffer from a chronic illness? Your best guess is fine.

- 0-10%
- 11-25%
- 26-50%
- More than 50%

17. About what percent of the patients you see have the following types of insurance? Your best guess is fine.

\[
\text{Commercial Insurance} \quad + \quad \text{Medicaid Insurance} \quad + \quad \text{Medicare Insurance} \quad + \quad \text{Other Insurance} \quad + \quad \text{No Insurance} = 100\%
\]

18. What specific policy reforms or changes do you think would help physicians deliver high quality, cost-effective patient care?

____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________

That's all the questions we have!
Thank you for participating in this survey. Please place it in the postage-paid envelope and drop it in the mail.
We will send a summary of results from this survey to you in early 2012.
### APPENDIX C: DATA TABLES

Medical Liability Survey – Parts 1 and 2 – Physician Satisfaction and Clinical Decision-Making

#### Q1 and Q2

<table>
<thead>
<tr>
<th>How satisfied are you with...</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>--your career in medicine?</td>
<td>41%</td>
<td>45%</td>
<td>5%</td>
<td>7%</td>
<td>1%</td>
<td>824</td>
</tr>
<tr>
<td>--your overall income?</td>
<td>33%</td>
<td>50%</td>
<td>7%</td>
<td>9%</td>
<td>1%</td>
<td>825</td>
</tr>
<tr>
<td>--your relationships with patients?</td>
<td>58%</td>
<td>37%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>824</td>
</tr>
<tr>
<td>--your relationships with co-workers?</td>
<td>60%</td>
<td>34%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>826</td>
</tr>
<tr>
<td>--the balance between work and personal life?</td>
<td>21%</td>
<td>41%</td>
<td>10%</td>
<td>22%</td>
<td>7%</td>
<td>826</td>
</tr>
<tr>
<td>--the amount of time you have with patients?</td>
<td>23%</td>
<td>41%</td>
<td>11%</td>
<td>21%</td>
<td>4%</td>
<td>825</td>
</tr>
<tr>
<td>--your ability to provide patients with the best care possible?</td>
<td>29%</td>
<td>46%</td>
<td>10%</td>
<td>13%</td>
<td>2%</td>
<td>828</td>
</tr>
</tbody>
</table>

#### Q3

<table>
<thead>
<tr>
<th>In the last year, has your satisfaction with your medical career increased, stayed about the same, or declined?</th>
<th>It's increased</th>
<th>It's stayed about the same</th>
<th>It's declined</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12%</td>
<td>53%</td>
<td>35%</td>
<td>829</td>
</tr>
</tbody>
</table>

#### Q4

<table>
<thead>
<tr>
<th>In a typical month, about how often do patients ask you for unnecessary or cost-ineffective tests or treatments?</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7%</td>
<td>25%</td>
<td>33%</td>
<td>30%</td>
<td>6%</td>
<td>819</td>
</tr>
</tbody>
</table>

#### Q5

<table>
<thead>
<tr>
<th>How often have concerns about medical liability caused you to...</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>--order more tests than you would based on your judgment of what is medically needed?</td>
<td>11%</td>
<td>27%</td>
<td>44%</td>
<td>18%</td>
<td>819</td>
</tr>
<tr>
<td>--prescribe more medications than you otherwise would based on your judgment of what is medically needed?</td>
<td>29%</td>
<td>41%</td>
<td>24%</td>
<td>6%</td>
<td>814</td>
</tr>
<tr>
<td>--refer to specialists more often than you would based on your judgment of what is medically needed?</td>
<td>16%</td>
<td>34%</td>
<td>38%</td>
<td>12%</td>
<td>815</td>
</tr>
<tr>
<td>--use invasive procedures, such as biopsies, to confirm a diagnosis more often than was medically needed?</td>
<td>38%</td>
<td>41%</td>
<td>17%</td>
<td>4%</td>
<td>811</td>
</tr>
<tr>
<td>--avoid personally conducting certain procedures or interventions?</td>
<td>35%</td>
<td>31%</td>
<td>24%</td>
<td>10%</td>
<td>810</td>
</tr>
<tr>
<td>--avoid caring for high-risk patients?</td>
<td>50%</td>
<td>25%</td>
<td>18%</td>
<td>7%</td>
<td>811</td>
</tr>
</tbody>
</table>
### Q7

When you make clinical decision in your practice, how important are each of the following...

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not too Important</th>
<th>Not at all Important</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely out-of-pocket cost for the patient?</td>
<td>35%</td>
<td>47%</td>
<td>12%</td>
<td>6%</td>
<td>817</td>
</tr>
<tr>
<td>Overall cost effectiveness of the treatment or test?</td>
<td>52%</td>
<td>38%</td>
<td>7%</td>
<td>2%</td>
<td>819</td>
</tr>
<tr>
<td>How strongly the patient asks for the test or treatment?</td>
<td>10%</td>
<td>55%</td>
<td>30%</td>
<td>5%</td>
<td>816</td>
</tr>
<tr>
<td>Threat of a possible malpractice suit?</td>
<td>20%</td>
<td>38%</td>
<td>30%</td>
<td>11%</td>
<td>820</td>
</tr>
</tbody>
</table>

### Q8

Have you ever been named in a malpractice suit?

<table>
<thead>
<tr>
<th></th>
<th>Yes, in the past 3 years</th>
<th>Yes, but not in the past 3 years</th>
<th>No, never</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9%</td>
<td>34%</td>
<td>57%</td>
<td>826</td>
</tr>
</tbody>
</table>

### Q9

How much confidence do you have that your current liability insurance will cover all situations for which you might need coverage?

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>A great deal</th>
<th>Some</th>
<th>Not much</th>
<th>None at all</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49%</td>
<td>43%</td>
<td>6%</td>
<td>3%</td>
<td>822</td>
</tr>
</tbody>
</table>

### Q10

How much of a financial burden are your professional liability insurance premiums?

<table>
<thead>
<tr>
<th>Burden Level</th>
<th>A great deal</th>
<th>Some</th>
<th>Not much</th>
<th>None at all</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13%</td>
<td>40%</td>
<td>20%</td>
<td>27%</td>
<td>814</td>
</tr>
</tbody>
</table>

### Q11

How do you currently get your primary layer of professional liability insurance?

<table>
<thead>
<tr>
<th>Type of Carrier</th>
<th>Hospital employed by</th>
<th>Hospital affiliated with</th>
<th>Insurance carrier as part of practice</th>
<th>Insurance carrier, individually</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36%</td>
<td>2%</td>
<td>44%</td>
<td>18%</td>
<td>814</td>
</tr>
</tbody>
</table>

### Q12

From which insurance carrier do you currently get your primary layer of professional liability insurance?

<table>
<thead>
<tr>
<th>Carrier</th>
<th>NPMIC</th>
<th>CNA</th>
<th>The Doctor's Company</th>
<th>Physician's Insurance</th>
<th>Other</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7%</td>
<td>30%</td>
<td>18%</td>
<td>5%</td>
<td>40%</td>
<td>714</td>
</tr>
</tbody>
</table>
### Q13

How likely is it that each of the following reforms would reduce the impact of medical liability concerns on your clinical decision making?

<table>
<thead>
<tr>
<th>Reform</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not too Likely</th>
<th>Not at all Likely</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>--a safe harbor rule with medical guidelines as the standard of care</td>
<td>28%</td>
<td>43%</td>
<td>21%</td>
<td>7%</td>
<td>792</td>
</tr>
<tr>
<td>--caps on medical liability across all types of patients</td>
<td>44%</td>
<td>32%</td>
<td>18%</td>
<td>7%</td>
<td>806</td>
</tr>
<tr>
<td>--caps on medical liability for subsets types of patients</td>
<td>27%</td>
<td>39%</td>
<td>25%</td>
<td>9%</td>
<td>798</td>
</tr>
<tr>
<td>--changes in how joint and several liability is handled</td>
<td>21%</td>
<td>41%</td>
<td>28%</td>
<td>10%</td>
<td>754</td>
</tr>
<tr>
<td>--binding or non-binding medical panels</td>
<td>18%</td>
<td>41%</td>
<td>32%</td>
<td>9%</td>
<td>756</td>
</tr>
<tr>
<td>--an administrative compensation system</td>
<td>17%</td>
<td>35%</td>
<td>37%</td>
<td>12%</td>
<td>712</td>
</tr>
</tbody>
</table>

### Q14

How likely is it that a safe harbor rule with clinical guidelines as a standard of care would...

<table>
<thead>
<tr>
<th>Effect</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not too Likely</th>
<th>Not at all Likely</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>--increase your adherence to clinical guidelines?</td>
<td>33%</td>
<td>49%</td>
<td>14%</td>
<td>4%</td>
<td>785</td>
</tr>
<tr>
<td>--result in improved patient safety due to better guideline adherence?</td>
<td>24%</td>
<td>45%</td>
<td>24%</td>
<td>6%</td>
<td>786</td>
</tr>
<tr>
<td>--be an effective approach to medical liability reform?</td>
<td>24%</td>
<td>47%</td>
<td>23%</td>
<td>5%</td>
<td>784</td>
</tr>
</tbody>
</table>

### Medical Liability Survey – Part 3 - Provider and Practice Characteristics

#### Q15

Years practicing medicine (n=823)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Count (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td>2%</td>
</tr>
<tr>
<td>2 to 5 years</td>
<td>10%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>15%</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>28%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>45%</td>
</tr>
</tbody>
</table>

#### Q16

Hours per week involved in direct patient care activities (n=823)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Count (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>2%</td>
</tr>
<tr>
<td>1-20 hours</td>
<td>16%</td>
</tr>
<tr>
<td>21-40 hours</td>
<td>42%</td>
</tr>
<tr>
<td>More than 40 hours</td>
<td>40%</td>
</tr>
</tbody>
</table>
### Q17
Primary practice setting (n=820)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician-owned solo practice</td>
<td>13%</td>
</tr>
<tr>
<td>Physician-owned group practice</td>
<td>35%</td>
</tr>
<tr>
<td>Staff-model HMO</td>
<td>7%</td>
</tr>
<tr>
<td>Public clinic</td>
<td>3%</td>
</tr>
<tr>
<td>Hospital-based</td>
<td>20%</td>
</tr>
<tr>
<td>Hospital-owned outpatient clinic</td>
<td>11%</td>
</tr>
<tr>
<td>Nursing facility</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
</tr>
</tbody>
</table>

### Q18
Employment status at primary practice (n=815)

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full owner</td>
<td>26%</td>
</tr>
<tr>
<td>Part owner</td>
<td>17%</td>
</tr>
<tr>
<td>Employee</td>
<td>47%</td>
</tr>
<tr>
<td>Independent contractor</td>
<td>8%</td>
</tr>
<tr>
<td>Volunteer</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Q19
Number of physicians are in primary practice (n=817)

<table>
<thead>
<tr>
<th>Number of Physicians</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo practice</td>
<td>15%</td>
</tr>
<tr>
<td>Partnership (2 physicians)</td>
<td>5%</td>
</tr>
<tr>
<td>3-10 physicians</td>
<td>36%</td>
</tr>
<tr>
<td>11-50 physicians</td>
<td>24%</td>
</tr>
<tr>
<td>More than 50 physicians</td>
<td>20%</td>
</tr>
</tbody>
</table>

### Q20
Number of patients seen per week in primary practice (n=818)

<table>
<thead>
<tr>
<th>Number of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 50 patients</td>
<td>41%</td>
</tr>
<tr>
<td>50 to 100 patients</td>
<td>43%</td>
</tr>
<tr>
<td>100 to 200 patients</td>
<td>9%</td>
</tr>
<tr>
<td>More than 200 patients</td>
<td>2%</td>
</tr>
<tr>
<td>Does not apply</td>
<td>5%</td>
</tr>
<tr>
<td>Q1 and Q2</td>
<td>Very satisfied</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>How satisfied are you with...</td>
<td></td>
</tr>
<tr>
<td>--your career in medicine?</td>
<td>40%</td>
</tr>
<tr>
<td>--your overall income?</td>
<td>36%</td>
</tr>
<tr>
<td>--your relationships with patients?</td>
<td>64%</td>
</tr>
<tr>
<td>--your relationships with co-workers?</td>
<td>60%</td>
</tr>
<tr>
<td>--the balance between work and personal life?</td>
<td>23%</td>
</tr>
<tr>
<td>--the amount of time you have with patients?</td>
<td>24%</td>
</tr>
<tr>
<td>--your ability to provide patients with the best care possible?</td>
<td>31%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3</th>
<th>It's increased</th>
<th>It's stayed about the same</th>
<th>It's declined</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last year, has your satisfaction with your medical career increased, stayed about the same, or declined?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14%</td>
<td>54%</td>
<td>32%</td>
<td>353</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q4</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very often</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a typical month, about how often do patients ask you for unnecessary or cost-ineffective tests or treatments?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9%</td>
<td>30%</td>
<td>34%</td>
<td>23%</td>
<td>5%</td>
<td>348</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often have patient requests or other pressures caused you to...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--order more tests than you would based on your judgment of what is medically needed?</td>
<td>12%</td>
<td>38%</td>
<td>41%</td>
<td>9%</td>
<td>345</td>
</tr>
<tr>
<td>--prescribe more medications than you otherwise would based on your judgment of what is medically needed?</td>
<td>21%</td>
<td>43%</td>
<td>29%</td>
<td>7%</td>
<td>344</td>
</tr>
<tr>
<td>--refer to specialists more often than you would based on your judgment of what is medically needed?</td>
<td>21%</td>
<td>43%</td>
<td>30%</td>
<td>5%</td>
<td>346</td>
</tr>
<tr>
<td>--use invasive procedures, such as biopsies, to confirm a diagnosis more often than was medically needed?</td>
<td>44%</td>
<td>43%</td>
<td>11%</td>
<td>2%</td>
<td>346</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q7</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not too important</th>
<th>Not at all important</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you make clinical decision in your practice, how important are each of the following...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--the likely out-of-pocket cost for the patient?</td>
<td>37%</td>
<td>47%</td>
<td>11%</td>
<td>5%</td>
<td>346</td>
</tr>
<tr>
<td>--the overall cost effectiveness of the treatment or test?</td>
<td>54%</td>
<td>39%</td>
<td>6%</td>
<td>1%</td>
<td>349</td>
</tr>
<tr>
<td>--how strongly the patient asks for the test or treatment?</td>
<td>8%</td>
<td>45%</td>
<td>39%</td>
<td>8%</td>
<td>346</td>
</tr>
<tr>
<td>--the threat of a possible malpractice suit?</td>
<td>21%</td>
<td>41%</td>
<td>25%</td>
<td>12%</td>
<td>347</td>
</tr>
</tbody>
</table>
### Q8
How much of a role do you believe individual physicians should play in helping control health care costs?

<table>
<thead>
<tr>
<th>A great deal</th>
<th>Some</th>
<th>Not much</th>
<th>None at all</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>57%</td>
<td>39%</td>
<td>3%</td>
<td>1%</td>
<td>339</td>
</tr>
</tbody>
</table>

### Q9
How likely is it that each of the following would help reduce unnecessary procedures?

<table>
<thead>
<tr>
<th></th>
<th>Very likely</th>
<th>Somewhat likely</th>
<th>Not too likely</th>
<th>Not at all likely</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>--more patients education by health plans?</td>
<td>24%</td>
<td>41%</td>
<td>28%</td>
<td>7%</td>
<td>348</td>
</tr>
<tr>
<td>--reductions in administrative burdens?</td>
<td>30%</td>
<td>37%</td>
<td>28%</td>
<td>5%</td>
<td>341</td>
</tr>
<tr>
<td>--medical liability reform?</td>
<td>62%</td>
<td>26%</td>
<td>11%</td>
<td>1%</td>
<td>346</td>
</tr>
</tbody>
</table>

### Cost-Effective Care – Part 3 - Provider and Practice Characteristics

#### Q10
Years practicing medicine (n=352)

<table>
<thead>
<tr>
<th></th>
<th>Less than 2 years</th>
<th>2 to 5 years</th>
<th>6 to 10 years</th>
<th>11 to 20 years</th>
<th>More than 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1%</td>
<td>10%</td>
<td>16%</td>
<td>24%</td>
<td>49%</td>
</tr>
</tbody>
</table>

#### Q11
Hours per week involved in direct patient care activities (n=352)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>1-20 hours</th>
<th>21-40 hours</th>
<th>More than 40 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4%</td>
<td>15%</td>
<td>40%</td>
<td>40%</td>
</tr>
</tbody>
</table>

#### Q12
Primary practice setting (n=350)

<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician-owned solo practice</td>
<td>17%</td>
</tr>
<tr>
<td>Physician-owned group practice</td>
<td>33%</td>
</tr>
<tr>
<td>Staff-model HMO</td>
<td>9%</td>
</tr>
<tr>
<td>Public clinic</td>
<td>4%</td>
</tr>
<tr>
<td>Hospital-based</td>
<td>17%</td>
</tr>
<tr>
<td>Hospital-owned outpatient clinic</td>
<td>9%</td>
</tr>
<tr>
<td>Nursing facility</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>
### Q13
Employment status at primary practice (n=348)

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full owner</td>
<td>32%</td>
</tr>
<tr>
<td>Part owner</td>
<td>17%</td>
</tr>
<tr>
<td>Employee</td>
<td>44%</td>
</tr>
<tr>
<td>Independent contractor</td>
<td>5%</td>
</tr>
<tr>
<td>Volunteer</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Q14
Number of physicians are in primary practice (n=346)

<table>
<thead>
<tr>
<th>Number of Physicians</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo</td>
<td>19%</td>
</tr>
<tr>
<td>Partnership (2 physicians)</td>
<td>5%</td>
</tr>
<tr>
<td>3-10 physicians</td>
<td>32%</td>
</tr>
<tr>
<td>11-50 physicians</td>
<td>25%</td>
</tr>
<tr>
<td>More than 50 physicians</td>
<td>19%</td>
</tr>
</tbody>
</table>

### Q15
Number of patients seen per week in primary practice (n=348)

<table>
<thead>
<tr>
<th>Number of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 50 patients</td>
<td>43%</td>
</tr>
<tr>
<td>50 to 100 patients</td>
<td>42%</td>
</tr>
<tr>
<td>100 to 200 patients</td>
<td>10%</td>
</tr>
<tr>
<td>More than 200 patients</td>
<td>0%</td>
</tr>
<tr>
<td>Does not apply</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Q16
Percent of patients with chronic illness (n=341)

<table>
<thead>
<tr>
<th>Percent of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10%</td>
<td>10%</td>
</tr>
<tr>
<td>11-25%</td>
<td>19%</td>
</tr>
<tr>
<td>26-50%</td>
<td>25%</td>
</tr>
<tr>
<td>More than 50%</td>
<td>46%</td>
</tr>
</tbody>
</table>
Medical Liability Reform in Oregon: Possibilities, Costs, and Benefits

A Report to the Oregon Health Authority

Michelle Mello, JD, PhD
Allen Kachalia, MD, JD

January 2, 2012
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Context

This Report was commissioned by the State of Oregon, Oregon Health Authority (OHA) under RFP #3322. The commission was pursuant to a legislative mandate in Section 16 of House Bill 3650 (2011), also known as the Health Care Transformation bill, requiring OHA to study and develop recommendations for medical liability reforms.

About the Authors

Michelle Mello, JD, PhD is Professor of Law and Public Health at the Harvard School of Public Health in Boston. A lawyer and health policy researcher by training, Dr. Mello’s research focuses on empirical evaluation of the medical liability system and liability reforms. She is the author of more than 100 peer-reviewed research publications and a frequent advisor to state and federal policymakers on medical liability reform issues.

Allen Kachalia, MD, JD is Assistant Professor of Medicine at Harvard Medical School and Associate Chief Quality Officer at Brigham and Women’s Hospital in Boston. Dr. Kachalia is a Board-certified internist who is clinically active as a hospitalist. In addition, he conducts research on medicolegal issues, patient safety, and health care quality improvement and oversees quality and safety initiatives at Brigham and Women’s Hospital.
Acknowledgments

The authors are indebted to many individuals for help assembling the information necessary to complete this report on an expedited timeline. Laura Cali of the Oregon Insurance Division provided extensive support and information to help us understand the medical professional liability insurance market in Oregon. Mark Levy, Vickie Wilson, and Theresa Lee of the Oregon Medical Board provided data and guidance concerning the Board’s malpractice claims database and reporting requirements. Jeremy Vandehey, Jeanene Smith, Elyssa Tran, Joe McNaught, Linda Grimms, representatives from The Doctors Company, Physicians Insurance, and CNA, David Studdert, Bernard Black, and staff at Harvard University’s Institute for Quantitative Social Science also provided helpful information. Finally, we thank Melissa Isavoran of the Oregon Health Authority for her tireless efforts to coordinate the necessary resources for this project. All conclusions and any errors in this report are entirely our own.
Executive Summary

In the Health Care Transformation Bill of 2011, H.B. 3650, Section 16, the Oregon legislature required the Oregon Health Authority (OHA) to conduct research and develop recommendations concerning potential medical liability reform options for the State of Oregon. The objective was to support the transformation of health care delivery within Oregon through implementation of coordinated care organizations (CCOs) and other measures by improving the medical liability environment for health care providers and patients. The legislature specified several potential liability reform options that could help contain health care costs by reducing costs attributable to defensive medicine, protect access to health care services for those in need, and protect injured patient’s access to legal redress for medical injuries. To carry out the legislature’s mandate, OHA contracted with us to conduct research into these options.

In this report, we explore the key design features and likely effects of the following liability reform options specified in H.B. 3650:

1. **Caps on noneconomic damages**, which impose a flat limit on the amount of compensation a malpractice plaintiff may recover for noneconomic loss, or “pain and suffering,” at trial.

2. **Medical panels**, also known as pretrial screening panels, which review malpractice claims at an early stage and provide an opinion about whether a claim contains sufficient merit to proceed or be successful at trial.

3. **Extending coverage under the Oregon Tort Claims Act (OTCA)** to health care practitioners when they provide care to Medicaid or SCHIP enrollees in a coordinated care organization. Under this reform, Medicaid or SCHIP patients would sue the State of Oregon, rather than individual health practitioners, when they are injured in the context of care provided through a CCO. They would be subject to the OTCA’s rules regarding maximum damages.

4. **Clarifying or modifying Oregon’s joint-and-several liability (JSL) reform statute** so that participation in a CCO does not entail heightened liability for malpractice damages. We explore the likely effects of removing some existing provisions in Oregon’s liability reform statute to completely abolish joint-and-several liability.

5. **An administrative system for compensating harm resulting from medical malpractice**, through which patients could file a compensation claim outside of the judicial courts.

Our work was conducted in November-December 2011. Our approach to the work was to review and synthesize the best available evidence concerning the effects of these reforms and, where possible, apply it to data from Oregon to estimate specific effects for the state. We reviewed and analyzed empirical studies that meet accepted standards of scientific rigor for analyses of the effects of laws and policies. Generally, these studies appear in peer-reviewed, academic journals, although we also incorporated information from some well-designed studies in government and think tank reports and law journals. We also gave consideration to issues and evidence outlined in written input submitted to OHA by several stakeholder groups.
Where possible, we used key findings from empirical studies and data on Oregon malpractice claims, malpractice insurance premiums, and health care to model the effects of liability reforms in Oregon. For many of the reforms, such quantitative analysis was not possible to do because key data, reliable estimates of the effects of the reforms, or both were unavailable. Our report provides information about the strength of evidence underlying our conclusions, problems with the available evidence base, and how some of these problems and gaps might be overcome. We also provide detailed information about the methods and data used in our quantitative analyses in an Appendix.

Our main conclusions can be summarized as follows:

1. **Caps on noneconomic damages:** In previous studies, caps on noneconomic damages have been shown to be associated with lower average indemnity payments, lower malpractice insurance premiums, decreased defensive medicine, and increased physician supply. They have also been shown to disproportionately burden claimants with severe injuries. The evidence base is inconclusive as to their effects on claim frequency, settlement rates, economic damages awards, and access to the legal process. We are able to provide some specific estimates of the effects of caps in Oregon, which are laid out in Table 9. However, the empirical evidence for some of the estimates is stronger than for others. Additionally, the fact that Oregon already has a partial cap (damages limits apply to the State, as well as to private defendants in claims involving wrongful death and prenatal or perinatal injury) makes it problematic to apply effect sizes from existing studies to Oregon, as those studies compare states with full caps to states with no caps. **Overall, the benefits of noneconomic damages caps can be characterized as statistically significant, but modest in size.**

2. **Medical panels:** In previous studies, medical panels have been found not to be associated with any improvement in time to claim resolution, the frequency of filed or paid claims, average indemnity payments, or lower insurance premiums. There is limited evidence that they may reduce defensive medicine in obstetrical practice. The available evidence base concerning medical panels is fairly small, and the evidence is insufficient to draw a conclusion about the effects of panels on litigation costs, provider litigation stress, settlement rates, or access to courts. We estimate that medical panels may be associated with slight reductions in rates of cesarean section and improvements in rates of vaginal birth after cesarean section—both markers of defensive medicine—in Oregon (see Table 10). No other quantification of potential effects of panels in Oregon was possible. **Overall, existing evidence does not suggest that medical panels would be effective in improving key liability-related outcomes for providers or patients.**

3. **OTCA coverage extension:** There is little or no empirical evidence available with which to evaluate the likely costs and benefits of extending OTCA coverage to practitioners in the context of caring for state-insured patients in CCOs. Analysis of the dynamics of malpractice insurance, liability, and health care on the ground, however, suggests that **the benefits of OTCA coverage for providers**
and patients may be quite limited. Liability insurers may or may not pass along any cost savings they experience due to their insured providers’ OTCA coverage in the form of lower premiums. Because the OTCA protection would only apply to some of a provider’s panel of patients, premium reductions may be small and difficult to calculate. At the point of care, providers may not know which patients the coverage applies to, and thus may not alter defensive behavior. **Finally, OTCA coverage may not protect providers from one of the most feared consequences of being sued: having a report made to state licensing boards and the National Practitioner Data Bank.** An OTCA coverage extension may benefit patients by creating access to larger payouts because the State’s coverage limit generally exceeds that of privately insured physicians. However, the available data suggest that only a small number of claims in Oregon are paid at, near, or above the $1 million policy limit that most physicians carry, so this benefit may accrue to few claimants. Other potential benefits to patients remain murky—for example, whether the liability protection would lead to greater provider participation in CCOs, improving access to care. Finally, **OTCA coverage would involve direct costs to the State, although we project them to arise from a relatively small number of claims.** Studies of other states have found that Medicaid patients account for only about 8% of malpractice claims and 6% of paid claims. Furthermore, not all Medicaid patients will be enrolled in CCOs. Therefore, the State may not be subject to many additional malpractice claims.

4. **Modifications to Oregon’s JSL statute:** The current Oregon JSL reform statute provides a limited form of protection from a “deep pocket” defendant becoming financially liable for the negligence of others. A CCO structure is not likely to introduce any new liability risks or heighten the risk that particular defendants are unable to pay their portion of a damages award. Providers may nevertheless have concerns that CCO participation may involve increased liability risk, and further JSL reform could help assuage those fears. The provision in the statute allowing plaintiffs to recover damages from other defendants within a year of the judgment if the defendant’s share of responsibility is sufficiently large could be eliminated. It may also be helpful for the State to clarify how the JSL reform statute operates if one defendant is public and the other private, and to reduce reporting requirements to state boards of licensing stemming from claims in which providers are held only minimally at fault, or not a fault, in a joint liability case. However, **further JSL reform is likely to be of only limited financial benefit to providers and because nearly all providers in Oregon purchase liability coverage with limits that are rarely exceeded.** Our analysis of paid Oregon claims from 2006-2010 revealed just 34 claims paid in excess of $1 million over the 5-year period and another 11 that settled at or just under $1 million. Thus, instances in which physicians must pay damages for which another defendant is responsible are probably quite uncommon.

5. **Administrative compensation system:** Evidence about the likely effects of an ACS is available only from the experience of analogous systems in foreign countries and the “no-fault” administrative compensation systems for severe, neurological birth injuries operating in Florida and Virginia. None of these analogs are completely
representative of how an ACS that covered all types of malpractice injuries would operate in Oregon. However, the experience of the systems in New Zealand, Denmark, and Sweden suggests that it is possible to replace the tort litigation process with an administrative remedy that is perceived as fair, more accessible than the tort process, and provides improved access to compensation. These systems have controlled their costs by limiting the size of awards, utilizing collateral source offsets, and operating highly efficiently. They are also now leveraging their systems to improve patient safety. The experience of the Florida and Virginia birth injury funds has been more checkered, but the “no-fault” standard they employ, and their tight focus on a narrow group of injuries that involve extremely high costs, makes them poor proxies for a broader ACS. Although the evidence base is not strong, there is a reasonable probability that an ACS would result in a large number of benefits for Oregon stakeholders (see Tables 16), including a faster, less adversarial claims process; lower spending on system overhead costs; improved access to compensation for patients; greater predictability of outcomes; reduced stigmatization for providers; an improved environment for health care and patient safety; and enhanced availability of data for patient safety research. Providers and insurers face considerable downside financial risk, as reduced barriers to claiming and a more generous compensation standard could greatly increase total indemnity costs. However, costs can be controlled by altering key design features of the system, such as available damages. Another potential drawback of an ACS is that denying patients access to the courts may raise significant fairness concerns, as well as legal challenges under the federal and state constitutions. Patients would also likely face limitations on recoverable damages, compared to what is available in tort. These and other adverse impacts, which are summarized in Tables 15 and 16, must be weighed carefully against the benefits. On balance, however, it is probably possible to design an ACS that achieves the key potential benefits of the ACS concept while not significantly increasing total costs or leaving patients worse off than they are under the tort system. Careful system design, and a broadly inclusive process for making key design decisions, would be crucial in maximizing the benefit/cost balance of the system and minimizing political opposition and the likelihood of constitutional challenge.

In closing, we note that one lesson of the past 30 years of malpractice reform is that the reform options for which it is easiest to win passage tend not to be those that have a large impact on the problems they are intended to address. Incremental changes to liability rules will have incremental effects, if any. The fundamental problems in the liability system require farther-reaching approaches to liability reform, but such approaches—including ACS—can involve formidable political, legal, and practical challenges. As Oregon transforms the delivery of health care in the state, policy makers will need to consider whether a comparable level of transformation is required in the surrounding liability environment, or whether it can achieve its goals without it.
Scope of the Report

This report explores the key design features and likely effects of 5 medical liability reform options proposed for Oregon: caps on noneconomic damages, medical panels, extending coverage under the Oregon Tort Claims Act to health care practitioners when they provide care to Medicaid or SCHIP enrollees in a coordinated care organization, clarifying what modifications may be needed to Oregon’s joint-and-several liability reform statute to facilitate coordinated care organization (CCO) implementation, and an administrative compensation system for medical injuries. This report was commissioned by the Oregon Health Authority (OHA) pursuant to a legislative mandate in H.B. 3650. The scope of work specified by the legislature and OHA is as follows:

Contractor shall collect data and perform a study to identify and analyze the potential benefits, costs and impacts of caps on medical liability insurance premiums, including making recommendations for providing a cap on damages for those acting on behalf of the State and serving individuals who receive medical assistance or have medical coverage through other publicly funded programs. Analysis should also include the impact of caps on parties seeking redress through the judicial system for harms caused by medical malpractice.

Contractor shall collect and analyze data and research and provide a report on the potential benefits, costs and cost savings from the extension of coverage through the Oregon Tort Claims Act to Medicaid providers providing care or services to members of a coordinated care organization as persons who serve or act as agents of the State.

Contractor shall obtain data and research on possible clarifications and limitations on joint and several liability requirements for coordinated care organizations, which should be considered by OHA, so that these organizations can assume the risk of their actions but are not liable for the actions of others within the coordinated care organization or its contracted services.

Contractor shall obtain data and provide a report on the potential costs, benefits, and cost savings of binding and nonbinding medical panels in addressing claims of medical malpractice. Analysis should also include the impact of caps on parties seeking redress through the judicial system for harms caused by medical malpractice.

Contractor shall research, study, and provide recommendations for an administrative system for compensating harm resulting from medical malpractice. The administrative system would be designed in a way that would contain health care costs by reducing costs attributable to defensive medicine and the over utilization of health services and procedures, while protecting access to health care services for those in need and protecting their access to seek redress through the judicial system for harms caused by medical malpractice. The study should address:


(b) The potential costs, benefits and potentials savings of creating the administrative system to the state, health care delivery system, and patients.
(c) Whether a net savings from the administrative system would be created after taking into account collateral costs of medical liability, including administrative costs, litigation rates and costs, and the cost of over utilization and defensive medicine.

(d) Whether the administrative system would be a more effective tool for improving patient safety than currently exists.

(e) Whether the administrative system would more effectively compensate individuals who are injured as a result of medical errors.

(f) Whether the administrative system could be designed in an opt-in or opt-out system, or would need to be mandatory to all patients or providers.

Our approach to this charge was to review and synthesize the best available evidence concerning the effects of these reforms and, where possible, apply it to data from Oregon to estimate specific effects for the state. We began by reviewing stakeholder input submitted to OHA. We incorporated this input by using arguments advanced by stakeholders in favor of and against the reforms to help identify topics for research and analysis. We also considered the specific design features that stakeholders endorsed or objected to in analyzing and making recommendations for the optimal design of reform legislation. Finally, we considered whether factual information provided by stakeholders (for example, reports written by external analysts) provided credible evidence about the effects of reforms that should be included in our analysis.

Our next step was to systematically review the available literature on the effects of the various reforms. In addition to scholarly studies published in peer-reviewed and other academic journals, there is a very sizeable “gray literature” concerning the effects of various malpractice reforms. Much of this literature consists of position papers composed by interest groups and reports prepared by consulting firms that were commissioned by interest groups. The quality of the analysis in most of this gray literature is low. Analyses typically present descriptive data about the effects of reform in a single state or group of states without adequately controlling for other factors that may explain observed differences across states or over time. For this and other reasons, the analyses generally do not meet accepted standards for scientific rigor in statistics and health policy research. We did not include reports that were not published in academic journals in our analysis unless our judgment was that they did meet such standards. This ruled out most of the unpublished literature with the exception of some reports by government agencies and well-regarded “think tanks.”

After synthesizing the available evidence in well-designed studies, we considered whether the evidence about particular effects of the reforms was sufficiently strong—considering the quantity of studies, the quality of their methods, and the consistency in their findings—to use estimates of these effects to model the likely effects of the reforms in Oregon. The reforms we studied can be divided into 3 groups: (1) reforms for which there is a high-quality, mature evidence base; (2) reforms for which there is some evidence from a limited-number of well-designed studies; and (3) reforms that are untested in the U.S. and for which, consequently, no quantitative evidence is available. The only reform in group (1) is caps on noneconomic damages, and the only reform in group (2) is medical panels. For the other reforms, we were
limited to drawing conclusions about their likely effects based on evidence from analogous reforms or similar reforms in other settings. Hence, our quantitative, Oregon-specific analyses are extensive for damages caps, modest for medical panels, and very limited for the other reforms. Along with our conclusions, we have provided information about the strength of evidence underlying them.

To maximize the readability of the report, we have provided limited information about our analytical methods in the main body of the report. The Appendix contains detailed information about our methodology for particular quantitative analyses, the data on which the analyses rely, and the known strengths and weaknesses of the data.
I. Caps on Noneconomic Damages

A. Nature of the Reform

A cap on noneconomic damages is a legislatively imposed limitation on the amount of money a plaintiff may recover at trial for noneconomic losses associated with a medical injury. The concept of noneconomic loss, often called “pain and suffering,” captures the decrement in quality of life—temporary or permanent—that a patient incurs as a result of the injury.

Several key design choices will shape the impact of a damages cap:

Amount of the cap. The cap may be set at any of a number of levels. The earliest noneconomic damages cap, adopted by California in 1975, was set at $250,000. Many of the later-adopting states, however, selected higher amounts. For the 16 states that adopted noneconomic damages caps between 1991 and 2007, the cap amounts range from $250,000 to $500,000, with the latter representing the modal choice (7 of 16 states). Some states have opted for a tiered cap, specifying two, three, or more levels of damages that apply to different types of cases (for example, based on the severity of injury or the number and types of defendants involved).

Inflation indexing. A state may or may not opt to index the cap amount to inflation. This decision has a dramatic effect on the stringency of the cap over time (California’s cap, for example, would currently exceed $1 million had it been indexed to inflation). Non-inflation-adjusted caps will impose much tighter cost control over time. A non-indexed cap may depart from the enacting legislature’s original judgment as to what constitutes reasonable compensation for noneconomic loss, or may be part of a deliberate legislative scheme to gradually tighten the limit on noneconomic damages over time.

Applicability of the cap. Although states generally apply their cap to all types of medical malpractice claims, it is also possible to restrict it to claims of certain types. It may apply only to claims involving particular clinical specialties, such as emergency medicine; only to injuries of a certain type or severity; or only to claims involving certain classes of defendants (for example, not-for-profit hospitals).

Party to whom the cap applies. A cap may attach to the plaintiff, limiting the amount he may receive in satisfaction of a claim involving a particular incident, or to each defendant, limiting the amount for which each may be held liable. The latter allows a legislature to customize the legislation for particular types of defendants (granting the protection of the cap to not-for-profit hospitals, for example, but not individual physicians, or to physicians but not facilities). The tradeoff is that a plaintiff’s recovery in a case involving multiple defendants may be quite large.

The analysis that follows assumes that the legislation imposing a noneconomic damages cap is written so as to apply the cap only to payments made pursuant to a jury verdict or other court judgment. Although it is theoretically possible to write legislation that would restrict
the ability of parties to a malpractice suit to enter into settlement agreements above a certain amount, this is not an approach other states have taken.

B. Potential Benefits

Overview

Theoretically, damages caps may reduce liability costs and improve other outcomes related to the medical liability system through several pathways. This section reviews these theoretical effects. Next, we discuss the available evidence in the scholarly literature about the extent to which these various effects actually occur. Finally, we model the likely effects in Oregon using the best available estimates of effect sizes from the published literature and Oregon-specific data.

Noneconomic damages caps, as a theoretical matter, have both direct effects and other intended but indirect effects. Their most direct effect is to reduce the amount of money paid by defendants for noneconomic damages in cases resolved by a court judgment. A second direct effect is to encourage the parties to litigation to settle by reducing their uncertainty about the value of the case at trial. It is well established in legal scholarship that the likelihood of settlement is inversely proportional to the amount of disagreement between the parties about the value of a claim. When a cap limits what a plaintiff can recover at trial, there is likely to be less disagreement about the value of the case.

There are also several ways in which caps may affect liability outcomes indirectly. First, they may result in fewer claims being filed. By reducing the prospects for recovering large noneconomic damages, caps make malpractice cases less financially attractive for plaintiff’s attorneys, who work on a contingent-fee basis. A lower total damages award means a lower attorney’s fee. Consequently, attorneys have a theoretical incentive to be more selective in the cases they accept. The result may be reduced claim frequency, as well as changes in the characteristics of suits that are brought.

Second, cases may be settled for smaller amounts of money, on average, than was the case before imposition of the cap. The parties to a lawsuit engage in pretrial settlement negotiations in the shadow of the cap—that is, with an awareness of how it affects the likely return on investment associated with taking a case to trial. Not only might this promote settlement, it might promote settlement for more modest sums, since both parties will size up the value of the case in relation to what might be awarded at trial.

Third, caps may result in lower malpractice insurance premiums. The effects discussed above—if real, substantial, and not offset by other, new costs—would mean that insurers pay out less in indemnity payments and spend less on litigation expenses. This would occur both because there are fewer claims and because insurers are able to reach more expeditious resolution of cases, avoiding trial. Avoiding trial has two benefits: defense costs are lower, and average settlement amounts are lower than average trial verdicts in favor of plaintiffs. Additionally, it is important to recognize that part of the price of insurance represents the insurer’s uncertainty about its exposure to large losses. When this uncertainty is reduced, so should the price of insurance. These price effects all assume that when insurers are able to
reduce their expenses, they pass on the savings to their subscribers in the form of lower prices. This assumption is reasonable. Empirical studies have established that insurers’ losses strongly drive their decisions about the price of insurance. Additionally, the Oregon Insurance Division requires insurers to file and justify their rates each year, and losses are an important part of this showing.

A fourth indirect of damages caps may be to reduce defensive medicine—that is, the provision of services primarily to reduce liability risk rather than because they are medically indicated. Caps tend to be favored by physician groups above all other liability reforms, and physicians tend to believe that they provide significant relief from malpractice exposure. This belief may lead physicians to engage in defensive medicine practices less, resulting in lower health care services utilization and spending.

Finally, proponents of caps hope that the reform will improve physician supply by attracting physicians to practice in the adopting state and retaining physicians who are currently active in practice there. If the cost of liability insurance and the stress of a high-risk malpractice environment are important factors in physicians’ decisions about whether to see patients, what kinds of services to provide, and where to provide them, then reforms that reduce liability risk could improve the supply of physicians in a state and the supply of high-risk services, such as obstetrical care and neurosurgery.

Evidence from the Scholarly Literature

There is a very large literature on the effects of damages caps. It is important to recognize that the available studies are of varying quality, however. Many analyses—particularly those in the “gray literature”—are simple, descriptive studies that do not adequately control for confounding variables. Our review focused on studies published in peer-reviewed, scholarly journals, as well as government and think tank reports with strong methodologies. Even focusing on this subset of studies, the available evidence base can be characterized as robust and mature, supporting inferences on many points with a high degree of confidence. In the digest that follows, we synthesize findings from the best-designed, most rigorous studies, drawing on our previous work in this area.

The studies on which we rely generally employ the methodology of combining data on key outcomes, such as indemnity payments and premiums, from all 50 states and using multivariate regression analysis to isolate the effect that different tort reform laws have on determining these outcomes. This is a strong methodology because it controls for a variety of ways in which states differ from one another aside from their tort reform laws. The best studies are able to draw on variation in states’ tort reform laws not just across states, but also over time, which makes it possible to draw stronger inferences about causal associations. When interpreting study findings, it is important to keep in mind that this type of study design generates estimates of the effects of different reform laws on average across all states. These effect sizes—which are also known as “elasticities”—do not indicate the effects of a particular reform in a particular state. There may be states that have more positive experiences than average, or more negative ones. However, when thinking about the likely effects for Oregon, it is advisable to think in terms of the average or typical experience of other states, rather than the experience of what may be “outlier” states, or unusual cases.
Another limitation of the available studies to bear in mind is that they lump all types of noneconomic damages caps together in the analysis. It is not feasible to model different types of caps separately, but the consequence is that we cannot conclude from these studies whether caps with different design features have different effects.

**Effects on average and total indemnity payments.** We have described above why it is of interest to separately analyze the effects of caps on court judgments and their effects on settlement amounts: one effect is direct, while the other is indirect and subject to greater uncertainty and potential variation. Most studies of the effects of caps on indemnity costs, however, have looked at settlements and verdicts together. Looking across studies, there is strong evidence that caps reduce average indemnity payments. In the report, we categorize the reduction on average indemnity payment as a benefit only because it is one of the primary direct goals of a cap. Policymakers advocating for caps, therefore, would consider this a benefit of the reform. Patients, obviously, are not likely to view lower average awards as a benefit, nor will they welcome the diminution in their bargaining power at the settlement table that would accompany a cap.

Most studies that have looked at the effects of noneconomic damages caps on indemnity payments have found a statistically significant impact. The effect size tends to be in the range of a 20-30% reduction in the average size of a payout to a plaintiff.\(^5\)\(^-\)\(^12\) It may seem obvious that such an effect would occur, but it is not as straightforward as one might assume. Although caps will certainly reduce awards in cases to which they apply—cases that are resolved by court judgment and have initial noneconomic damages awards above the cap amount—they may not affect average compensation payments or total statewide indemnity costs to a statistically significant extent if (1) few cases meet the triggering criteria for the cap, (2) juries start awarding higher *economic* damages because they anticipate that their noneconomic damages award will be reduced by the court, and/or (3) the caps legislation spurs plaintiff attorneys to bring a different mix of claims, with higher average severity. Thus, it is not surprising to find a few well-designed studies in the literature that do *not* find statistically significant effects of noneconomic damages caps on average and/or total indemnity costs.\(^9\)\(^,\)\(^13\)\(^,\)\(^14\) **Overall, however, a fair characterization of the body of evidence is that noneconomic damages caps do significantly decrease indemnity payments.**

Only two published studies have separately examined the effects of a noneconomic damages cap on court judgments and settlements. The first used a simulation methodology and examined data from only one state, Texas, which adopted cap on noneconomic damages in 2003.\(^1\) The data did not include settlements under $25,000 or payments by hospitals or nursing homes. This study found that the proportional reduction in payouts was larger for tried cases (27% average reduction) than for settlements (18% average reduction), but that payouts in both types of cases were affected by the cap.\(^11\) The cap was triggered in 18% of settled cases and 47% of jury verdicts. An important finding of the study was that the effect of the cap on actual *payouts* was smaller than the effect on initial settlements and awards, because courts often reduced large awards and amounts above the defendant’s insurance

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\(^1\) The cap is set at $250,000 for individual health care practitioners with an additional $250,000 or $500,000 recoverable if a hospital or other institution is involved.
policy limits often did not end up being paid. Importantly, this study’s analysis was based on the assumption that the mix of cases brought would not change under a cap—which may not be true.

The second study examined settlements from all 50 states reported in the National Practitioner Data Bank (NPDB). In models using states as the unit of analysis (in other words, comparing total settlement payments in a state in a given year) noneconomic damages caps were associated with a 15-20% reduction in payments, but this effect did not achieve statistical significance in all model specifications. In models using individual cases as the unit of analysis, caps on noneconomic damages reduced the average amount for which a case settled by 65-74%. The precise effect size varied across model specifications, but the effect was statistically significant in all models. In summary, even though damages caps do not regulate settlements, most analyses have found that they have the effect of leading parties to settle cases for less.

Effects on settlement rate. No studies have examined whether settlement rates—that is, the proportion of cases that are resolved by settlement rather than tried—change when a noneconomic damages cap is imposed. The effect on settlement rates, therefore, remains theoretical. Some scholars have pointed out that caps may have a mixed effect on propensity to settle: although the legislation can reduce uncertainty about what a case would be worth at trial, parties may be unsure whether newly adopted legislation will be subject to a successful judicial challenge (as in Oregon, where the state’s noneconomic damages cap legislation was judicially invalidated as unconstitutional under the Oregon constitution). The settlement rate may actually dip following the adoption of caps in this context, if plaintiffs hold out for the courts to lift the cap.

Effects on claim frequency. Several studies have examined whether damages caps affect the number of claims brought in a state, returning mixed findings. Three studies found that caps were associated with lower claiming frequency. Importantly, two of these relied on data from the NPDB, which records only claims that resulted in a payment. Although their methodology is strong, they are properly understood as studies of the effect of caps on the frequency of paid claims, which depends on both the number of claims filed and the proportion of cases that close with a payment. Examining data from the 1990s, one study found that compared to states without caps, states with caps saw 10-13% fewer paid claims per physician. The other also found a statistically significant effect on paid claim frequency, but it was quite small. The third study used data from Texas only, and thus provides less robust information.

On the other hand, 3 studies have found no association between noneconomic damages caps and claim frequency. Two of these, as well, look only at paid claims. The third study used insurance company data, including information about unpaid claims, but the data is fairly old (1974-1986) and does not measure the effects of more recently adopted reforms.

Overall, these studies are too conflicting and limited to support conclusions about the effects of noneconomic damages caps on claim frequency. We cannot draw inferences
with confidence about whether caps reduce the total number of claims filed, the number of paid claims, both, or neither.

**Effects on insurance premiums.** The body of studies of the effects of noneconomic damages caps on malpractice insurance premiums is extremely variable in terms of the quality of the underlying data and methods. Examining well-controlled studies, we conclude that findings vary considerably across studies. Four studies found statistically significant relationships between noneconomic damages caps and premiums, with effect sizes ranging from 6-25% (however, the study with the largest effect sizes did not make an important adjustment to account for insurers’ respective market shares). Four older studies found no statistically significant association. Overall, the strongest available study suggests that liability insurance premiums in states with noneconomic damages caps are about 13% lower, on average, than premiums in states without caps.

This conclusion is fairly consonant with the finding of a recent Congressional Budget Office (CBO) analysis of the likely effect of nationwide implementation of a $250,000 noneconomic damages cap together with 4 other reforms that tend to have lesser effects (a punitive damages cap, collateral-source offsets, short statutes of limitation, and joint-and-several liability reform). This analysis, which relied on estimates from previously published studies, looked at the effect on total malpractice premiums paid throughout the nation, rather than the price paid per physician. It concluded that adoption of the reforms by states that do not yet have them would result in a 10% reduction in total national premiums.

**Effects on defensive medicine.** The literature on defensive medicine is sprawling and complex. Focusing on well-designed studies that directly model the effects of noneconomic damages caps and other tort reforms on health care utilization and spending, we find considerable diversity in the findings. However, a reasonable overall conclusion is that the weight of the evidence suggests that noneconomic damages caps have a statistically significant effect on the utilization of at least some types of health services that are considered to be indicators of defensive medicine. The CBO recently reached a similar conclusion after examining studies of the association between tort reforms and health care spending. In our judgment, the strongest work in this field is the series of analyses by Daniel Kessler and Mark McClellan concerning cardiac care for Medicare patients, which found that states with one or more “direct reforms” (including noneconomic damages caps and 4 other reforms) experienced significantly lower hospital costs for Medicare patients with diagnoses of ischemic heart disease or myocardial infarction. Looking across these studies, the most reasonable point estimate to take away is that direct reforms—including but not limited to damages caps—reduce hospital spending by 5.4%.

Several limitations of the evidence base concerning this effect should be carefully noted. First, Kessler and McClellan’s estimates are based on 2 diagnoses and a sample of elderly patients. Other analysts have questioned whether their results can be generalized to all health conditions and patient groups. In particular, it should be noted that Kessler and McClellan modeled only inpatient expenditures, not outpatient services. Second, a more recent analysis of Medicare data produced findings in conflict with Kessler and McClellan’s, concluding that caps and other tort reforms did not significantly affect Medicare expenditures for patients with myocardial infarction, breast cancer, diabetes or stroke. We believe, however, that
this study’s methodology is not as strong as that of the earlier work by Kessler and McClellan. Third, it is quite possible that the effects of liability pressure (and liability reforms) may be different for different types of medical care. Clinical areas in which liability pressures are acutely felt by physicians—for example, obstetrical—may show greater sensitivity to changes in the liability environment than lower-risk clinical areas. (Interestingly, however, even studies that have focused narrowly on obstetrical practice have produced conflicting findings.4, 28, 29)

Effects on physician supply. Most, though not all, well-designed studies have established a statistical association between levels of malpractice premiums in a state and the supply of physicians.30-32 Similarly, most studies that have directly examined the relationships between noneconomic damages caps and physician supply have identified an association,4, 33, 34 though there are exceptions.35 The strongest studies find that the effect of noneconomic damages caps on physician supply is statistically significant, but modest in size and potentially concentrated in the most rural areas. One rigorous study found that states with caps and other reforms that directly limit liability have 3% higher physician supply, on average, than states that do not.33 Another, which separately modeled effects in more and less rural areas within states, found that caps only had a significant effect in the most rural counties.34 There, the effect size was 4.5%.

Oregon-Specific Analysis

Effects on average and total indemnity payments. We used data from the NPDB to simulate the effect of different levels of noneconomic damages caps on indemnity payments in Oregon. Our methodology, which is based on a similar study of Texas closed claims,11 is described in the Appendix. All results are presented in 2010 dollars.

Our analytical NPDB dataset contained 430 paid claims reported in 2006-2010, 420 of which involved a fully licensed physician, 5 of which involved an intern or resident, and 5 of which involved a physician assistant. Of these 430 paid claims, only 7 were resolved through a court judgment, as opposed to a settlement. Across all NPDB claims, the mean total compensation payment, after adjusting for inflation, was $391,379 in 2010 dollars (s.d. $611,518) and the median was $152,250. Among the 7 judgments, total damages ranged from $131,250 to $1,550,000. Although caps only formally affect verdicts, we included settlements in our analysis.

Because compensation payments are not reported to the NPDB broken down into their constituent components, we estimated the proportion of total payments that consisted of noneconomic damages. Two different estimators—a “Low” estimator (42% of total damages) and a “High” estimator (64.9% of total damages) were used in these calculations (see Appendix for details). We believe the Low estimator is probably better, but we present results from both analyses to give a sense of the potential range of cost impacts.

The mean pre-cap noneconomic damages award using the Low estimator was estimated to be $164,379 (s.d. $256,837, maximum $2.121 million) and the median was $63,945. The difference between the mean and medians shows that the mean is pulled up by a fairly small
number of high awards. Less than 5% of cases were estimated to have noneconomic damages in excess of $1 million, in 2010 dollars. Using the High estimator, the mean noneconomic damages payment was $253,222 (s.d. $395,652) and the median was $98,506.

The annual number of claims paid and total compensation payments are presented in Table 1. To calculate total compensation payments including payments made in the name of institutional defendants, which are not reported to the NPDB, we adjusted the NPDB payment figures upward by 35% (see Appendix for justification). We estimate that the total amount paid out in noneconomic damages over the 5-year period was in the range of $95.4-$147.5 million.

Table 1. Number and Cost of Paid Malpractice Claims in Oregon, 2006-2010

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>5-Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physicians and Physician Assistants Only:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of claims paid</td>
<td>86</td>
<td>90</td>
<td>90</td>
<td>74</td>
<td>90</td>
<td>430</td>
</tr>
<tr>
<td>Total indemnity payments</td>
<td>$28.7 m</td>
<td>$31.5 m</td>
<td>$31.9 m</td>
<td>$36.3 m</td>
<td>$39.9 m</td>
<td>$168.3 m</td>
</tr>
<tr>
<td>Total noneconomic damages – Low estimate*</td>
<td>$12.0 m</td>
<td>$13.2 m</td>
<td>$13.4 m</td>
<td>$15.2 m</td>
<td>$16.8 m</td>
<td>$70.7 m</td>
</tr>
<tr>
<td>Total noneconomic damages – High estimate*</td>
<td>$18.6 m</td>
<td>$20.4 m</td>
<td>$20.7 m</td>
<td>$23.5 m</td>
<td>$25.9 m</td>
<td>$109.1 m</td>
</tr>
<tr>
<td><strong>Including Institutional Defendants:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of claims paid</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Total indemnity payments*</td>
<td>$38.7 m</td>
<td>$42.5 m</td>
<td>$43.1 m</td>
<td>$48.9 m</td>
<td>$53.9 m</td>
<td>$227.1 m</td>
</tr>
<tr>
<td>Total noneconomic damages – Low estimate*</td>
<td>$16.3 m</td>
<td>$17.9 m</td>
<td>$18.1 m</td>
<td>$20.6 m</td>
<td>$22.6 m</td>
<td>$95.4 m</td>
</tr>
<tr>
<td>Total noneconomic damages – High estimate*</td>
<td>$25.1 m</td>
<td>$27.6 m</td>
<td>$28.0 m</td>
<td>$31.8 m</td>
<td>$35.0 m</td>
<td>$147.5 m</td>
</tr>
</tbody>
</table>

* Indicates an estimate; see Appendix for details. Other figures are calculated from the NPDB Public Use File. N/E=Not estimable

Tables 2 and 3 report the number of claims that would be affected by different levels of noneconomic damages caps. Several conclusions can be drawn from these findings. First, the choice of estimator for the noneconomic damages component of awards makes a difference in the analysis: the numbers of claims affected by the caps using the High estimate is much higher than the numbers derived from the Low estimate. Second, however, in both tables, the numbers of claims affected are small, except for the $250,000 noneconomic damages cap. Only 31 to 67 claims over 5 years would have been affected by a $500,000 cap. A cap set at the OTCA level in 2010 would only have affected 2 to 8 claims over 5 years. Third, because court judgments are so rare in Oregon, most of the effect of caps on indemnity payments is an effect on settlement dynamics. That is, we have identified a modest number of cases that likely would have settled for smaller amounts because of the existence of a noneconomic damages cap.
Table 2. Results of Simulation A: Low Estimate of Number of Malpractice Payments Affected by Noneconomic Damages Cap, 2006-2010, Including Institutional Defendants

<table>
<thead>
<tr>
<th>Year</th>
<th>Noneconomic Damages Cap Level</th>
<th>All</th>
<th>Judg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$250K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$500K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$750K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$1.6 m</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td>2006</td>
<td>14</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>20</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2008</td>
<td>14</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2009</td>
<td>20</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>2010</td>
<td>18</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5-Year Total</td>
<td>86</td>
<td>3</td>
<td>31</td>
</tr>
</tbody>
</table>

All=Settlements and judgments combined, Judg=Judgments only
Data Source: NPDB Public Use File
Simulation A estimates noneconomic damages at 42% of total compensation payments.

Table 3. Results of Simulation B: High Estimate of Number of Malpractice Payments Affected by Noneconomic Damages Cap, 2006-2010, Including Institutional Defendants

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Claims Affected, by Noneconomic Damages Cap Level</th>
<th>All</th>
<th>Judg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$250K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$500K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$750K</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td></td>
<td>$1.6 m</td>
<td>All</td>
<td>Judg</td>
</tr>
<tr>
<td>2006</td>
<td>22</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2007</td>
<td>31</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>2008</td>
<td>24</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>2009</td>
<td>23</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>2010</td>
<td>30</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>5-Year Total</td>
<td>130</td>
<td>2</td>
<td>67</td>
</tr>
</tbody>
</table>

S=Settlements, J=Judgments
Data Source: NPDB Public Use File
Simulation B estimates noneconomic damages at 64.7% of total compensation payments.

We then examined the size of reductions in total compensation payments attributable to different levels of noneconomic damages caps. Table 4 presents both absolute reductions—the number of dollars lost from a total award—and proportional reductions—the percentage of the pre-cap total award that is lost due to the cap. In this Table, the unconditional mean amounts represent the average reduction in total compensation among all claims, whether they triggered the cap or not. The conditional mean represents the average reduction among claims that triggered the cap. The 5-year total savings represents the product of the conditional mean and the number of claims that triggered the cap.
### Table 4. Simulation Results: Estimated Mean Reductions in Total Compensation Payments due to Noneconomic Damages Cap, 2006-2010

<table>
<thead>
<tr>
<th>Reductions in Total Awards, by Noneconomic Damages Cap Level</th>
<th>$250K</th>
<th>$500K</th>
<th>$750K</th>
<th>$1.6 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Estimate:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unconditional Mean</td>
<td>-$48,535</td>
<td>-4.8%</td>
<td>-$35,136</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Conditional Mean</td>
<td>-$242,674</td>
<td>-24.1%</td>
<td>-$487,671</td>
<td>-26.0%</td>
</tr>
<tr>
<td>5-Year Total</td>
<td>-$20.9 m</td>
<td>--</td>
<td>-$15.1 m</td>
<td>--</td>
</tr>
<tr>
<td>High Estimate:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unconditional Mean</td>
<td>-$73,375</td>
<td>10.1%</td>
<td>-$75,672</td>
<td>-6.2%</td>
</tr>
<tr>
<td>Conditional Mean</td>
<td>-$242,703</td>
<td>33.5%</td>
<td>-$485,655</td>
<td>-39.9%</td>
</tr>
<tr>
<td>5-Year Total</td>
<td>-$31.6 m</td>
<td>--</td>
<td>-$32.5 m</td>
<td>--</td>
</tr>
</tbody>
</table>

Two conclusions can be drawn from Table 4. First, although few cases are affected by the cap, those that are affected lose a considerable share of the total damages award. Under the most stringent cap, $250,000, affected cases lost 24.1 to 33.5% of total compensation, depending on whether the Low or High estimator for noneconomic damages was used. The proportion of the award lost in affected cases increases with the size of the cap.

Second, the 5-year savings associated with the caps, though not trivial, is modest. The savings decreases with the size of the cap: a $250,000 cap can be expected to save $20.9 to $31.6 million over 5 years. A cap at the OTCA level would save $3.2 to $12.6 million over 5 years. To set these amounts in context, the total amount collected in medical professional liability insurance premiums by Oregon carriers (excluding those that did not write policies for physicians) in 2010 was $74.1 million.

In summary, the effects of a noneconomic damages cap on indemnity payments will depend on the level of the cap and the actual split in compensation payments between noneconomic and other compensatory damages. Oregon liability insurance carriers may be able to provide additional information to firm up the latter estimate, although it is also possible that they will be unable to decompose settlement amounts in this fashion. Our estimates account for the uncertainty around this split by providing a range of potential effects. The main conclusions emerging from our analysis is that the effects of a damages cap will primarily be on settlement behavior, since few cases are tried to a verdict; and that few cases would be affected by most levels of a damages cap, but those that are affected would experience substantial reductions in awards. Finally, the total savings in compensation payments statewide is fairly modest because so few awards are affected. Oregon liability insurers would need to be consulted in order to draw firm conclusions about whether reductions in
compensation payments at these levels would lead insurers to reduce the price of insurance, and if so, by how much and over what period.

**Effects on settlement rate.** Because of the lack of information in the scholarly literature about the effect of damages caps on settlement rates, it is not possible to model the likely effect of a cap on settlement rates in Oregon. However, analysis of the NPDB data reveals that it is quite rare for a malpractice case to be decided by court judgment in Oregon. Over a 5-year period, there were only 7 paid claims in the NPDB that were coded as having been resolved by judgment. Neither the OMB nor the NPDB database permits a reliable estimate of the number of claims in Oregon that were resolved by court judgment but did not result in a payment; however, results from a national study of closed claims indicate that 19% of cases tried to a verdict result in a payment to the plaintiff. Thus, the total number of claims resolved by verdict in Oregon is probably in the neighborhood of 35 over 5 years, or 7 per year. There is, therefore, little room for improvement in settlement rates.

**Effects on claim frequency.** We have not attempted to model the effect of a damages cap on the number of claims in Oregon. Without reliable estimates of this elasticity from the scholarly literature, it is impossible to model with any degree of confidence. However, we would note that, as described in Tables 2 and 3 above, we estimate that most paid claims in Oregon did not have large enough noneconomic damages awards to trigger a noneconomic damages cap at greater than the $250,000 level. If plaintiffs’ attorneys perceive that a cap is unlikely to affect the expected value of a case, their decision about whether to bring the case should not be affected by the existence of a cap. Our findings thus provide suggestive—but certainly not conclusive—evidence that claim frequency may not be affected much by the imposition of noneconomic damages caps, at least those set at $500,000 or higher.

**Effects on insurance premiums.** It is extremely difficult to generate a reliable estimate of the likely effect of a noneconomic damages caps on malpractice insurance premiums in Oregon. It is critical that the estimates presented below be interpreted in light of 4 analytical challenges.

First, although there is a sound estimate in the scholarly literature of the average elasticity of malpractice premiums to damages caps—the 13% figure cited above—the analysis that produced it grouped all types of compensatory damages caps of a variety of levels together. Caps on total damages were rare (5 states) and probably did not heavily influence the resulting estimates, but noneconomic damages caps ranging from $250,000 to over $1 million were grouped together for analytical purposes. Consequently, the study does not permit us to draw inferences about the comparative effects of different levels of noneconomic damages caps. The 13% elasticity represents the average difference in premiums per physician between states that had some type of compensatory damages cap and states that had no cap on compensatory damages. It does not tell us, for example, the estimated elasticity associated with a $500,000 damages cap. Consequently, with the available data we cannot separately model the effects of different levels of caps on premiums in Oregon.

Second, Oregon already has two types of damages caps in place. The OTCA caps damages for health care providers that are considered state actors or instrumentalities of the state; in
2010, the cap was set at $1.6 million. Additionally, the $500,000 noneconomic damages cap that was partially invalidated by the Oregon Supreme Court remains applicable to wrongful-death claims and claims involving prenatal and perinatal injuries. Because these types of claims are often among the most expensive for insurers, this is very important to bear in mind. The prices that Oregon insurers currently charge should be considered as already reflecting a downward adjustment for the existence of a noneconomic damages caps—albeit a modest one, since the cap is not applicable to most types of claims.

Third, as discussed above, very few cases are resolved by jury verdict in Oregon. If Oregon has a disproportionately low proportion of jury verdicts, then estimates of the effects of damages caps that come from nationwide data will not accurately reflect the likely effect of caps in Oregon. Noneconomic damages caps are known to affect both verdict and settlement amounts, but the effect on settlements is smaller than the effects on verdicts. If the effect on total indemnity costs is more modest in Oregon than elsewhere, and if the prices insurers charge reflect what they pay out in indemnity costs, then premium elasticities that are based on national data will overstate the likely effect of caps on premiums in Oregon.

Fourth, any effect of newly adopted damages cap legislation in Oregon would likely occur with a lag. Given the history of judicial review and partial invalidation of previous damages cap legislation, insurers will expect a legal challenge to the cap and are likely to delay any actuarially indicated reduction in their rates until they receive assurance that the cap will not be overturned by the courts.

For these reasons, our estimates of the effects of noneconomic damages caps on premiums in Oregon should be considered rough estimates that probably overstate the true effect. We consider these estimates to be of limited utility as a basis for policy decisions. If there is legislative interest in pursuing a broader damages cap than currently exists in Oregon, our recommendation is that each of the major professional liability carriers for physician insurance be asked to provide an actuarial analysis of the likely impact of caps set at several different levels on rates for a standard ($1 million per incident/$3 million per year), claims-made policy.

In Table 5, we present the results of applying the 13% elasticity to data on malpractice premiums in 2010 obtained from the Oregon Insurance Division and the Medical Liability Monitor’s (MLM’s) 2010 Annual Rate Survey. Additional information about these data sources and the limitations of the data and our analysis is presented in the Appendix.

This analysis shows that the average price for a standard policy for an Internal Medicine physician would have been $870 lower in 2010 in the presence of a typical noneconomic damages cap. The average General Surgery premium would have been $3,694 lower and the average Obstetrics/Gynecology premium would have been $6,249 lower. Examining the total direct premiums earned by all carriers statewide ($74,118,696 in 2010), the 13% reduction would result in a savings of $8,526,930 in 2010. Again, these estimates represent upper bounds and the actual effect of a damages cap set at a level typical among the states would likely be lower.
Table 5. Simulation Results: Estimated Maximum Effect of a Fully Applicable Noneconomic Damages Cap on Malpractice Insurance Premiums in Oregon for Physicians in Select Specialties, 2010

<table>
<thead>
<tr>
<th>Carrier</th>
<th>2010 Premiums: 1 No Cap</th>
<th>2010 Premiums: With Cap</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal Medicine</td>
<td>General Surgery</td>
<td>Ob/Gyn</td>
</tr>
<tr>
<td>CNA:</td>
<td>$5,479</td>
<td>$33,113</td>
<td>$64,286</td>
</tr>
<tr>
<td></td>
<td>$4,849</td>
<td>$29,304</td>
<td>$56,890</td>
</tr>
<tr>
<td></td>
<td>-$630</td>
<td>-$3,809</td>
<td>-$7,396</td>
</tr>
<tr>
<td>The Doctors Company:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>$9,373</td>
<td>$36,076</td>
<td>$46,276</td>
</tr>
<tr>
<td>General Surgery</td>
<td>$8,295</td>
<td>$31,926</td>
<td>$40,952</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>-$1,078</td>
<td>-$4,150</td>
<td>-$5,324</td>
</tr>
<tr>
<td>Medical Protective:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>$8,126</td>
<td>$31,279</td>
<td>$40,597</td>
</tr>
<tr>
<td>General Surgery</td>
<td>$7,191</td>
<td>$27,681</td>
<td>$35,927</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>-$935</td>
<td>-$3,598</td>
<td>-$4,670</td>
</tr>
<tr>
<td>Physicians Insurance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>$10,568</td>
<td>$37,351</td>
<td>$54,965</td>
</tr>
<tr>
<td>General Surgery</td>
<td>$9,352</td>
<td>$33,054</td>
<td>$48,642</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>-$1,216</td>
<td>-$4,297</td>
<td>-$6,323</td>
</tr>
<tr>
<td>Market average:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>$7,562</td>
<td>$6,692</td>
<td></td>
</tr>
<tr>
<td>General Surgery</td>
<td>$34,457</td>
<td>$30,493</td>
<td></td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>$54,320</td>
<td>$48,071</td>
<td></td>
</tr>
</tbody>
</table>

1 Premiums represent prices charged for a $1 million / $3 million, claims-made policy, as reported by the carrier to the MLM.
2 Market average computed as a weighted average of the 4 carriers’ respective market shares, with market share measured by the carrier’s direct earned premiums as a proportion of the total direct earned premiums collected by the 4 carriers. These calculations exclude price and market-share information from carriers that do not report to the MLM, which collectively account for approximately 13% of the physician insurance market based on direct earned premiums.

Effects on defensive medicine. The effects of damages caps on health care spending, which is a key measure of defensive medicine, are the focus of a separate report commissioned by the OHA from Drs. Bill Wright and Katherine Baicker. We do not repeat that analysis here. However, we can add analysis of the effects of caps on key defensive practices in obstetrics. A recent study found that noneconomic damages caps of $250,000 or less were associated with a 1.92 percentage point increase in VBAC rates and a 0.32 percentage point decrease in cesarean rates. A cap between $250,001 and $500,000 was associated with a 1.37 percentage point increase in VBACs and a 0.15 percentage point decrease in cesarean sections. A cap above $500,000 produced a 1.25 percentage point increase in VBACs but did not significantly affect cesarean section rates. Applying these findings to Oregon birth data (see the Appendix section on medical panels for details) indicates that adopting a cap of $250,000 or less would result in 146 fewer cesarean sections in Oregon for 2010, and a cap
of $250,001-$500,000 would result in 68 fewer cesarean sections. The lowest cap would result in 874 additional VBACs, the middle-level cap an additional 624 VBACs, and a cap of over $500,000 another 569 VBACs for 2010.

**Effects on physician supply.** We simulated the effects of a noneconomic damages cap on the number of licensed physicians in Oregon using extant data on the Oregon physician workforce and David Matsa’s elasticities (4.5% for counties in the in bottom quartile of population density and zero elsewhere).  Details about the data sources, our analytical methods, and their limitations are provided in the Appendix. Results are presented in Table 6. A high proportion (16/20) of Oregon counties fall into the bottom quartile of population density nationwide. Nevertheless, the effect of a cap on physician supply in Oregon is calculated to be very small, because those counties have only a small number of physicians (about 450) to begin with. Statewide, the total number of physicians would be expected to increase by about 20 physicians, or 0.21%.

An alternative estimate can be derived by applying the 3% elasticity from another well-designed study that did not separately model counties based on their rurality. Applying this multiplier to the statewide total number of physicians in Oregon for 2009 yields an estimated increase of 291 physicians. We believe the Matsa elasticities are preferable for use in this analysis. However, it would also be reasonable to conclude that Oregon could experience an increase anywhere in the range of 0.2% to 3.0%, or 20 to 291 physicians, statewide.

Table 6. Simulation Results: Estimated Effect of Noneconomic Damages Cap on Oregon Physician Supply

<table>
<thead>
<tr>
<th>Counties, by population density</th>
<th>Estimated number of physicians in full-time or part-time practice, 2009</th>
<th>Absolute difference</th>
<th>Percentage difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without noneconomic damages cap</td>
<td>With noneconomic damages cap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom quartile (n=16)</td>
<td>449.90</td>
<td>70.24</td>
<td>4.50%</td>
</tr>
<tr>
<td>Top 3 quartiles (n=20)</td>
<td>9,252.99</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total (n=26)</td>
<td>9,702.89</td>
<td>20.25</td>
<td>0.21%</td>
</tr>
</tbody>
</table>

**C. Potential Costs and Adverse Impacts**

Caps on noneconomic damages have several potential, unintended adverse effects. In this section, we review the theoretical effects briefly. We then present a digest of the available evidence on these points from well-designed studies. There follows an analysis of the likely effects in Oregon.
Scholarly commentators have discussed several potential collateral effects of damages caps. First, imposing a cap may spur strategic behavior by juries that leads to **increases in economic damages awards**. This phenomenon is called a “crossover effect” and could theoretically be expected to result where juries are aware that noneconomic damages are limited by law but strongly desire to award generous compensation to a plaintiff. They may award higher economic damages than are warranted by the testimony about economic losses presented at trial in order to make up for a low noneconomic damages award. If this practice is widespread, one would expect to see little or no difference in total compensatory damages awards after the cap goes into effect.

Second, noneconomic damages caps may **lead to greater inequity in damages awards**. A flat cap is a crude mechanism for reducing what are considered “excessive” noneconomic damages awards. Such a cap gives no consideration to the severity of the injury involved. Nor is consideration given to whether the case is one in which economic damages are likely to be very low—for example, because the injury is of a type that, while serious, does not impair a person’s functioning (such as severe facial scarring) or because the plaintiff is elderly and has no lost wages. A flat cap will tend to flatten the distribution of noneconomic damages awards, undermining “vertical equity,” or the principle that injuries of greater severity should attract higher compensation. It may also disproportionately burden certain kinds of plaintiffs, such as women and the elderly, who are unlikely to be candidates for high economic damages awards because of their lower labor force participation. These effects do not involve economic costs, but do trigger fairness concerns.

Third, caps may **reduce access to the legal system for patients with meritorious but low-value malpractice claims**, particularly where economic losses are low. Attorneys working on a contingency fee basis will find these plaintiffs less financially attractive. Although many proponents of caps hope and expect that the measure will reduce the volume of malpractice claims, this reduction is likely to occur based on the size of the expected damages award, rather than the merit of the claim. It is well documented in the scholarly literature that a very high proportion of individuals who are victims of malpractice do not bring claims, and the imposition of a cap may increase this proportion. This, too, raises fairness concerns.

Fourth, caps may have the paradoxical effect of **depressing settlement rates**. Above, we have discussed why caps may lead to increased propensity to settle. However, the opposite may be true, for two reasons. First, the plaintiff may choose to delay settlement. If there is uncertainty as to whether the cap will survive a legal challenge and the plaintiff expects a challenge to be brought and decided in the near future, the plaintiff has no incentive to settle. Rather, a strategic plaintiff’s attorney would do whatever is possible to extend the length of the litigation in the hope that the cap will be lifted before the case comes to trial. This would improve both the prospects for recovering a large award at trial and the prospects for obtaining a high settlement. Thus, the effects of caps on settlement rates may differ in jurisdictions where the legislation is likely to be upheld and in jurisdictions—like Oregon—where its constitutionality is in question.
The second reason that caps may result in lower settlement rates relates to defendant behavior. A cap greatly reduces the downside risk that a defendant and his/her liability insurer face in taking a case to trial. An insurer who knows that the maximum noneconomic damages that could be awarded at trial are relatively modest will have less incentive than an insurer who faces a potential multi-million-dollar noneconomic damages award to settle the case before trial. If the cases that are taken to trial are those that are truly defensible—meaning, no actual malpractice occurred—then this behavior can be construed as appropriate and just to the involved health care provider. It may, however, result in higher defense costs and a higher ultimate payout, relative to what the case might have been settled for, should the plaintiff prevail at trial.

Finally, many commentators have expressed concern that caps may decrease the quality of care by undermining the incentives sent by the tort liability system to avoid negligence. In theory, negligence liability should incentivize individual and institutional health care providers to take socially efficient levels of care—meaning, they take precautions to prevent medical injuries at a cost-justified level. This “deterrence” function of tort law is commonly described as one of its most important functions. The argument that caps undermine deterrence depends on the assumption that indeed liability does lead providers to practice higher-quality, safer care than would be the case in the absence of liability; and that providers are aware of and sensitive to changes in the law that affect their liability exposure, and calibrate their behavior accordingly.

Evidence from the Scholarly Literature

Crossover effects on economic damages awards. A single study has examined potential crossover effects of noneconomic damages caps in medical malpractice cases. A single study has examined potential crossover effects of noneconomic damages caps in medical malpractice cases. This case-level analysis of jury verdicts by Catherine Sharkey found that, controlling for severity of injury, noneconomic damages caps were not associated with lower total compensatory damages. The author’s interpretation of this finding is that it is evidence of a crossover effect, though it could also be the case that the effect of caps on noneconomic damages—even in the absence of a crossover effect—is simply not large enough to give rise to a statistically significant reduction in total awards. For example, the cap may be so high that it is not triggered for most jury awards. Other studies, discussed above, have found that caps are associated with lower total indemnity payments, but Sharkey’s analysis is somewhat unusual in controlling for the severity of injury. Sharkey’s study also may have reached different conclusions than other studies because it excluded settlements, although this decision is likely to push results in the other direction (toward a statistically significant effect). Overall, Sharkey’s explanation of a crossover effect seems plausible, but is not fully proven by this study. An important limitation of her analysis that precludes verification of this suggested effect is that the data did not permit her to break down compensatory damages by component. That is, she could examine only total compensatory damages, not the constituent components of economic damages and noneconomic damages.

Equity effects. A handful of studies have examined jury verdicts in states that have noneconomic damages caps to determine how often awards are reduced by the cap and what proportion of the total award the reduction constitutes. Two studies of jury verdicts from a
single state have confirmed the theoretical prediction that noneconomic damages caps exacerbate existing problems with vertical equity in damages awards.\textsuperscript{40, 41} In cases resolved by verdict, California’s $250,000 noneconomic damages cap disproportionately affected the most severely injured plaintiffs and compressed the distribution of awards so that there was less variation across plaintiffs with different levels of injury severity. The evidence concerning whether noneconomic damages caps disproportionately affect women or the elderly is more mixed. The 2 previously mentioned California studies both concluded that the effect of the cap on these groups was not significantly greater than its effect on men or the nonelderly. A third study analyzing California data but with a weaker methodology found that women and the elderly were disproportionately affected, and a fourth study using data from Texas concluded that the elderly, unemployed, and deceased were disproportionately affected.\textsuperscript{11, 42} \textbf{Overall, there is good evidence that caps disproportionately burden the most severely injured patients and make awards less equitable from a vertical perspective. The evidence base is not sufficient to draw a strong conclusion about whether they disproportionately burden certain demographic groups.}

\textbf{Effects on access to the legal system.} Unfortunately, there is scant evidence in the published literature with which to gauge the effects of noneconomic damages caps on access to the legal system for patients with meritorious but low-value claims. As we discussed above, the evidence concerning whether the total volume of claims is reduced by damages caps is too equivocal to support a firm conclusion. We know even less about the mix of claims that are brought (and forgone) under a gap, in terms of their merit, the severity of the injuries involved, the expected value of the claims, and the characteristics of the plaintiffs. The only relevant statistical analysis is a recent paper on claiming in Texas which found that the state’s damages cap resulted in significantly lower total volume of claims and significant drops in claim frequency among all plaintiff age groups.\textsuperscript{15} The elderly were not disproportionally affected, relative to other age groups.

Another interesting, but less conclusive study surveyed 965 plaintiff’s medical malpractice attorneys in 19 states about their willingness to accept meritorious malpractice cases under different circumstances.\textsuperscript{43} The study used hypothetical scenarios that conveyed clearly that the claim had merit and held that constant across all scenarios, varying other characteristics of the case, such as its expected damages. The study found that attorneys’ willingness to accept a case increased with the financial attractiveness of the case. The effects of a noneconomic damages cap may be small or large depending on 4 other factors: how financially attractive the case would be in the absence of a cap, how large and selective the attorney’s law firm is, how the cap level compares to the expected value of the noneconomic damages in the case (in other words, how much the cap is expected to reduce noneconomic damages), and the total dollar damages associated with the case. An important limitation of this study is that there was a low response rate to the survey (22\%), raising the prospect that responding attorneys may not have been representative of all attorneys. Additionally, what attorneys report they would do in a hypothetical situation may not reflect their actual behavior. Still, this study provides some insight into how attorneys separate considerations of merit and return on investment when deciding which cases to accept. \textbf{Overall, however, there is insufficient evidence to accept or reject the proposition that noneconomic}
damages caps reduce access to the legal system for patients with meritorious but low-value claims.

**Effects on defense costs and settlement rates.** The evidence concerning the effect of caps on propensity to settle and defense costs is also very sparse. One unpublished study, discussed in a later work by the same authors, found that the effect on settlement rates varies according to the level of the cap and the perceived likelihood that it will be judicially overturned—factors that are related to one another, since the probability of overturn may hinge in part on a court’s judgment about whether the allowed damages under the cap constitute a sufficient remedy for injury. That study found that when the cap amount is low and the probability of overturn high, the parties to litigation will delay settlement until the outcome of the legal challenge becomes clear. In contrast, when the cap level is high and probability of overturn low, parties will expedite settlement, compared to litigants in states without caps.

One study has examined the relationship between noneconomic damages caps and defense costs in malpractice cases and found that caps were associated with significantly higher costs. This could reflect insurers’ decisions to take cases to trial more often, since there is less risk of a high noneconomic damages award, but the study is at best circumstantial evidence for such an effect. An alternative explanation is that the cases that get filed under a cap tend to be more complex cases of severe injury that require a more intensive “workup” by attorneys for both sides. **Overall, the existing evidence is not adequate to draw conclusions about the effects of caps on defense costs and settlement rates.**

**Effects on quality of care.** The effect of damages caps and other tort reforms on the quality of care is difficult to study, and as a result, has not often been studied. The existing analyses have examined not direct measures of quality of care, but rather patient outcomes. Many of them focus on patient mortality, which is an extreme outcome that may not capture more subtle variations in quality of care well. A more important issue, though, is that patient outcomes depend not just on quality of care but also a host of factors that are outside the control of a health care provider. Consequently, these studies provide only very indirect evidence of the extent to which tort reforms lead providers to change their clinical behavior in ways that jeopardizes quality of care.

This literature provides scant evidence that noneconomic damages caps are associated with significant changes in patient outcomes. One study of obstetrical care found that caps were associated with a statistically significant reduction in complications of labor—cutting against the hypothesis that caps result in lower quality of care. Other studies have not found any significant difference in patient outcomes. **Overall, the available evidence is insufficient to support a conclusion about the effect of damages caps on quality of care, but there is some evidence to suggest that patient outcomes do not suffer in the presence of a damages cap.**
Oregon-Specific Analysis

It is not possible to use simulation methods to attempt to gauge the magnitude of the various adverse impacts discussed above in Oregon—with the exception of equity effects. The other effects cannot be analyzed quantitatively for Oregon because the scholarly literature has not produced a reliable estimate of the magnitude of the effect, because it is necessary to analyze data on the relevant outcome variable in the presence of an actual cap (rather than a hypothetical one), or both. Whether noneconomic damages caps would have crossover effects, reduce access to the legal system, increase defense costs, reduce settlement rates, or reduce the quality of care in Oregon cannot be determined based on the available evidence.

Equity effects. It is possible to use simulation methods to examine how noneconomic damages caps might affect the vertical and horizontal equity of damages awards—that is, whether severely injured claimants, women, and the elderly would be disproportionately burdened by the effects of the cap, relative to less severely injured patients, men, and the nonelderly. We have previously developed a methodology for examining these effects on a sample of jury verdicts from California.\textsuperscript{41} Here, we applied that methodology to our sample of verdicts and settlements from the NPDB. Details are provided in the Appendix.

This analysis, presented in Tables 7 and 8, shows that more severely injured claimants are disproportionately affected by noneconomic damages caps at all levels except $1.6 million.

Table 7. Multivariate Regression Results: Absolute Reductions in Total Compensation Payments due to Noneconomic Damages Cap, 2006-2010

<table>
<thead>
<tr>
<th>Noneconomic Damages Cap Level</th>
<th>$250K</th>
<th>$500K</th>
<th>$750K</th>
<th>$1.6 m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>s.e.</td>
<td>β</td>
<td>s.e.</td>
</tr>
<tr>
<td><strong>Low Estimator:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury severity</td>
<td>6816.8**</td>
<td>2123.6</td>
<td>5868.4*</td>
<td>2845.5</td>
</tr>
<tr>
<td>Female</td>
<td>-9102.5</td>
<td>9578.1</td>
<td>-18530.2</td>
<td>12834.5</td>
</tr>
<tr>
<td>Baby</td>
<td>44808.1**</td>
<td>17272.2</td>
<td>10900.7</td>
<td>23144.4</td>
</tr>
<tr>
<td>Elderly</td>
<td>-37605.3*</td>
<td>15088.2</td>
<td>-33848.4</td>
<td>20217.8</td>
</tr>
<tr>
<td><strong>High Estimator:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury severity</td>
<td>10245.5**</td>
<td>2404.4</td>
<td>12885.1**</td>
<td>3831.7</td>
</tr>
<tr>
<td>Female</td>
<td>-11901.1</td>
<td>10844.7</td>
<td>-27033.9</td>
<td>17282.7</td>
</tr>
<tr>
<td>Baby</td>
<td>21888.8</td>
<td>19566.2</td>
<td>82346.9**</td>
<td>31165.9</td>
</tr>
<tr>
<td>Elderly</td>
<td>-55859.9**</td>
<td>17083.4</td>
<td>-64454.6*</td>
<td>27225.0</td>
</tr>
</tbody>
</table>

Asterisks indicate a statistically significant result: * $P<0.05$; ** $P<0.01$. 
Table 8. Multivariate Regression Results: Proportional Reductions in Total Compensation Payments due to Noneconomic Damages Cap, 2006-2010

<table>
<thead>
<tr>
<th>Noneconomic Damages Cap Level</th>
<th>$250K</th>
<th>$500K</th>
<th>$750K</th>
<th>$1.6 m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>s.e.</td>
<td>β</td>
<td>s.e.</td>
</tr>
<tr>
<td>Low Estimator:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury severity</td>
<td>0.0058*</td>
<td>0.0024</td>
<td>0.0031</td>
<td>0.0016</td>
</tr>
<tr>
<td>Female</td>
<td>-0.0038</td>
<td>0.0106</td>
<td>-0.0095</td>
<td>0.0072</td>
</tr>
<tr>
<td>Baby</td>
<td>0.037</td>
<td>0.019</td>
<td>-0.0066</td>
<td>0.013</td>
</tr>
<tr>
<td>Elderly</td>
<td>-0.035*</td>
<td>0.017</td>
<td>-0.017</td>
<td>0.011</td>
</tr>
<tr>
<td>High Estimator:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury severity</td>
<td>0.013**</td>
<td>0.0038</td>
<td>0.010**</td>
<td>0.0034</td>
</tr>
<tr>
<td>Female</td>
<td>-0.0099</td>
<td>0.017</td>
<td>-0.0203</td>
<td>0.015</td>
</tr>
<tr>
<td>Baby</td>
<td>-0.015</td>
<td>0.0309</td>
<td>0.068*</td>
<td>0.028</td>
</tr>
<tr>
<td>Elderly</td>
<td>-0.077**</td>
<td>0.027</td>
<td>-0.051*</td>
<td>0.024</td>
</tr>
</tbody>
</table>

Asterisks indicate a statistically significant result: * P<0.05; ** P<0.01.

In terms of both absolute and proportionate reductions, the size of the reductions in total awards increases with the severity of injury. Thus, damages caps (with the exception of the $1.6 million cap) tend to decrease vertical equity in compensation payments.

The analysis finds no disproportionate effects on female claimants; neither their absolute nor their proportional reductions differ significantly from those of males. The elderly are disproportionately affected by noneconomic damages caps set at $500,000 or below, in terms of both absolute and proportionate reductions, but not by caps at higher levels. In several models, fetuses and infants also experienced disproportionately large reductions. In summary, noneconomic damages caps of $750,000 and below disproportionately burden claimants with more severe injuries, while caps of $500,000 or less particularly burden the elderly.

D. Conclusions

The key findings from both our review of the scholarly literature and our Oregon-specific analyses are summarized in Table 9. As we have discussed, the quality and quantity of evidence available from the scholarly literature is very good for some of the effects covered in our review but poor for others. Applying elasticities from the published literature to Oregon is also somewhat problematic because Oregon already caps noneconomic damages in some types of claims. Thus, our confidence that Oregon-specific estimates accurately represent what would occur if Oregon adopted caps of broader applicability is only moderate.
Table 9. Summary of Effects of Noneconomic Damages Cap

<table>
<thead>
<tr>
<th>Theoretical effect</th>
<th>Conclusions from Scholarly Studies</th>
<th>Best Estimates from Oregon-Specific Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower average indemnity payments*</td>
<td>Statistically significant decrease in average indemnity payments, on the order of 20-30%. Both verdicts and settlements are affected. Studies that produced these estimates did not separate out different levels of caps.</td>
<td>Sizeable reductions in total awards will occur only for a small number of cases annually, primarily due to effects on settlement behavior. A $500,000 cap may reduce total compensation payments by as much as $15.1-$32.5 million statewide over 5 years.</td>
</tr>
<tr>
<td>Higher settlement rate</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Lower claim frequency*</td>
<td>Evidence too conflicting to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Lower insurance premiums</td>
<td>Statistically significant decrease in premiums, about 13% lower than states without caps. Studies that produced these estimates did not separate out different levels of caps.</td>
<td>Applying the 13% elasticity results in an estimated premium savings per physician of $870 for Internal Medicine physicians, $3,694 for General Surgeons, and $6,249 for Ob/Gyn physicians for 2010, but these estimates likely overstate the actual effect in Oregon.</td>
</tr>
<tr>
<td>Lower defensive medicine</td>
<td>Statistically significant reduction in the use of at least some types of health services. Total reduction of about 5.4% in hospital spending overall.</td>
<td>See separate report by Wright and Baicker for estimates of impact on health care spending. Caps may modestly reduce defensive practices in obstetrics. In 2010, the effect of a cap of $250,000-$500,000 would have been 68 fewer cesarean sections and 624 additional VBACs.</td>
</tr>
<tr>
<td>Higher physician supply</td>
<td>Statistically significant increase in number of active physicians, but effect tends to be concentrated in the most rural areas (4.5% increase, vs. 0% in other areas).</td>
<td>Increase of 0.21%, or 20 physicians, statewide. (An alternative estimate that represents an upper bound on the effect is +3.0%, or 291 physicians, statewide.)</td>
</tr>
<tr>
<td>Costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher economic damages awards</td>
<td>Some evidence of a crossover effect, but not firmly proven.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Greater inequity in damages awards</td>
<td>Good evidence that caps worsen vertical inequity in awards. Evidence concerning disproportionate effects on female</td>
<td>Caps of $750,000 or less disproportionately burden more severely injured claimants. Caps of $500,000 or less also</td>
</tr>
<tr>
<td>Theoretical effect</td>
<td>Conclusions from Scholarly Studies</td>
<td>Best Estimates from Oregon-Specific Analysis</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Elderly access to the legal process</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Lower propensity to settle</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Lower quality of care</td>
<td>Insufficient evidence to support a conclusion concerning quality of care, but some evidence that caps are not associated with worse patient outcomes.</td>
<td>Not possible to estimate.</td>
</tr>
</tbody>
</table>

*Lower average indemnity payments and claim frequency are classified as benefits only because they would be part of the theoretical goals of enacting caps. Injured patients are likely to see lower payments and claim frequency as adverse impacts.

The benefits of noneconomic damages caps are best characterized as statistically significant, but modest in size. Policymakers will need to weigh these potential benefits against (1) the possibility that adverse effects may occur, including exacerbation of existing inequities in tort awards; and (2) the high likelihood that the cap legislation would be challenged in court, perhaps successfully.

Noneconomic damages caps of $500,000 or less are most likely to produce appreciable benefits in terms of a reduction in indemnity costs and insurance premiums—but are also most likely to inequitably burden the most severely injured patients and the elderly. In terms of other design choices, inflation indexing is desirable in order to preserve the legislature’s original valuation of what constitutes reasonable compensation as time passes. Attaching the cap to what each defendant may be required to pay, as opposed to what each plaintiff may collect, is advisable in order to enable insurers to better predict their risk exposure in multiple-defendant cases. Finally, the legislature could consider an innovation on the dominant approach to noneconomic damages caps among the states: a tiered cap. Tiered caps establish multiple levels of maximum noneconomic damages for different injury severity levels. They could help avoid the inequities associated with a flat cap and maximize the likelihood that courts would view the compensation as an adequate remedy.
II. Medical Panels

A. Nature of the Reform

Medical panels, also commonly known as pretrial screening panels, are designed to review malpractice claims at an early stage and provide an opinion about whether a claim contains sufficient merit to proceed or be successful at trial. At least 16 states currently have some type of medical panel requirement or option before trial. States implementing panels typically specify that a negative panel opinion does not bar a case from going forward to trial, but may trigger other requirements for the claimant to proceed. Rules concerning the admissibility of panel findings at trial vary from state to state. When introduced, evidence of panel decisions can provide juries with a neutral source of expertise. Panels are generally adopted with the goal of reducing the number of nonmeritorious (including frivolous) malpractice claims and the associated litigation expenses.

Medical panels have been legislatively repealed in at least 9 states and overturned by courts on constitutional grounds in at least 5. The constitutionality of medical panels has long been debated and the factors that affect the constitutionality of panels are now fairly well defined. These issues are outside the scope of our report, but are important, and are being explored by the Oregon Department of Justice.

When introducing medical panel reviews into the litigation process, several key design choices must be considered. However, for any design choice, the constitutional limits of the design features should be considered before turning to an evaluation of their effects on litigation and clinical care related outcomes. In general, to pass constitutional muster, panel design features should not impermissibly interfere with a plaintiff’s right to trial, or violate equal protection or due process rights. Within these constitutional bounds, panels should be also designed so that on balance they expedite resolution and reduce nonmeritorious claims to an extent that justifies the costs and burdens of the extra administrative steps they involve.

The key design choices for panels include the following:

- **Mandatory or voluntary use of the panel:** Whether use of the medical panel is mandatory or voluntary for the litigants (including what kinds of cases or parties are covered and how a party can opt out).
- **Panel financing:** Who pays for the panel review process (e.g., the parties, the state, or the losing party).
- **Timing of the panel review:** When in the litigation process the panel makes its decision (e.g., at the time the lawsuit is filed or closer to trial).
- **Panel size and member composition:** How many members are on the panel and what their qualifications and background are.
- **Length of the panel process:** The amount of time and effort required to go through the panel review process, and how much time the panel has to deliver a decision.
- **Panel’s scope of review:** What parts of the case the panel will evaluate (e.g., the merits of the case only, or both the merits and damages).
• **Information available to panel:** Whether the panel has discovery powers of its own, merely reviews submissions of the parties, or reviews submissions of the parties supported by the panel’s discovery powers.

• **Panel’s determination:** Whether the panel makes a finding as to whether the standard of care was violated, or simply determines whether a case has sufficient merit to proceed.

• **Effects of a panel’s decision (binding vs. non-binding):** For this, there are several possibilities:
  - The panel’s opinion is merely advisory and inadmissible at trial (non-binding, inadmissible).
  - The case can go to trial, but the panel findings can be used as evidence in trial (non-binding, admissible).
  - The case cannot go to trial if there is a negative panel finding (a fully binding decision).
  - The case can go forward, but only if the party who receives an adverse decision from the panel posts a bond that can be used to help cover litigation expenses in event of a similar outcome at trial (partially binding).

Of the design choices listed above, the two that likely raise the largest constitutional questions are (1) whether the use of panels is mandatory and (2) the effects of a panel’s decision. These two design choices are also likely the most important with regard to a panel’s effects on litigation and clinical care. Mandatory panel use allow panels to exert their effect on a great number of claims, potentially providing greater reassurance of protection against frivolous claims to health care providers. The more binding the decision, the more effective the panel will be at ultimately resolving disputes.

Assuming that medical panels can be lawfully be implemented in Oregon, the state would like to further explore the potential costs and benefits of enacting medical panels, whether binding or non-binding. Their effects on the liability system and clinical care have been explored in a handful of well-designed studies, which we review below. In the sections that follow, we outline the theoretical benefits and costs of medical panels and review the evidence from the scholarly literature concerning each of these effects. We include a brief discussion of how effects may differ for binding and nonbinding panels. Our analysis updates and extends a previous synthesis. Finally, we consider whether quantitative analyses of the purported effects of panels using Oregon-specific data are possible.

**B. Potential Benefits**

**Overview**

In theory, the direct effects of medical panels are to **speed the litigation process** in at least some claims and **prevent nonmeritorious claims from proceeding**. These direct effects, in turn, may have several indirect effects. Panels may **deter plaintiff’s attorneys from filing nonmeritorious claims** if attorneys know that the claims lack merit and believe that the panel will stop them from proceeding, perhaps with a penalty to the attorney or claimant. Thus, they may lead to **reduced frequency of both filed and paid claims**. If liability
insurers incur and pass along savings in claim payouts and defense costs, providers would theoretically enjoy lower malpractice insurance premiums.

Panels are not generally conceived of as a reform that offers benefit to patients. However, claimants and their attorneys may benefit from early review of their cases. Obtaining an early opinion about the case’s merit may inform their decisions about whether to continue to invest in litigating the case, and ultimately reduce litigation expenses if nonmeritorious claims are halted. Early termination of nonmeritorious claims may also have psychological benefits for patients who would otherwise invest emotionally in litigation that could be protracted and fruitless. On the other hand, when a panel opines that a case has merit, that signal may expedite settlement by heightening the likelihood that the defendant will make a settlement offer. Finally, if panels are successful in reducing costs and liability stress for health care providers, this may redound to the benefit of patients if providers respond by reducing defensive medicine, thereby improving the quality of care.

Evidence from the Scholarly Literature

The body of evidence about the effects of panels from well-designed studies is of modest size—much smaller than the literature concerning the effects of damages caps. The literature contains a number of case studies of particular states’ experiences with panels, but these are not designed to produce reliable, quantitative estimates of their effects. We synthesize findings from the strongest studies below. As with our analysis of damages caps, it is important to bear in mind that these studies—generally multivariate regression studies that model the joint effect of many different tort reforms across all the states—produce estimates of the average effect of the reforms, which may or may not be representative of what would occur in Oregon.

Effects on time to resolution. The evidence does not demonstrate that panels on balance speed the claims resolution process, although the quality and quantity of evidence on this point are both low. Single-state, descriptive studies have found that panels have led to increases in average time to claim resolution.\(^5\)\(^5\), \(^5\)\(^7\), \(^5\)\(^8\) Another study, which was a multivariate, multistate analysis but had methodological limitations, found no difference in time to resolution across states that had mandatory panels, optional panels, and no panels.\(^5\)\(^9\) It is unclear whether the lack of observed reduction in claim resolution time stems from the fact that panels do not weed out many claims, the fact that additional time is involved in preparing cases for panel review, both factors, or some other factor.

Effects on claim frequency. Four controlled studies have examined the effects of panels on the frequency of filed or paid claims; 3 of them are based on data from the 1980s and are thus rather dated at this point in time.\(^6\), \(^7\), \(^9\), \(^14\) Three of these studies have found no statistically significant reduction in the number of claims filed,\(^6\), \(^7\), \(^14\) suggesting that panels do not have the desired deterrent effect on plaintiff’s attorneys. Some single-state, descriptive studies have actually identified a higher rate of claiming in the years following implementation of screening panels than in the years prior.\(^5\)\(^5\), \(^6\)\(^0\) It is unclear why the number of claims is not reduced. It is possible that because claimants hope that a panel’s positive finding will lead to a quicker settlement of valid claims, they may be more likely to file claims that they might
not have otherwise pursued (i.e., because the presence of panels may be seen as reducing litigation effort and expense). It may also be that screening panels simply do not issue an adverse decision in many cases or that plaintiff’s attorneys pursue claims notwithstanding adverse panel decisions. Whatever the reason, there is good evidence that panels do not reduce claim frequency.

**Effects on claim payouts.** Seven controlled studies have examined the association between panels and average or total indemnity costs.\(^6-9, 14, 59, 61\) Six have found no statistically significant differences in average indemnity per paid claim between states with and without panels;\(^6-8, 14, 59, 61\) the other found no statistically significant difference in total indemnity payments in states with and without panels.\(^9\) Thus, there is strong evidence that panels do not result in reduced payouts on claims.

**Effects on defense costs.** Two multivariate studies have explored whether panels reduce average defense costs in malpractice litigation. The methodologically stronger of the 2 studies found that mandatory panels significantly reduced defense costs.\(^45\) The other study found no difference across states with mandatory, optional, and no panels.\(^59\) Overall, the available evidence is insufficient to conclude that panels reduce defense costs.

**Effects on malpractice insurance premiums.** Three studies have examined the relationship between screening panels and malpractice insurance premiums. One study found a significant effect in the direction of lowering premiums,\(^21\) while the 2 others (one of which was methodologically stronger\(^6\) and one of which was weaker\(^59\)) did not. Overall, the evidence provides no basis for concluding that panels result in reduced insurance premiums. The absence of a drop in premiums suggests that insurers do not experience a net cost savings due to panels, which is unsurprising given study findings concerning panels’ lack of effectiveness in reducing claim frequency, claim payouts, and defense costs.

**Psychological benefits.** No studies have examined potential psychological benefits of expediting the litigation process for patients or providers.

**Effects on settlement behavior.** No studies have examined the effects of panels on settlement behavior.

**Effects on defensive medicine and quality of care.** Unfortunately, there is only a small amount of empirical evidence about the relationship of medical panels to less defensive practice and quality of care. One study found an association between the presence of medical panels and lower rates of cesarean section and higher rates of vaginal birth after cesarean section (VBAC), both of which are considered markers of the intensity of defensive practice among obstetricians.\(^29\) Although the effect was statistically significant, it was small in magnitude: having any type of medical panel in place was associated with 0.07 percentage point increase in the VBAC rate and a 0.28 percentage point decrease in the cesarean section rate. Overall, the evidence base concerning the effects of panels on quality of care is extremely thin, but suggest a small effect on defensive medicine in obstetrics.
Oregon-Specific Analysis

We have not conducted an analysis of the effects of panels on time to resolution, claim frequency, or claims payouts because the weight of the evidence from scholarly studies is that panels do not have a statistically significant effect on these outcome variables.

We have not conducted Oregon-specific analyses of the psychological benefits of panels or their effects on defense costs, premiums, or settlement behavior because no reliable estimate of these effect sizes is available in the scholarly literature.

We can analyze the defensive-medicine effects of medical panels in Oregon, but only effects relating to obstetrical practice, since studies have not investigated other areas of clinical care in a manner that permits inferences to be drawn about the effects of medical panels (separated from other tort reforms). Based on the findings of the one existing study of obstetrical practices, we calculate that adopting a medical panel in Oregon would decrease the rate of cesarean section from 29.4% to 29.12%, and would increase the rate of VBAC from 12.9% to 12.97% (see Appendix for details). For 2010, this would have translated into 128 fewer cesarean sections and 32 additional VBACs in Oregon.

C. Potential Costs and Adverse Impacts

Overview

The theoretical costs of medical panels to providers come mostly from a prolonged litigation process and increased defense costs, if panels are not able to deliver on their theoretical promise of reducing claims and more quickly resolving disputes.

Panels may theoretically have adverse effects on patients’ access to courts and compensation. Panels erect a barrier in patients’ path to compensation that in theory should not pose more than a modest delay and expense for patients with meritorious claims. However, if the panel process is protracted, or panels erroneously deny patients with meritorious claims the right to proceed in litigation or erect substantial obstacles in their path (for example, by requiring the posting of a bond), they may obstruct access to justice. On the other hand, if panel review is not meaningful and rarely results in an adverse decision for a claimant, panels may harm plaintiffs by lengthening the litigation process and creating additional litigation costs for no sound reason.

Panels also involve operational costs. Convening and operating panels requires money, which may be collected from litigants or insurers, but may also come from taxpayers through state financing.

Evidence from the Scholarly Literature

Effect on time to resolution and defense costs. The literature regarding these effects has been summarized above. On balance, it remains unclear if panels have any significant costs for providers. They may lengthen an already protracted litigation process. However,
the support that panels receive from medical societies suggests that even if panels have lead
to a longer process, physicians may favor panels as an added layer of review.

**Effect on access to courts.** Studies have not attempted to examine the accuracy of panel
decisions, in terms of panels’ propensity to decide against litigants who later proceed to trial
and prevail, or who are judged by other expert reviewers to have meritorious cases. The
literature has established that the total volume of claims does not decrease, as discussed
above, but this does not tell us anything about whether claimants are able to proceed with
their claims. **Overall, the evidence base is insufficient to draw conclusions about panels’
effect on access to justice for claimants with meritorious cases.**

**Operational costs.** We are not aware of studies that set forth typical operational
expenses for panels.

**Oregon-Specific Analysis**

The insufficiency of evidence from the scholarly literature precludes any Oregon-specific
analysis of these potential costs.

**Potential Differences between Binding and Nonbinding Panels**

In the vast majority of the states in which panels have been enacted, medical panel review
has been made mandatory.50, 52, 53 The effect of the panel’s decisions, on the other hand,
generally have not been made binding48—perhaps because doing so could be deemed by a
court to be an impermissible substitution of right to a jury trial. Short of making panel
decisions binding, states have used other methods to give panel decisions more weight. For
example, in Massachusetts, after an adverse finding from a panel, a plaintiff may only
proceed after posting a bond.62 In other states, after an adverse finding from a panel, a
plaintiff may still proceed, but the panel findings would be admissible at trial.51 Binding
panel decisions would theoretically carry more weight because they would no longer just be
another step that a claimant would have to go through to get to court.

Assuming they are constitutionally permissible, it is still unclear that the how the effects of
binding panels might differ from nonbinding panels. Existing empirical studies have not
analyzed this distinction, probably because there are too few examples of binding panels to
make it feasible to do so. Given the absence of data on the performance of binding panels, it
is unknown whether the benefits and costs of panels vary according to whether or not they
are binding. However, a few theoretical differences are worthy of note.

First, binding panels would probably reduce time to case resolution than nonbinding panels,
since the panel’s decision would end the litigation. There would not, however, be a
significant, population-level decrease in average time to resolution if panels rarely issued
adverse decisions to claimants. There is also the possibility that claimants denied access to
court would frequently appeal the panel’s decision (appeal rights are likely to be
constitutionally required), lengthening time to final disposition.
Second, the positive effects that might be created by nonbinding panel decisions may disappear if the parties start to prepare for panel hearings the same way as they do jury trials. Every incentive to do so would exist if the panel’s decision was binding, since litigants would know they would not get a “second bite at the apple” if they faltered before the panel. Thus, binding panels may be less likely than nonbinding panels to result in decreased litigation costs—or at least decreased spending in the early stages of litigation.

Third, binding panels may have a greater effect on defensive medicine than nonbinding panels. The more protection a health care practitioner perceives that he has from a tort reform, the more likely he is, in theory, to reduce his defensive practices. If panels are perceived as “loose sieves” that allow most cases to proceed to trial, providers may not consider them to provide meaningful protection.

D. Conclusions

The key findings from our analysis of medical panels are summarized in Table 10. As we have discussed, the scholarly literature on the effects of panels is modest in size. Our conclusions about the effects of panels come from a handful of studies, some of which produced mixed findings. For many of the outcomes of interest, no relevant evidence is available from well-designed studies. Consequently, it is not possible for us to conduct Oregon-specific analyses for these outcomes. Overall, we can only draw conclusions with a high degree of confidence for two outcome variables: claim frequency and claim payouts.

<table>
<thead>
<tr>
<th>Theoretical effect</th>
<th>Conclusions from Scholarly Studies</th>
<th>Best Estimates from Oregon-Specific Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits:</strong></td>
<td><strong>Infrequently studied, but available evidence suggests no improvement in time to resolution.</strong></td>
<td><strong>Not modeled because no effect expected.</strong></td>
</tr>
<tr>
<td><strong>Shorter time to resolution of claims</strong></td>
<td><strong>Studies have found no significant effect on filed or paid claim frequency.</strong></td>
<td><strong>Not modeled because no effect expected.</strong></td>
</tr>
<tr>
<td><strong>Lower claim frequency</strong></td>
<td><strong>Multiple studies have found no significant effect on average claim payouts.</strong></td>
<td><strong>Not modeled because no effect expected.</strong></td>
</tr>
<tr>
<td><strong>Lower claim payouts</strong></td>
<td><strong>Insufficient evidence to support a conclusion.</strong></td>
<td><strong>Not possible to estimate.</strong></td>
</tr>
<tr>
<td><strong>Lower defense costs</strong></td>
<td><strong>Mixed findings, but little evidence that panels result in lower premiums.</strong></td>
<td><strong>Not possible to estimate.</strong></td>
</tr>
<tr>
<td><strong>Psychological benefits</strong></td>
<td><strong>Insufficient evidence to support a conclusion.</strong></td>
<td><strong>Not possible to estimate.</strong></td>
</tr>
<tr>
<td><strong>Higher settlement rates</strong></td>
<td><strong>Insufficient evidence to support a conclusion.</strong></td>
<td><strong>Not possible to estimate.</strong></td>
</tr>
<tr>
<td>Theoretical effect</td>
<td>Conclusions from Scholarly Studies</td>
<td>Best Estimates from Oregon-Specific Analysis</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Less defensive medicine / higher quality of care</td>
<td>Very little evidence available, but panels may modestly reduce defensive practices in obstetrics.</td>
<td>In 2010, panels would have resulted in 128 fewer cesarean sections and 32 additional VBACs in Oregon.</td>
</tr>
<tr>
<td>Costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longer time to resolution</td>
<td>Infrequently studied, but one study found an increase in average time to resolution.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Higher litigation costs</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Reduced access to courts</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
<tr>
<td>Operational costs</td>
<td>Insufficient evidence to support a conclusion.</td>
<td>Not possible to estimate.</td>
</tr>
</tbody>
</table>

As Oregon considers whether to implement panels, evaluating the experiential evidence from other states that have already enacted panels can help inform decision-making. Existing experience is largely limited to mandatory, nonbinding panel system (in which, at most, an adverse panel determination can be introduced at trial or require a claimant to post a monetary bond to proceed). The evidence suggests that such panels do not appear to lower the number of claims filed, may lengthen the claim resolution process by introducing another administrative step, and do not appear to reduce premium costs. This suggests that the benefits of panels for providers or patients may be nonexistent. However, there is no clear indication that panels carry many extra costs or adverse effects, either. The effect of panels on overall quality of care is unknown, but panels may provide a sense of security that might ultimately lower some defensive practices.

In terms of key design choices, panels are not likely to be effective unless their use is made mandatory. Other design decisions present harder choices. In particular, policy makers need to carefully weigh the risks and benefits associated with binding versus nonbinding panels. These two designs may have different effects, with binding panels possibly offering greater advantages for improving time to resolution, defensive medicine, and other outcomes. However, a binding design also heightens the likelihood that the legislation will be struck down as unconstitutional.

Decisions about the timing of panel review and nature of the panel determination also present difficult tradeoffs. The earlier and more limited the panel’s review is, the greater the prospects are for reducing litigation costs, since parties will not have engaged in extensive discovery and workup to prepare for the review. However, these circumstances also heighten the prospects for erroneous decision making by the panel. Information about what happened in a medical injury case often emerges gradually over the course of discovery, with relatively little known at the outset of the case. A panel determination at that about whether the standard of care was violated—particularly one that is binding—could be a very uninformed one. Waiting until the litigation has matured reduces the likelihood of error, but also the
likelihood of producing substantial savings on litigation expenses, psychological benefits for litigants, and other positive outcomes.
III. Oregon Tort Claims Act Coverage

The focus of our report now shifts from analysis of traditional reforms with which there has been extensive state experimentation to analysis of innovative proposals that lack existing analogs in the US. Consequently, our analysis shifts away from critical synthesis of the existing evidence base and quantitative analysis of Oregon-specific data. In the sections that follow, our analysis represents our best judgment about the likely effects of these innovative reforms based on our knowledge of similar (but somewhat different) measures in other settings and information supplied by the OHA, Oregon legislature, and Oregon Department of Justice about how the proposed reforms would be structured.

We begin with the proposed extension of coverage under the Oregon Tort Claims Act (OTCA) to health care providers caring for patients as part of a coordinated care organization (CCO). We first explicate exactly what this reform would involve. We then analyze potential benefits and costs to key stakeholders, including health care providers, patients, and the State. A brief concluding section follows.

A. Nature of the Reform

As Oregon plans to implement CCOs to transform healthcare in the state, the legislature is considering whether to extend the liability protection contained in the OTCA to “Medicaid providers providing services to members of a coordinated care organization (CCO).” The purpose of extending OTCA coverage would presumably be to allay concerns that health care practitioners may have that participating in new and untested CCO arrangements could heighten their malpractice liability, possibly in unforeseeable ways. The legislature envisions that providing liability protection through the OTCA could advance the State’s interest in promoting provider participation in CCOs as mechanisms to transform care, including improving the quality and efficiency of care for Medicaid patients.

The OHA has obtained and provided clarification on how extension of OTCA protection is currently envisioned. Specifically, the change being considered involves extending OTCA protection to health care practitioners only when they are delivering medical care and services to Medicaid and SCHIP patients (for simplicity, we hereinafter refer to these patients collectively as “Medicaid patients”) who are receiving care as members of a CCO. OTCA coverage or protection would not be extended to providers:

(1) for care provided to non-Medicaid patients, simply because the provider also delivers care to Medicaid patients in a CCO;
(2) for care provided to Medicaid patients who are not members of CCOs; or
(3) for care to non-Medicaid (e.g., privately insured) patients enrolled in a CCO.

OTCA coverage would be extended to individual health care providers, not to organizations. Finally, OTCA coverage would be extended to the provider regardless of whether the CCO is a public or private entity.
The OHA has asked us to analyze the potential benefits, costs, and cost savings that would arise from this type of reform. This analysis is necessarily limited to theoretical benefits and costs because the final design, implementation, and clinical and liability-related effects of CCOs remain unknown. The legal practicality and constitutionality of enacting this reform will be evaluated in the Department of Justice’s separate report. These issues are important, because the proposed extension raises several thorny legal issues. For example, can OTCA protection legally be extended as envisioned? Can a statute that abrogates sovereign immunity be used to expand private liability protection?

What OTCA Protection Entails

Any evaluation of the potential costs and benefits of this reform must start by first reviewing how the OTCA functions. Under the legal principle of sovereign immunity, the government may not be sued without its consent. Through the OTCA, the Oregon government has given its consent for claimants to sue the State of Oregon and other public bodies (such as counties) for torts, but has restricted the amount of money they may recover. The damages limits are based on the year of injury, and rise every year. For example, for causes of action that arise at the end of 2012, the statutory limit is $1.8 million.

Oregon first created an exception to its sovereign immunity in 1967, but at that point, still allowed its employees and agents to be held personally liable for torts committed in the course of employment. In 1975, the legislature then directed the Oregon’s public bodies to indemnify its employees and agents for torts committed in the course of employment.

In 1991, the Oregon legislature eliminated a claimant’s ability to file a claim against any officer, employee, or agent for work-related torts and directed that the government “shall be substituted as the only defendant.” The legislature enacted this change for a number of reasons. The law already provided indemnification for state officers (meaning that it provided a guarantee to pay any legal judgment arising from their actions). Therefore, naming the officers as parties did not appear to serve any additional purpose. The states also wanted to end disputes over whether the limitation on the liability of the State did not apply to the liability of individuals. In addition, the State noted that considerable resources were spent litigating over which State officials were properly named in a suit and wanted to end that.

Oregon’s ability to substitute itself as a defendant and concurrently limit the amount of liability was challenged in the Oregon Supreme Court. In Clark v. OHSU, the court found that substituting the State for a defendant would be unconstitutional (because of the Oregon’s Constitution’s Remedy Clause) if the State’s liability limits amounted to creating a substituted remedy that was an “emasculated version of the remedy that was available at common law.” To address this constitutional issue, the OTCA now specifies that either party may challenge the constitutionality of the damage award by appealing to the state Supreme Court. That court may then adjust the award or direct a lower court to enter a new award.
In summary, the current OTCA:

- Provides consent for the State of Oregon to be sued for torts.
- Substitutes the State as a defendant for any claims against public agents, employees, officers acting in the scope of their employment.
- Imposes limits on damages that escalate modestly every year.
- Provides a right to appeal damages awards to the state Supreme Court, which can waive the OTCA’s damages limit in the case if the award is deemed inadequate.

**How an OTCA Coverage Extension Could Work**

To understand the effects of an OTCA coverage extension, it is useful to review the types of situations in which liability can attach to a provider when caring for a Medicaid patient in a CCO. In general, there are two types of circumstances in which providers can be liable for medical practice.

The first is **sole liability**, where responsibility is assigned to only one provider (and no one else) either because of negligence directly committed by the provider (e.g., a physician orders the wrong medication or makes a technical surgical error) or because of vicarious liability (e.g., an employee or agent of a provider makes a negligent error when acting within the scope of employment).

The second is **joint liability**, where a provider is negligent (via either direct or vicarious liability), but this time as part of larger team or group of separate legal parties that is also negligent. For instance, a primary provider inappropriately refers a patient for a surgery that is not necessary and the surgeon makes a harmful error during the procedure, or a provider orders blood work from a CCO-owned lab, but the results are never transmitted back to the provider, resulting in patient harm.

It is the potential for joint liability may give concern to providers contemplating CCO participation. Consider the following arrangement in which the CCO contracts with both Provider A and Provider B (which could be either facilities or individual clinicians) and A makes a referral to B:

![Diagram](image)

From the individual providers’ standpoint, what is worrying is the prospect of being held liable for the negligence of the other parties in this arrangement. Might Provider A have
liability for B’s negligence? What about liability for an error that someone else within the CCO makes that results in injury to A’s patient—for example, installing a faulty electronic medical records system that fails to transmit a lab test result? These concerns frame our analysis of OTCA coverage extensions and modifications to the joint-and-several liability statute in Oregon.

B. Potential Benefits

Benefits to providers. The extension of OTCA protection to providers appears to be a targeted benefit or incentive for providers to participate in CCOs. With this reform, when caring for Medicaid patients that are in a CCO, providers would be afforded protection from liability. Closer examination, however, reveals that extension of OTCA coverage alone—without other companion reforms or clarifications—may ultimately be of limited benefit to providers.

The malpractice risk of a provider caring for a Medicaid patient in a traditional fee-for-service structure should not be appreciably different from that of a provider caring for a Medicaid patient in a CCO. With regard to sole liability, this is because the risk that a provider himself or herself will commit negligence should not increase. For the most part, all that is being changed is a patient’s status as enrolled in a CCO. Indeed, if there is any effect of CCO participation, it is likely to be in the direction of reducing the risk that a provider commits an error, since CCOs are envisioned to involve greater coordination of care, improved use of information technology, and other innovations that are known to be associated with safer, higher-quality care.

Similarly, the vicarious liability risks are likely to be similar for providers caring for Medicaid patients whether enrolled in a CCO or not. For example, the risk of a medication error being committed by a staff member is not likely to be very different for a Medicaid patient whether or not the patient is a member of a CCO—unless, again, resources that flow from the CCO actually improve the prospects for patient safety.

Participating in a CCO, then, should not include a provider’s sole liability risks. In this context, an OTCA coverage extension could help insulate physicians from sole liability risks that they might otherwise have. Therefore, it could indeed serve as an incentive for a provider to join a CCO. The key point here is that the coverage extension does not mitigate increased liability risk that a provider takes on by agreeing to be in a CCO; it decreases existing liability risk.

Let us now consider joint liability. Here, too, participation in a CCO is unlikely to involved increased exposure to malpractice claims. The liability risk that a provider would face in the context of a CCO is probably not very different from the risk associated with practicing with or referring to other doctors in other contexts. Today, a physician might face joint liability as a result of referrals to other physicians within her practice group or in an outside practice, or referring patients to a hospital. To illustrate, a Medicaid patient may be under the care of two physicians—a cardiologist and surgeon—and scheduled to undergo surgery. It is possible that this patient may be on blood “thinning” agents for the heart that will need to be discontinued and started on other medications through the perioperative period. If these
medications are not properly managed and result in injury, both physicians may be at fault. Clearly, though, the liability risk in this case is not likely to be different whether the patient is in a CCO or not. Thus, with regard to joint liability, we are again left with the conclusion that an OTCA coverage extension would not serve to mitigate new liability risk that accompanies CCO participation. Rather, it would decrease a provider’s liability risk relative to what it is today, in the absence of CCOs.

Even though extension of OTCA coverage appears to provide substantial benefit to providers by protecting them from liability risks that already exist, this reduction in risk may not translate to substantial savings for providers on malpractice insurance premiums. Several considerations are relevant here. First, the direct financial savings of the substitution of the State as defendant will accrue to the provider’s liability insurance company, which will no longer have to pay defense and compensation costs associated with covered claims. Savings will only flow to providers if the insurance companies pass them along. As we have discussed earlier, this is likely to occur, but the pass-through may not be 100% and it may take some time for the insurer to gauge the reduction in its expected losses, particularly since it is unclear at this point how many Medicaid patients will enroll in CCOs and thus how many fewer potential claimants there will be.

Second, even if the companies do pass along their savings, liability premiums in Oregon are largely rated by specialty, not individual risk factors. Although some companies incorporate more physician-specific information than others when pricing policies, it is difficult to envision dramatic price reductions because a physician sees Medicaid patients in a CCO. To accurately take this risk factor into account, the insurer would require information on what proportion of a provider’s panel of patients such patients constituted—a figure that could fluctuate over short periods of time. Therefore, incorporating this information into underwriting decisions poses some substantial challenges. To ensure that the benefits of OTCA protection directly reach participating providers, the State may need to collaborate with insurance companies or effect additional law changes to ensure that appropriate premium adjustments are made. It would not be surprising, however, if insurers indicated that the practical challenges associated with doing so are difficult to surmount.

Reductions in insurance premiums are not the only mechanism by which providers may financially benefit from an OTCA coverage extension. There is also the possibility that providers may reduce their risk of incurring judgments in excess of their liability insurance policy limits (because the state would now be covering the awards regardless of amount). However, empirical studies suggest that malpractice claims rarely settle in excess of policy limits, and our communications with Oregon insurers revealed that neither of two large insurers had experienced a case in recent memory in which the physician had to pay out of pocket. Rather, the parties generally reach agreement to settle at the policy limit.

Though the financial benefits of OTCA coverage extensions may be muted, there is another potential large benefit for providers. Substituting the State as a defendant for physicians can reduce the considerable emotional stress of being sued and defending claims. However, the size of this benefit will depend to some extent on how claims-related reporting is handled. Part of the stress of litigation for providers is that all payments made
in malpractice claims—whether the provider and his insurer acknowledge negligence or not—must be reported to the NPDB, state boards of licensing, and other bodies. Providers perceive these reports as “black marks” on their record that are stigmatizing and may affect their prospects for being credentialed at health care facilities. Clarification is needed as to whether providers would be reported to the NPDB or other bodies when the State substitutes itself for the provider in a claim and makes a payment to the claimant. For example, even though physicians who are Veterans Affairs (VA) employees enjoy OTCA-like liability protection under the Federal Tort Claims Act (FTCA), VA Medical Centers only sometimes report their physicians to the NPDB.\textsuperscript{66-68} Reporting appears to be based on the nature of the claim and how it is settled. Based on Oregon law, it appears that reporting to the state’s medical professional licensure boards may indeed be required even under the scenario of OTCA coverage.\textsuperscript{69}

In summary, it is unclear to what extent providers would actually realize a financial or psychological benefit extension of OTCA coverage to Medicaid CCO patients. Regardless, however, a coverage extension may serve the State’s goal of encouraging provider participation in CCOs by helping to allay the concerns that providers may have about CCO participation heightening their liability risk.

**Benefits to patients.** Extension of OTCA coverage may carry direct and indirect benefits for patients. The direct benefits may come from the ability to seek compensation from the State, as *many patients may feel more comfortable seeking damages against the State rather than an individual provider*, but this benefit is likely to be minimal. Most claims are driven by either severity of injury or relationship or communication breakdowns between patients and providers, and substituting the State as a defendant may not significantly affect these drivers.\textsuperscript{70}

For patients filing claims, there can be another substantial benefit: the ability to obtain larger awards. It is estimated that almost all providers in Oregon carry liability coverage, but on average, only $1 million per incident. As discussed above, claims in Oregon have almost never settled for greater than policy limits. Given that Oregon’s medical malpractice liability limits for public entities are already higher than the typical physician’s insurance policy limits ($1.8 million at the end of 2012, versus $1 million),\textsuperscript{63} OTCA protection for providers may create access to larger malpractice awards.

Patients may also potentially realize some indirect benefits. First, if the OTCA extension succeeds as an incentive to get more provider participation in CCOs, this may lead to better access to care. However, this requires that CCOs be proven a more effective model to deliver healthcare, and/or that the coverage extension is effective in reducing defensive medicine—both unknowns for the Oregon context. Second, OTCA protection might lead to reduced defensive medicine. However, Oregon’s proposal extends coverage only to Medicaid patients who are part of a CCO. Providers may not know the insurance status of Medicaid CCO patients when they are caring for them. As a result, providers may not be fully aware of the legal protections they are receiving for particular care encounters. Although providers’ inability to discern insurance status at the point of care may be desirable from the standpoint of encouraging equal treatment of all patients regardless of ability to pay,
if providers do not fully appreciate the lower liability risk, it might not affect their clinical approach to patients. **Thus, the partial extension of OTCA coverage contemplated by Oregon may not exert strong enough effects on providers to reduce defensive medicine.** Empirical evidence surrounding the benefits of providing liability protection (with or without reporting protections) to providers for a limited segment of their patients does not exist. Finally, indirect benefits to patients may come from the possible generation of greater trust in the physician/patient relationship if the threat of suit is diminished.

**Benefits to liability insurance companies.** Liability insurance companies may benefit significantly from this reform, if enacted alone. Even though the liability risk borne by providers caring for Medicaid CCO patients may be the same (or less) than the risk associated with caring for non-CCO Medicaid patients, OTCA extension would shift defense and compensation costs from the insurance companies to the State in these cases. As reviewed above in the provider benefit section, if the insurance companies do not pass these savings along to either the enrolling providers or to the entire population, the companies stand to gain.

The extent of the financial benefits the liability insurance companies would enjoy will depend on the number of claims and amount of payments shifted to the State, which is difficult to predict. Previous studies of closed claims from other states have found that Medicaid patients account for only a small share of malpractice claims—about 8% of all claimants and 6% of claimants who receive compensation (see Appendix for details). Presumably, not all Medicaid patients will be enrolled in CCOs. Our analysis of OMB data on claims filed over the period 2006-2009 showed that the total number of claims filed against physicians and physician assistants in Oregon over this 4-year period was 703, or an average of about 176 claims per year. This suggests that a generous upper bound on the potential number of claims to be shifted to the State through an OTCA coverage extension is about 14 claims per year, or about 11 claims that result in a payment (these estimates assume that 100% of Medicaid patients are CCO enrollees). **Because most malpractice claims will not involve Medicaid CCO patients, it appears that the prospects for the proposed OTCA coverage extension to substantially reduce the number of malpractice claims that insurers have to defend are quite limited.**

**Benefits to the State.** The potential benefits of the coverage extension to the State are theoretically relatively straightforward: it is hoped that the measure will **help ensure the successful deployment of CCOs in Oregon by attracting providers to participate.** How much this extension of coverage is needed to achieve the State’s goal, and how large an incentive for provider participation it would ultimately prove to be, remain unknown. As we have discussed, **providers may appreciate and respond to the perceived benefit of OTCA extension even if does not actually lead to much actual benefit.**

**C. Potential Costs and Adverse Impacts**

**Adverse impacts on providers.** Since OTCA coverage extension would be offered to providers in exchange for participating in a CCO and the OTCA coverage is free, there should be little to no cost for providers. One potential adverse impact arises if (1) patients
are more likely to file claims for compensation in the presence of OTCA coverage because they find it easier to sue the State than to sue their physician and (2) the filing or payment of the claim triggers a requirement to make a report in the provider’s name to the NPDB or other entity. In this case, the unintended consequence of the OTCA coverage extension is more reporting against covered providers. This possibility depends on what the state reporting requirements are specified to be and may be offset by reduced claim frequency if the CCOs prove to be safer models of care.

**Adverse impacts on patients.** Substituting the State for an individual defendant is likely to be of limited cost or adverse impact to patients. The right to sue is still preserved. **Damages limits will apply,** meaning that in theory, patients will be able to recover less in cases that do not involve wrongful death or prenatal or perinatal injury (which are now covered by Oregon’s $500,000 noneconomic damages cap). However, patients can appeal a capped award if they believe it to be inequitable under the circumstances. More importantly, as discussed earlier, **the OTCA damages limits are actually higher than most providers’ insurance limits and payouts in nearly all cases.** In the NPDB data we analyzed, there were only 34 claims paid in excess of $1 million over the period 2006-2010 and another 11 that settled at or just under $1 million. This suggests that few cases would be affected by access to a larger pool of compensation.

It is possible that extending the protections to providers may lead to **lower quality care** by removing the threat of financial risk or accountability, but as reviewed above, because the protection is not uniformly applied to all patients of any given provider, any enervation of the “deterrent signal” of tort law is likely to be minimal. Most of a provider’s patients will not be covered by the OTCA extension, and it strains plausibility to believe that a provider will be sensitive enough to different levels of liability exposure and familiar enough with her patients’ insurance arrangements to shift the quality of care she provides as she moves from patient to patient.

An additional concern may exist: **Would providing this sort of protection attract “bad apple” or less talented physicians to CCOs?** If so, can the system’s overall design still lead to safer and higher quality care? Insights may be gained by studying care at OHSU, VA hospitals,71 and other systems that function with no personal provider liability. Nevertheless, the answer to these questions remains unknown.

**Costs to the State.** OTCA extension may have at least two substantial costs or adverse impacts for the state. The first is **liability-related expenses that the State would not otherwise incur** for Medicaid providers rendering care in a private CCO. All the claims in which the State is substituted as a defendant represent a marginal increase in defense and compensation costs for the State. It is currently difficult to predict these costs because the structure of CCOs, the liability risk of CCOs, and the proportion of Medicaid patients who will enroll in a private CCO all remain unknown. However, it is useful to recall that all Medicaid patients together are estimated to account for less than 10% of malpractice claims and an even smaller share of paid claims—probably less than 15 claims per year in Oregon. These numbers get even smaller once one subtracts out Medicaid patients that do not enroll in any CCO and those who enroll in a public CCO.
The other potential cost to the state is one of **public trust**. By trying to provide an incentive or reassurance for providers to spur participation in CCOs, Oregon may inadvertently create the perception that a second, lesser tier of accountability exists for providers caring for Medicaid patients. In other words, the extension could create the public perception that when physicians care for Medicaid patients, they can take less caution, because the government will pay for the mistakes. This perception may not comport with the notion of treating all populations equitably.

**D. Conclusions**

As a means to promote provider participation with CCOs, Oregon is considering extending OTCA coverage to providers when they care for Medicaid patients that are enrolled in a CCO. There is little or no empirical evidence available with which to evaluate the likely costs and benefits of such a move, although some useful information can be learned from the VA’s experience with FTCA protection. Our best judgments as to the likely benefits, costs, and adverse impacts of the proposed coverage extension are summarized in Table 11.

At first glance, extending OTCA coverage may seem like a clear win for providers. However, closer examination reveals that the benefits for providers may be limited for a number of reasons: liability insurance companies may not pass along premium benefits to participating providers; because the OTCA protection applies to only a part of a provider’s panel, any liability premium benefits may be negligible and, moreover, at the point of care, providers may not know for which patients they are covered; and OTCA coverage may not protect providers from claims-related reporting.

If Oregon wishes to create a clear benefit for providers for participating in CCOs, it should couple the OTCA coverage extension with efforts to negotiate rate decreases from insurers to ensure that insurers’ cost savings are passed along to providers. Alternatively, the State might consider providing liability premium subsidies to participating providers rather than OTCA coverage. Oregon will also need to clarify or modify State claims-related reporting requirements.

An OTCA coverage extension may benefit patients by creating access to larger payouts because the State’s coverage limit generally exceeds that of privately insured physicians. However, the available data suggest that only a small number of claims in Oregon are paid at, near, or above the $1 million policy limit that most physicians carry, so this benefit may accrue to few claimants. Other potential benefits to patients remain murky—for example, whether the incentive leads to greater provider enrollment in CCOs and less defensive medicine, and whether CCOs lead to improved care for patients.

Benefits of OTCA protection may accrue to liability insurance companies as they would have to defend and pay fewer liability claims. These savings may or may not be fully passed on to subscribers. It is difficult to predict the size of the potential savings, but Medicaid patients do not account for a substantial proportion of malpractice claims. Lastly, although the benefits to the State remain unclear, the proposed OTCA coverage extension would require...
an additional investment on the part of the State to cover defense and indemnity costs for a greater number of claims. Again, however, we anticipate that only a small number of claims would be implicated, because Medicaid patients account for only a modest proportion of claims and not all Medicaid patients will be enrolled in CCOs. Nevertheless, the State would need to carefully consider how to provide sufficient funds to cover these expenses. This may be particularly challenging in the early years of CCOs when claiming rates among enrollees are difficult to predict.

Table 11. Summary of Effects of OTCA Coverage Extension

<table>
<thead>
<tr>
<th>Theoretical effect</th>
<th>Predicted magnitude of effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>To providers:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower insurance premiums</td>
<td>Unclear to what extent insurers' cost savings will be passed on in the form of lower premiums; may be practically difficult to do.</td>
</tr>
<tr>
<td>Less exposure to awards in excess of policy limits</td>
<td>Likely of little benefit because few awards are currently at or above typical policy limits.</td>
</tr>
<tr>
<td>Less emotional stress</td>
<td>Could substantially reduce emotional stress of litigation, but depends on how reporting to regulatory bodies is handled.</td>
</tr>
<tr>
<td><strong>To patients:</strong></td>
<td></td>
</tr>
<tr>
<td>Greater comfort suing the State</td>
<td>Of minimal benefit.</td>
</tr>
<tr>
<td>Access to larger awards</td>
<td>Probably would benefit few claimants.</td>
</tr>
<tr>
<td>Better access to care</td>
<td>Unclear how large an incentive for provider participation in CCOs it would be.</td>
</tr>
<tr>
<td>Less defensive medicine</td>
<td>Unlikely to have substantial effects on defensive medicine.</td>
</tr>
<tr>
<td>Improved physician/patient relationships</td>
<td>Effect could be substantial, but only if providers and patients aware of the OTCA coverage.</td>
</tr>
<tr>
<td><strong>To insurers:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower losses and defense costs</td>
<td>Effect is likely to be modest because few claims would be shifted to the State.</td>
</tr>
<tr>
<td><strong>To the State:</strong></td>
<td></td>
</tr>
<tr>
<td>Higher provider participation in CCOs</td>
<td>Unclear how large an incentive for provider participation in CCOs it would be.</td>
</tr>
<tr>
<td><strong>Costs:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>To providers:</strong></td>
<td></td>
</tr>
<tr>
<td>More reporting to regulatory bodies</td>
<td>Depends on how reporting is handled.</td>
</tr>
<tr>
<td><strong>To patients:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower quality of care</td>
<td>Little available evidence, but unlikely to occur.</td>
</tr>
<tr>
<td><strong>To the State:</strong></td>
<td></td>
</tr>
<tr>
<td>Increased claims and defense costs</td>
<td>Effect is likely to be modest because few claims would be shifted to the State.</td>
</tr>
<tr>
<td>Theoretical effect</td>
<td>Predicted magnitude of effect</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
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<tr>
<td>shifted to the State.</td>
<td></td>
</tr>
<tr>
<td>Public trust problem</td>
<td>Public may well perceive that providers are held less accountable when caring for Medicaid patients</td>
</tr>
</tbody>
</table>
IV. Joint-and-Several Liability Reform

A. Nature of the Reform

We have been asked to explore possible clarifications and limitations of Oregon’s rules concerning joint-and-several liability (JSL) that might support the implementation of CCOs. Our understanding is that there are concerns that the move to CCOs may somehow create greater joint liability risk than is presently the case for providers. Therefore, there is a question as to whether the JSL reform statute should be revised to prevent this from occurring.

As we discussed above in relation to OTCA coverage extensions, concerns about increased liability for practitioners arising from CCO participation are probably misplaced. Neither the risk of sole nor the risk of joint liability is likely to be very different from what practitioners currently encounter, and CCOs may improve quality of care in ways that actually reduce malpractice injuries and claims.

It is important to recognize that unlike the proposed OTCA coverage extension, the JSL statute does not affect the likelihood that a practitioner will be held liable for negligence. Rather, JSL relates only to how damages will be paid among multiple defendants who are found liable for the same injury. In other words, a state’s JSL rule affects a practitioner’s financial exposure conditional upon being found liable for an injury.

Oregon’s JSL Statute

Oregon has enacted a statute that modifies the common-law JSL principles that normally apply when multiple defendants are found to have contributed to a single negligent event, but only for defendants minimally at fault and defendants at no greater fault than the claimant. At common law, where multiple defendants are found liable for an injury, the plaintiff can collect the 100% of the judgment from any one of those defendants, regardless of that defendant’s share of the fault relative to the other defendants. Thus, if a jury finds Physician A to be 40% liable and Hospital B to 60% liable in a case, the claimant can collect the entire amount from the hospital if the physician proves unable to pay. Indeed, the claimant could collect the entire amount from Hospital B even if Hospital B were only 1% at fault. The hospital would have the right to seek restitution from Physician A, but that can involve time and expense.

Oregon’s JSL statute partially modifies this common-law rule. The statute specifies that, immediately after a successful award judgment, a judgment will be entered against each defendant only for the amount of damages that is proportional to each defendant’s fault. Thus, in the above example, Hospital B would only have to pay 60% of the award. However, the elimination of JSL is not complete in Oregon. Within one year after the judgment and only upon the claimant’s filing of a motion, if damages are uncollectable from one party, a court may reallocate damages to any remaining parties, provided that the remaining party’s percentage fault was greater than 25% and greater than that of the claimant. In the case example above, only after filing a motion within a year after the judgment, a claimant would
be able to collect 100% of the judgment from either Physician A or Hospital B. However, if Hospital B’s share of liability had been only 20% rather than 60%, Hospital B could not be made to pay more than its share. Just as under the common-law rule, under Oregon’s law, parties paying more than their share have right to seek restitution from other defendants.

**JSL Concerns for the CCO**

To address concerns about JSL in the context of CCO participation, it may be helpful to clarify what types of liability would *not* be affected by JSL principles. To do so requires reviewing how legal liability can attach to entities like a CCO. There are circumstances in which sole liability (either direct or vicarious) could attach to the CCO. Direct liability could arise through either principles of “corporate negligence” or “enterprise liability” if, for example, a CCO operated a hospital or clinic that was too understaffed to properly provide services. In this case, if an error occurs due to understaffing, the CCO could be directly liable for that injury. In this situation, there is no need to consider JSL issues because the CCO alone is liable. Similarly, a CCO might be liable for negligently “credentialing” a provider—meaning, a plaintiff proves that the CCO should not have contracted with Provider B because it should have known that Provider B was not a competent provider. This situation is not fundamentally different from the current ability of patients to hold hospitals and managed care organizations liable for negligence in hiring and contracting with providers, though it is possible that the tighter degree of integration and CCO control over care could intensify CCOs’ potential liability compared to what managed care organizations now have. However, note that this is still not a JSL issue.

Vicarious liability is another method in which direct liability may attach to a CCO. For example, if a CCO employs a lab technician who makes a negligent error, the CCO could be vicariously liable for this error. In this case, JSL principles will not need to be applied because the employer is held solely accountable to the negligent errors of the employees. It is not a matter of joint liability. The employer may attempt to seek indemnity from the employee, but even if possible, this is often difficult to do. In fact, in Oregon, employers rarely if ever seek reimbursement from negligent employees, and in many cases, are contractually forbidden to do so.²²

However, there are examples in which a CCO may be *jointly* liable for negligence along with another party, such as a practitioner with whom it has contracted. For example, a contracting provider may order a test that is to be performed by the CCO. The CCO performs the test, but does not transmit the results to the provider. The provider, despite ample opportunity, does not inquire or follow up on the test results. Harm then results to the patient. The event is determined to be negligent, caused by both the CCO and the provider. Let us assume that liability is assigned 20% to the CCO and 80% to the provider.

In this case, the first step in the analysis of who owes what in damages would be to assess whether the provider is deemed to be an agent of the CCO. If so, the CCO would be held vicariously liable for the acts of the provider and there is no need to apply JSL principles. In the case of a public CCO, the OTCA would apply. If the provider is not an agent of the CCO, the Oregon JSL reform statute would apply. This would protect the CCO from the
becoming the “deep pocket” by limiting its liability to its allocated 20% share. If damages proved to be uncollectable from the provider, the Oregon JSL reform rule would protect the CCO from JSL because the CCO is less than or equal to 25% at fault. However, if the CCO had been deemed greater than 30% at fault, the claimant could then seek the entire damages (if uncollectible) from the CCO.

A legal analysis will need to be conducted to see how the Oregon JSL reform statute applies if the CCO is public and the provider private, especially if a private provider incurs liability greater than the statutory limits enjoyed by the state.

**JSL Concerns for Providers**

Participation in CCOs may also raise liability concerns for providers. The analysis for providers should be conducted similarly to that for CCOs. First, was the provider solely (directly or vicariously) liable? Examples of direct liability include prescribing the wrong antibiotic or making an error during surgery. Examples of vicarious liability include being held responsible for the acts of employed office staff. In these cases, the liability risks of the responsible provider should not be different than that of a provider caring for a non-CCO patient. Not only are liability risks similar, they are not affected by JSL principles.

We now turn to circumstances in which providers may have concerns over joint liability. Using the examples from the OTCA section above, the liability risk that providers might see here is also likely not very different than a provider practicing with or referring to other doctors, whether in a solo or group practice or employed (i.e., working for a clinic or hospital). For example, consider again the example of the surgical patient who is under the care of both a cardiologist and a surgeon. If the patient’s blood “thinning” medications are not properly managed, leading to injury, both physicians may be at fault. However, the liability risk for the physicians is not likely to be different whether the patient is in a CCO or not.

Notwithstanding the lack of elevation in joint liability risk, practitioners may feel that they do not have enough control over the selection of the other providers in the CCO. Perhaps the CCO more tightly controls who they can refer patients to, relative to the open, fee-for-service environment. In the above example, the cardiologist may lack confidence in the surgeon but have little alternative but to refer the patient to him and accept the risk of joint liability. If the cardiologist is held 30% responsible and the surgeon, 70%, the cardiologist, under Oregon JSL rules, can eventually be held liable for the entire judgment. As a practical matter, this should not happen often, however, because Oregon physicians almost universally carry liability insurance coverage and awards very rarely exceed their policy limits.

**On balance, participation in a CCO should not create much, if any, additional financial risk for individual providers relating to joint liability. To the extent that it does elevate risk, the current JSL reform statute provides fairly good protection.** Providers that are 25% or less at fault, or at less than or equal fault than a claimant, cannot be held jointly liable at any time. Providers with a greater share of fault can be held liable for damages.
attributable to other defendants, but this may rarely occur, given the prevalence of adequate levels of liability insurance.

**B. Potential Benefits**

Modifying the Oregon JSL reform statute to close the exceptions for defendants whose fault is greater than 25 percent or greater than that of the claimant may appear to be of benefit to providers. The theoretical benefit is to assure that CCO participation does not elevate practitioners’ financial risk for joint liability. In reality, however, this benefit may be minimal. One reason is that claimants may infrequently avail themselves of JSL principles against physicians. We were unable to obtain any hard data about the frequency with which physicians have been asked to contribute more than their share under Oregon’s JSL statute, but a representative of one major liability insurer could not recall any case in which the JSL statute had been used to recover uncollected damages from a physician insured in the private sector.

A second reason is that JSL reform, in general, tends not to have significant benefits. There is a fairly large body of well-designed studies in the scholarly literature that have examined the effects of eliminating the common-law JSL rule on a range of outcomes. Although study findings on some points have been somewhat mixed, the weight of the evidence suggests that eliminating JSL has no significant effect on claims payouts, defense costs, liability insurance premiums, physician supply, or quality of care. Evidence concerning its effects on claim frequency is too limited and equivocal to draw a firm conclusion. Oregon’s proposed JSL reform represents less than a full JSL reform, since JSL has already been partially abolished, which suggests that desired effects are even less likely to materialize.

The greater concern that individual providers may have about participating in CCOs may relate not to financial liability for damages, but simply to the risk of being named in more claims and subjected to all of the other unpleasant aspects of litigation. Such fears may stem from providers’ worry that CCOs are not contracting with appropriate personnel. However, the fix to this concern lies not with JSL reform, but rather with steps and protections that help minimize claims-related reporting.

**C. Potential Costs and Adverse Impacts**

Given that Oregon has already partially eliminated JSL, the marginal costs of moving to complete abolition should be modest. The potential cost is simply the risk to patients of being unable to collect a full damages award because one or more defendants is unable to pay. Again, because Oregon providers tend to be well insured, this risk would appear to be fairly minimal, but data on how often this situation occurs are unavailable.

**D. Conclusions**

In light of the additional relationships that the CCO structure may create, CCOs and individual participating providers may have heightened concerns about liability (Table 12).
The current Oregon JSL reform statute provides a limited form of protection from a “deep pocket” becoming financially liable for the negligence of others. A CCO structure is not likely to introduce any new liability risks or heighten the risk that particular defendants are unable to pay their portion of a damages award.

Table 12. Summary of JSL Issues Surrounding CCOs

<table>
<thead>
<tr>
<th>Liability Risk</th>
<th>Risk theoretically affected by CCOs?</th>
<th>Potential JSL statute modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole liability risk (direct or vicarious) for CCOs and providers</td>
<td>Not likely to be materially different. Possibly lower, if CCO model leads to safer care.</td>
<td>None needed. Not a JSL issue.</td>
</tr>
<tr>
<td>JSL risk for CCOs</td>
<td>Not likely to be materially different. Possibly lower, if CCO model leads to safer care.</td>
<td>How are JSL rules applied if CCO is public and co-defendant private and vice versa?</td>
</tr>
<tr>
<td>JSL risk for providers</td>
<td>Financial risk is not likely to be materially different, though providers may have concerns about being jointly named in more claims, if CCOs lead to tighter networks and contracts with less competent personnel than providers would otherwise partner.</td>
<td>No JSL statute modifications needed. Explore alternatives to current claim reporting requirements when defendants are minimally at fault. Clarify how JSL rules are applied if one defendant is public the other private</td>
</tr>
</tbody>
</table>

Whether or not the risks are actually significant, CCOs and providers may have lingering concerns. If Oregon wishes to address these concerns, the State could consider making the JSL reform statute a complete, instead of partial, elimination of the common-law JSL rule. The state may consider modifying the JSL reform statute to also protect defendants whose fault is greater than 25% or greater than that of the claimant from being held responsible for the entire judgment. It may also be helpful for the State to clarify how the JSL reform statute operates if one defendant is public and the other private. However, further JSL reform is likely to be of limited financial benefit because most physicians purchase liability coverage with limits that are rarely exceeded. Lastly, if the State is trying to address non-financial concerns that providers may have over being named in more suits, it should explore modifications to claim-related reporting requirements for providers minimally, or not, at fault in a joint liability case.
V. Administrative Compensation System

Our analysis of administrative compensation systems (ACS) is based on several studies conducted by our research group at Harvard University over the past decade and a small number of studies by other scholars. This work has aimed to identify optimal design features for a U.S.-based ACS and the likely effects of an ACS on key liability and clinical-care outcomes through study of analogous medical injury compensation systems. Specifically, we have focused on the comprehensive schemes that have long operated in New Zealand, Sweden, Denmark, and other Scandinavian countries and the “no-fault” ACS for compensation of severe, neurological, birth-related injuries that exist in Florida and Virginia. There are, however, no existing examples of the type of ACS envisioned in the Oregon reform proposal operating in the U.S. today that could inform our analysis here.

Our previous research into the ACS concept has led us to endorse the concept in a number of publications. In the analysis that follows, however, we present a balanced assessment of the available data concerning ACS and the benefits, costs, and adverse impacts such a system might involve. We draw on two previous reports on this topic we have prepared for other interested groups of policy makers.

A. Nature of the Reform

In its 2010 report, “Oregon Medical Liability Task Force: Report and Recommendations,” the Oregon Medical Liability Task Force identified 3 major patient-centered goals for liability system reform:

1. The medical liability system becomes a more effective tool for improving patient safety;
2. The medical liability system more effectively compensates individuals who are injured as a result of medical errors; and
3. The collateral costs associated with the medical liability system (including costs associated with insurance administration, litigation, and defensive medicine) are reduced.

Collectively, the three goals target many of the known shortcomings of the currently liability system.

The tort liability system is designed to compensate injured individuals and deter substandard care. Ostensibly, this should mean that the system helps to ensure patient safety, but the effectiveness of the system’s ability to deter unsafe care has long been questioned. Moreover, many experts today assert that the assigning fault to providers is not fully compatible with more a more modern approach to patient safety that recognizes that even those exercising the utmost care will make errors; consequently, health care systems, not just individuals, should be held accountable.

Compounding the concerns over deterrence are data demonstrating that when negligent injuries occur, patients are rarely compensated. Further, for those who do access compensation, it often comes at a great cost. Suits take a long time to resolve and the
litigation process is expensive. Only about 40 to 46% of malpractice insurance premium dollars reach patients; the remainder is spent on insurance overhead and litigation costs.

In addition to the inherent problems within the liability system, there are also many collateral costs or secondary effects. The most notable collateral cost is perhaps that of defensive medicine. Though extremely difficult to quantify, there is fairly widespread agreement that defensive practices—defined as ordering additional services or avoiding high-risk patients or services for the primary purpose of reducing liability risk—exist and are highly prevalent. Estimates of defensive medicine costs vary widely. A recent estimate found that about $45.6 billion of health care costs are due to defensive practices, totaling a small proportion of health care spending (about 2%), but a large number nonetheless.

Advocates of ACS proposals believe that they will address each of these flaws in the tort liability system. An ACS would be a far-reaching transformation of the U.S. approach to medical injury compensation. Before considering the benefits and problems potentially associated with implementing an ACS, it is important to understand the basic design of such a system. Many different proposals have been advanced under the rubric of an ACS. The fundamental identifying characteristic of all such proposals is that they describe a nonjudicial process for making determinations about eligibility for medical injury compensation. Beyond that, there are many variations in the key design features of the proposals.

We begin with a review of the major design decisions to be made in constructing an ACS and the potential options for each. We then identify the options that most scholars of ACS, including our group, believe are optimal for experiments with ACS in the United States. Next, we discuss the benefits, costs, and adverse impacts that may be associated with an ACS with those design features. We conclude with a summary and some reflections on the political feasibility and constitutionality of the proposal.

**Key Design Choices**

Design choices would need to be made about several key elements of an ACS. These choices would affect how well an ACS could achieve Oregon’s 3 main goals of improving patient safety, better compensating patients, and reducing collateral costs. Only a few design options would result in large impacts on patient safety. Several of the design options, however, would likely result in significant improvements in patient access to compensation. Collateral costs, including overhead and defensive medicine, are also fairly susceptible to many of the design options.

As we evaluate design, we consider 5 questions (the first 3 of which match the Task Force goals) that the Task Force recommended be asked about any proposal to change the medical liability system:

1. What is the likely effect of the proposal on patient safety?
2. What is the likely effect of the proposal on access to compensation for patient injury?
3. What is the likely effect of the proposal on health care costs?
4. Is the proposal feasible?
5. Can the proposal be implemented without statutory or constitutional changes? If not, what changes are necessary?

**Element #1: Claim filing procedure.** The rationale for moving compensation determinations out of the courts is that it may address many of the challenges and inefficiencies that arise from the use of the court system. First, an administrative filing procedure could make it easier for patients to request a review of and compensation for their injury. In the current tort system, patients may file *pro se*, but will likely have difficulty prevailing in the case without the help of an attorney. Legal representation may be difficult to obtain, however, if the case has low expected damages, difficulties of proof, or other “triability” issues that discourage attorneys. An ACS, because it would involve a simpler process and would not require litigants to present expert testimony, would make it feasible for patients to bring claims without legal representation and may resolve some of the issues that would prevent attorneys from being interesting in accepting certain kinds of cases.

For an ACS, the main claim filing options include: (1) requiring a physician (but not necessarily the involved physician) to file on behalf of the patient; or (2) imposing no requirement concerning who files. The latter would allow patients or family members to file on their own or with legal representation. Both options have advantages. Requiring that a physician file or help file the claim can act as a coarse filter to assure that filed claims are meritorious. It can also help speed the claims process by making the initial compensation requests more specific. However, as much as physician filing may help discourage nonmeritorious claims, this step may also act as a barrier preventing meritorious claimants from coming forward.

Foreign nations that have implemented ACS systems for medical injury have taken divergent approaches to filing requirements. New Zealand requires a physician (any physician) to file for the patient, while Sweden and Denmark allow patients to file on their own but allow physicians to help. None require that a provider file a claim when she becomes aware of a potentially compensable injury, although this could help improve patient access to compensation; the decision to file lies with the patient or family.

No data are available to show the differential impact of the Scandinavian and New Zealand systems filing requirements on the number of claims filed. Indeed, administrators in all of those systems still voice concern that an insufficient number of compensable injuries go without a request for compensation. Nevertheless, on a per-capita basis, the foreign ACSs appear to attract more claims than the United States (750-2000 claims per million persons in the foreign ACSs vs. 200 claims per million persons in the U.S.).

**Element #2: Claim adjudication.** In both the courts and an ACS, claims adjudication is carried out by a neutral adjudicator. However, in ACS the jury is replaced by a claims adjudicator of some type. Most proposals—including proposals for so-called “health courts”—call for this adjudicator to be a judge or panel of other adjudicators who specialize in the evaluation of malpractice claims. Some, such as the “medical courts” model advanced by medical professional associations, call for a physician-judge.
Since few claims are decided by a jury in the tort system—about 85% (and a higher percentage in Oregon) are settled without a jury verdict—this design feature does not represent the most radical change associated with an ACS, although it is often framed as such by opponents of the proposal. The more significant effect would come from how an ACS gathers facts and expert opinions. Within an ACS, instead of using an adversarial model to investigate and determine the facts associated with a claim, a claims adjudicator and the adjudicator’s staff request the appropriate medical records and conduct the necessary interviews. Then, relying on (1) the written record, (2) precedent, and (3) opinions from neutral experts retained by the ACS, the adjudicator arrives at a compensability determination.

The neutral fact-finding process is probably the main reason that savings on administrative costs are achieved in an ACS. Reliance on a limited number of neutral experts per case can help avoid the costs frequently associated with a “battle of the experts.” The validity and weight of the ACS expert determinations are further strengthened by the system’s use of precedent—past decisions in previous cases involving similar injuries. ACS proposals generally contemplate that adjudicators will prepare a written decision that is stored in a searchable database and accessible to decision makers in future cases. This can help ensure that decisions, even if difficult for patient and providers to understand or accept, are at least consistent and predictable. The consistency can help bring a sense of fairness around decisions.

Foreign ACS all utilize neutral claims adjudicators and a nonadversarial investigative process to resolve claims. System overhead costs (as a percentage of total costs) for the adjudication process run about 16-17% in Sweden and Denmark in 10% in New Zealand, compared to 60% in the US. To put this in perspective, we estimate that approximately $44.5 million was spent on administrative costs of the medical liability system in Oregon in 2010, applying the 60% figure to total direct earned premiums of $74.1 million. If administrative costs were reduced to 17% of total premiums, the annual savings would be nearly $31.9 million.

**Element #3: Compensability criteria and determinations.** The standard used to separate compensable from noncompensable adverse events will be one of the most important aspects of ACS design. Moving away from a negligence standard is not necessary for an ACS to operate or for its other functions. However, the ease with which patients can meet, and adjudicators can apply, a chosen standard carries significant implications for patient access to compensation, administrative efficiency, and compensation costs. The choice of standard can also determine how readily patient-safety-related information can be captured. In addition, the compensation standard can affect public perception about how effectively the system works, potentially influencing how often patients will access the system.

Numerous options for the compensation standard exist. Standards that are more difficult for claimants to meet than the negligence standard are not likely to be desirable because they will conflict with the Task Force goals. Stricter standards can be just as challenging to apply as negligence, and will not improve patients’ access to compensation. For example, determining whether gross negligence was present in a case is not likely to be a much easier
determination than ordinary negligence. Even if it is, the stricter standard would fail the second goal by making it more difficult for patients to obtain compensation.

Maintaining the negligence standard is a viable option, but its difficulty in application makes it less desirable than alternatives. Furthermore, keeping this standard would not advance the goal of improving access to compensation. The concept of negligence is also out of step with current thinking about patient safety, which focuses on the concept of preventable harm rather than negligent harm. This distinction can give rise to two challenges. Patients might lose faith in a system that deems an injury to be preventable but not compensable, and gaining providers’ buy-in to an ACS (e.g., their willingness to assist patients in bringing claims) would be extremely difficult in a system that makes negligence determinations, which are much more stigmatizing than judgments that a harm could have been avoided.

Perhaps because of these challenges, the 2 most commonly proposed standards for an ACS are both broader than negligence: “avoidability” and “no fault.” Both of these standards are already in use internationally. New Zealand currently employs a “no-fault” standard for compensating medical injury. This means that if the injury was caused by medical treatment (note that causation is still required) and the injury not “necessary and ordinary” (i.e., not a known complication of treatment), it is compensable. No determination about negligence or preventability is made. New Zealand’s standard has resulted in over 65% of claims being compensated.91

If a no-fault standard is felt to be too broad or too large a step, an alternative that is broader than negligence but not as expansive as “no-fault” is “avoidability.” The avoidability standard, briefly, is one that compensates injuries that would not have happened in the hands of the experienced or “best” specialist in the relevant specialty and the optimal system of care.73 Avoidability encompasses a set of adverse events that is broader and more easily identifiable than negligence in the tort system, but narrower than the group of all adverse outcomes that are causally linked to medical treatment. Epidemiological studies suggest that about 30% of hospital adverse events are attributable to negligence and that 55% of hospital adverse events are preventable (a reasonable estimate of avoidability).92, 93

The concept of avoidability hews closely to the patient safety concept of preventability. For example, making a determination about whether a ureteral ligation during uncomplicated hysterectomy is compensable will be easier under an avoidability standard than a negligence standard. During a claims investigation, once the circumstances of the surgery (including the course of the ureter) are determined, the factfinder will have to determine whether the compensability standard was met. This determination is easier to make with avoidability, because most would agree that in the “best” hands this would not happen in the vast majority of cases, whereas with negligence, determining whether the provider was “unreasonable” in this case is much harder to do.

Broader standards may be easier to apply, but are also not without difficulties in application. For example, the use of the avoidability standard will not make all determinations easier because facts may still be limited and because determining preventability is not always an easy judgment.94 Even with a broad “no-fault” standard, determining what is “necessary and
ordinary” to treatment can still be challenging. Using the case example above, a ureteral ligation during an uncomplicated hysterectomy would clearly not be “necessary and ordinary” to treatment, and thus, would be compensable. However, whether a deep venous thrombosis (DVT) that occurs after hip replacement surgery despite proper DVT prophylaxis is an injury “necessary and ordinary” treatment would be a tougher determination. In addition, causation still remains a vexing challenge with all standards—the controversy over the contribution of obstetrical care to causation of cerebral palsy is a leading example of this that has made for difficult decisions in the Florida and Virginia birth injury compensation programs.73

To further improve the claims resolution process, another mechanism has been proposed for use in ACS: “accelerated-compensation events” (ACEs), also called “avoidable classes of events”. ACEs are defined as medical injuries that are commonly seen in malpractice claims and that should not normally happen with safe care.95-98 A group of experts can periodically review data about malpractice claims and common injuries and make a determination about which injuries meet this standard. An illustrative example is that of a retained foreign body, such as a sponge, during a non-emergent operation. Lists of these ACEs can be used by adjudicators in the ACS to make expedited decisions in cases of that type. These events are deemed presumptively compensable, although adjudicators have the latitude to determine that exceptional circumstances apply that remove them from the realm of compensability. The use of ACEs not only speeds compensation decisions in many cases, but also reduces the administrative costs of investigating and adjudicating claims. The information generated by the system can also be used for quality improvement purposes, since ACEs are thought to be good indicators of where care systems have failed, resulting in serious harm to patients.95

Determining an ACE generally involves the application of three criteria.99 First, the injuries are at least 70-90% preventable as a class. Second, the injuries are readily detectable, meaning readily specified, with clear boundaries distinguishing them from other adverse outcomes. Third, selection of the injuries will not give rise to perverse incentive effects in medical decision making, such as avoiding certain medically necessary services. Smaller feasibility studies have demonstrated that in obstetrical injuries, ACEs can increase the number of paid claims (from 25% to 50%), capture high-severity events, and lower administrative costs for resolving injuries that are determined to be ACEs.96

When considering a compensation standard broader than negligence or the use of ACEs, the greater number of compensable events undoubtedly raises concerns about total system costs. However, it is important to realize that the compensation standard should not be the only feature changed when adopting an ACS. The compensation costs associated with paying a larger number of claims can be offset by other features of the system, such as a nonadversarial factfinding process, which can reduce overhead costs. We discuss other potential offsetting features below, including smaller average compensation awards, collateral-source offsets, and reductions in the number of injuries due to more effective patient safety improvement efforts. International experience suggests that patients are likely to be satisfied with smaller “pain and suffering” awards if they have ready access to compensation for economic losses.73 Other methods to lower costs may also be deployed by employing collateral-source reform rules.
Based on the Task Force’s 3 main goals of improving patient safety, improving patient access to compensation, and reducing collateral costs, it appears that the avoidability standard with the use of ACEs is the best fit for an ACS in Oregon. A “no-fault” standard would also advance these goals, but the attendant increase in the number of compensable claims may involve too great a cost increase to be politically feasible. A move to avoidability would also raise cost concerns, but they are potentially more tractable, depending on decisions made about the system of financing and the size of allowable awards. Use of the avoidability standard with ACEs will require statutory reform, but is not likely to cause constitutional problems, since it expands rather than restricts patients’ access to a legal remedy.

**Element #4: Relationship of the system to other accountability structures.** Today’s approach to patient safety calls for a “just culture”. A just culture does not mean “no blame” or “no accountability” for all errors or adverse events. Rather, when an adverse event occurs, the focus should be on how the system could have prevented it. This holds true for events that may have resulted from provider negligence. Individual accountability should be reserved for cases in which despite adequate notice and training, practitioners fail to adhere to proven or validated practices. In these cases, the penalties should also be fairly and proportionately applied.

Commentators and experts have often pointed to the conflicts between patient safety principles and the current liability system. Physicians may feel that they are assigned blame or a “black mark” on their record simply by dint of being named in a suit, particularly when they are required to report asserted claims to credentialing boards when applying for privileges, insurance companies when applying for liability coverage, and the state board of licensing when applying for or renewing a medical license. The sentiment of feeling blamed or punished may be even greater when claims are settled on behalf of a physician, as that also triggers reporting to the NPDB.

If an ACS is designed to generate and compensate a greater number of injuries and claims, maintaining current claims-related reporting requirements is likely to be a significant barrier to physician buy-in. Overcoming this barrier by simply removing all reporting requirements as part of a move to a systems-approach to safety is not a viable option. In fact, safety experts agree that methods to assure that providers feel personally accountable are still needed to ensure high quality care. Patients also desire some level of personal accountability when some harmful errors occur.

A viable solution to this problem can be found in how the foreign ACS function. In the Swedish system, claims investigations are conducted solely for the purposes of compensation and safety assurance. These investigations do not lead to provider discipline. If a patient wishes for the provider to be investigated for possible disciplinary action, a separate filing with the appropriate disciplinary body is necessary. The two systems are administratively separate and do not share information. Perhaps as a result of this separation, a high proportion of providers are willing to help patients file claims for compensation.
New Zealand arrived at this arrangement through hard experience. Prior to 2005, New Zealand had, among its compensation criteria for medical injury, a “medical error” standard that was very close to the negligence standard. When such a finding was made by the compensation system, it triggered mandatory review by the relevant disciplinary board. This created provider resistance to the compensation system and ultimately led to the decision to stop using medical error as a compensation standard, as well as to separate the compensation and disciplinary processes. Now, the compensation system only makes a report for disciplinary investigations in cases where there is felt to be a high “risk of harm to the public” from an ongoing problem.

If Oregon wishes to adopt an ACS that is designed to capture and compensate more claims, experience from foreign systems demonstrates a need to delink the compensation process from other processes for ensuring accountability and physician quality, as New Zealand and other countries have done. This would necessitate reconsideration of current reporting requirements relating to malpractice claims.

**Element #5: Damages awards.** One of a compensation system’s main functions is to provide patients with fair compensation for their injury-related losses, which may be both economic and noneconomic. Like the tort system, an ACS would provide compensation for types of damages. But because an ACS would have more centralized decision making than the jury-based tort system, it holds out the prospect for creating rules that result in awards that are more equitable across cases and that reflect shared, deliberative social judgments about how much we wish to spend on medical injury compensation.

ACS proposals envision that the system would award full or nearly full compensation for economic losses, including medical expenses, lost wages, and household production, as well as projected future expenses resulting from the injury. Particular design options include determining whether (1) awards will provide salary replacement at the 100% level, or something lower (as many disability insurance schemes do); (2) whether a “deductible” period of lost work time would apply before a person becomes eligible for compensation; (3) whether medical expenses awards would be offset by collateral sources, such as health and disability insurance; and (4) whether losses would be compensated in a lump sum or through periodic payments. Most states have worked through decisions about economic loss compensation for ACS in the context of workers compensation and no-fault auto insurance systems.

The epidemiology of medical injury suggests that including a deductible period (which would exclude many low-severity, temporary injuries from compensation for economic losses) would result in significant cost savings for the ACS. However, this would clearly impair patient access to compensation for injuries that may be the easiest to compensate. A collateral-source offset rule may also be cost saving, by shifting expenses such as medical expenses to health insurers. Empirical evidence on collateral-source rule reform does not clearly show a drop in medical liability costs in our tort system, but this experience of the jury-based tort system is not directly exportable to an ACS. The experience of foreign ACS, which in effect utilize collateral-source offset because they make the medical injury compensation scheme a secondary payer to other sources of coverage such as social
insurance, demonstrates that the average award for injuries can be much lower in systems that do not cover medical expenses. The average award in Sweden is US$ 20,000, Denmark, US$ 40,000; and in New Zealand US$ 4,450.91

The decision as to what entity should bear the cost of medical expenses should take into consideration how the two options affect incentives for patient safety improvement. If costs are borne by health insurers, health care providers will have a dampened financial incentive to avoid injuries, unless the health insurers find mechanisms to financially penalize the providers. For example, in an effort to induce safer care, the Centers for Medicare and Medicaid Services has implemented no-pay policies for several hospital-acquired conditions. If medical expenses are borne by the defendants’ liability insurers, incentives may be given to providers by adjusting premiums based on claims experience, participation in safety-related training activities, or implementation of safety-related structural changes. Evidence for which method is most effective does not exist, but both models hold theoretical promise.

Decisions on how to compensate noneconomic losses will involve more difficult choices. One option is to simply leave these determinations up to individual adjudicators with no guidelines, which is essentially how the tort liability system operates. However, valuations of noneconomic damages would ideally be made using methods that are explicit, rational, and consistent. This would promote equity and predictability in awards and help to control system costs.

A variety of scholarly analyses of noneconomic losses have pointed to a schedule or sliding scale of noneconomic damages as a desirable method of valuing noneconomic loss in an ACS.111-115 This approach would involve creation of a matrix of levels of injury severity and assignment of a range of dollar values to each cell in the matrix. The adjudicator would then select an amount for noneconomic damages that falls somewhere within the range, depending on the specific facts of the case.

The tiers of the matrix could be constructed using an existing injury severity scale, such as the one developed by the National Association of Insurance Commissioners (NAIC).112 The NAIC scale is used widely by insurers to evaluate the severity of malpractice claims. The scale is as follows:

1. Emotional disability only: fright; no physical damage
2. Temporary insignificant: lacerations, contusions, minor scars, rash; no delay in recovery
3. Temporary minor: infections, missed fracture, fall in hospital; recovery delayed
4. Temporary major: burns, surgical material left, drug side effect, brain damage; recovery delayed
5. Permanent minor: loss of fingers, loss or damage to organs includes non-disabling injuries
6. Permanent significant: deafness, loss of limb, loss of eye, loss of one kidney or lung
7. Permanent major: paraplegia, blindness, loss of two limbs, brain damage
8. Permanent grave: quadriplegia, severe brain damage, lifelong care, or fatal prognosis
9. Death

An additional resource for evaluating injuries on the high end of the scale is the American
Medical Association’s *Guides to the Evaluation of Permanent Impairment*, but this has been criticized.117

An alternative approach would be to base the injury tiers on some type of quality-of-life measure.112 A significant body of scholarship in the decision sciences has developed methods for quantifying the utility losses associated with different health states.112 The utility scales are typically based on surveys of physicians and/or the general public. One example of such a scale is the Injury Priority Ratings, which were developed and refined through a series of studies supported by the United States Department of Transportation.

Formulation of the severity tiers would define the relative values of a range of injury types commonly seen in claims—for example, a decision that an injury of NAIC level 8 should receive 1.4-1.6 times as much as a level 7 injury. The next step would be to determine the dollar value ranges assigned to each tier. This could be accomplished by through expert, political, or public deliberation about (1) what constitutes reasonable compensation for the various levels of noneconomic loss; and (2) what the total costs of the compensation system should be limited to.

Dollar values in a damages matrix could also be designed to respect an existing cap on noneconomic damages in a state, or could be designed to replace a flat cap. Given the equity concerns associated with a low-dollar, flat cap, it may be desirable not to stay within it.41, 112 It should be noted that the total cost of noneconomic damages theoretically could be lower under a schedule than under a flat cap even if the maximum allowable award under the schedule is higher. This is because the matrix could result in limits on a great number of claims that fall below the trigger value for the flat cap. To the extent that scheduling is seen as a cap or caps are applied, constitutional considerations will apply.

The Oregon Task Force suggested that among the important design decisions for an ACS would be to determine how the system would handle the following 3 specific types of injury: injuries resulting in death, injuries uncertain in duration or extent, and injuries that may also involve pharmaceutical- or device-related claims. Although some might question whether an ACS should pay death benefits, if the goal of the ACS is to compensate injured patients and families and improve patient safety, it follows that the system should provide do so. By providing a reason for families to report potentially preventable deaths, the system would be more effective at collecting safety data on grievous injuries. Families would also be compensated for potentially very significant losses related to the death of a household member, such as lost wages, as they are in the tort system.

For injuries that are uncertain in duration or extent, structuring compensation as periodic payments and requiring periodic review by the ACS is likely the best option. This is how New Zealand’s ACS and the no-fault system of compensation of birth related neurological injuries in Florida handle such cases.78,118 By routinely reassessing injuries, the system can ensure that economic damages neither overcompensate nor undercompensate claimants. This also allows predicted costs of medical care, non-medical care such as home care or skilled nursing care, and lost wages to be paid by the system on an ongoing basis.
For injuries that involve pharmaceutical- or device-related claims, injuries resulting from a health care provider’s misuse or of drugs or equipment should be handled by the ACS. These types of injuries result from improper care delivery by the provider (e.g., inappropriate dosing of a blood “thinner” or incorrect use of a cautery device) and are essentially professional malpractice claims. Claims that involve pharmaceutical or device defects, on the other hand, are different. Since drug or device defect claims do not necessarily assert professional medical malpractice, they should not be adjudicated in the ACS.

In summary, based on the Oregon Task Force’s goals of improving patient access to compensation, both economic and noneconomic damages should be available in an ACS. Taking feasibility and cost into consideration, the state will need to consider what cost saving-measures should be applied to processes of determining awards. Key decisions include whether deductibles will be applied, how to handle collateral sources, and how to compensate noneconomic loss. This last decision is the most important and the most difficult, politically and constitutionally.

**Element #6: System financing.** Several options for ACS system financing exist. This choice should be driven by the key objectives of creating optimal incentives to improve patient safety, fairly compensating patients, and reducing collateral costs of liability.

Options for system financing include: (1) a general tax (social insurance model), (2) a tax on employers, (3) a health insurance or care surcharge, (4) a tax on health care providers (e.g., replace private liability insurance with “premiums” paid to the ACS), and (5) retaining the current system of private liability insurance and having liability insurers finance the ACS. Further, each of these options could be selected for financing of compensation costs, financing the administrative costs of running the system, or both.

Foreign ACS have taken different approaches to financing. New Zealand’s system is funded by revenue from general and employer taxes. Denmark’s system is financed by self-insured regional hospital authorities using tax revenue, while Sweden’s system is financed by insurance companies. In the U.S., it is difficult to imagine that political support could be marshaled for the replacement of private insurance by public funding. Thus, the most feasible approach is likely to be funding of both compensation costs and administrative costs by private liability insurers and self-insured institutions. In essence, these entities already cover most of these expenses. For example, they pay the cost of retaining medical experts. In an ACS, they would instead contribute funds to the ACS system to cover its costs of retaining neutral experts and other expenses. The largest concern in this financing model would be insurers’ uncertainty about their potential financial exposure in a system that widens access to compensation for patients. There would be considerable initial uncertainty about the number of claims, the percentage of claims that would result in a payment, average compensation costs, and even overhead costs. Initial financing might therefore include some method of stop-loss protection or subsidized reinsurance for liability insurers provided by the government.

Decisions on attorney fee recovery will also need to be made. Since an ACS would not require claimants to have an attorney, this would not be an issue for all claims, but some
patients would choose to be represented. Options include retaining contingent-fee arrangements or encouraging or requiring attorneys to bill on an hourly basis. The argument in favor of hourly fees is that less attorney workup of cases would be required in an ACS than in tort litigation. The argument in favor of contingency fees is the access to counsel it provides for claimants who cannot afford to pay even modest attorney’s fees unless they recover a compensation award.

**Element #7: Appeals process.** All existing examples of ACS for medical injury include a process to appeal ACS decisions, whether on compensability determinations or amount of damages. Indeed, an appeals process is both a political and constitutional necessity in the U.S. Previously, proposals to replace juries have been seen as favorable to defendants. An appeals process can thus serve the additional purpose of persuading key constituencies that the alternative system provides claimants with a fair hearing. Additionally, the Oregon Constitution requires that when a tort remedy is modified or eliminated, it is replaced with an adequate substitute remedy.

Appeals processes used in other systems are readily exportable to an ACS for medical injuries. Relevant systems include worker’s compensation, Social Security Disability Insurance, and the Swedish, Danish, and New Zealand ACS. The appeals process could be single-stage or multiple-stage, and could incorporate administrative and/or judicial review. The process for appeals is probably best handled with an internal administrative appeal followed by a further appeal to the courts. The level of review (e.g., de novo vs. deferential) afforded at each appeal level should be based on a balancing of patient, provider, and financing considerations. Clearly, there are tradeoffs between providing extensive appeal rights and ensuring expeditious disposition of claims. Referring appeals back to the courts for de novo adjudication is probably not advisable, as it would result in substantial delay and remove cases from review by neutral experts. However, providing a robust appeals process at the ACS level is important, and the system will not be credible to patients unless there is also recourse to the courts.

**Element #8: Mandatory vs. voluntary participation.** In theory, participation in an ACS could be either mandatory or voluntary for patients, and either mandatory or voluntary for providers. Consider the following alternative models:

A. All patients and all providers are subject to the system.
B. Providers have a choice as to whether to participate in the ACS. Any patients who choose to receive care and are injured must have their claims adjudicated by the ACS.
C. Providers have a choice as to whether to participate in the ACS. Patients who receive care from a participating provider have the option to bring their claim either in the ACS or in tort.
D. All providers are subject to the system, but patients can choose to bring their claim either in the ACS or in tort.

The foreign compensation systems are all model “A” systems—they are mandatory for both patients and providers. The birth-related neurological injury compensation scheme operating in Florida is a model “B” system. When a woman chooses an obstetrician who
participates in the system, she is informed of that fact and of her rights. If she elects to receive care from that obstetrician, she accepts that the no-fault scheme will be her exclusive remedy for any injuries that fall within the class of injuries covered by scheme.

Models C and D have not been pursued to date due to concerns about “adverse selection.” Patients whose claims appear to be obvious candidates for compensation in tort will tend to choose that system over the ACS if the available tort damages are considerably higher, resulting in missed opportunities to rein in costs. In Florida, for example, data suggests that families try to establish that their claims do not meet the criteria for inclusion in the ACS and head to the courts when they perceive the ability to collect larger awards. The cost impacts of such strategic behavior could be significant. Adopting an ACS would open up a new avenue for compensation in a range of cases that would not be eligible in tort (for example, because they involve injuries that are avoidable but not negligent), but allowing patients full access to the tort system could fail to offset these new compensation costs with savings in the form of fewer very high awards or dramatically lower administrative costs.

An additional consideration is that having one system for compensation promotes the reliability and predictability of claims, as well as the aggregation of data about medical injuries in one place for potential use in patient safety research and improvement. Defensive medicine will also continue to be practiced at high levels if traditional litigation remains an option.

For a new ACS to exert its full effects, therefore, a mandatory system would be most effective. Access to the courts would be preserved, but only for appeal. A model “B” system is a viable alternative. Individual practitioners, hospital systems, and/or liability insurers could voluntarily decide to submit to an ACS, and patients could decide whether to submit to it at the point of choosing their health care provider. Such a system may be more likely to pass constitutional muster, but it would be necessary to assure that the patient’s election is made in an informed fashion at a time when the patient is not in need of urgent or emergent medical care and has a meaningful choice of providers. For example, asking a patient to elect ACS participation when presenting to an emergency room with chest pain would not be giving the patient an effective choice.

If the decision is made to adopt a system that is voluntary for patients, possible options include opt-in or opt-out. An opt-out system would almost certainly result in higher patient enrollment in the ACS, but an opt-in policy would be constitutionally preferable, since it requires the patient to make an affirmative election in order to waive legal rights. Opt-in or opt-out could be implemented at the time of signing up for a health plan or when choosing an individual practitioner, organization, or system for health care (e.g., a CCO or other large integrated provider network or health system).

The federal and state constitutional issues associated with decisions about the mandatory, voluntary, opt-in, or opt-out nature of an ACS merit serious attention. State-law issues are likely to be particularly salient. Analysis of these issues is beyond the scope of our report, but at the end of this section, we briefly identify some issues under Oregon
constitutional law that would need to be resolved in the context of these different design choices. Further clarification of these issues will be left to the Oregon Department of Justice.

**Recommended Design**

**Based on our previous research and other scholarship on ACS in the U.S. and abroad, we recommend the following design features for an ACS in Oregon:**

**Element #1: Claim filing procedure**: Impose no requirement concerning who files. Allow patients or family members to file on their own or with legal representation. Design the claiming process to be simple enough that attorney representation is not a necessity.

**Element #2: Claim adjudication.** Adjudicators are not necessarily medically trained, but are experienced adjudicators who specialize in evaluation of medical malpractice claims. Adjudicators work closely with neutral medical experts to make determinations on claims. Expert testimony is not arranged by the claimant or defendant.

**Element #3: Compensability criteria and determinations.** Replace the negligence standard with an avoidability standard. Continue to require proof of causation. Fast-track some highly preventable events for compensation using a list of ACEs. Require experts and adjudicators to base their determinations not only on medical evidence in the case, but also on applicable precedent.

**Element #4: Relationship of the system to other accountability structures.** Conduct claims investigations primarily for the purpose of awarding compensation and identifying opportunities for patient safety improvement, not to assign blame for injuries. Modify claim reporting requirements so that a finding of compensability does not result in a “black mark” on a practitioner’s record. Strengthen existing disciplinary processes to better police practitioner competence, but maintain separate processes and an information “firewall” between disciplinary processes and the ACS (unless the compensation investigation reveals a pressing threat to public health or safety).

**Element #5: Damages awards.** Provide full compensation for economic losses after application of collateral-source offsets and very modest deductible periods of lost work or disability days. Limit noneconomic damages according to a tiered schedule based on severity of injury.

**Element #6: System financing.** Retain the current system of private liability insurance and have liability insurers and self-insured institutions finance the ACS.

**Element #7: Appeals process.** Provide an initial right of administrative appeal, followed by judicial appeal. The court applies a deferential standard of review on appeal.

**Element #8: Mandatory vs. voluntary participation.** Optimally, use model (A)—the system is mandatory for providers and patients. Alternatively, use model (B)—providers
have a choice as to whether to participate in the ACS, and any patients who choose to receive care and are injured must have their claims adjudicated by the ACS.

B. Potential Benefits

The system we have described has a number of potential benefits and advantages relative to the tort liability system. The benefits fall into 5 main categories: patient safety, system reliability, patient compensation, overhead costs, and culture. Critics of ACS proposals have raised concerns in 3 areas: costs, fairness and constitutionality, and deterrence of medical errors. Because a comprehensive ACS for medical injury has never been implemented in the U.S., these proposed advantages and disadvantages have not been empirically tested. Nevertheless, some insights can be gleaned from evaluations of the Florida and Virginia birth injury compensation schemes and the ACS in Scandinavia and New Zealand. Below, we first describe each potential benefit and drawback and then discuss any available empirical evidence about the extent to which it may actually occur.

Contributions to Patient Safety

An ACS can be designed to support much-needed efforts to improve patient safety. The main methods by which an ACS could improve safety are by:

1. improving reporting of adverse events;
2. creating a repository of adverse events and errors that spans across institutions and making this available to patient safety organizations and researchers;
3. concurrent with claims investigations for causes of error, also capturing what type of interventions would have prevented the error; and
4. supporting a culture of transparency and safety that can lead to more concerted efforts to disclose, discuss, and address error, improve trust in physician-patient relationships, and lower defensive practices that can carry their own risks.

An ACS should prove to be a more effective tool than the tort system for advancing each of these avenues of patient safety improvement, as is explained in Table 13. Perhaps most notable is that an ACS can serve as a valuable central warehouse for collecting and storing information on preventable medical injuries. In the tort system, there are few mechanisms for gathering information about adverse events across health care institutions and liability insurers for purposes of data analysis. With an ACS, every adverse event resulting in a claim would be recorded in the system’s database. The ACS would not only centralize data from all claims, but also capture a greater number of events because patients would be more likely to make a compensation claim in an ACS than in tort. The recorded data could include the type of event and its root causes as well as what types of interventions may have prevented the injury. These data could be analyzed either by system personnel or external researchers. Findings could then be reported back to the public, relevant organizations, and providers.
### Table 13. Advantages of an ACS for Advancing Patient Safety Improvement

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Advantages Relative to the Tort System</th>
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<tbody>
<tr>
<td>Improved reporting of adverse events</td>
<td>Mandatory reporting of adverse events in the U.S. is currently limited to selected events and depends on providers’ willingness to comply with reporting requirements. Malpractice claims represent a kind of adverse event reporting system, but injured patients rarely “report” to this system (file claims). Because the claiming process in an ACS would be simpler than tort claiming, and the prospects for recovering compensation better than in tort, patients would likely file more claims— thereby contributing information about a greater number of adverse events to the system. The resulting database can support research into patient safety problems and feedback to providers.</td>
</tr>
<tr>
<td>Creating a large repository of adverse events for analysis by safety researchers</td>
<td>Currently, information about adverse events contained in malpractice claims files is spread among hundreds of different liability insurers nationwide. Few databases exist that aggregate this information, and those that do exist are limited in scope and only partially accessible to researchers and the public. An ACS would consolidate this information in a single location. This could support numerous patient safety analyses to better identify where and how errors occur and how they could have been prevented. The broader the compensation standard, the greater the number of events that will be captured.</td>
</tr>
<tr>
<td>Claims investigations also capture prevention strategies</td>
<td>Currently, when courts adjudicate or insurance companies investigate claims, there is little incentive to concurrently capture data on what interventions may have prevented the injury because events are often analyzed in isolation. An ACS would be collecting and analyzing data in the aggregate, creating the incentive to concurrently capture prevention strategies.</td>
</tr>
<tr>
<td>Supporting a culture of safety</td>
<td>By reducing the stigma a provider experiences when a compensation claim is brought, and using a separate process for sanctioning incompetent providers, an ACS could help providers feel more comfortable disclosing and discussing errors. Trust in the physician-patient relationship may grow in this context, both because patients trust physicians to be candid about adverse events and because physicians have less fear that being candid will result in devastating legal consequences for them. An ACS is also likely to bring greater predictability to the claiming process and send clearer signals about the kinds of injuries that will merit a compensation payment, both of which may reduce defensive behaviors.</td>
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</table>

The experience of foreign injury compensation systems suggests that these prospects for safety improvement are real and feasible to pursue. The ACSs in Scandinavia and New Zealand were not designed for patient safety improvement, but rather arose from frustration with the existing tort systems— namely the poor rates of patient compensation and the inefficiencies of the systems. However, as the Scandinavian nations and New Zealand have come to embrace the need to improve the quality and safety of their health care, in parallel with the United States, the ACSs in these countries have started to redesign their systems to better capture and use patient-safety-related information. Each of the systems maintains an electronic claims database that is used by researchers internal to the system, in academia, or both to identify opportunities for patient safety improvements. Lessons learned are presented to health care providers through regular outreach efforts.
Greater Reliability in Compensation Determinations

In the present system, there is no formal mechanism for (1) consistently deciding which evidence will ultimately be incorporated into final determinations, (2) using ACEs, or (3) relying on precedent. As a result, there is substantial variation in liability and damages determinations across similar cases. **An ACS would ground compensation decisions in the best available scientific evidence about the causes of adverse outcomes in health care.**

In addition, **an ACS would utilize precedent and predetermined ACE-based compensation guidelines.** These 3 features are very likely to result in improved consistency or reliability in decision-making across claims involving similar injuries. **This reliability has the potential to create more trust in the validity of the compensation system, as well as reduce insurers’ uncertainty about their liability in particular cases and their vulnerability to large, unexpected awards**—which may translate into lower premiums and less volatility year over year in the price of insurance.

Shorter Time to Claim Resolution

Research indicates that the average time between the filing and final resolution of a malpractice claim in the U.S. is about 3 years, and that an additional 2 years elapses, on average, between the malpractice incident and the filing of the claim.\(^{36}\) An ACS would likely reduce this time to resolution by a significant margin. The average time to investigate and decide a claim in the foreign ACS is about 7 months if an avoidability standard is applied and 16 days if a “no-fault” standard is applied.\(^{73, 91}\) The Florida and Virginia birth injury schemes also reportedly have reduced average time to disposition in covered cases.\(^{119}\)

Improved Access to Compensation

**An ACS contains many features that can advance the Oregon Task Force’s goal of improving patient compensation:**

1. reducing financial barriers to filing claims by eliminating the need for an attorney and providing neutral fact-finders and experts free of charge to claimants;
2. replacing the negligence standard with a compensation standard that is easier for claimants to satisfy;
3. expediting the compensation process, relative to tort litigation; and
4. delinking compensation and disciplinary processes, and eliminating stigmatizing negligence judgments, so that providers can feel more comfortable disclosing adverse events and assisting patients in filing for compensation.

The extent to which an ACS would indeed improve access to compensation can be evaluated by considering the likely number of patients compensated and the amounts they would be likely to receive. Evidence from the foreign ACSs supports the notion that claiming rates would be higher, while payment rates for filed claims would depend on the particular compensation standard and process chosen and the mix of claims brought. In New Zealand, where a broad “no fault” standard is employed, the claiming rate is about 2000 per million persons and about 68% of claims ultimately receive compensation, translating to a paid claim rate of 1360 per million persons.\(^{73, 91}\) In Sweden, the claiming rate is 1000 per million persons.
persons with 45% of claims ultimately receiving compensation, translating to 450 paid claims per million persons. In Denmark, the claiming rate is 1330 per million persons with 34% being compensated, resulting in 452 paid claims per million persons. These figures compare to a paid claims rate of 60 to 112 per million persons in the U.S. (about 200 claims per million with payment rate estimates ranging from 30% to 56%).

The differences in paid claim rates could be due to a number of factors besides ACS characteristics. Chief among these are differences in the rate of medical error in the countries and the populace’s propensity to seek redress when an injury occurs. It is noteworthy that even in these foreign countries, ACS administrators worry that claiming rates are lower than they should be. One design feature that Oregon might consider to boost claiming rates is to require providers to advise patients to file a claim when the provider believes a compensable injury has occurred. None of the foreign ACSs require this, but one can readily appreciate how such a requirement could boost the number of claims, especially if discipline is not linked to the compensation process.

Though more individuals would receive compensation for injuries in an ACS, if the awards are not sufficient to cover the losses caused by the injury, the compensation process will not be more effective for patients. Average awards in the foreign ACSs are dramatically lower than in the U.S.: New Zealand, $4,450, Sweden, $20,000, and Denmark $40,000, versus $323,816 in the United States. Comparing award amounts is complicated, however, by the fact that the foreign systems operate within a larger social insurance structure that covers health care and disability. This obviates the need for the foreign ACSs to compensate these components of a damages award, which can be sizeable at times. Medical expenses, for example, constitute about half of the economic damages awarded in American malpractice cases. Another confounding factor is that because it is so easy to file a claim in the foreign systems, and no attorney is needed, the systems see many more claims for minor injuries, lowering the average losses. Nevertheless, the foreign systems do either schedule damages or cap awards (either by total amount or on noneconomic damages). Sweden and Denmark cap awards at US$1.2 million and US$1.7 million, respectively. New Zealand has no cap on economic damages, but does cap noneconomic damages at approximately $85,000.

These data demonstrate that foreign ACSs, as compared to the U.S. tort system, extend compensation to a larger number of patients but at much lower levels. It is not clear whether the other sources of compensation available to citizens of these countries (e.g., universal health care, unemployment insurance) makes up for the difference in what is received from the medical injury compensation system, but the amounts received for noneconomic loss are almost certainly lower than would be available for similar injures in most U.S. states.

Reduced Administrative Costs

With the move away from an adversarial fact-finding process, significant savings on claims investigations can result from lower attorney and expert expenses. Further savings could be realized from the use of ACEs to fast-track some determinations. As discussed above, overhead savings will also result from the improved predictability of liability decisions and damages awards, which can translate to lower insurance premiums.
Providing a concrete structure for noneconomic damages awards, in particular, would be a great help to insurers in better estimating their exposure.

**Administrative costs in existing ACS compare very favorably with those of the U.S. tort system.** The administrative cost of foreign ACS is estimated to be about 10% of total system costs in New Zealand and about 17% in Sweden and Denmark, compared to about 55-60% in the United States.73, 90, 91 The birth injury compensation schemes in Florida and Virginia also have enjoyed low administrative costs (less than 10% of total expenses).90, 127, 128

**Improved Physician-Patient Relationships and Care Environment**

The tort liability system, particularly in times of a malpractice “crisis,” can create an environment that reduces trust in the physician-patient relationship. Fear of liability can also lead to lack of candor about adverse events, an atmosphere of fear among physicians, and unnecessary stigmatization associated with making errors.

**Moving to an ACS would involve the replacement of the concept of negligence (which is individualistic and punitive in orientation) with the more systems-oriented concept of avoidability.**73 In addition, the separation of compensation investigations and determinations from disciplinary investigations and determinations (except in cases of clear public danger), should also help remove the stigma that can be associated with a claim. Hopefully, with a lessened degree of stigma would come a greater willingness among health care providers to discuss preventable adverse events among themselves and with affected patients, as well as a willingness to assist patients in filing claims for compensation rather than fighting such efforts.74

Patients would have less reason to believe that providers will “cover up” errors and physicians would have less reason to view every patient as presenting the potential for a devastating malpractice lawsuit. Describing classes of ACEs and making that information available to the public should improve public awareness that medical care often involves bad outcomes; that some are preventable and some are not; and that there is a kind of social contract in place, in which providers pledge that preventable injuries will be disclosed and compensated. All of these dynamics should result in an improved physician-patient relationship and environment of care.

The improved culture may also address another problem in the current system: uncertainty over what kinds of behavior will result in adverse liability determinations, which is felt to be a major reason for defensive medicine. **With greater understanding of the sorts of events that will and will not be compensable under an ACS and without the associated stigma, doctors will have less incentive to behave defensively.** However, no evidence exists about the effects of any of the existing ACS for medical injury on defensive medicine, so these theoretical effects cannot presently be verified.

**A. Potential Costs and Adverse Impacts**

**Uncertain and Potentially Enormous Compensation Costs**
Perhaps the greatest weakness of ACS proposals is the inability to project with reasonable confidence the number of claims that will be asserted and paid, and the resulting total compensation costs. The pool of patients eligible for compensation would more than double if estimates of the prevalence of preventable and negligent injuries are accurate. But it is not known how many of these eligible persons would file a claim. Even if damages are carefully limited, because of the unknown number of additional claims, there is the potential for compensation costs to increase significantly under such a system. It remains unclear whether the savings on administrative costs, award sizes, and collateral source offsets would be sufficient to offset this increase, or whether the improvements in patient safety that an ACS might spur would result in a substantial reduction in claims over the long term.

As reviewed above, the lack of experience with a comprehensive ACS for medical injury in the United States makes it difficult to determine whether a net savings would arise. A previous estimate by scholars in our research group at Harvard of the cost of a statewide ACS for Utah and Colorado based on the rules of the Swedish medical injury compensation scheme determined that the overall cost would be roughly the same as the cost of the tort system. Although a much larger group of patients would be eligible for compensation, this increase would be essentially offset by (1) standardized compensation packages and (2) lower administrative costs.

The Harvard estimates relied on 4 assumptions that might not hold in the real world and, if they did change, would influence the bottom line.

1. **Injury rate.** Estimates of the number of patients who would be eligible for compensation were based on a review of medical records by trained physicians. Sometimes two reviewers examining the same record disagreed about whether an compensable event had occurred. System costs would increase if these disagreements resulted in an underestimate of the true rate of avoidable medical injury.

2. **Claiming rate.** The estimates assumed that all patients who sustained avoidable injuries would seek and obtain compensation. In reality, only a subset will do so. If the claiming rate was less than 100% in an American ACS, system costs would be lower than the Harvard estimate—potentially by a very large margin.

3. **Damages.** In deciding the level of damages to be awarded to successful claimants, the compensation packages used in the estimates from Colorado included full compensation for economic losses and noneconomic damages capped at $250,000. The Utah package was more limited: it had 66% wage replacement and noneconomic damages capped at $100,000. Removing or raising these limits would increase total system costs relative to the Harvard estimate.

4. **Overhead costs.** Administrative costs were conservatively estimated at 30% of total injury costs. Foreign medical injury compensation schemes have lower overhead costs. Total system costs could be higher or lower than the Harvard estimate depending on the actual overhead costs of an American ACS.
In an unpublished report, the Harvard researchers subsequently explored the impact of varying these assumptions on their original estimate.\(^{130}\) They applied the following adjustments (details about the reasons for selecting these particular adjustments are available in the report):

1. A 28% increase in the rate of preventable injury;
2. Increasing available damages to include full wage replacement and noneconomic damages of up to $500,000;
3. A 60% claiming rate; and
4. A 40% overhead cost rate.

Jointly applying these adjustments, the researchers found that their effects essentially canceled one another out—the total cost of the ACS was basically unchanged. Of course, a variety of other levels of adjustment could have been chosen and may have produced different results.

Three broad conclusions can be drawn about the cost impacts of an ACS. **First, the best available analyses—which are based on considerable guesswork—suggest that a shift from the tort system to an ACS with the design features of the Swedish system would likely be cost neutral.** An ACS in Oregon would likely provide higher noneconomic damages than the Swedish system, and other assumptions also may not apply, but these estimates provide a “ballpark” for considering the possible cost impact of an ACS.

**Second, the precise cost of an Oregon ACS would depend on a large number of different factors,** set forth in Table 14. Most of these factors would be heavily determined by choices made about the design of the ACS—for example, how easy the claim filing process is and what damages are available. The underlying rate of preventable medical injury in Oregon, however, is one factor that is external to the system (at least until the ACS starts to have positive effects on patient safety).

<table>
<thead>
<tr>
<th>Table 14. Factors Influencing the Overall Direct Cost of an ACS in Oregon(^1)</th>
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<tbody>
<tr>
<td><strong>Factor</strong></td>
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<tr>
<td>Population prevalence of adverse events and avoidable adverse events</td>
</tr>
<tr>
<td>Claiming rate</td>
</tr>
</tbody>
</table>
Payment rate

The proportion of claims that are determined to be eligible for compensation will determine the total number of awards made by the ACS and the total indemnity costs of the system. The payment rate is a function of decisions made about the compensation standard and, to a lesser extent, the nature of ACS investigations, the nature of ACS determination processes, and the qualifications of adjudicators.

Average award size

The larger the average award, the higher total indemnity costs of the system will be. Award size will depend on decisions made about compensable economic losses (including “deductible” periods) and noneconomic losses (including caps or schedules of noneconomic damages).

Administrative costs

The higher the system overhead rate, the higher the total system cost will be, and the lower the potential to offset projected increases in the total number of claimants. Administrative costs will be a function of decisions made about the structure and processes of the ACS, attorney involvement, appeal rights, and system financing.

† Table does not include indirect costs of the ACS, including potential effects on health care spending arising from changes in defensive medicine or patient safety improvements.

Third, implementation of an ACS would need to involve very careful actuarial analysis to ensure that the system is adequately funded. The experience of the Virginia birth injury compensation fund shows that underestimating the number of claims, rate of payment, or average award size in the system, and consequently underreserving funds for payment of liabilities, can result in substantial financial problems for the system. Although such problems should resolve over time as these factors become more predictable, an initial financial imbalance in the system can undermine the public’s confidence in the ACS and threaten its survival.

Unfairness to Claimants

One criticism of ACS proposals is that ACS deny injured patients access to fair compensation and corrective justice. Although an ACS provides a mechanism for obtaining restitution, awards are likely be smaller, on average, than what is available in tort. Many groups strongly oppose any form of limitations on damages on grounds of fairness. Critics of ACS also object to replacement of juries with other adjudicators, in part out of concern that ACS adjudicators may exhibit a bias towards defendants. A further feature of ACS that raises fairness concerns, as we have discussed above, is an opt-in or opt-out provision that may be implemented in ways that do not really allow patients a meaningful, informed choice. This has been a major issue in the Florida and Virginia birth injury compensation schemes. In Florida, participation rates by obstetricians in the ACS have been so high that patients have difficulty finding a nonparticipating provider. In Virginia, there is greater choice of physicians, but concerns exist that many patients do not adequately understand the implications of agreeing to be subject to the ACS.

Finally, critics worry that a system that encourages patients to file claims without assistance of legal counsel will frequently result in unsophisticated patients accepting compensation payments that are far less than what their claims are truly worth. This can be a difficult claim to evaluate, since such judgments typically reference the value of claims in tort as the
“true” value, when in fact tort judgments may not always represent a reasonable social valuation of an injury.

A related criticism relates to corrective justice. Whatever its flaws, the tort system does succeed in providing claimants with a proverbial “day in court”—a forum for confronting persons who have wronged them and explaining how the wrongdoing has affected them. Although other disciplinary processes would remain available if an ACS was adopted, the compensation process would be less public, less adversarial, and involve less shaming of the defendant. Thus, opportunities to receive corrective justice are arguably lost, unless one considers improved access to financial compensation to be an equally valuable way of providing corrective justice.

There is little available empirical evidence that sheds light on these issues. As discussed above, awards are indeed much lower in foreign ACS than in the U.S. tort system, although one reason for this is that other social insurance schemes cover medical expenses and some other economic losses. No evidence is available concerning adjudicator bias. The proportion of claims that receive a payment on initial determination ranges from 34% to 63% in the foreign schemes, compared to 56% in the US, but this likely has more to do with the mix of claims that are brought and the compensation standard applied than with any bias on the part of the evaluators of claims. It is difficult to evaluate the argument that claims may be resolved for below their “true” value because such arguments assume that valuations in the tort system represent fair and “true” valuations—a questionable assertion.

Finally, 2 pieces of data are useful in assessing arguments about corrective justice. First, only about 2% of patients injured by negligence file malpractice claims in the U.S. Second, only about 15% of U.S. malpractice claims are resolved by trial verdict. Together, these estimates suggest that few injured patients in fact receive a “day in court” in the tort liability system. Settlement processes provide some opportunity for the functions of corrective justice to play out, but not in a public or fully confrontational way.

It is worth noting that these fairness issues, regardless of how real they may ultimately prove to be, raise significant constitutional questions that could provoke legal challenges to an ACS. Among the issues that would need to be thoroughly explored prior to ACS implementation are the following:

- **Right to jury trial**: The Oregon Constitution guarantees a right to jury trial. Mandatory ACS participation may be deemed to improperly impair this right, for both patients and providers.

- **Equal protection**: The 14th Amendment to the U.S. Constitution, and similar provisions in state constitutions, guarantee that similarly situated classes of persons will be treated similarly before the law. A court may determine that an ACS for medical injury impermissibly treats medical malpractice plaintiffs less favorably than other plaintiffs.
• **Due process:** The 14th Amendment to the U.S. Constitution, and similar provisions in state constitutions, guarantee that individuals cannot be deprived of liberty or property without fair procedures. The shift to an ACS could be argued to constitute an impermissible reduction of important due process rights for patients, including notice, assistance of legal counsel, and appeal rights.

• **Separation of powers:** Many state constitutions contain provisions that vest judicial powers exclusively in the court system, similar to Article III of the U.S. Constitution. Arguably, the legislative branch may be infringing on judicial powers when it enacts laws that alter or impact the courts’ powers.

**Reduced Deterrence of Medical Errors**

A final criticism of ACS is that by making the claiming process less adversarial and punitive than under the tort system, such proposals undercut the effectiveness of the medical injury compensation system in inducing health care providers to practice safely. Even if providers do not feel the economic consequences of lawsuits because they are fully insured against adverse judgments, it is argued, providers seek to avoid the psychological and reputational costs of being sued. If this threat is removed from the system, the deterrent effect of that the tort liability system currently serves may be reduced.

The extent to which the tort liability system actually deters substantial care has rarely been studied, and no systematic evidence on this point exists. There are strong theoretical reasons to suspect that does not send strong economic signals that result in good deterrence: most malpractice victims do not file claims, so most instances of negligence are never sanctioned; providers are generally fully insured against the financial consequences of an adverse malpractice judgment; and individual practitioners’ liability insurance premiums generally do not increase much when they experience a claim. The psychological costs of being sued, however, may be substantial, and an ACS would indeed penalize providers less in this regard.

**D. Conclusions**

The expected benefits, costs, and adverse impacts of shifting adjudication of medical injury claims to an ACS in Oregon are summarized in Table 15. Although the evidence base to support conclusions about the likely effects of an American ACS is quite limited, there is a reasonable probability that a well-designed ACS would result in a large number of benefits for providers and patients in Oregon, including a faster, less adversarial claims process; lower spending on system overhead costs; improved access to compensation for patients; greater predictability of outcomes; reduced stigmatization for providers; an improved environment for health care and patient safety; and enhanced availability of data for patient safety improvement and research.

Providers and insurers would face considerable downside financial risk in the transition to an ACS, as reduced barriers to claiming and a more generous compensation standard could greatly increase total indemnity costs. However, costs can be controlled by altering key design features of the system, such as available damages. Another potential drawback of an
ACS is that denying patients access to the courts may raise significant fairness concerns, as well as legal challenges under the federal and state constitutions. Patients would also likely face limitations on recoverable damages, compared to what is available in tort. These and other adverse impacts must be weighed carefully against the benefits of an ACS. On balance, however, it is probably possible to design an ACS that achieves the key potential benefits of the ACS concept while not significantly increasing total costs or leaving patients worse off than they are under the tort system. Careful system design is crucial to maximizing the benefit/cost balance of the system, since much depends on the particular choices made about who will be eligible for compensation, how much compensation may be recovered, how compensation decisions will be made, and other design features.

Table 15. Summary of Effects of an ACS

<table>
<thead>
<tr>
<th>Theoretical effect</th>
<th>Predicted magnitude of effect</th>
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</thead>
<tbody>
<tr>
<td><strong>Benefits:</strong></td>
<td></td>
</tr>
<tr>
<td>Patient safety improvements</td>
<td>• Significant progress in event reporting, pooling of data across institutions, and safety-focused investigations.</td>
</tr>
<tr>
<td></td>
<td>• With parallel and independent compensation and disciplinary processes, significant improvement in safety culture.</td>
</tr>
<tr>
<td>Greater reliability in compensation decisions</td>
<td>• Consistency and predictability would improve substantially through centralization of decision-making and use of</td>
</tr>
<tr>
<td></td>
<td>ACEs, damages guidelines, and precedent.</td>
</tr>
<tr>
<td>Improved access to compensation</td>
<td>• Significant improvement expected because of easier filing requirements and lack of need to hire experts or attorney.</td>
</tr>
<tr>
<td></td>
<td>• Would improve considerably further if compensation standard is broader than negligence.</td>
</tr>
<tr>
<td>Shorter time to claim resolution</td>
<td>• Significant decrease, with exact magnitude affected by choices made about adjudication process and compensation standard.</td>
</tr>
<tr>
<td>Lower administrative costs</td>
<td>• Current overhead for tort system (55-60%) may be reduced to as low as 10-17%, if a broader compensation standard is chosen.</td>
</tr>
<tr>
<td>Improved physician-patient relationships and care environment</td>
<td>• Removing the threat of litigation would improve trust in physician-patient relationship and possibly lower defensive medicine.</td>
</tr>
<tr>
<td><strong>Costs:</strong></td>
<td></td>
</tr>
<tr>
<td>Total compensation costs</td>
<td>• Likely to increase compared to tort, with total costs dependent on choices about eligibility for compensation and available damages, but increase can be limited by use of collateral source offsets, modest deductibles, and scheduling of noneconomic damages.</td>
</tr>
<tr>
<td></td>
<td>• Other offsets include savings in overhead costs.</td>
</tr>
<tr>
<td></td>
<td>• Longer term offsets include savings from patient safety improvements (which would decrease compensation payments and may decrease health care costs) and decrease in defensive practices.</td>
</tr>
<tr>
<td></td>
<td>• No change in overall cost to insurers if government-funded</td>
</tr>
</tbody>
</table>
The political feasibility of an ACS will hinge on whether the overall benefits to influential stakeholder groups are perceived as outweighing the drawbacks. Due to the large number of stakeholders involved—including patients, providers, liability insurers, plaintiff and defense attorneys, health insurers, patient safety researchers, the State, and others—generating the broad political acceptance necessary to ensure successful adoption will not be easy. Table 16 displays the potential drawbacks and benefits (whether perceived or actual) for each key stakeholder group of adopting an ACS with the features we have recommended.

Table 16. Stakeholder Analysis: Drawbacks and Benefits of an ACS

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Drawbacks</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Patients    | - No access to adjudication by jury  
             - Accessing judicial system requires exhaustion of administrative remedies  
             - Limits on noneconomic damages  
             - Concern that ACS adjudicators will be biased in favor of defendants  
             - No “day in court”  
             - In a system that is not purely mandatory, concern that a meaningful choice about participation will not be available. | - Easier and less expensive to file a claim; attorney representation not required  
                                                                   - Easier to meet the compensation standard  
                                                                   - Reduced time to resolution of claims  
                                                                   - More consistent, predictable, and transparent compensation decisions and awards  
                                                                   - Able to seek compensation without “punishing” the provider  
                                                                   - Providers may be more willing to disclose errors and assist patients in filing claims  
                                                                   - In long run, potential for safer medical care |
| Providers   | - Injured patients more likely to file a claim  
             - Increased claims may mean increased reporting to regulatory bodies and higher | - Improved care environment, including culture of safety, culture of transparency, and trusting physician-patient relationships  
                                                                   - Stigma of negligence removed |
<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Drawbacks</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start of table</td>
<td></td>
</tr>
</tbody>
</table>
| Insurance premiums                 | • from compensation decisions  
|                                   |   • Possible ability to help patients obtain compensation for injury with less fear of stigma and reporting  
|                                   |   • Better information on where errors occur, supporting provider-led patient safety efforts  
|                                   |   • Reduced adversarialism and psychological and reputational costs associated with being the subject of a claim  
|                                   |   • Possible reductions in malpractice insurance premiums                  |                                                                          |
| Health care institutions           | • Potential increase in total compensation costs (for self-insured institutions) | • Access to better safety-related information  
|                                   |                                                                           |   • Improved care environment, including culture of safety, culture of transparency, and trusting physician-patient relationships  |
| Health insurers                   | • Reduced prospects for recouping medical expenses from defendants due to collateral-source offset rule | • Lower health care spending if safer care materializes or defensive medicine is reduced  |
| State                             | • Possible financial risk if providing stop-loss protection               | • Lower case volume in judicial system  
|                                   |                                                                           |   • Advance the public interest in safe care and a positive care environment  
|                                   |                                                                           |   • If defensive medicine is reduced, lower spending on state health insurance programs  |
| Plaintiff attorneys               | • Fewer clients and lower fees if many patients opt to proceed without an attorney  
|                                   |   • Concerns about fairness to patients                                   | • May perceive that the ACS advances the interest they share in patient safety and patient access to compensation  |
| Liability insurers                | • Potential increase in financial exposure: will greater ease of filing and more generous compensation standard be offset by reduced administrative expenses, lower average awards, and other cost savings? | • Lower average awards  
|                                   |                                                                           |   • Greater predictability of awards  
|                                   |                                                                           |   • Lower administrative costs  
|                                   |                                                                           |   • Improved opportunities for loss prevention through analysis of aggregated claims data  |
| Safety organizations and researchers |                                                                          | • Creation of centralized database that can help identify root causes of adverse events and prioritize patient safety efforts  |

The table readily illustrates that the groups that stand to gain the most from this are patients, providers, health care institutions, and safety organizations. However, there are significant
concerns (drawbacks that could be seen as wiping out all benefits) for patients, liability insurers and self-insured health care institutions, and plaintiff attorneys that will need to be addressed. Liability insurers’ concerns over unpredictable costs should dissipate over time as actuarial experience with the ACS grows, but will be significant in the short run. On balance, in light of the uncertainty around the first time implementation of an ACS, some level of resistance can likely be anticipated from every stakeholder in the table, except perhaps safety organizations. However, previous efforts to mobilize political support for ACS proposals in several states have resulted in significant momentum in favor of the proposal emanating from provider organizations, patient safety advocacy groups, and some liability insurers. Opposition from the trial bar has consistently proven to be the most difficult political barrier to overcome.77

Finally, whether policymakers can leverage the potential benefits of an ACS to overcome the perceived drawbacks will also depend on the prospects for upholding the system against constitutional challenge. Few policy makers or stakeholder groups will be willing to expend political capital to assure the passage of a law that is unlikely to survive judicial review. Therefore, careful consideration of constitutional issues and system design choices that maximize the chances for withstanding judicial scrutiny is essential.
APPENDIX: Notes on Data Sources and Analytical Methods

This Appendix provides additional information about the data used in the quantitative analyses of the effects of noneconomic damages caps and other reforms in this Report. Some of the analyses combined multiple data sources and parameters to generate estimates. Here, we provide detail about the sources of the data and known issues with the quality of the data. Readers should carefully consider the data-quality issues when interpreting our findings.

Noneconomic Damages Caps Analysis

Analysis of Effects on Indemnity Payments

Our analysis of the effects of caps on indemnity payments drew on 2 data sources: the Oregon Medical Board’s (OMB’s) database of malpractice claims and the National Practitioner Data Bank (NPDB) Public Use File. We discuss each in turn, and then describe our methodology.

OMB data. ORS 742.400 requires that information about malpractice claims be reported to the OMB by primary insurers, any “public body required to defend, save harmless and indemnify an officer, employee or agent of the public body,” self-insurance entities that cover OMB licensees, and HMOs. ORS 30.278 speaks to the public body requirement to report. These designated reporters must report claims whether they are closed with a payment or not, and must make an initial report within 30 days of the filing of the claim and a follow-up report within 30 days of closure. Reporting to OMB is only required if the claim involves an OMB licensee, which include physicians, physician assistants, and podiatrists. The dataset thus does not include claims involving health care organizations, nurses, or other health care providers. For licensees, however, a fairly rich set of data are collected, including specifics about the resolution of the claim, the allegations, the injury, and the claimant.

Specific reporting requirements changed in 2010. According to OMB representatives, prior to that date, claims had to be reported whether they were filed in court or not. A “claim” was any written demand for payment. As of 2010, the term “claim” was redefined to include only claims filed in court. Some claims may be settled with a payment without ever being filed in court, so the OMB database for 2010 and later likely underrepresents the true volume of indemnity payments against OMB licensees. For this reason, we have opted to use NPDB data rather than OMB data to estimate the effects of caps on indemnity payments. The OMB data prior to 2010 is, however, useful for obtaining information about the total volume of claims filed in the state. It also likely represents good information about the proportion of claims closed with a payment.

OMB asks insurers to report not just total payments made in a case, but also how they broke down between economic damages, noneconomic damages, and punitive damages. Unfortunately, insurers frequently do not report this information—likely because they do not separate those components out in their internal calculations. We examined all OMB claims
records involving physicians or physician assistants for 2006-2010 and found that this breakdown was missing in 81.6% (218/267) of claims that apparently closed with a payment.

Other fields in the OMB dataset also show evidence of insurer underreporting. OMB’s ability to audit reports and reconcile suspected instances of missed fields or incorrect data entry is limited, although some effort is made to validate insurers’ reports by asking licensees about their malpractice claims history when they renew their licenses. The two reports are compared and OMB asks for clarification regarding any discrepancies.

An additional limitation of the OMB data is that ambiguities and discrepancies exist in various fields that capture the means by which the case was resolved. Although the reporting form elicits detailed information about disposition method, the reported data often do not match across two fields that should be capturing the same information. Staff at OMB and the Insurance Division were unable to reconcile these discrepancies. An additional problem is that the response categories for the disposition variables are structured in a way that makes it impossible to reliably separate out cases that were abandoned from cases that were settled. Because of these reliability problems, we opted to use NPDB data, rather than OMB data, to determine which cases were settled and which were tried to a verdict. A limitation of this approach is that we lack information about cases that were closed without a payment, as these are not reported to the NPDB.

We used OMB data only to obtain (1) a total count of claims closed per year for 2006-2010 and (2) an estimate of the average proportion of total awards for which noneconomic damages accounted in Oregon in 2006-2009. We analyzed claim file identifier numbers to identify potential duplicate claims; there were none. Our analytical dataset consisted of 782 claims against physicians and physician assistants that were closed from 2006-2010. Excluding the 2010 claims, 33.3% (234/703 claims) appeared to have been closed with a payment to the plaintiff by one or more insurers. (It may be noted that the number of paid claims here does not match the number presented in Table 1. Table 1 presents data from the NPDB, which we believe is the most accurate source of counts of paid claims. However, to determine the proportion of claims paid, it was necessary to take both the numerator and the denominator from the same data source—which could only be the OMB database, because the NPDB does not include unpaid claims.)

After eliminating claims for which the insurer did not provide a breakdown of the award in terms of its constituent components, we were left with just 49 claims. For these claims, we calculated Noneconomic Damages / (Noneconomic Damages + Economic Damages + Punitive Damages), focusing on amounts paid only by the reporting insurer. Across these 49 claims, the mean proportion of noneconomic damages was 64.7%. We use this estimate to perform a sensitivity analysis for the effects of caps on indemnity payments, but do not use it as our main estimator because of it is based on such a small sample of claims. Given the high rate of nonreporting of economic and noneconomic damages components in the OMB dataset, we cannot conclude that the claims for which this information was reported are representative of all paid claims.
The NPDB Public Use File for the years 2006-2010 was examined as a second source of claims information. Pursuant to the federal Health Care Quality Improvement Act of 1986, the Health Resources and Services Administration (HRSA) requires that liability insurers and certain other entities report all payments made on malpractice claims in the name of a health care practitioner. The Public Use File contains a host of useful claim-level information, including the amount of indemnity payments and whether they resulted from a court judgment or a settlement. The dataset is, however, known to have several limitations. Unlike the OMB dataset, the NPDB does not collect information about claims that did not result in a payment to the plaintiff. It does not ask insurers to estimate how payments break down into the constituent components of economic damages, noneconomic damages, and punitive damages. With a few exceptions, the NPDB does not collect information about payments made in the name of health care facilities, such as hospitals. Finally, payments made in malpractice claims are not provided in the Public Use File in their actual amounts, but rather, at the midpoint of a dollar value range near their actual amount. This is done to protect the confidentiality of the defendant. For example, a payment of $318,000 would be recorded as the midpoint of the nearest $10,000 increment, or $315,000. This introduces a modest amount of measurement error into calculations of mean, median, and total payments. An advantage of the NPDB is that the disposition categories are relatively straightforward, at least insofar as cases resolved by the judgment of a court, as opposed to a settlement of some kind, are clearly indicated (PAYTYPE=J).

We used the NPDB data for most components of our indemnity payments analysis, as it appears to have more complete reporting than the OMB data, it more reliably codes the disposition method of each case, and it contains useful data on claimant characteristics. We examined records for reporting years (ORIGYEAR) 2006-2010 that were designated as Malpractice Payments (RECTYPE=P) for MD and DO physicians, MD and DO physician assistants, and MD and DO interns/residents (LICNFELD = 10, 15, 20, 25, 642, 645). The limitation to those license types was made to maximize comparability with the OMB dataset and because many of the practitioners in the NPDB are not health care providers in the conventional sense of the word (e.g., social workers, art/recreation therapists).

We examined the data for duplicate claims (defined as same practitioner number, incident year, and payment amount) and dropped 9 duplicate observations. The analytical dataset contained 648 reports involving non-trainee physicians, 5 reports against residents/interns, and 11 reports against physician assistants. Pre-2010 payments were inflated to 2010 dollars using the Consumer Price Index (U.S. Department of Labor, Bureau of Labor Statistics).

**Analytical methods.** To simulate the effect of different levels of cap, we first had to determine the proportion of the total payment in each cases that represented noneconomic damages, since this information is unavailable in the NPDB. We applied two different estimates. Estimate 1, our main estimator, (42%) is taken from our previous work modeling the national costs of the medical liability system. It was derived by examining the proportion of noneconomic damages reported in the closed-claims databases maintained by Texas and Florida, which include both settlements and verdicts. This estimate may not represent the actual breakdown in Oregon, however. Estimate 2 (64.7%) is taken from the OMB data. Although it is desirable to utilize the breakdowns from Oregon, as opposed to
Texas and Florida, the widespread underreporting of the damages components in the OMB database makes this estimate potentially unrepresentative of Oregon claims. We assumed that the split of economic and noneconomic damages was the same for settled and tried cases, which is questionable, but not empirically testable with available data.

We next applied the 4 potential noneconomic damages cap levels ($250,000, $500,000, $750,000 and $1.6 million) to each claim to determine which claims would trigger the caps. We deflated these cap amounts using the Consumer Price Index to simulate the effect that a cap set at the above levels in 2010 dollars would have had if imposed on our entire sample of claims. For example, for 2006 claims, the $250,000 cap was modeled as $231,481.

To compute the effects of these caps on total indemnity payments statewide, it was necessary to upweight the total payments in the NPDB to account for the absence of payments made in the name of institutional defendants. Based on a previous study, we estimate such payments to constitute 35% of total indemnity payments. This estimate is based on national data and may not represent the actual proportion in Oregon, but no state-level estimate is available for Oregon.

It is important to note that our simulation assumed that the mix of cases filed and paid would be unchanged in the presence of a damages cap. Although other, similar analyses have also made this assumption, it is possible that casemix would change in important ways if a cap was imposed. In particular, the average level of injury severity might reasonably be expected to increase, as attorneys sought to weed out low-value cases. The assumption of no change in casemix may result in overestimation of the effect of a noneconomic damages cap in cases resolved through settlement.

**Analysis of Effects on Premiums**

The Oregon Insurance Division supplied information on total direct earned premiums for Oregon liability insurers for calendar years 2001-2010, by carrier. These amounts represent the total dollars collected by the carriers from all medical professional liability coverage subscribers. By summing across carriers, we can obtain the total amount paid in insurance premiums by Oregon health care providers—however, an important limitation is that the Insurance Division does not collect this information from carriers that are not state regulated. A second limitation is that information about the number of policies written by each carrier is unavailable. Without this, it is not possible to calculate the prices charged to physicians for their insurance policies.

We supplemented these data with data on premiums charged from the Medical Liability Monitor’s (MLM’s) Annual Rate Survey for 2010. This is a survey of insurance carriers conducted by a well-regarded trade publication. Survey participation by carriers is voluntary, but 4 of Oregon’s most significant market players participated (Table 17). Using the total earned premium data, we calculated that collectively, these 4 companies account for nearly 87% of all medical professional liability insurance premiums collected from physicians in Oregon in 2010. Thus, the MLM data are reasonably representative of premiums charged in Oregon.
The MLM data are valuable because they break out prices charged for a standard (claimsmade, $1 million/$3 million) insurance policy for physicians in 3 specialties that reflect a range of malpractice risk levels: internal medicine, general surgery, and obstetrics/gynecology. These specialties are not, however, representative of all specialties. The reported prices also do not account for the many physician-specific factors that affect the price that any given physician would pay for this type of coverage.

To obtain a “market average” price for these specialties, we calculated a weighted average of the 4 reporting carriers’ prices for each specialty. We calculated each insurer’s market share by dividing the carrier’s direct earned premiums (as reported to the Oregon Insurance Division) by the total direct earned premiums collected by all 4 reporting carriers. The weighted average was thus calculated as: (CNA price)(CNA % market share)+ (TDC price)(TDC % market share)+ (Medical Protective price)(Medical Protective % market share)+ (Physicians Insurance price)(Physicians Insurance % market share). This “market average” does not incorporate information about prices charged by carriers who do not report to the MLM, nor the market shares for which these carriers account.

Table 17. Premiums for a Standard ($1 million/$3 million) Medical Professional Liability Policy Charged by Oregon Carriers, 2010.

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Market Share: All Carriers</th>
<th>Market Share: Carriers Reporting to MLM</th>
<th>2010 Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal Medicine: $5,479</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Surgery: $33,113</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ob/Gyn: $64,286</td>
</tr>
<tr>
<td>CNA</td>
<td>39.39%</td>
<td>45.31%</td>
<td>Internal Medicine: $9,373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Surgery: $36,076</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ob/Gyn: $46,276</td>
</tr>
<tr>
<td>The Doctors Company</td>
<td>39.29%</td>
<td>45.19%</td>
<td>Internal Medicine: $8,126</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Surgery: $31,279</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ob/Gyn: $40,597</td>
</tr>
<tr>
<td>Medical Protective</td>
<td>5.70%</td>
<td>6.55%</td>
<td>Internal Medicine: $10,568</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Surgery: $37,351</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ob/Gyn: $54,965</td>
</tr>
<tr>
<td>Physicians Insurance</td>
<td>2.56%</td>
<td>2.95%</td>
<td>TOTAL:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>86.94%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

1 Proportions based on direct premiums earned. Denominator is all carriers that report to the Oregon Insurance Division, except for 3 carriers that apparently write only for non-physicians (Dentists Benefit Insurance Co., Podiatry Insurance Co. of America, Pharmacists Mutual Insurance Co.).
2 Proportions based on direct premiums earned. Denominator is the 4 carriers that participated in the Medical Liability Monitor Annual Rate Survey for 2010.
3 Premium data source: Medical Liability Monitor Annual Rate Survey, October 2010.

Analysis of Effects on Physician Supply

To estimate the effect of caps on physician supply, we applied elasticities from David Matsa’s 2007 study, which is methodologically strong and permits estimates to be
generated on a county-by-county basis according to the degree of rurality of the county. Matsa found that the effect of caps on physician supply only achieved statistical significance in the most rural quartile of counties, based on population density in 1970. There, the elasticity was 4.5%. The point estimate for other counties was -1.4%, but we model it as zero because it did not achieve statistical significance.

To apply these elasticities, we obtained county-level physician workforce data from a 2011 report by the Oregon Office for Health Policy and Research. This report lists the number of health care practitioners by county based on 2009 license renewal applications to the Oregon Medical Board and 6 other boards of health professions licensing in Oregon. Our analysis includes the data for all MD and DO physicians, but not other health care practitioners.

The data in the OHPR report have the following limitations: (1) applications received since 2009, and physicians who subsequently left practice in Oregon, are not captured; (2) the physician counts exclude federally-employed physicians who practice exclusively in federal government programs or facilities; and (3) the physician counts reported include physicians who are not providing full-time patient care, including physicians who were unemployed but looking for work in their profession, physicians working part time, physicians working on a temporary basis, physicians retired but engaged in patient care, physicians who provided care on a volunteer basis, and physicians not currently working or looking for work but planning to return to the field. The counts thus overstate the number of physicians who were actually providing patient care services and the number of physician full-time-equivalents, which would be the most meaningful measures of physician supply. We adjusted the reported physician counts by a factor of 0.898 to account for the 10.2% physicians who, according to the report, are not in full-time or part-time practice. The remaining upward bias in the physician counts should be quite minimal and have only a very small effect on our analysis of the effects of tort reforms, since we are estimating only the marginal effect of adopting the reforms on the total supply of physicians.

We divided Oregon counties into those within and outside the most rural quartile. Quartile cutpoints and county classifications were generated by a statistical analyst at Harvard University’s Institute for Quantitative Social Science using 2000 U.S. Census data on county population density across all U.S. counties. The threshold for the bottom quartile was 17.0 residents per square mile. We calculated county population density for 2009 using (1) population counts generated by the Population Research Center at Portland State University, reported in its 2009 Annual Population Report and the 2011 OHPR report; and (2) county land area data from the 2000 U.S. Census. A limitation of our analysis is that our bottom-quartile cutpoint is derived from 2000 Census data, while our population densities incorporate 2009 estimates. However, this is very unlikely to have affected the classification of Oregon counties as within our outside the bottom quartile of all U.S. counties on population density.

Applying the cutpoint of 17.0 to the 2009 population densities, the following Oregon counties were classified as falling into the bottom quartile: Baker, Crook, Curry, Gilliam, Grant, Harney, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Union, Wallowa,
Wasco, and Wheeler. The number of full-time and part-time physicians in 2009 was multiplied by 1.04 for these counties to simulate the effects of a damages cap in the most rural areas. The physician counts for the remaining counties were not adjusted. The final counts for each county were summed to arrive at the total estimate of physician supply in Oregon in the presence of a cap.

**Analysis of Equity Effects**

We used the NPDB data to simulate the effect of different cap levels on groups of claimants who may be disproportionately affected by noneconomic damages caps: women, the elderly (defined in our analysis as aged 70 and higher), and claimants with severe injuries. Following the methods we employed in a previous study, we examined the absolute and proportional reductions in awards under each of the cap amounts for each of these groups. The absolute reduction is the number of dollars by which the total award is reduced. The proportional reduction is calculated as Absolute Reduction / Total Pre-Cap Award. The proportional reduction is of interest because it is more sensitive to the pre-cap split between economic and noneconomic damages in each award. We examined differences between women and men, the elderly and nonelderly, and claimants with different levels of injury severity using conventional statistical tests of bivariate association. We then ran a multivariate ordinary least squares regression model to estimate both absolute and proportional reductions as a function of plaintiff sex, age (elderly, infant, or other), and level of injury severity (from 1 to 9 on the National Association of Insurance Commissioners’ disability rating scale).

**OTCA Extension Analysis**

Because the proposed extension of the OTCA would apply only when a provider treats a patient covered by Medicaid or another state insurance program, we required an estimate of the percentage of malpractice claims and indemnity payments involving these patients in order to model the potential cost savings. The OMB closed-claims database does not collect information about the patient’s health insurer. We queried the two largest medical liability insurers in Oregon as to whether they could provide a breakdown of their claims by patient’s health insurer, but this information was not readily ascertainable from their databases. We were also unsuccessful in obtaining this breakdown from the Oregon Insurance Division and other state agencies.

We did locate two estimates in the published literature, both of which are limited to Medicaid patients (i.e., they did not include patients covered by other state insurance programs). Estimate 1, from the Malpractice Insurers Medical Error Prevention and Surveillance Study conducted by Harvard researchers, is that Medicaid patients account for 10% of claims. This study has two limitations as a source of information on this issue, however. Approximately 40% of the claim files reviewed in that study were missing information on the patient’s insurer. Furthermore, the sample of claims analyzed in the study likely was not representative of malpractice claims nationwide. Academic medical centers and their affiliated physicians were overrepresented in the sample of participating insurers, and malpractice claims were only included if they fell within the 4 clinical specialties that account for 80% of all claims (medication-related, missed/delayed diagnosis, operative, or
obstetrical). Estimate 2, from the Utah-Colorado Medical Practice Study conducted by Harvard researchers,\(^{(38)}\) is that Medicaid patients account for 8% of all claimants and 6% of claimants who received compensation. Although it is older, and based on data from only 2 states, this study did not suffer from either of the limitations noted above. For that reason, we use Estimate 2 in our analysis.

**Medical Panels Analysis**

The effects of medical panels on obstetrical practice were calculated in a study by Yang and colleagues as a 0.07 percentage point increase in VBAC rates and a 0.28 percentage point decrease in cesarean section rates.\(^{(29)}\) The number of births in Oregon (45,535 in 2010) was obtained from the National Vital Statistics Report (preliminary 2010 data) produced by the National Center for Health Statistics. Rates of VBAC and cesarean section in Oregon were taken from National Vital Statistics Report data for 2008 and 2009, respectively.\(^{(133, 134)}\) These rates were 12.9% for VBAC and 29.4% for cesarean section. We simply added the effect sizes from the Yang study to these baseline rates to estimate the rates with medical panels. We then applied these rates to the total number of births in Oregon and computed the difference in number of births with and without panels.
References


60. Struve CT. Improving the medical malpractice litigation process. Health Affairs 2004;23:33-41.


64. *Clarke v. OHSU*, 343 Or. 581 (2007).


66. United States Government Accountability Office. VA health care: VA uses medical injury tort claims data to assess veterans' care, but should take action to ensure that these data are complete. 2011.


72. Communication with OHPR and representatives from two liability insurers in Oregon; December 20, 2011.


January 6, 2012

Bruce Goldberg, M.D.
Oregon Health Authority
500 Summer Street NE, E-20
Salem, OR 97301

Re: HB 3650 Reports

Dear Dr. Goldberg:

Enclosed are two reports prepared by the Department of Justice at the request of Oregon Health Authority to assist you in responding to various legislative directions contained in section 16 of HB 3650 (2011): (1) a legal analysis of potential medical malpractice liability reforms under Oregon law; and (2) a study of the Stark Law and related limitations on financial interests in health care reimbursements.

Please let us know if you have any questions about these reports or if we can be of further assistance to you and the authority in this matter.

Sincerely,

[Signature]

Joseph T. McNaught
Deputy Chief Counsel
General Counsel Division

JTM: aw/3162087
Enclosures
c: David Leith, DOJ
    Keith Dubanevich, DOJ
    Linda Grimm, DOJ
Medical Liability Reform in Oregon:

A Legal Analysis of Several Alternatives
Under Oregon Law

Joseph McNaught, Amy Alpaugh, and David Hicks,
Assistant Attorneys General
Oregon Department of Justice
January 6, 2012
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Executive Summary

The Oregon Health Authority (OHA) is conducting a study about and developing recommendations for reducing costs attributable to defensive medicine and the over-utilization of health services. See Or Laws 2011, ch 602, § 16 (HB 3650) (assigning task). OHA’s recommendations must allow OHA clients to seek redress for harms caused by medical malpractice. Id. As part of these efforts, the OHA has asked the Oregon Department of Justice (DOJ) for a legal analysis of four issues under Oregon law.

Those issues and DOJ’s summary conclusions are as follows:

1. Extending agent status and corresponding liability coverage through the Oregon Tort Claims Act to those who serve OHA’s clients:

A “tort” is a civil breach of a non-contractual duty. Medical malpractice is a type of tort. By statute, the legislature may declare that, at least for Oregon Tort Claims Act purposes, those who provide medical services to OHA clients, (including a coordinated care organization (CCO)) act as agents of the state when they provide those services. The legislature may promise to indemnify these agents against tort claims brought by OHA clients. Unless that promise is conditioned upon the availability of future discretionary appropriations, however, the legislature must appropriate or otherwise provide for funds sufficient either to purchase insurance or to establish and maintain an actuarially sound self-insurance fund that covers the claims.
2. *A path, if possible, for capping malpractice damages awarded against those who provide medical services to OHA's or other public agencies’ clients:*

The term “damages” refers to money claimed by or ordered to be paid to a person as compensation for an injury. Damages caps potentially run afoul of three sections of Article I of the Oregon Constitution: the jury trial (section 17), remedy (section 10), and privileges and immunities clauses (section 20). An amendment to the Oregon Constitution is the only way to insure that a cap on damages will be upheld in *all* medical negligence cases (or in *all* cases where the medical care is publicly-funded).

If a tort claim did not exist at common law in 1857, the year the people adopted the original Oregon Constitution, then the legislature may impose a damages cap on that type of claim. Examples of claims that did not exist as common law claims in 1857, according to the Oregon appellate courts, include those for wrongful death and for prenatal injuries.

A statute that substitutes the state for its agent as a defendant in a lawsuit and that caps the damages in that suit, as does the OTCA, does not violate the jury trial provision or the privileges and immunities clause and does not *facially* violate the remedy clause. But such a statute may violate the remedy clause when it is applied to certain situations, such as when the damages incurred are especially large and the cap results in an “emasculated” remedy for the injury.

3. *Whether the joint and several liability statutes need to be amended so that CCOs assume the risk of their actions but are not liable for the actions of others:*

“Joint and several liability” generally refers to the responsibility of each defendant who is found to be at fault to pay the entire judgment owed to the plaintiff, regardless of his or her degree of fault relative to that of the other defendants. The Oregon legislature eliminated joint and several liability in 1995. Now, under ORS 31.610, defendants are responsible only for their own percentage of fault (except in certain circumstances when the award from one defendant is deemed uncollectible and proportionally reallocated to the remaining defendants). In light of ORS 31.610, there probably is no need for joint and several liability *per se* to be clarified in Oregon.

But CCOs may potentially be held responsible for the torts of their providers on a theory of vicarious liability, which holds principals responsible for the torts of their agents or apparent agents. No Oregon case addresses vicarious liability of HMOs or other managed care organizations. But Oregon courts have held hospitals and other entities to be vicariously liable for the torts of physicians, even when the physicians were independent contractors. If a CCO
holds out a provider as its agent and the patient relies on that holding out in seeking care, Oregon courts may determine that CCOs are vicariously liable for any harm that arises from the provider’s medical negligence.

4. The possibility of implementing an administrative system for compensating harm resulting from medical malpractice:

We consider two types of administrative systems. Under the first type, a medical panel acts as a pretrial screening forum for malpractice claims. If the panels are mandatory and purport to issue binding medical negligence decisions, they violate the jury trial provision of the Oregon Constitution. But if the parties voluntarily participate in a medical panel process, the panel may issue a binding medical negligence decision. If the panels are mandatory but issue only non-binding decisions (either subsequently admissible or non-admissible in evidence), they likely are constitutional. If the medical panels are mandatory only for OHA clients and issue non-binding decisions, then they likely do not violate the Oregon Constitution.

The second type is an administrative compensation system (ACS) that is the exclusive forum for the adjudication of medical malpractice claims. The compensability standard is lower than negligence. While the compensation awards are substantial, they are either limited, subject to schedules, or issued pursuant to guidelines. The ACS may provide a constitutionally inadequate remedy in certain cases and is subject to “as-applied” challenges on that basis. The ACS does not violate the jury trial provision and should survive a challenge that it is facially invalid under the remedy clause.

Scope of Report

This report addresses Oregon law only. Oregon’s medical assistance program is administered in accordance with federal standards applicable to the state’s receipt of federal funds under Title XIX of the Social Security Act (Medicaid) and Title XX (State Children’s Health Insurance Program) as well as state laws. HB 3650 also affects individuals who are eligible for both Medicaid and Medicare. This report does not evaluate whether any of the legal issues discussed herein (including those related to the potentially differential treatment of medical assistance recipients) might also involve issues raised by these federal regulatory contexts.

Report

I. Extension of Oregon Tort Claims Act (OTCA) Agent Status

OHA first asks about conferring agent status for OTCA purposes upon medical providers when those providers are serving OHA’s clients. This is possible. But there are several legal and practical hurdles that must be overcome before implementing such a scheme.
A. OTCA Claims Against the State and Its Agents

For purposes of this discussion, the OTCA, ORS 30.260 to 30.300, contains four principal elements:

1. The state consents to be sued “for its torts and those of its officers, employees and agents acting within the scope of their employment or duties * * *.” ORS 30.265(1).

2. In a claim against a state’s agent, the state is substituted for the agent as the sole defendant in many cases.1

3. The damages awarded in an OTCA claim against the state or its agents may not exceed certain amounts. ORS 30.271(2)-(4). For example, for such claims that arise after July 1, 2011 and before July 1, 2012, the damages are capped at $1.7 million per claimant and $3.4 million for all claimants on that claim. ORS 30.271(2)(c), (3)(c).2

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1 The 2011 legislature amended 30.265, effective January 1, 2012. Or Laws 2011, ch 270, § 1. The prior version of the statute required the substitution of the state as defendant for a state officer, employee, or agent in every case. ORS 30.265 (2009). The amended version mandates substitution only when the damages alleged do not exceed the limits established by ORS 30.271. As discussed in greater detail below, in 2007 the Oregon Supreme Court found the prior version of ORS 30.265(1), which required substitution in every case, “to violate “the Remedy Clause of Article I, section 10” as “applied to plaintiff’s claim against the individual defendants” due to the elimination of the cause of action against public employees or agents. Clarke v. Oregon Health Sciences University, 343 Or 581, 610, 175 P3d 418, 434 (2007). While an agent continues to be a named defendant in any case where the amount of alleged damages exceeds the ORS 30.271 cap, a qualifying agent is still fully indemnified (i.e., the state pays the full judgment on behalf of the agent) even when the judgment exceeds the ORS 30.271 cap. ORS 30.285(1) (3). See Letter of Advice to Richard Peterson, Director, Department of Corrections, January 26, 1989 (OP-6229), 1989 WL 439798, 1 (even if damages exceeding the OTCA limits are assessed in a 42 USC § 1983 civil rights case, the state is “responsible for payment of the damages so long as a physician-agent was “acting within the scope of [his or her] employment or duties,” ORS 30.265(1), and was not guilty of “malfeasance in office or willful or wanton neglect of duty,” ORS 30.285(2).”).

2 The per claimant and all claimants per claim caps rise $100,000 and $300,000 a year, respectively, until they reach $2 million and $4 million, respectively, for claims arising during the 2014-2015 fiscal year. ORS 30.271(2)(d)-(f), (3)(d)-(f). Thereafter, the State Court Administrator determines annual changes in the caps, based upon the corresponding changes in the Portland-Salem consumer price index. ORS 30.271(2)(g), (3)(g), and (4).
4. The state commits to “defend, hold harmless, and indemnify any of its * * * agents” against any tort claim arising out of an “alleged act or omission occurring in the performance of duty,” except when the alleged “act or omission amounts to malfeasance in office or willful or wanton neglect of duty,” regardless of whether a judgment in the case exceeds the limits stated in ORS 30.271. ORS 30.285(1), (3).

The Department of Administrative Services (DAS) “has exclusive authority to manage [OTCA] claims against * * * agents of the state * * *.” ORS 278.120(1). DAS also “direct[s] and manage[s] all risk management and insurance programs of state government,” subject to exceptions not relevant here. ORS 278.405. DAS may purchase insurance or develop self-insurance programs, or a combination thereof, to carry out this responsibility. ORS 278.405(2).

DAS also administers the state’s “Insurance Fund, a separate fund in the State Treasury, separate and distinct from the General Fund.” ORS 278.425(1). The Insurance Fund is used to provide “insurance and self-insurance” for the state and participating local public bodies. Id. The legislature intends that the Insurance Fund “operate on an actuarially sound basis” and that “assessments and charges [to agencies] shall reflect this policy.” ORS 278.435(1).

B. Plenary Power of Legislative Assembly

The legislature may enact any law it wishes so long as the law does not conflict with the Oregon Constitution, the United States Constitution, or superseding federal statutes or regulations. See MacPherson v. Department of Administrative Services, 340 Or 117, 127-28, 130 P3d 308 (2006) (so stating). As discussed at length below, a damages cap or mandatory administrative compensation scheme may, in certain circumstances, run afoul of the jury trial or remedy clauses of the Oregon Constitution, regardless of whether the provider is or is not a state agent. The legislature may extend state agent status under the OTCA to medical providers, including CCOs, while they are treating OHA clients, without otherwise violating the Oregon Constitution, provided that the costs of that extension are fully funded or the General Fund is protected from any funding shortfall.3

C. Public Purpose Doctrine

We have observed in the past that, “[a]s a general rule, under the express or implied restrictions of state constitutions, public funds may be used only for public purposes.” 37 Op Atty Gen 911, 926 (1975). To the extent that this so-called “public purpose doctrine” continues

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3 In their January 2, 2012, report to OHA, consultants Dr. Michelle Mello and Dr. Allen Kachalia address the empirical and policy aspects of such a statutory change (benefits “may be quite limited”). See Mello and Kachalia, “Medical Liability Reform in Oregon: Possibilities, Costs, and Benefits,” at 5-6 and 45-50.
to exist as a viable concern for state expenditures, we can dispose of it quickly for purposes of this discussion.

In Oregon, the question of whether an adequate public purpose exists has largely arisen when a local government’s expenditure benefits a private party. See, e.g., Carruthers v. Port of Astoria, 249 Or 329, 438 P2d 725 (1968) (unsuccessful challenge to Port’s issuance of revenue bonds to support construction of an aluminum plant). The Oregon Supreme Court has characterized the following as “sensible tests” to use in determining whether an adequate public purpose exists in such a situation:

Much has been written in the cases and law reviews already cited about public purpose. The cases generally hold that if there is a substantial public benefit, the plan is not defeated if a private purpose also is served. “The grounds for deciding such cases ** are seldom articulated clearly. ** [T]he relevant inquiry would seem to be whether the proposed project will augment the community's total value position.” 70 Yale L.J., supra at 791 and 796.

“The only valid criterion would seem to be whether the expenditures are sufficiently beneficial to the community as a whole to justify governmental involvement; but such a judgment is more appropriate for legislative than judicial action. The judiciary should invalidate expenditures only where reasonable men could not differ as to their lack of social utility.” Note, 66 Harv.L.Rev. 898 at 903 (1953).

_Carruthers_, 249 Or at 341.

The extension of state agent status to individuals who otherwise would be treated as private medical providers obviously benefits those individuals. But the legislature can easily articulate what it perceives as the public benefits that flow from such a decision. For example, the public benefits may include inducing more providers to treat OHA patients, reducing the incidence of defensive medicine, reducing overall costs to the system, and so on.4

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4 The legislature has previously decided to extend agent status by statute to individuals who otherwise may not be deemed state or public officers, employees, or agents. For example, if commercial insurance is not available to cover higher education students involved in student teaching, internships, clinical experiences, capstone projects and related activities, then such students “shall be considered to be acting within the course and scope of state employment duties for purposes of ORS 30.260 to 30.300.” ORS 30.264(2). And a retired physician who provides medical care as a volunteer without compensation to persons referred from a county health officer “shall be considered to be an agent of a public body for purposes of ORS 30.260 to 30.300.” ORS 30.302(2). Finally, “nonsalaried or courtesy physicians or dentists” who are “affiliated” with Oregon Health and Science University (OHSU) and receive a fee for
D. Article XI, Section 7 and Funding Issues

Article XI, section 7, of the Oregon Constitution is the debt limitation clause of the Oregon Constitution. It limits the power of the state to create debt in excess of $50,000, except in limited circumstances.5 “Dubbed the ‘pay as you go’ provision by the members of the Constitutional Convention of 1857, [the provision] was adopted by the people in 1859.” State ex rel. Kane v. Goldschmidt, 308 Or 573, 579-80, 783 P2d 988 (1989). We have long concluded that an unqualified promise by the state to indemnify another party against a contingent liability violates Article XI, section 7. See, e.g., 28 Op Atty Gen 50 (1956) (an agreement to indemnify the United States from damages due to river project construction violates Article XI, § 7). Every “contract of indebtedness entered into or assumed by or on behalf of the state” in violation of this debt limitation provision “shall be void and of no effect.” Or Const, Art XI, § 7.

There essentially are two ways for an indemnity promise to avoid violating Article XI, section 7. The first is to fully fund the obligations created by that promise on an ongoing basis with current appropriations or other funding. See Oregon State Police Officers’ Ass’n v. State, 323 Or 356, 377, 918 P2d 765 (1996) (“[The Public Employees Retirement Fund] is fully funded on a pay-as-you-go basis by employer and employee contributions and interest on its investments. Because full payment is made in the present, the pension benefits at issue in these cases do not create a future debt obligation.”). In the case of a promise to indemnify a state agent, the ongoing funding could be used to purchase insurance or to fund an actuarially sound6 self-insurance fund, separate from the General Fund.

The second option is to make the indemnity obligation conditional. One example would be for the legislature to expressly declare that the indemnity promise is subject to the legislature appropriating funds to support that promise. If the legislature retains discretion as to whether to enact such an appropriation, there is no violation. See, e.g., State ex rel. Kane, 308 Or 573 at 586 (upholding certificates of participation with a “nonappropriation clause”: “The state's promise of repayment is conditioned on the willingness of future legislative assemblies to appropriate the funds. The state does not promise that future legislatures will appropriate any funds.”).

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treating patients at the campus of OHSU are deemed to be “within the scope of their state employment or duties” for OTCA purposes when they provide such patient services. ORS 30.267(1)(b), (2)(a).

5 The exceptions include war debts and highway debts authorized by Article XI, section 7, as well as the bonded indebtedness authorized by other articles of the constitution.

6 ORS 278.005(1) defines “actuarially sound” for purposes of ORS chapter 278 to mean “funding and insurance sufficient to pay those losses and their related costs which are known by the Oregon Department of Administrative Services from analyses of claims, loss experiences and risk factors.” In this report, we accord a similar meaning to the term.
A variation on the conditional indemnity promise approach is for the legislature to make the funds to fulfill that promise payable only from a special fund that is separate from the General Fund. See, e.g., Moses v. Meier, 148 Or 185, 35 P2d 981 (1934) (no debt limitation violation because repayment of certificates limited to liquor revenues deposited in special fund; the state had no legal obligation to replenish the fund if it was insufficient; and the certificate holders could not look beyond the special fund for repayment). Again, the state must have no obligation to replenish the special fund with General Fund appropriations if it becomes depleted. As a practical matter, a medical provider may not find much comfort in a conditional promise to defend and indemnify.

In sum, if the legislature extends OTCA agent status to certain medical providers, it must not violate Article XI, section 7. Accordingly, if the legislature makes a new indemnity promise, it must (1) make clear that the state’s obligation is a conditional one; or (2) appropriate, or otherwise provide for, on an ongoing basis moneys sufficient to purchase adequate insurance or to create and maintain an actuarially sound self-insurance fund.

II. Statutory Damages Caps

As part of its section 16 study, OHA is considering a cap on the amount of damages that an OHA client may recover for injuries caused by medical negligence. OHA asks us to review how Oregon courts have approached challenges to legislatively-imposed damages caps. Based on that review, OHA further asks for advice as to the cap options that are most likely to survive legal challenges and to recommend a “path” for imposing them.

Statutory damages caps already have been challenged under several provisions of the Oregon Constitution. Oregon courts have found the caps as applied in particular cases to violate two Oregon constitutional provisions, the “remedy clause” in Article I, section 10, and the right

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7 We have previously concluded that the predecessor to the current Insurance Fund established by ORS 278.425 (the Liability Fund within the former Restoration Fund) was such a special fund. 37 Op Atty Gen at 929. As the state’s OTCA indemnity obligations were fulfilled solely at that time from the moneys in that special fund, we concluded that the “indemnity promised by ORS 30.285” did not “violate Article XI, Section 7, of the Oregon Constitution.” Id. at 913, 929. We have not had occasion to analyze the special fund status of the current Insurance Fund in a formal Attorney General’s opinion.

8 We recommend that OHA confer with the Department of Administrative Services as to the projected costs of acquiring insurance or maintaining an actuarially sound fund in order to cover the liabilities associated with an extension of OTCA agent status to additional medical providers.

9 From an empirical and policy standpoint, Dr. Mello and Dr. Kachalia conclude that the “benefits of non-economic damages caps can be characterized as statistically significant, but modest in size. Mello and Kachalia report, at 5.
to a jury trial in Article I, section 17. The right to a jury trial poses the most significant barrier to imposing damages caps in medical negligence cases, so we begin with it.

A. Right to a Jury Trial - Article I, Section 17

1. The provision

Article I, section 17, guarantees that, “[i]n all civil cases the right of Trial by Jury shall remain inviolate.” The provision was part of the original Oregon Constitution, which was adopted by the people in 1857. In *Molodyh v. Truck Insurance Exchange*, 304 Or 290, 295, 744 P2d 992 (1987), the Oregon Supreme Court explained that Article I, section 17 guarantees a jury trial “in those classes of cases in which the right was customary at the time the [Oregon] constitution was adopted or in cases of like nature.” The right “includes having a jury determine all issues of fact, not just those issues that remain after the legislature has narrowed the claims process.” *Id.* at 297-98.


In *Lakin v. Senco Products, Inc.*, 329 Or 62, 987 P2d 463 (1999), the court considered a claim that a statutory damages cap violated Article I, section 17. The challenged statute, ORS 18.560, capped noneconomic damages at $500,000. The plaintiffs challenged the trial court’s post-trial application of the statutory cap to reduce their noneconomic damages jury awards. No party in that case questioned whether the plaintiffs had a right to a jury trial. *Id.* at 69. The question, instead, was whether the determination of damages was a question of fact for the jury such that Article I, section 17, prevented legislative interference with its decision. The court concluded that it was, holding:

>The determination of damages in a personal injury case is a question of fact. The damages available in a personal injury action include compensation for noneconomic damages resulting from the injury. The legislature may not interfere with the full effect of a jury’s assessment of noneconomic damages, at least as to civil cases in which the right to jury trial was customary in 1857, or in cases of like nature. It follows, therefore, that, in this context, ORS 18.560(1) violates Article I, section 17.

*Id.* at 82 (citations omitted).
Significantly, the court rejected the defendants’ argument that application of the cap complied with Article I, section 17, because the capped amount was substantial. The court explained that:

[W]e do not assess the constitutionality of ORS 18.560(1) under Article I, section 17, based on the amount of the statutory cap; rather we assess its constitutionality because it is a cap on the jury’s determination of noneconomic damages.

_Id._ at 81 (emphasis added).

### 3. Summary – caps and jury trial provision

In sum, any legislatively-imposed noneconomic damages cap, no matter how high the capped amount, will violate Article I, section 17, in the cases to which the provision applies. The court’s analysis applies equally to prohibit caps on economic damages. The provision will apply to most, but not all, claims based on injuries caused by medical negligence, and, therefore, prohibits the legislature from imposing damages caps in those cases. We next briefly review the situations in which Oregon courts have concluded that Article I, section 17, does not apply to bar statutory caps.

### 4. Article I, section 17, does not apply to causes of action that did not exist in 1857

The Oregon Supreme Court has held the provision to be inapplicable in three types of cases that may involve medical negligence. First, the court has held Article I, section 17, to be inapplicable to a wrongful death claim, including one seeking redress for injury resulting from medical negligence. _See Hughes v. PeaceHealth_, 344 Or 142, 154-56, 178 P3d 225 (2008) (holding that application of statutory damages cap in a wrongful death case did not violate Article I, section 17); _see also, Greist v. Phillips_, 322 Or 281, 294, 906 P3d 789 (1995) (“[T]he right of action for wrongful death is statutory. ‘[A]t common law no remedy by way of a civil action for wrongful death existed.’ * * * * *. Because wrongful death actions are ‘purely statutory, they ‘exist only in the form and with the limitations chosen by the legislature.’”).

The plaintiff in _Hughes_ argued that a wrongful death claim based on medical negligence is of “like nature” to a personal injury claim based on medical negligence and, therefore, Article I, section 17, should apply. The _Hughes_ court rejected the plaintiff’s contention, stating that it clearly conflicted with the principle that Article I, section 17, “is not a source of law that creates or retains a substantive claim or theory of recovery in favor of any party.” 344 Or at 142, 156 (citations omitted).
The Oregon Court of Appeals recently held that Article I, section 17, does not apply to a second type of claim based on medical negligence – a claim for prenatal injuries:

[A] claim for prenatal injuries – including those that occur during birth – did not exist at the time the Oregon Constitution was adopted * * * [which] necessarily forecloses plaintiffs’ contention that the jury trial provision[] of Article I, section 17 * * * preclude[s] the application of ORS 31.710 [the current statutory cap on noneconomic damages].

*Klutschkowski v. PeaceHealth*, 245 Or App 524, 546-47, 263 P3d 1130 (2011), 2011 WL 4376727 at 13. The court rejected the plaintiff’s contention that his claim for prenatal injuries was “of like nature” to a negligence claim that existed in 1857, and, therefore, Article I, section 17, should apply. *Id.* (citing the analysis in *Hughes v. PeaceHealth*).

Third, Oregon courts have held that Article I, section 17, does not apply in actions against the state or an instrumentality of the state performing state functions. Because those entities would have had sovereign immunity in 1857 and a plaintiff would not have had a civil action against them under common law, the legislature may impose damages caps in those actions without running afoot of Article I, section 17. *Clarke v. OHSU*, 343 Or 581, 600 n 9, 175 P3d 418 (2007); *Ackerman v. OHSU*, 233 Or App 511, 526 n 8, 227 P3d 744 (2010).

5. **Article I, section 17, does not create or retain a substantive claim or theory of recovery**

As discussed above, one of the actions that OHA is considering is asking the legislature to add providers of publicly-funded medical assistance to those protected by the substitution and

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10 The Oregon Constitution contains another provision concerning the right to trial by jury. Article VII (Amended), section 3 provides that “[i]n all actions at law, where the value in controversy shall exceed $750, the right to trial by jury shall be preserved, and no fact tried by a jury shall be otherwise reexamined in any court of this state, unless the court can affirmatively say there is no evidence to support the verdict.” This provision was adopted by the voters of Oregon by initiative petition in 1910. *Greist v. Phillips*, 322 Or at 293. Oregon courts thus far have held that provision to be inapplicable to the same claims that Article I, section 17 is inapplicable to. *See Id* at 297 (holding that the provision did not restrict the legislature’s authority to set a maximum recovery for statutory wrongful death actions); *Voth v. State of Oregon*, 190 Or App 154, 161–62, 78 P3d 565 (2003), *rev den*, 336 Or 377, 84 P3d 1081 (2004) (holding that the provision did not apply on the same ground that Article I, section 17 did not apply, because the common law did not provide a jury trial for a claim against the state in 1857); and *Klutschkowski*, 245 Or App 546-47 (holding the provision did not apply to claims for prenatal injuries, because no common law claim for those injuries existed in 1857). Accordingly, we do not separately address this provision in this report.
cap provisions of the OTCA. If that were to be done, Article I, section 17, would not apply to invalidate the substitute and cap provisions.

In *Jensen v. Whitlow*, 334 Or 412, 51 P3d 599 (2002), the Oregon Supreme Court considered a claim that the OTCA substitution and cap provisions violated Article I, section 17. In rejecting that claim, the court distinguished *Lakin*:

[I]n this case, the legislature has eliminated plaintiff’s right to bring her claim against the individual employees and has substituted a different remedy against the state. Article I, section 17, is not a source of law that creates or retains a substantive claim or theory of recovery in favor of any party. * * *. The right to pursue a “civil action,” if it exists, must arise from some source other than Article I, section 17, because that provision “is not an independent guarantee of the existence of a cognizable claim.”

*Id.* at 422. In other words, if the legislature eliminates a cause of action against the individual provider under the substitution and cap provisions of the OTCA, Article I, section 17, will not apply. On the other hand, legislative elimination of a cause of action implicates the remedy clause of the Oregon Constitution. We turn to that provision.

**B. Remedy Clause, Article I, Section 10**

1. **The provision**

   Article I, section 10, of the Oregon Constitution, includes a “remedy clause,” which provides that “every man shall have a remedy by due course of law for injury done him in his person, property or reputation.” In *Smothers v. Gresham Transfer, Inc.*, 332 Or 83, 124, 23 P3d 333 (2001), the Oregon Supreme Court concluded that, because Article I, section 10, guarantees a remedy for injuries to “absolute common-law rights” respecting person, property or reputation, the legislature does not have plenary authority to extinguish a remedy for such injuries. The legislature may abolish a remedy that existed at common law only if it provides a “constitutionally adequate substitute remedy.” *Id.* In determining whether legislative action has violated Article I, section 10:

   [T]he first question is whether the plaintiff has alleged an injury to one of the absolute rights that Article I, section 10 protects. Stated differently, when the drafters wrote the Oregon Constitution in 1857, did the common law of Oregon recognize a cause of action for the alleged injury? If the answer to that question is yes, and if the legislature has abolished the common-law cause of action for injury.
to rights that are protected by the remedy clause, then the second question is whether it has provided a constitutionally adequate substitute remedy for the common-law cause of action for that injury.

Id.

2. The OTCA substitution and cap provisions are facially constitutional

In Jensen, the Oregon Supreme Court upheld the facial constitutionality of the OTCA substitution and cap provisions against an Article I, section 10, challenge. A “facial challenge” asserts that the statute violates the constitution on its face and is void, rather than violating the constitution as applied in a particular case. A statute is not facially unconstitutional unless it is incapable of constitutional application in any circumstance. Jensen, 334 Or at 421. The court declared that the statute did not violate Article I, section 10, on its face, because the provisions could be applied constitutionally in some circumstances (i.e., when the damages award did not exceed the statutory cap). Id.

3. Application of the sub and cap provisions may be unconstitutional in particular cases

Oregon courts subsequently have held the substitution and cap provisions to violate the remedy clause as applied in individual cases. In Clarke, 343 Or 581, the plaintiff (a severely brain damaged infant) alleged that he had sustained over $17,000,000 in damages caused by the medical negligence of medical personnel who were OHSU employees, officers or agents. The question for the court was whether the application of the substitution and cap provisions, which eliminated a cause of action against the individual doctor and substituted a remedy against OHSU, capped at $200,000, violated the remedy clause in that particular case. The court concluded that the elimination of the cause of action against the individual doctor violated the remedy clause in that case, because the substituted capped remedy against the public body was an emasculated version of the remedy available at common law. Id. at 610.

In reaching its decision, the court made several important observations about the remedy clause. First, it clarified that the clause protects the substance of the redress as well as the procedure for seeking redress for injury. Id. at 601 n 10. Second, the court refused the defendants’ invitation to analyze whether the substitute remedy was constitutionally adequate “on a categorical basis only” that “should not focus on the facts of the individual case, but instead should focus on the balance struck by the legislature in creating a substitute remedy[]” and which should hold the legislative policy choice constitutional “unless a category of potential plaintiffs is left without a remedy.” Id. at 601. The court, instead, focused on the facts of the individual case without regard to any balance struck by the OTCA.
In doing so, the court distinguished an earlier case, *Hale v. Port of Portland*, 308 Or 508, 783 P2d 506 (1989), in which the court had balanced the OTCA’s expansion of the class of plaintiffs who could recover against municipalities (who had a limited form of sovereign immunity) against the limits on the amount that could be recovered, to conclude that the OTCA caps as applied to a municipality did not violate the remedy clause. *Clarke*, 343 Or at 602 (summarizing the rationale in *Hale*). The court in *Clarke* distinguished *Hale* on the ground that “*Hale* examined the adequacy of a statutorily capped monetary remedy in a claim against public bodies *not* the sub and cap provisions that eliminated any claim against the individual tortfeasor.” *Id.* at 608 (emphasis added).

The Oregon Court of Appeals also has held that, as applied in a particular case, the OTCA’s substitution and cap provisions violates the remedy clause. In *Ackerman*, another medical negligence case, the OTCA’s substitution and cap provisions limited the plaintiff’s remedy to a recovery of only $400,000 from two public bodies ($200,000 each, under the former, much lower cap), when the plaintiff had incurred $1,412,000 in damages. Again the question was whether that recovery was a constitutionally adequate substitute remedy for the uncapped remedy against the individual doctors. 233 Or App at 526-27. The court concluded that it was not. *Id.* at 533. Drawing from *Clarke*, the court affirmed that “the adequacy of a legislatively created substitute remedy is gauged on a case-by-case basis.” *Id.* at 527. It further observed that “we cannot gauge the constitutionality of a legislatively created damages cap wholesale, that is, by determining whether the legislature has compensated for abolishing or limiting an individual plaintiff’s damages by expanding the availability of a limited remedy to additional plaintiffs.” *Id.*

### 4. Summary – caps and remedy clause

In sum, if a plaintiff alleges an injury to an “absolute common-law right” and the legislature has abolished or limited the plaintiff’s substantive remedy against a tortfeasor (such as a public agent or employee) that is not himself or herself a public body, it must provide a constitutionally adequate substitute remedy. Adequacy will be judged on a case-by-case basis, rather than by a “wholesale” balancing of benefits and burdens imposed by the legislation. Oregon courts recently have been receptive to “as-applied” challenges, although, given the recent, significant increases in the OTCA damages caps, the number of cases where future challenges are brought or are successful may be limited.

The Oregon Supreme Court has suggested that *Clarke* is an outlier case. See *State v. Rodriguez/Buck*, 347 Or 46, 80, 217 P3d 659 (2009) (cases such [as this one] and *Clarke* “illustrate the specific, limited circumstances in which we may conclude that a statute that is constitutional on its face nevertheless may be unconstitutional as applied to particular facts.”) Despite that admonition, as just discussed, the court of appeals in *Ackerman* held that a much smaller discrepancy than was present in the *Clarke* case between the full amount awarded and
the capped recovery constituted a constitutionally inadequate substitute remedy. And, while
defendants in individual cases may litigate whether the plaintiff would have had an “absolute
common-law right” to recovery, that litigation will be expensive. In short, the protections
provided to individual medical providers under the OTCA substitution and cap provisions (or
any other legislative action that abolishes or limits a cause of action against them) are not
absolute, and are potentially vulnerable to an as-applied remedy clause challenge.

C. Article I, Section 20 – Equal Privileges and Immunities

1. The provision

Although several plaintiffs have claimed that statutory damages caps violate Article I,
section 20, of the Oregon Constitution, none of those claims have succeeded. Article I,
section 20, provides that “No law shall be passed granting to any citizen or class of citizens
privileges, or immunities, which, upon the same terms, shall not equally belong to all citizens.”
That provision scrutinizes benefits given to, rather than discrimination against, a particular class.
*Crocker and Crocker*, 332 Or 42, 54, 22 P3d 759 (2001). This provision prohibits granting of
privileges or immunities to any class of citizens which are not available on the same terms
equally to all citizens. *Hale*, 308 Or at 524. The target of the “provision was the abuse of
governmental authority to provide special privileges or immunities for favored individuals or
classes, not discrimination against disfavored ones.” *Id.* (Emphasis in original.)

2. Article I, section 20, challenges to capped damages

The Oregon Supreme Court has explained that classes created by the challenged law
itself are not considered to be classes at all for purposes of Article I, section 20. *Sealey v. Hicks*,
309 Or 387, 397, 788 P2d 435, *cert den* 498 US 819 (1990), *overruled in part on other grounds
by Smothers*. 332 Or 83. The court has also held that the classes created by the statutory
noneconomic damages cap “clearly are ‘classes created by the challenged law itself.’” *Greist v.
Phillips*, 322 Or at 292.

The court has further reasoned that, even if a law creates a favored class, the law will
survive scrutiny under Article I, section 20, if the legislature has a rational basis for
distinguishing between the classes involved. *Crocker*, 332 Or at 55. In *Jensen*, the plaintiff
argued that the OTCA substitution and cap provisions extended an immunity to government
employees that was unavailable to other citizens. 334 Or at 423. In rejecting that argument, the
court reasoned that, even assuming that the OTCA created a class of public employees, that
classification was based on public employment, not an immutable characteristic (personal or
social characteristics of the asserted class). Therefore, the statute would survived an Article I,
section 20, challenge if the legislature had a rational basis for making the distinction. *Id.* at 424
(citing *Crocker*, 332 Or at 55). The court concluded that the provisions satisfied the rational-
basis test, because public bodies must attract people to provide public services and the legislature
may reasonably have concluded that providing public employees with personal immunity for
torts committed in the scope of their public employment would help recruitment efforts. Id.

3. **Summary – privileges and immunities**

The Oregon courts have concluded that general statutory damages caps do not violate
Article I, section 20, because the law itself creates the classification. If the legislature were to
enact a statute that applied the caps in a more selective manner to claims against providers whose
medical services are publicly-funded, the courts would be likely to conclude either that the
legislation created the class or that the class was not based on immutable characteristics and the
legislature had a rational basis for making the distinction. Similar to *Jensen*, the court likely
would hold that the legislature reasonably could conclude that it is necessary to attract health
care providers to serve persons receiving publicly-funded medical assistance and that providing
some form of tort relief for torts committed in the scope of providing those services would help
the recruitment effort (the analysis would likely be similar for any immunity extended to the
providers under the OTCA).

D. **A Path for Imposing Damages Caps**

In light of *Lakin*, Oregon courts likely will hold that any economic or noneconomic
statutory damages cap violates Article I, section 17, when applied to a case in which the right to
a jury trial existed in 1857. That would include most personal injury claims based on medical
negligence, with the specific exceptions discussed above. More exceptions may be carved out,
but that is difficult to predict. It is even difficult to predict whether the Oregon Supreme Court,
if given the opportunity, will agree with the Oregon Court of Appeals that Article I, section 17, is
inapplicable to prenatal injuries.

The only path to a constitutional damages cap that would apply in all cases of personal
injury based on medical negligence (or in all cases where the medical care was publicly-funded)
is to amend the Oregon Constitution specifically to permit a cap. Such an amendment would
eliminate other constitutional challenges as well. But a constitutional amendment is no small
undertaking and, ultimately, must be approved by a majority of Oregon voters. Or Const Art IV,
§ 1 (authorizing citizen initiatives to amend the Oregon Constitution and specifying process);
Or Const Art VIII, §§ 1, 2 (establishing legislative referral processes for constitutional
amendments).

The history of attempts to adopt precisely this type of amendment is not encouraging.
Oregon voters have had two opportunities to approve a constitutional amendment to allow
noneconomic damages caps in the wake of *Lakin* and have rejected them both. In 2000, one year
after *Lakin* was decided, Measure 81, which proposed to amend the Oregon Constitution to
allow caps on noneconomic damages, was placed on the ballot. Oregon State Measure 81,
Primary Election, May 16, 2000 at http://www.sos.state.or/electionsmay162000/m81.htm. The measure failed by a landslide, garnering only 219,009 Yes votes to 650,348 No votes. Id.

In 2004, Measure 35, which proposed an Oregon constitutional amendment imposing a $500,000 cap on non-economic damages, was submitted to Oregon voters. Oregon State Measure 35, General Election, Nov. 2, 2004 at http://www.sos.state.or.us/elections/nov22004/abstract/m35.pdf. This time, the measure was narrowly defeated, garnering 896,857 No votes to 869,054 Yes votes. Id. The measure failed despite its proponents (spearheaded by physicians) significantly outspending its opponents (spending over five million dollars to the opponents’ two million dollars). See “Comments, The Current Medical Malpractice Crisis: The Need for Reform to Ensure a Tomorrow for Oregon’s Obstetricians,” Lindsay J. Stamm, 84 Or Law Rev 284 (2005); “Friends, Foes of Oregon Ballot Measures Pull Out Wallets to Influence Outcome,” The Register Guard, (Eugene, Or), Oct. 22, 2004 at A1.

If the OTCA is amended to extend the substitution and cap provisions to physicians providing publicly-funded medical services, Article I, section 17, would not apply to those caps. But, as discussed, there are numerous other problems with that proposition as well. In conclusion, under current Oregon law, the path to imposing damages caps that apply in all cases may be too steep and rocky to warrant serious pursuit.

III. Joint and Several Liability

As required by HB 3650, section 16, OHA next asks us to examine “the possible clarifications and limitations regarding joint and several liability requirements for coordinated care organizations so that these organizations can assume the risk of their actions but are not liable for the actions of others within the coordinated care organization or its contracted services.”11

A. Coordinated Care Organizations

HB 3650 proposes a statewide system of Coordinated Care Organizations (CCOs). “These organizations would manage all of the care for Oregon Health Plan members in their communities.” Oregon Health Authority, Coordinated Care Organizations, Frequently Asked Questions, OHA 9565 at 1 (August 9, 2011). The CCO model differs from the current managed care organization model in two significant ways: (1) CCOs “would be responsible for coordinating all of the mental, physical and dental care for OHP members through collaborative relationships”; and (2) CCOs “also would be paid differently ***. There would be a global

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11 From an empirical and policy standpoint, Dr. Mello and Dr. Kachalia conclude that “further JSL reform is likely to be of only limited financial benefit to providers and because nearly all providers in Oregon purchase liability insurance with limits that are rarely exceeded.” Mello and Kachalia report, at 6.
budget for all care, rather than a set rate or a ‘capitated rate’ for each type of care. At the same time, the CCO would have more flexibility to manage dollars in a way that pays for improved health rather than having to rely on approved billing services.” Id. at 1-2.

HB 3650, § 4(1) requires the OHA to adopt criteria for CCOs and to integrate the criteria into each contract, but the bill does not dictate their organizational structure:

[CCOs] may be local, community-based organizations or statewide organizations with community-based participation in governance; they may be single corporate structures or networks of providers organized through contractual relationships. * * * * * [CCOs] would be charged with developing a comprehensive service delivery network with patient-centered primary care homes at the core.

Oregon Health Policy Board Agenda, October 11, 2011, Coordinated Care Organizations Attachment at 1. In short, CCOs will be responsible for the coordination of holistic patient medical care, which may require new types of relationships with doctors. We first address whether Oregon’s current comparative fault statutes are adequate to protect CCOs from incurring the obligation to pay for judgments against the doctors and other health care professionals with whom they contract.

B. Oregon’s Comparative Fault Statutes

“Joint and several liability” generally refers to the responsibility of each defendant in a case to pay the entire judgment owed to the plaintiff, regardless of their percentage of fault. Before 1995, Oregon law imposed joint and several liability. Lasley v. Combined Transport, Inc., 351 Or 1, --- P3d --- (2011), 2011 WL 4389890 at 10. But in 1995,

the legislature * * * changed the comparative negligence scheme. Or Laws 1995, ch 696, §§ 1-5 (Spec Sess). * * * [T]he legislature eliminated joint and several liability. Now, under ORS 31.610, liability is several only; a tortfeasor is responsible only for its percentage of fault as determined in the action brought by the plaintiff.

Id. (citations omitted). Oregon’s current statute, ORS 30.610(1), provides that:

Except as otherwise provided in this section, in any civil action arising out of bodily injury, death or property damage, including claims for emotional injury or distress, loss of care, comfort, companionship and society, and loss of consortium, the liability of each defendant for damages awarded to plaintiff shall be several only and shall not be joint.

A defendant’s percentage of comparative fault is determined by the trier of fact, ORS 31.605, and the liability of each defendant is set out separately in the judgment, based on the percentages
of fault determined by the trier of fact. ORS 31.610(2). “The proportional shares of tortfeasors in the entire liability shall be based upon their relative degrees of fault or responsibility.” ORS 31.805(1).

However, there is a caveat; if a judgment against one defendant is uncollectible, the court may reallocate that obligation to the other parties:

Upon motion made not later than one year after judgment has become final by lapse of time for appeal or after appellate review, the court shall determine whether all or part of a party’s share of the obligation determined under subsection (2) of this section is uncollectible. If the court determines that all or part of any party’s share of the obligation is uncollectible, the court shall reallocate any uncollectible share among the other parties. The reallocation shall be made based on any percentage of fault determined to be attributable to the claimant by the trier of fact under ORS 31.605, plus any percentage of fault attributable to a person who has settled with the claimant. Reallocation of obligations under this subsection does not affect any right to contribution from the party whose share of the obligation is determined to be uncollectible. Unless the party has entered into a covenant not to sue or not to enforce a judgment with the claimant, reallocation under this subsection does not affect continuing liability on the judgment to the claimant by the party whose share of the obligation is determined to be uncollectible.

ORS 31.610(3).

But a defendant’s share may not be increased by reallocation under ORS 31.610(3) if:

(a) The percentage of fault of the claimant is equal to or greater than the percentage of fault of the party as determined by the trier of fact under ORS 31.605; or

(b) The percentage of fault of the party is 25 percent or less as determined by the trier of fact under ORS 31.605.

ORS 31.610(4). On the other hand, if a defendant is exempted from reallocation under subsection (4), that defendant’s share of the reallocation is deemed to be uncollectible and reallocated to the other defendants. ORS 31.610(5).

Under the reallocation statutes, a CCO whose fault exceeds both 25 percent and the percentage of fault attributed to the claimant could become liable to pay the reallocated amount of an uncollectible judgment against a provider. The reallocation statute appears to be premised on the notion that, as between an injured person and the tortfeasors, the tortfeasors should bear
the cost of uncollectible judgments, at least when the tortfeasor’s own conduct contributed substantially to the injury and was greater than the injured party’s own negligent conduct.

In sum, CCOs will not be held responsible to pay judgments against providers, except when those judgments are deemed to be uncollectible pursuant to ORS 31.601(3), in which case they may become liable for some portion of the judgment unless one of the exceptions applies. That is no different than for any other defendant. CCOs could seek a legislative amendment to exempt them from reallocation, but there is no reason that we can think of that would justify a different policy choice for CCOs. In fact, CCOs have more control than most defendants, as they can choose the providers with whom they contract and ensure that they are adequately insured.

C. Vicarious Liability

Another avenue through which CCOs potentially could be held responsible for damages resulting from the torts of their providers is through the theory of “vicarious liability.” Under that theory, the damages caused by the torts of an agent are imputed to a “principal.”12 There are two theories for imposing vicarious liability on a principal: (1) actual agency; and, (2) “apparent” or “ostensible” agency. Oregon courts have not yet addressed whether HMOs could be held vicariously liable for the torts of providers in their networks. But Oregon cases do provide some guidance about how the courts will apply agency principals to physicians.

1. Actual agency

An actual agency relationship requires: (1) consent by the parties to an agency relationship in which one shall act on behalf of and subject to the control of the other; and (2) the principal’s control over the agent. *Vaughn v. First Transit, Inc.*, 346 Or 128, 135, 206 P3d 181 (2009). An employment relationship is not the only type of consensual agency relationship. For example, a written agreement that provided that a physician would be deemed to be the “agent” of the county in performing medical services on behalf of a county Healthystart program established consent to an agency relationship. *Bridge v. Carver*, 148 Or App 503, 506, 941 P2d 1039, rev den, 326 Or 57, 944 P2d 947 (1997).

Moreover, Oregon courts have found physicians to be actual agents even though the principal did not control the manner in which the physician provided treatment. In *Bridge*, the court found it sufficient that a physician:

\[\text{Agreed to provide prenatal services on an “on-call” basis to Healthystart patients * * * [and] did not control which patients he saw or when he saw them.}\]

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12 You ask only about CCO liability that is based on the acts of providers, not about any theories of direct liability that may be applied to hold CCOs liable for their own acts.
Healthystart administrators determined the criteria used to refer Healthystart patients to a doctor when necessary. * * *. Although the county did not exercise control over the manner in which [the doctor] treated [the patient], it did control which patients [the doctor] treated and the scope of his treatment as a Healthystart physician.

Id. at 509-10. It is not necessary for physicians to “abrogate their independent professional judgment” to act as agents. Id. at 508.

Hence, in Oregon, an agency relationship may be found to exist between a physician and a principal even though the principal does not control the manner in which the physician treats the patient. As we understand it, CCOs will have some control over referral criteria and the scope of treatment – both relevant factors to finding an agency relationship. We do not know what form or forms written agreements between CCOs and providers will take, but courts will examine the language in those agreements carefully when determining whether an agency relationship exists.

2. Apparent or ostensible agency

An “apparent” or “ostensible” agency theory is likely to be a more successful basis for plaintiffs to hold CCOs vicariously liable for the medical malpractice of contracted providers. That theory does not require an actual agency relationship; it requires only that the principal “engage in conduct that holds out another as its agent” and that the injured party “as a result of that ‘holding out,’ rel[ies] on the skill or care of the apparent agent.” Eads v. Borman, 234 Or App 324, 333, 227 P3d 826 (2010). A mere “subjective belief” on the part of the injured party is insufficient to give rise to an apparent agency relationship; the principal must engage in some conduct or make some representation that holds out the physician as its agent that the patient relied on in seeking treatment from the physician. Id. at 334-35.

Oregon courts have examined apparent agency theories as applied to physicians in two contexts. The first is in the hospital context. But those cases expressly announce a rule that is specific to the hospital context, and, therefore, are not particularly helpful to predict how the courts will apply the theory to the CCO-provider relationship. Id. at 335 (cases finding physicians to be the apparent agents of hospitals “are specific to the hospital context”); Shepard v. Sisters of Providence, 89 Or App 579, 587, 750 P3d 500 (1988) (announcing rule that physicians who are nominally “independent contractors” may be treated as actual or ostensible hospital agents for purposes of vicarious liability when they perform professional services which are integral to hospital operations and which hospitals hold themselves out to the public to provide.). Outside the hospital context, the Oregon Court of Appeals applied the usual test for apparent agency in examining the relationship between a physician and a spine center in whose building the physician worked. Eads, 227 at 332-35.
At a minimum, Oregon courts will apply the usual apparent agency test when considering claims that physicians are the apparent agents of CCOs. Relevant factors for determining whether a physician is the apparent agent of a CCO likely will include whether:

- The CCO held out the physician to be competent and qualified;
- The CCO provides a list of approved physicians;
- CCO advertisements refer to physicians;
- The CCO selects or limits the choice of consultants;
- The physicians’ office displays the CCO name;
- The physicians’ forms contain the CCO name;
- The patient looked to the CCO, rather than the physician, as their health care services provider;
- There was any notice or disclaimer regarding the status of the physician’s relationship to the CCO;
- The physician works in a clinic run by the CCO; and
- The CCO may overrule the physician’s recommended care.

CCOs and providers may allocate the risk of liability between themselves by contract. Although that allocation will not be binding against a successful plaintiff, it will allow the CCO and providers to shift the liability between themselves if a plaintiff prevails. The most common way to do that is through contract clauses that: (1) require the provider to defend and indemnify the CCO against any liability arising out of the provider’s negligence; and (2) require the provider to carry insurance that provides adequate coverage for the assumed third-party liability.

### 3. Dual agency

As discussed above, OHA is studying an extension of state “agent” status to certain medical providers. This raises the issue whether a physician who is an agent of the state could also be the agent of a CCO. The Oregon Court of Appeals has held that a physician can be a dual agent serving more than one principal. *Shepard*, 89 Or App at 585.

### 4. Vicarious liability and punitive damages

We point out one final issue relating to vicarious liability for the torts of licensed health care providers. ORS 18.550 prohibits an award of punitive damages against listed licensed health care practitioners who act within the scope of their practice and without malice. It is an open question whether that statute will protect a CCO that is being sued on a vicarious liability theory for the torts of licensed providers. *See Johannesen v. Salem Hospital*, 336 Or 211, 216, 82 P3d 139 (2003) (hospital’s argument “assumes that [it] may invoke the standards in ORS 18.550 if plaintiff relies on a theory of vicarious liability arising from the conduct of
health practitioners that [hospital] employed.” This question could be resolved by an amendment to ORS 18.550 that expressly extends the protection against punitive damages to those being sued on a vicarious liability theory.

IV. Medical Panels

For purposes of this discussion, a medical panel is an administrative forum that reviews a malpractice claim at an early stage and either offers an advisory opinion or issues a decision as to medical negligence and possibly as to damages. We understand that the goals of such a medical panel are to encourage an early resolution in meritorious cases and to deter plaintiffs from pursuing cases of no or questionable merit. Below, we address the interplay of the Oregon constitution and several alternative medical panel designs.13

A. Binding Medical Panels – Mandatory Participation

Under the first alternative, the legislature establishes a medical panel system to decide the question of liability in every case of alleged medical malpractice. Panel decisions as to liability are binding. If a panel finds the defendant liable, depending upon the legislature’s policy choice, either the panel or a jury decides the question of damages. We conclude that this option would violate the jury trial provision of the Oregon Constitution.

As discussed above, because claims alleging medical malpractice generally are civil actions for which the common law historically provided a jury trial, litigants have an Article I, section 17, right to have “a jury determine all issues of fact.” Molodyh, 304 Or at 297-98. Whether a provider was negligent, i.e., breached the applicable standard of care, is factual, which means that the legislature generally may not compel participation in an administrative system whose decisions on liability are binding. See Foltz v. State Farm Mut. Auto Ins. Co, 326 Or 294, 299, 952 P2d 1012 (1998) (holding that a statute compelling arbitration did not violate Article I, section 17, but a companion statute that made the arbitration decision binding did), Molodyh, 304 at 299 (construing a statute that made an appraisal process permissive, but the results binding, to be non-binding as to the non-demanding party to avoid running afoul of Article I, section 17).

B. Binding Medical Panels – Voluntary Participation

Under the second alternative, the legislature creates a medical panel system to make binding decisions as to liability in a medical malpractice case only if the claimant and the medical provider agree to participate in the system. The legislature could also provide that (1)

13 Dr. Mello and Dr. Kachalia describe medical panels and key design choices in greater detail in their report. See Mello and Kachalia report, at 33-34. From an empirical and policy standpoint, they conclude that “existing evidence does not suggest that medical panels would be effective in improving key liability-related outcomes for providers or patients.” Id. at 5.
the medical panel decides damages; (2) a jury decides damages; or (3) damages presumptively
go to either the panel or a jury, but permit the parties in each case to elect otherwise. We
conclude that such a voluntary system, including all three alternatives as to damages, likely
would not violate the Oregon Constitution.

It is possible to waive the constitutional right to a civil jury trial. The Oregon Court of
Appeals recently stated:

> Article I, section 17, of the Oregon Constitution provides that “[i]n all
civil cases the right of Trial by Jury shall remain inviolate.” A party may not be
compelled to give up that right, even by statute. [Citing Molodyh]. But a party
may voluntarily waive the right by agreement. Carrier v. Hicks, 316 Or 341, 352,

an arbitration provision in an employment agreement was unenforceable because it “did not
contain an explicit waiver of [plaintiff’s] right to a jury trial”); see also, _Barackman v. Anderson_,
338 Or 365, 371, 109 P3d 370 (2005) (holding that when a party agrees to arbitration the state
has not deprived that party of the right to a jury trial).

But we caution that a waiver must be knowing and intentional:

> “Waiver is ‘the intentional relinquishment of a known right, either in
terms or by such conduct as clearly indicates an intention to renounce a known
Or 62, 72, 475 P2d 415 (1970)).

factual question precluded summary judgment as to whether insurer waived right to rely upon
statute of limitations).

The agreement should be clear about the consequences of using the medical panel to
ensure that it will constitute a valid waiver of the right to a jury trial. Language expressly stating
that the effect of the agreement is to waive the right to a jury trial is preferred, but not necessary.
See _Hays_, 222 Or App at 351 (finding a waiver because “the agreement expressly provides that
any claim relating to the employment relationship * * * ‘shall be settled by final and binding
arbitration.’ Claims cannot be settled by ‘final’ and ‘binding’ arbitration except by a waiver of
the right to a jury trial.”); see also _Motsinger v. Lithia Rose-FT, Inc._, 211 Or App 610, 617, 156
P3d 156 (2007) (finding that the plaintiff could not claim that he did not know the consequences
of his agreement where the agreement stated in bold letters that by voluntarily agreeing to
binding arbitration, he waived his right to a jury trial).
C. Non-binding and Subsequently Inadmissible Medical Panel Decisions – Mandatory Participation

Under the third alternative, the legislature creates a system that requires every medical malpractice case to be first reviewed by a medical panel as to the question of medical malpractice before the case may proceed to a court trial. The panel’s decision is advisory only, however, and it is not admissible as evidence in any subsequent trial. We conclude that such a system would not violate the Oregon Constitution.14

As to Article I, section 17, as noted above, the Oregon Supreme Court has distinguished a statute that compelled arbitration from a companion statute that made the arbitration decision binding, upholding the former and striking down the latter. *Foltz* 326 at 303 (addressing 1995 versions of now-revised statutes that provided for arbitration of personal injury protection benefit disputes).

As to the remedy clause, the Oregon Supreme Court implied approval of the legislature's imposition of reasonable conditions precedent in *Smothers*, declaring that “this court *** never has held that the remedy clause prohibits the legislature from *** attaching conditions precedent to invoking [a protected] remedy.” 332 Or at 119. In keeping with that sentiment, the court would probably uphold a mandatory, non-binding administrative process if it were not overly burdensome.

D. Non-binding but Subsequently Admissible Medical Panel Decisions – Mandatory Participation

The fourth alternative differs from the third only in that panel decisions on negligence are admissible in subsequent trials. We conclude that this alternative likely would not violate the Oregon Constitution.

Although obviously intended to influence jurors’ thinking on a fundamental factual question, the plaintiff or the defendant could introduce contrary expert opinions. The jurors would remain free to disregard the panel’s conclusion and to decide the question of negligence as they saw fit. This should satisfy Article I, section 17.

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14 Indeed, such a system would be somewhat similar to the mandatory arbitration program established in each circuit court by ORS 36.400(1). Among other items, that program directs every circuit court to “require arbitration under ORS 36.400 to 36.425 in matters involving $50,000 or less.” ORS 36.400(3). A party against whom relief is granted in such a mandatory arbitration “may file a notice of appeal and request for trial de novo of the action in the court on all issues of law and fact.” ORS 36.425(2)(a).
E. Non-binding but Subsequently Admissible Administrative Forum Decisions –
Mandatory Participation only for OHA Patients and Providers

Under the fifth alternative, the legislature would require only OHA patients and
providers to participate in a medical panel system whose conclusions are non-binding but
admissible in any subsequent court trial. We conclude that this alternative likely would not
violate the Oregon Constitution, although this conclusion is not free from doubt.

This alternative implicates Article I, section 20, because it would treat persons receiving
OHA-funded services at the time of injury (“OHA patients”) and their providers (“OHA
providers”) differently than non-OHA patients and providers. As discussed, Article I, section 20,
limits the legislature’s power both to grant privileges and immunities to or to impose burdens on
one citizen or class of citizens and not others. While it is not certain that this medical panel
alternative necessarily benefits or burdens OHA patients or providers, we assume for purposes of
analysis that it would disadvantage (some) OHA patients and benefit (some) providers.

We first consider the analysis that would apply to a contention that the law imposed a
burden on OHA patients:

Although Article I, section 20 is textually and historically a leveling
provision aimed at prohibiting laws that confer special benefits on an aristocratic
or quasi-aristocratic “class,” it has for many years served as the state
constitutional analog to the federal Equal Protection Clause prohibiting legislation
that imposes burdens on a historically oppressed minority. See, e.g., Tanner v.

State v. Borowski, 231 Or App 511, 520, 220 P3d 100 (2009). When considering whether a law
discriminates against members of a minority class, the court first determines whether the
burdened group is a “true class.” Id. A “true class” is a “group that consists of individuals who
would be considered as belonging to a distinctive group even if the statute that burdens them did
not exist (for example, African Americans, Catholics, veterans, residents of Portland). Id. Such
groups are defined by “antecedent personal or social characteristics or societal status.” Tanner,
157 Or App at 521 (quoting Hale, 308 Or at 525). If the group does not fit that definition,
Article I, section 20 simply does not apply. Sealey, 309 Or at 397.

OHA patients appear to be a class created by the statutes that provide for those services.
Without those statutes, that particular group would not exist. Those statutes confer benefits on
OHA patients and may define the conditions under which the benefits are conferred on all
patients without running afoul of Article I, section 20.
Even assuming that OHA patients are a “true class,” that is, a group that exists apart from the laws that treat them differently from non-OHA patients, for an Article I, section 20, challenge to succeed, the class would have to be “based on immutable traits or traits on the basis of which class members are subjected to adverse social or political stereotyping or prejudice” and the law would have to “in fact” discriminate “based on stereotype or prejudice and not some rational basis.” State v. Abbey, 239 Or App 306, 311, 245 P3d 152 (2010) (citations omitted; emphasis in original). The fifth alternative would impose a condition on the receipt of OHA-funded services in an attempt to accomplish rational objectives, including providing a more efficient and less expensive process for separating meritorious from non-meritorious claims, not on the basis of stereotype or prejudice. We conclude that the fifth alternative would be unlikely to violate Article I, section 20, by imposing a burden on a true class on the basis of stereotype or prejudice.

Oregon courts would be similarly unlikely to conclude that the fifth alternative violates Article I, section 20 by conferring a special privilege on providers who provide services to patients paid with OHA funds. That claim would require the court to conclude that OHA providers are a “cohesive and societally recognized group” apart from the challenged law itself. Borowski, 231 Or App at 521. As the doctors who accept OHA patients do not appear to be a societally-recognized group, such a claim should also fail.

V. Administrative compensation system

A. Attributes of System

In an administrative compensation system (ACS), claims concerning medical malpractice are adjudicated exclusively in an alternative, non-judicial process. The compensability threshold is lower than negligence. The process is more streamlined and less adversarial than traditional litigation.

An adjudicator like an administrative law judge who specializes in such matters makes the compensability and damages decisions. The adjudicator may be assisted by neutral experts, rather than hired medical experts. The adjudicator may be guided by formal decision guidelines concerning types of injuries that are presumptively compensable, as well as past precedent. If a live hearing is held, it is more limited in scope than a traditional trial.

The ACS may limit the amount of compensation that the adjudicator may award or prescribe compensation schedules for certain types of injuries or impairments. In the alternative, the adjudicator may just draw on a set of guidelines in awarding damages. In any event, while
the compensation awarded may be less in some cases than would a jury would award in a common law lawsuit, the compensation still would be substantial.15

B. Jury Trial and Remedy Clause Issues

The case law and legal principles that bear generally on the constitutionality of such an arrangement have been discussed already.

The ACS would create a new exclusive remedy and abolish the common law remedy for medical malpractice. As noted above, the elimination of a cause of action does not violate the jury trial provision, Article I, section 17, of the Oregon Constitution. Jensen, 334 Or at 422.

As to the remedy clause, however, as discussed above, the legislature may abolish a common law remedy only if it provides a “constitutionally adequate substitute remedy.” Smothers, 332 Or at 124. Because the ACS may provide substantial compensation, the scheme likely would be upheld against a facial remedy clause challenge. Jensen, 334 Or at 421.

And, as with the OTCA, the adequacy of the substitute remedy would probably be judged on an individual, case-by-case basis. Clarke, 343 Or at 610; Ackerman, 233 Or App at 527. For those reasons, there is no assurance that the application of the ACS would be upheld as to every medical malpractice injury.16 On the other hand, there would be no constitutional issue if participation in the ACS is voluntary, that is, if the parties waive their constitutional rights.

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15 Dr. Mello and Dr. Kachalia describe administrative compensation systems and key design choices in greater detail in their report. See Mello and Kachalia report, at 57-69. From an empirical and policy standpoint, they conclude that “it is probably possible to design an ACS that achieves the key potential benefits of the ACS concept while not significantly increasing total costs or leaving patients worse off than they are under the tort system.” Id. at 7.

16 In making this assertion, we expressly do not address the constitutionality of Oregon’s well-established Workers’ Compensation Law, ORS chapter 656. As to that issue, in Smothers, the Oregon Supreme Court acknowledged its long-standing implicit recognition of the constitutionality of that system:

[W]e note that, since Evanhoff in 1915, this court implicitly has recognized the legislature’s constitutional authority to substitute workers’ compensation for the common-law negligence cause of action for work-related injuries. See, e.g., Atkinson v. Fairview Dairy Farms, 190 Or 1, 13, 222 P2d 732 (1950) (“The Workmen’s Compensation Act has been held on a number of occasions to be constitutional.”) Nothing in this case challenges those precepts. The constitutionality of the overall workers’ compensation statutory program is not in question.

332 Or at 125 (emphasis added).
Stark Law and Related Limitations on Financial Interests in Health Care Reimbursement

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Context

This Report was prepared at the request of the Oregon Health Authority for purposes of responding to the request of the Legislative Assembly in HB 3650, 2011 Or Laws Chapter 602 Section 16(1)(c). This Report is intended to provide general background information and is not intended to be legal advice to anyone. Persons or entities that may be subject to the Stark Law, anti-kickback laws or false claims laws should confer with their own legal counsel about their specific duties or restrictions under these laws.
Executive Summary

In the Health Care Transformation law enacted in 2011 (2011 Or. Laws Chapter 602, referred to herein as HB 3650), the Oregon Health Authority was required to study several issues related to health care cost containment, including in Section 16(1)(c):

(c) An analysis of utilization, testing, services ordered, prescribed or delivered through centers or facilities in which there is a financial interest between the provider requesting a test or service and the entity or individual providing the test or service, including an examination of Stark laws and exemptions.

This report is limited to the examination of applicable laws, primarily the Stark Law, applicable to financial relationships between providers and the individuals or entities that provide tests or services. The listing of the Stark Law exemptions is provided at the end of this report, as Attachment A. This report also provides a brief summary of other laws applicable to financial relationships between providers and the individuals or entities that provide tests or services, including the anti-kickback law and the federal and state false claims laws.

The Stark Law and related statutory and regulatory limitations on financial interests in health care reimbursement impose legal constraints on certain types of health care arrangements among providers and entities making referrals for services and submitting health care claims to publicly funded Medicare and Medicaid programs. These laws seek to limit health care costs by reducing costs attributable to the overutilization of health services and procedures and by reducing fraud and abuse in the publicly funded health care system. Oregon law applicable to health care providers or entities reimbursed by the Medicaid program administered by the Oregon Health Authority is generally aligned with federal requirements.
I. What is the Stark Law?

The Ethics in Patient Referrals Act, also known as the Stark Law, generally prohibits a physician from making a referral under Medicare for designated health services to an entity with which the physician or a member of the physician’s immediate family has a financial relationship. Likewise, the Stark Law prohibits the entity with the financial relationship from submitting claims for reimbursement that were not authorized for referral under the law.

In 1989, the Office of Inspector General (OIG) of the U.S. Department of Health and Human Services (DHHS) reported that patients of referring physicians who had a financial interest in independent clinical labs received 45% more services than Medicare patients in general and 34% more services directly from clinical labs than Medicare patients in general. The OIG concluded that this increased utilization cost Medicare approximately $28 million in 1987. Magazines, newspapers and journals had also featured articles outlining the profits physicians could make by referring patients to providers in which they had a financial interest.

In response to these reports, Congress included the Ethics in Patient Referrals Act provisions in the 1989 Omnibus Budget Reconciliation Act, banning certain financial arrangements between physicians and clinical laboratories and creating limited exceptions. Congress’ goal was to limit the influence of financial relationships on physician referrals.

In 1993, Congress amended the ban by extending it to additional services and applying it to both Medicare and Medicaid, and clarifying exceptions included in the 1989 legislation. These amendments are known as “Stark II.”

Initially, the Stark Law was narrowly tailored as a proscription against physician referrals for clinical laboratory services, covered by Medicare or Medicaid, to an entity in which the physician had a financial interest. It has since evolved into a broader law, covering a wide array of health-related services and financial arrangements.

The 1989 and 1993 legislation are collectively known as the Stark Law (the “Law”). They are codified in the Medicare statutes and regulations at 42 USC §1395nn and the federal regulations related to the Law are at 42 CFR §411.350-411.389.²

In 2010, the Patient Protection and Affordable Care Act³ (“ACA”) updated a few provisions of the Stark Law:

- Section 6001 placed restrictions on hospitals with physician ownership that formerly had been eligible for the “whole hospital” exception. This change was made, in part, due to the growth of physician-owned specialty hospitals.
• Section 6003 added new disclosure requirements to the in-office ancillary services exception. The referring physician must inform the individual in writing at the time of the referral that the individual may receive the services from another person, and the individual must be provided with a list of alternative suppliers of the services.

• Section 6409 requires the Secretary of DHHS, in cooperation with the OIG, to develop a protocol to allow health care providers and suppliers of services to disclose actual or potential violations of the Stark Law using a self-referral disclosure protocol. Use of a self-disclosure protocol may result in a reduction of amounts owed for Stark Law violations.

How does the Stark Law apply to Oregon’s medical assistance program?

Oregon’s medical assistance program is administered in accordance with federal Medicaid regulations. Medicaid providers are required to disclose certain ownership interests at the time of enrollment, and to update any changes in that information. Consequently, Oregon’s medical assistance program includes these disclosure requirements in its provider enrollment process. The Stark Law is primarily enforced through the federally-administered Medicare program.

Does Oregon have a Stark Law?

The State of Oregon has the following statutory requirement for disclosure of financial relationships in ORS 441.098:

441.098 Physician referral of patient to treatment facility. (1) As used in this section:
   (a) “Facility” means a hospital, ambulatory surgical center or freestanding birthing center.
   (b) “Financial interest” means a five percent or greater direct or indirect ownership interest.
   (c) “Health practitioner” means a physician, podiatric physician and surgeon, dentist, direct entry midwife or licensed registered nurse who is certified by the Oregon State Board of Nursing as a nurse midwife nurse practitioner.
   (d) “Physician” has the meaning given that term in ORS 677.010.
   (2) If a health practitioner refers a patient for treatment at a facility in which the health practitioner or an immediate family member has a financial interest, the health practitioner shall inform the patient orally and in writing of that interest at the time of the referral.
   (3) In obtaining informed consent for treatment that will take place at a facility, a health practitioner shall disclose the manner in which care will be provided in the event that complications occur that require health services beyond what the facility has the capability to provide.
What types of health care and services are covered by the Stark Law?

The Stark Law and related regulations broadly prohibit a physician (or an immediate family member of a physician) from referring a patient to an entity in which he or she has a financial relationship for designated health services payable by Medicare or Medicaid.

**Designated health services** are defined as the following:

1. Clinical laboratory services
2. Physical therapy services
3. Occupational therapy services
4. Outpatient speech-language services
5. Radiology services, including magnetic resonance imaging, computerized axial tomography scans, and ultrasound services
6. Radiation therapy services and supplies
7. Durable medical equipment and supplies
8. Parenteral and enteral nutrients, equipment, and supplies
9. Prosthetics, orthotics, and prosthetic devices and supplies
10. Home health services
11. Outpatient prescription drugs
12. Inpatient and outpatient hospital services

What financial relationships are covered by the Stark Law?

The **prohibited financial relationship** can be in the form of:

1. An ownership or investment interest in the entity; or
2. A compensation arrangement between the physician and the entity.7

A prohibited financial relationship can be direct or indirect between the physician and an entity. For example, where a physician refers patients to a physical therapy business in which he or she owns stock, there is a direct financial relationship. An example of an indirect financial
relationship is where a physician refers patients to a MRI Center, and the physician is employed by a group practice which owns shares in the MRI Center.

Similarly, both direct and indirect compensation arrangements are prohibited. A direct compensation exists, for example, where a physician who serves as the part-time director of a clinical lab under an independent contractor agreement refers patients to the lab. If a physician who was a co-owner of a group practice and shared in the practice’s revenues and the group practice leased office space to a hospital, the physician would have an indirect financial interest in the hospital.

The Law defines an “ownership or investment interest” as one created “through equity, debt or other means and includes an interest in an entity that holds an ownership or investment interest in any entity providing the designated health service.”

The Law further defines “compensation arrangement” in part as “any arrangement involving any remuneration between a physician (or immediate family member of the physician) and an entity.”

“Remuneration” includes “any remuneration, directly or indirectly, overtly or covertly, in cash or in kind.”

The Law imposes self-reporting requirements on all businesses that bill Medicare and Medicaid. Upon request of the DHHS Centers for Medicare and Medicaid Services (CMS), or the OIG, a business must report its “ownership, investments and compensation arrangements” including covered services it provides and the names and physician identification numbers of all doctors with investment interests or compensation agreements or with immediate family members with such interests.

**What are the sanctions for violation of the Stark Law?**

The Law also imposes the following sanctions for violations, ranging in degree of severity, enforced by the federal government:

1. Payment may be denied.

2. The government may require refunds for certain claims. CMS enforces the Law and has taken the position that the Law requires providers to refund to Medicare all amounts collected from bills submitted in violation of the Law. CMS has promulgated regulations requiring the same. The regulations require a full refund within 60 days of furnishing the designated service under a prohibited referral.
3. Doctors who bill for a service they know or should know is improper may face civil penalties of $15,000 for each service wrongly billed-for and may be excluded from the Medicare and Medicaid programs.

4. A physician or entity who enters into an arrangement or scheme which the physician or entity knows or should know has a principal purpose of assuring referrals by the physician to a particular entity is subject to civil penalties of up to $10,000 per day for each arrangement or scheme.

5. Anyone failing to meet a reporting requirement faces fines up to $10,000 for each day for which reporting is required to have been made.

CMS has authority to issue advisory opinions to provide guidance on the application of the Law to an existing or proposed business arrangement. A CMS advisory opinion is legally binding on DHHS and the requesting party or parties. It is not binding on any other governmental department or agency. A party that receives a favorable advisory opinion is protected from CMS administrative sanctions, so long as the arrangement at issue is conducted in accordance with the facts submitted to the CMS.

**What are the exceptions to the Stark Law?**

The Law contains exceptions to prohibited referrals, which fall into three categories: (1) general exceptions; (2) exceptions related to ownership/investment interests; and (3) exceptions related to compensation arrangements. Due to the large number of these exceptions, a list is provided at the end of this report as Attachment A.

**II. What is the Relationship Between the Stark Law and Anti-Kickback Laws?**

Whether an action or relationship is permissible under the Stark Law does not provide a defense to or immunity from civil penalties or criminal prosecutions or other sanctions applicable under state or other federal laws other than the Stark Law. As explained in the Stark Law regulations, an arrangement permissible under the Stark Law may nevertheless violate other laws including but not limited to the anti-kickback laws or other state or federal fraud and abuse laws. The OIG often combines violations of anti-kickback laws with violations of physician self-referral in civil monetary cases, as demonstrated by the settlements with OIG described on the OIG website.

Congress enacted the anti-kickback statutes out of concern that decisions of health care providers can be improperly influenced by a profit motive. The anti-kickback laws prohibit any individual or entity from knowingly and willfully soliciting, receiving, offering, or paying any form of remuneration (“in cash or in kind”) in order to induce the referral of an individual
A party found to have violated the anti-kickback laws can be subject to civil money penalties, criminal prosecutions and imprisonment for up to five years, and exclusion from the Medicare and Medicaid programs.

As a result, the anti-kickback laws are broader than the Stark Law. Any physician referral arrangement that is subject to the Stark Law will also be subject to anti-kickback requirements.

The federal anti-kickback laws and regulations have established several “safe harbors” that are similar to but not necessarily identical to the Stark Law exceptions. The OIG has indicated that their safe harbors are not the only acceptable business arrangements. The OIG regularly issues advisory opinions and compliance guidance, as well as special fraud alerts.

Presently, Oregon law does not explicitly impose an anti-kickback requirement, except to the extent that those laws are applicable to providers receiving payments through the Oregon medical assistance program due to Medicaid requirements.

III. False Claims Law May Also Apply

The federal False Claims Act (FCA) imposes civil liability on persons who knowingly submit a false or fraudulent claim. False claims for health care programs include (but are not limited to) billing for services not provided, for unnecessary services, double billing, and upcoding. Penalties under the federal FCA can include triple damages for each claim filed. Some federal courts have held that a Stark Law violation can support a FCA violation.

The Oregon False Claims Act is found in ORS 180.750 – 180.785. It addresses claims (defined as a request or demand for payment) made to a public agency that seeks money that will be provided in whole or in part by a public body, whether directly or through reimbursement of another public body. Oregon’s False Claims Act is not limited to health care claims, but includes health care claims. The Attorney General may bring a civil action for recovery of damages, including penalties, and claims may be joined with other remedies available under other provisions of law.

Oregon law provides a number of additional authorities to address false claims in the health care setting. ORS 165.690 – 165.696 authorizes the Attorney General or a district attorney to bring criminal actions for making false claims for health care payments. If convicted, the prosecutor must notify the Oregon Health Authority and any appropriate licensing boards.

The Attorney General is actively engaged in the investigation and prosecution of Medicaid fraud and false claims, as well as abuse. The Medicaid Fraud Unit is located within the Oregon Department of Justice. The Medicaid Fraud Unit receives referrals from many
sources, including: federal, state and local agencies; social service organizations; law enforcement agencies; provider associations; insurance companies; and private citizens. The Unit must first consider all referrals for potential criminal prosecution and, in appropriate cases, the unit may utilize available civil remedies. In addition to prosecution of local fraud and abuse cases, Oregon's Medicaid Fraud Unit works with the FBI, OIG investigators, and U.S. Justice Department officials in investigations of Medicaid providers alleged to be involved in nationwide or regional billing fraud schemes. These large-scale cooperative cases may take several years to investigate, but cases already pursued have brought hundreds of millions of dollars back to the Medicaid program, and millions of dollars back to the Oregon program.

**Conclusion**

The Stark Law and related statutory and regulatory limitations on financial interests in health care reimbursement impose legal constraints on certain types of health care arrangements among providers and entities making referrals for services and submitting health care claims to publicly funded Medicare and Medicaid programs. These laws seek to limit health care costs by reducing costs attributable to the overutilization of health services and procedures and by reducing fraud and abuse in the publicly funded health care system. Oregon law applicable to health care providers or entities reimbursed by the Medicaid program administered by the Oregon Health Authority is generally aligned with federal requirements.
ATTACHMENT A

SUMMARY OF STARK LAW EXCEPTIONS

The full text of the exceptions and exemptions is found in the federal Stark regulations, 42 CFR 431 Subpart J. The following summary is provided for the convenience of the reader, and should not be relied upon as a complete recital of all federal requirements.

A. General Exceptions Applicable to Ownership/Investment Interests and Compensation Arrangements.

1. Physician Services Provided Personally or under the Personal Supervision of another Physician in the Same Group Practice as the Referring Physician. (This does not apply to “incident to” services—e.g., diagnostic tests, physical therapy.)

2. In-office Ancillary Services Furnished by the Referring Physician, Another Physician in the Same Group Practice or Personally by Individuals Directly Supervised by the Physician or another Physician in the Group Practice. The services must be furnished in (1) a building where the referring physician or other member of the group practice provides services unrelated to furnishing of designated health service; or (2) in another building used for the centralized provision of the group’s designated health services.

3. Services provided by a prepaid health plan to its enrollees. This includes coordinated care plans under the Medicare Advantage Program and Medicaid managed care organizations.

4. Academic Medical Centers (AMCs) services meeting the conditions for the referring physician.1 The referring physician must (a) be a bond fide employee of a component of the AMC on a full-time or substantial part-time basis; (b) be licensed to practice medicine in the state(s) in which he or she practices medicine; (c) have a bona fide faculty appointment at the affiliated medical school or at one or more of educational programs at the accredited academic hospital; and (d) provide either substantial (academic services or substantial clinical services or a combination) for which the faculty member receives compensation as part of his or her employment relationship with the AMC. (A physician meets the last requirement if the physician spends at least 20% of his or her professional time or eight hours per week providing such services.) The total compensation paid by each AMC must be component to the referring physician must be set in advance and not be determined in a manner that takes into account the volume or value of referrals or other business generated by the physician. The total compensation must not exceed fair market value.

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1 An AMC is (1) an accredited medical school or an accredited academic hospital; (2) one or more faculty practice plans affiliated with the medical school, the affiliated hospital(s) or the accredited academic hospital; and (3) one or more affiliated hospital(s) in which a majority of physicians on the medical staff consists of physicians who are faculty members and a majority of all hospital admissions are made by physicians who are faculty members.
5. **Implants furnished by an ambulatory surgical center (ASC).** This exception includes cochlear implants, intraocular lenses and other implanted prosthetic devices.

6. **Erythropoietin (EPO) and other dialysis-related drugs furnished in or by an end-stage renal disease (ESRD) facility exception.** This includes certain outpatient drugs that are required for the efficacy of dialysis and identified on the list of drugs that appear on the CMS website, updated annually.

7. **Preventive screening tests, immunizations and vaccines.** The items must meet Medicare frequency requirements and be on the list specifying items eligible for the exception.

8. **Eyeglasses and contact lenses following cataract surgery.** This applies to items provided in accordance with Medicare coverage and payment provisions.

9. **Intra-family rural referrals.** This exception applies when the patient resides in a rural area and no other person or entity is available to furnish the services in a timely manner within 25 miles or 45 minutes transportation time. This exception does not apply to home-based services.

B. **Exceptions relating only to the ownership or investment prohibition.**

1. **Ownership of Publicly Traded Investment Securities.** These are securities (1) purchased in a corporation listed on a major stock exchange; or (2) traded under an automated interdealer quotation system operated by the National Association of Securities Dealers. The corporation must have stockholder equity in excess of $75 million, either at the end of its most recent fiscal year or on an average during the previous three fiscal years. This exception also applies to ownership of shares in a regulated investment company, provided the company has total assets of over $75 million either at the end of its most recent fiscal year or on an average during the previous three fiscal years.

2. **Hospital Ownership.** Prior to the ACA, this exception is for designated health services provided by a hospital where (1) the referring physician is authorized to perform services at the hospital; and (2) the ownership or investment interest is in the hospital itself and not merely a subdivision. The ACA has imposed some limits on this exception, described above.

3. **Rural Providers.** Applies to designated health services provided by an entity in a rural area. The exception applies only where substantially all (not less than 75%) of the designated health services furnished by the entity are furnished to individuals residing in rural areas.

C. **Exceptions relating only to other compensation arrangements.**

1. **Rental of Office Space and Equipment.** Payments made by a lessee to a lessor are not considered a compensation arrangement if:

   a. The lease is in writing, signed by the parties, and specifies the premises or equipment covered by the lease;
b. The space or equipment rented or leased does not exceed that which is reasonable and necessary for the legitimate purposes of the lease or rental and is used exclusively by the lessee;

c. The term of the rental or lease is at least one year;

d. The rental charges over the term of the lease are set in advance, consistent with fair market value, and are not determined by taking into account the volume or value of any referrals or other business generated between the parties;

e. The lease would be commercially reasonable even if no referrals were made between the parties; **AND**

f. The lease meets any other requirements imposed by the HHS Secretary to protect against abuse.

2. **Bona Fide Employment Relationships.** Applies to payments made by an employer to a physician (or immediate family member) who has a bona fide employment relationship with the employer if:

   a. The employment is for identifiable services;

   b. The amount of remuneration is consistent with fair market value and is not determined in a manner that takes into account (directly or indirectly) the volume or value of referrals;

   c. The remuneration is pursuant to an agreement that would be commercially reasonable without such referral; **AND**

   d. The employment meets other requirements the HHS Secretary may impose as needed to protect against program abuse.

3. **Personal Service Arrangements.** Applies to payments from an entity (or downstream contractor) under an arrangement if:

   a. The arrangement is written, signed by the parties and specifies the services covered;

   b. The arrangement covers all of the services to be provided by the physician (or immediate family member) to the entity;

   c. The aggregate services contracted for do not exceed those reasonable and necessary for legitimate business purposes;

   d. The term of the agreement is at least one year;

   e. The compensation is set in advance, does not exceed fair market value, and (except for physician incentive plans) is unrelated to the volume or value of referrals or other business generated between the parties;
f. The services do not involve the counseling or promotion of activities counter to state or federal law; AND

g. The arrangement meets other requirements imposed by the HHS Secretary to protect against abuse.

4. Physician Incentive Plans. These are compensation arrangements between an entity and a physician or physician group that may directly or indirectly have the effect of reducing or limiting services provided to the entity’s enrollees.

5. Remuneration Unrelated to the Provision of Designated Health Services Exception. This exception applies when a hospital provides remuneration to a physician, which is unrelated to providing direct health services.

6. Physician Recruitment Exception. This exception applies to physician recruitment arrangements under which a hospital pays to relocate to become a member of the hospital’s staff as long as there are no requirements for the physician to refer patients to the hospital; and the amount of remuneration is unrelated, directly or indirectly, to the volume or value of referrals. DHS regulations require that:

   a. The arrangement must be in writing and signed by both parties;

   b. The arrangement is not conditioned on the physician’s referral of patients to the hospital;

   c. The hospital does not determine (directly or indirectly) the amount of remuneration to the physician based on the volume or value of actual or anticipated referrals; AND

   d. The physician is allowed to establish staff privileges at other hospital or hospitals and refer business entities, except as otherwise restricted under a separate employment or services contract that complies with the requirements for a bona fide employment relationship, as discussed above.

7. Isolated Transactions Exception. One example of this exception is a one-time sale of a property or practice where:

   a. The amount is consistent with fair market value and is unrelated (directly or indirectly) to the volume or value of referrals; AND

   b. The transaction would be commercially viable without such referrals.

8. Group Practice Arrangements with a Hospital Exception. This exception applies to certain arrangements under which designated health services are provided by a group practice but billed by a hospital where:

   a. In the case of services provided to inpatients, the arrangement is pursuant to the provision of inpatient services;
b. The arrangement began before December 19, 1989 and has continued in effect, without interruption, since that date;

c. Substantially all of the direct health services covered under the arrangement and furnished to patients are furnished by the group under the arrangement;

d. The arrangement is in writing and specifies the services to be provided and the compensation for the services;

e. The compensation is consistent with fair market value, the amount per unit of service is fixed in advance and is unrelated to the volume or value of referrals or other business generated by the parties;

f. The agreement would be commercially reasonable even if there were no referrals; AND
g. The agreement meets other requirements the HHS Secretary may impose to protect against program or patient abuse.

9. Payments by a Physician for Items and Services. This exception is for payments by a physician to a lab for clinical services and payments to another entity for items and services if they are furnished at a price consistent with fair market value.

10. Additional Exceptions. The HHS Secretary provides the following additional exceptions, specified by regulation:

   a. Charitable Donations by a Physician. This applies to bona fide charitable donations made by a physician or immediate family member to an entity where:

      i. The donation is made to a tax-exempt organization or to a supporting organization;

      ii. It is not solicited nor offered in any manner that takes into account the volume or value of referrals or other business generated by the referring physician; AND

      iii. The donation does not violate the anti-kickback statute or any law governing billing or claims submission.

   b. Non-Monetary Compensation. This exception applies to non-monetary compensation an aggregate amount per calendar year, adjusted yearly for inflation (e.g., $359 for 2011 and $373 for 2012), where:

      i. The non-monetary compensation cannot be determined in any manner that takes into account the volume or value of referrals or other business generated by the referring physician;

      ii. The compensation is not solicited by the physician or physician’s practice; AND
iii. The arrangement does not violate the anti-kickback statute or any law governing billing or claims submission.

c. **Fair Market Value Compensation.** This exception applies to compensation arising from an arrangement between an entity and physician (or immediate family member) or any group of physicians for the provision of items or services either by the physician (or family member) or group of physicians to the entity or by the entity to the physician (or family member) or group of physicians where:

i. The arrangement is in writing and covers identifiable items or services all of which are specified;

ii. The time frame is specified;

iii. The compensation is specified, set in advance, consistent with fair market value and does not take into account the volume or value of referrals or other business generated by the referring physician;

iv. The arrangement is commercially reasonable;

v. The arrangement does not violate the anti-kickback statute or any law governing billing or claims submission; and

vi. The services do not involve counseling or promotion of a business arrangement or other activity that violates federal or state law.

d. **Medical Staff Incidental Benefits.** This exception applies to non-monetary compensation from a hospital to a member of its when the item or service is used on the hospital’s campus where:

i. The compensation is offered to all members of the medical staff practicing in the same specialty without regard to the volume or value of referrals or other business generated between the parties;

ii. The compensation is provided during periods when the medical staff members are engaged in services or activities that benefit the hospital or its patients;

iii. The compensation is provided by the hospital and used on the campus;

iv. The compensation is reasonably related to or designed to facilitate directly or indirectly the delivery of medical services;

v. The compensation for each occurrence is less than an amount adjusted each calendar year ($359 for 2011) for inflation;

vi. Compensation is not determined by the volume or value of referral or other business generated between the parties; **AND**
vii. The arrangement does not violate the anti-kickback statute or any law governing billings or claims submission.

e. **Risk-Sharing Arrangements.** This exception applies to compensation provided pursuant to a risk-sharing agreement between a managed care organization or an independent practice association and a physician (either directly or through a subcontractor) for services provided to health plan enrollees if the arrangement does not violate the anti-kickback statute or any law governing billing or claims submission.

f. **Compliance Training.** This exception applies to compliance training provided by an entity to a physician (or immediate family member or office staff) who practices in the entity’s local community or service area if the training is held in such area.

g. **Indirect Compensation Arrangements.** This exception applies where:

   i. The compensation received by the referring physician (or immediate family member) is fair market value for services and items actually provided and does not take into account the volume or value of referrals or other business generated by the referring physician;

   ii. The arrangement is in writing and specifies the covered services; **AND**

   iii. The compensation does not violate the anti-kickback statute or any law or regulation governing billing or claims submission.

h. **Referral Services.** This exception applies to remuneration which fits into the anti-kickback safe harbor as defined in 42 CFR §1001.952(f) for referral services.

i. **Obstetrical Malpractice Insurance Subsidies.** This exception applies to remuneration which fits into the anti-kickback safe harbor as defined in 42 CFR §1001.952(f) for obstetrical malpractice insurance subsidies.

j. **Professional Courtesy Exception.** An exception for the provision of free or discounted health care items or services offered to a physician (or immediate family member, or office staff) applies where:

   i. The professional courtesy is offered to all physicians on the entity’s bona fide medical staff or entity’s local community or service area without regard to the volume or value of referrals or other business generated between the parties;

   ii. The health care items and services are of a type routinely provided by the entity;

   iii. The entity’s professional courtesy policy is written and approved in advance by the governing board;
iv. The courtesy is not offered to a physician or immediate family member who is a federal health care program beneficiary, unless there is a good-faith showing of financial need; **AND**

v. The arrangement does not violate the anti-kickback statute or any law or regulation governing billing or claims submission.

**k. Retention Payments in Underserved Areas.** This exception applies to remuneration provided by a hospital directly to a physician on its staff in order to retain the physician’s medical practice in the geographic area served by the entity. It also applies to remuneration provided by a federally qualified health center or a rural health clinic.

**l. Community-Wide Health Information Systems.** This exception applies to items or services of information technology provided by an entity to a physician that allow access to and sharing of electronic health care records and any complimentary drug information systems, general health medical alerts and related information for patients served by community providers and practitioners in order to enhance overall health where:

i. The items and services are available as necessary to enable the physician to participate in a community-wide information system; are principally used by the physician as part of that system; and are not provided in any manner that takes into account the value or volume of referrals or other business generated by the physician; **AND**

ii. The community-wide systems are available to all providers and practitioners and residents of the community who participate; **AND**

iii. The arrangement does not violate the anti-kickback statute or any law or regulation governing billing or claims submission.

ENDNOTES

1 Analysis of utilization, testing, services ordered, prescribed or delivered in relation to the requirements of these laws is beyond the scope of this report.


3 The Patient Protection and Affordable Care Act was enacted as Pub.L. 111-148 (2010).
See, e.g., 42 USC 1320a-5; 42 CFR 455.100 – 455.106.

See OAR 410-141-0120 (Managed care plans responsible for disclosure requirements of its contracted providers); OAR 410-120-1260 (fee-for-service provider enrollment disclosure requirements).

42 USC 1395nn(h)(6); 42 CFR 411.351 (definition of “designated health services”)

42 USC 1395nn(a)(2); 42 CFR 411.354.

42 USC 1395nn(a)(2); 42 CFR 411.354.

42 USC 1395nn(h)(1)(A); 42 CFR 411.354(c).

42 USC 1395nn(h)(1)(B); 42 CFR 411.351 (defining “remuneration”).

4 CFR 411.361(c).

42 CFR 411.350(b).


42 USC 1320a-7b(b).


The federal False Claims Act is codified at 31 USC 3729 – 3733.


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