

Threatening the Health Security of Washington:

The Uninsured & the Rising Costs of
Uncompensated Medical Care
Washington State 2006

A Data Report by Region and County



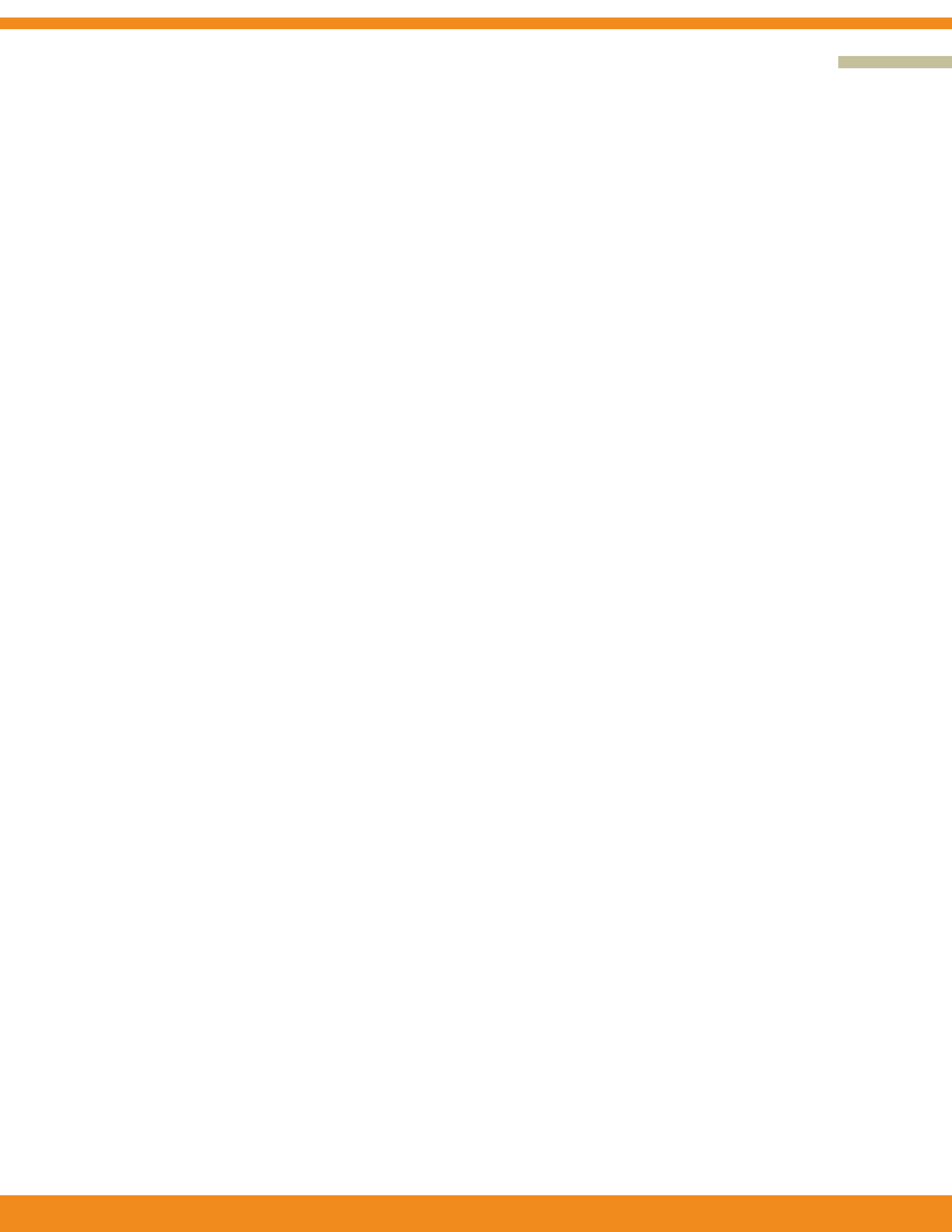
Mike Kreidler - State Insurance Commissioner

www.insurance.wa.gov



Table of Contents

Executive Summary	1
IS WASHINGTON’S HEALTH SECURITY THREATENED?	1
KEY FINDINGS OF THIS STUDY	1
SECURING WASHINGTON’S HEALTH: A SOLUTION FOR OUR STATE	2
Introduction	4
The Uninsured in Washington State	4
WHO ARE THE UNINSURED IN WASHINGTON STATE?	5
WHY ARE SO MANY WASHINGTONIANS UNINSURED?	6
WHAT ARE THE IMPACTS OF BEING UNINSURED?	6
The Insured in Washington State	7
FINANCIAL INSECURITY AND BANKRUPTCY	7
Cost of Uncompensated Care	8
COST OF UNCOMPENSATED CARE FOR THE UNINSURED	8
UNCOMPENSATED HOSPITAL CARE COST	9
How Uninsurance and Uncompensated Care Threaten Washington’s Health Security	11
ACCESS TO HEALTH SERVICES AND THE UNINSURED	11
IMPACT ON LOCAL AND STATE ECONOMIES	11
PUBLIC HEALTH	11
Securing Washington’s Health	12
Appendix 1: data tables	13
UNINSURED POPULATION BY COUNTY, WASHINGTON STATE	13
TREND OF UNINSURED POPULATION BY COUNTY	14
COST OF UNCOMPENSATED CARE BY COUNTY, WASHINGTON STATE	15
TREND OF COST OF UNCOMPENSATED CARE FOR UNINSURED BY COUNTY	16
POPULATION IN WASHINGTON STATE BY COUNTY	18
Appendix 2: methodology	19
UNINSURED POPULATION	19
COST OF UNCOMPENSATED CARE FOR THE UNINSURED POPULATION	21
HOSPITAL COST OF UNCOMPENSATED CARE	24
Appendix 3: data sources	25



Executive Summary

“It is misguided and even dangerous to assume the lack of health insurance harms only those who are uninsured. The rest of the community pays for uncompensated medical care either directly or indirectly, and high rates of uninsurance can strain community health systems to the point that important services have to be cut or eliminated.”

Arthur Kellermann, co-chair, Committee on the Consequences of Uninsurance, Institute of Medicine of the National Academies; Professor and Chairman, Department of Emergency Medicine, Director, Center for Injury Control, Emory University School of Medicine, Atlanta, Georgia.

Is Washington’s health security threatened?

In 2004, the Washington State Insurance Commissioner’s Office began studying the impacts of the uninsured and the cost of uncompensated medical care. “Uncompensated care” is health care for which no payment was received from the patient, insurer, or other third-party payers. It is the sum of both “bad debt” and charity care. The first study in 2004 documented the financial obligation an entire community assumes when individuals are uninsured and unable to pay their medical bills. In 2002, the community’s statewide financial burden was \$457 million. By 2006, it had ballooned to \$584 million.

As a state, we can no longer refuse to act on the problem of health care coverage and access. For the nearly 700,000 Washingtonians currently without health insurance, the danger of being uninsured is imminent, and can, in some cases, mean life or death. We have a moral obligation to expand access to health care coverage for these individuals; it is also in the best interest of our state’s economic and public health to move health insurance reform forward. A successful health insurance reform plan would expand health coverage to those Washingtonians who have no insurance, and provide greater security to those currently covered through their employer, union, self, or government program.

Key findings of this study

- Despite our state’s strong employment growth between 2004 and 2006, not much progress was made in reducing the state’s number of uninsured, which continues to hover around 11 percent.
- Uninsured rates in our state are as high as 16.8 percent in some regions, such as Yakima and the Tri-Cities.
- An estimated 24 percent of the U.S. population is considered “underinsured” or living with a “bare-bones” health insurance plan that barely covers their medical needs and leaves them unprepared to pay for major medical expenses.
- Every 30 seconds in the U.S., someone files for bankruptcy in the aftermath of a serious health problem. Of those who file for bankruptcy, 68 percent had health insurance.

- While poor working families are still the most likely to be uninsured, lower middle-class families (200-300 percent of the federal poverty level) face a growing problem. The rate of uninsurance for the latter increased about 50 percent between 2000 and 2004.
- Middle-aged adults (ages 35-64) are the fastest growing uninsured group; their rate of uninsurance increased about 44 percent between 2000 and 2004.
- The cost of uncompensated care continues to significantly rise from year to year. All regions of the state are experiencing an increase in the cost – some at alarming rates. For instance, Clark County saw a 50 percent increase in uncompensated care costs between 2002 and 2006.
- In 2006, hospitals, physicians, community clinics and other providers spent a combined total of \$584 million in uncompensated care for the uninsured, a 28 percent increase since 2002.
- Uninsured residents, however, are not solely responsible for the financial strain in our community health care systems. In 2006, hospitals in Washington State spent \$493 million on uncompensated care, partly for the uninsured but also for unpaid bills by insured and underinsured residents as well.

Securing Washington's Health: A Solution for Our State

How can we improve the security of health care in Washington State and make it more accessible and affordable for all residents?

Insurance Commissioner Mike Kreidler is drafting a proposal for consideration by the Legislature in 2008 to address some of these pressing issues. His **health insurance reform plan** – still under construction – includes these concepts:

Guaranteed coverage for all Washingtonians

- All Washington residents would have a guaranteed benefit plan that provides catastrophic coverage for unexpected health emergencies and guaranteed access to basic preventive care such as immunizations, cancer screening, and annual check-ups.
- All residents would be able to purchase additional coverage for the more routine health care not included in the guaranteed benefit plan. Premiums would be more affordable due to the plan, and subsidies would be available, on a sliding-scale, to help individuals and families purchase additional coverage.

Managing risk instead of avoiding it – changing insurance company behavior

- The costs for insuring all Washington residents – regardless of their health status – would be covered through combined pooling and better managing risk, rather than avoiding risk by making coverage unavailable and unaffordable for some.

Personal responsibility

- All residents would contribute according to their means and be encouraged to live healthy lifestyles, in part through guaranteed access to preventive care.

Choice

- This is not a one-size-fits-all proposal. Once preventive and catastrophic care protections were in place for everyone, consumers would be able to choose a quality, affordable insurance plan, according to their needs.

While this report is full of informative statistics about the state of health care coverage in Washington, it is not solely about numbers. It is a blueprint for the future health of our communities. The crisis in health care affects everyone, not just those who lack health insurance.

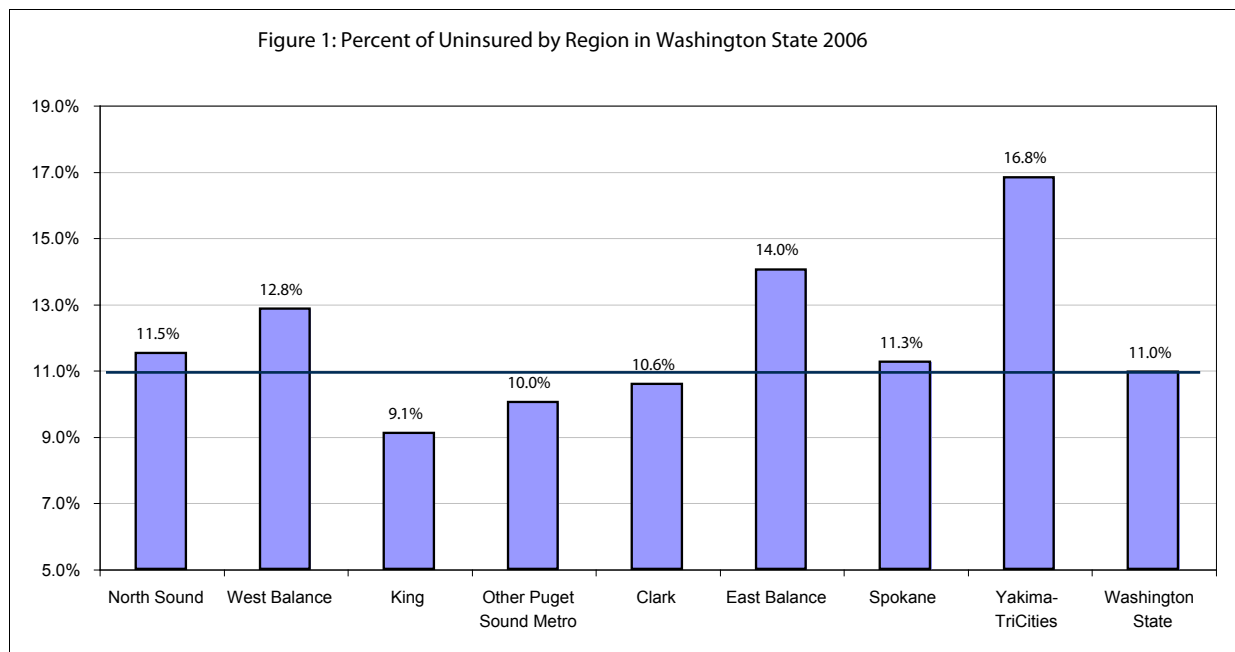
Introduction

In February 2003, the Institute of Medicine and its Committee on the Consequences of Uninsurance published the fourth in a series of six reports looking at the issues surrounding health insurance in the United States. The fourth report, entitled “A Shared Destiny: Community Effects of Uninsurance” examined whether the presence of a large uninsured population in a community can affect the health of and health services available to all in the community. The report concluded that the spillover effects of uninsurance go well beyond the individual who lacks coverage, affecting those who have adequate insurance as well. *Threatening the Health Security of Washington: The Uninsured and the Rising Costs of Uncompensated Care, Washington State 2006* reviews some of those findings and begins to put a dollar amount on its costs for our state.

The Uninsured in Washington State

Policymakers, providers and the public are correct in feeling anxiety about the growing numbers of uninsured. In Washington State, almost 700,000 residents were uninsured at some point during 2006 – about 11 percent of our state’s population. While many areas of the state saw slight decreases in their rates of uninsured residents between 2004 and 2006, the overall number of uninsured in our state has hovered around 11 percent for the last several years.

The rate of uninsured residents varies across regions, ranging from 9.1 percent in King County to a staggering 16.8 percent in the Yakima-Tri-Cities Region (Figure 1).



There are two common factors behind the variation of the uninsured rate among the regions: economic status and geographic location. The unemployment level of a particular county often means a higher rate of uninsurance; however, as health premiums keep rising, employers became increasingly reluctant to provide health insurance as employment benefits. Some employers reduce the level of benefits

to save costs. Some employers shift the cost burden to employees by increasing deductibles, co-payments, or share of co-insurance. This trend is confirmed by the fact that, while our state's strong employment growth between 2004 and 2006¹ may have resulted in slight decreases in the rate of uninsured in many regions of the state, it did not reduce the costs of uncompensated care related to either the insured or uninsured.

The distribution of uninsured individuals by county is listed in Table 1.

Table I: Uninsured by County, Washington State 2006

County	Number of Uninsured	Rate of Uninsured	County	Number of Uninsured	Rate of Uninsured	County	Number of Uninsured	Rate of Uninsured
Island	7,790	10.1%	Wahkiakum	455	11.7%	Garfield	250	10.4%
San Juan	1,570	10.0%	King	167,075	9.1%	Grant	13,545	16.8%
Skagit	14,230	12.6%	Kitsap	23,145	9.5%	Kittitas	4,305	11.5%
Whatcom	21,325	11.6%	Pierce	76,950	9.9%	Lincoln	1,065	10.4%
Clallam	8,340	12.3%	Snohomish	63,670	9.5%	Okanogan	7,115	17.9%
Cowlitz	12,600	13.0%	Thurston	28,815	12.5%	Pend	1,525	12.4%
Grays Harbor	9,435	13.4%	Clark	42,725	10.6%	Oreille	1,525	12.4%
Jefferson	3,280	11.6%	Adams	3,460	20.0%	Stevens	5,020	11.9%
Klickitat	2,665	13.5%	Asotin	2,545	12.1%	Walla Walla	7,585	13.1%
Lewis	9,620	13.2%	Chelan	10,025	14.3%	Whitman	4,565	10.7%
Mason	6,720	12.7%	Columbia	490	12.0%	Spokane	49,935	11.3%
Pacific	2,770	12.9%	Douglas	4,835	13.5%	Benton	20,100	12.5%
Skamania	1,285	12.1%	Ferry	1,190	15.9%	Franklin	13,035	20.3%
						Yakima	43,615	18.8%

Source: Office of Insurance Commissioner

Who are the uninsured in Washington State?²

- **Over 70 percent are members of working families**, many of whom are part of self-employed families.
- **Almost 62 percent are members of low-income families** who earn less than 200 percent of the federal poverty level (FPL) – \$37,700 for a family of four.
- While very poor families (up to 100 percent of the FPL) and near-poor families (100-200 percent of the FPL) are still most likely to be uninsured, **lower middle-class families** (200-300 percent of the FPL) **face a growing problem**. The rate of uninsurance for the latter group increased about 50 percent between 2000 and 2004).

¹ According to data from the Employment Security Department, our state's unemployment rate declined from 6.3 percent in 2004 to 5.0 percent in 2006. An additional 138,000 jobs were created for Washington residents.

² "Talking Points about Washington's Uninsured: Washington state planning grant on Access to Health Insurance, August 2005.

- **Close to 44 percent are young adults 19-34**, who are more likely to be uninsured than other age groups. However, when young adults are eligible for their employer's health insurance program and it is offered to them, they typically do sign up.
- **Middle-aged adults (ages 35-64) are the fastest growing problem.** Their rate of uninsurance increased about 44 percent between 2000 and 2004.
- Although most uninsured residents are white, the **issues surrounding access to health insurance**, and therefore access to health care, **disproportionably affect communities of color** (e.g. about 18 percent of Hispanics and 17 percent of American Indian/Alaskan Natives are uninsured, whereas only about 10 percent of whites are uninsured).

Why are so many Washingtonians uninsured?³

The reasons Washington residents consistently give for not having health insurance (in national surveys as well as in the state population survey) are as follows:

- **Insurance is unaffordable.** In most parts of the state, it takes an income of at least 250 percent of the federal poverty level to be able to afford basic living expenses, including health insurance.
- **Employers don't offer health insurance** or, in some cases, employers may offer it, but the employee is not eligible for it.
- **Residents are unemployed** or in-between jobs.
- **Another family member has insurance**, but it doesn't cover the entire family.
- **Residents can't get insurance or were refused it because of poor health or age.** (The Washington State Health Insurance Pool, a high-risk program, is an option for some people, but premiums make it unaffordable for many).
- **They don't think it's needed because they're healthy** (these are usually young adults but this is rarely the reason people give for not having health insurance).

What are the impacts of being uninsured?

While it is not necessary to have health insurance in order to receive health care, the lack of health insurance undeniably and significantly impacts one's ability to obtain access to health care services in our state. There are many negative impacts on people who lack health insurance, such as being much more likely to forgo needed care, and receive fewer preventive services and less regular care for chronic conditions. The findings indicate that uninsured patients:

- Have higher mortality rates, in general, and higher in-hospital mortality rates, in particular.

³ "Talking Points about Washington's Uninsured: Washington state planning grant on Access to Health Insurance, August 2005.

- Are more likely to experience adverse health outcomes – e.g. more likely to be diagnosed with cancer (colon, melanoma, breast, prostate) – at a late stage with lower survival rates.
- Are more likely to require emergency hospital care and avoidable hospitalizations, for conditions such as diabetes, hypertension, pneumonia, bleeding ulcers, and asthma.

It should be noted, too, that uninsured female patients are more likely to be at a higher risk of cardiovascular disease⁴.

Additionally, uninsured patients may be charged more than patients with health insurance coverage who benefit from discounts negotiated by their insurer.

The Insured in Washington State

Unfortunately, having health insurance does not necessarily provide security. Not only are those with health insurance increasingly anxious about losing that insurance altogether, many have already experienced either a reduction in benefits or an increase in deductibles and co-payments, resulting in high medical debt and, in some cases, bankruptcy. A new Consumer Reports study found that the number of “underinsured,” those living with “bare-bones” health insurance – barely covering their medical needs and leaving them unprepared to pay for major medical expenses – make up 24 percent of the entire U.S. population.

Without a doubt, uninsured residents are most impacted by medical bills and debt. However, **individuals and families with health insurance are suffering as well.** Despite digging deep into their savings, raiding their retirement accounts and running up credit card balances, 27 percent of underinsured residents said they were still in debt to doctors and hospitals.

Forty nine percent of all U.S. residents, and 43 percent of residents with insurance said they were “somewhat” to “completely” unprepared to cope with a costly medical emergency over the coming year.

When compared to individuals deemed “well insured,” Consumer Reports uncovered a high disparity:

Circumstance	Well Insured	Underinsured
Prepared to handle unexpected major medical costs in next 12 months	65%	37%
Postponed needed medical care in past 12 months due to costs	22%	56%
Dug deep into savings to pay medical bills	9%	33%
Decisions about retirement affected by medical expenses (adults 50+)	12%	34%

Financial insecurity and bankruptcy

A recent study by Harvard University researchers found that, every 30 seconds in the U.S., someone files for bankruptcy in the aftermath of a serious health problem.

⁴ State Planning Grant on Access to Health Insurance, Washington State, 2002.

The average out-of-pocket medical debt for those who filed for bankruptcy was \$12,000, and 68 percent of those who filed had health insurance. In addition, the study found that 50 percent of all bankruptcy filings were partly due to medical expenses.

Cost of Uncompensated Care

“Uncompensated care” is health care for which no payment was received from the patient, insurer, or other third-party payers. It is the sum of both “bad debt” and charity care. “Charity care” is care given by health care providers who don’t expect to be reimbursed. When providers cannot obtain reimbursement for services they have provided, they incur “bad debt.” This often happens when either insured or uninsured patients cannot pay their medical bills.

Two major reports provide information on the cost of uncompensated care:

- *Cost of Uncompensated Care for the Uninsured* reports the total cost of uncompensated health care services provided by all health care providers and received only by the uninsured population⁵.
- *Uncompensated Hospital Care Cost* includes uncompensated care provided by hospitals and received by both the uninsured population and some insured or underinsured individuals⁶.

Cost of Uncompensated Care for the Uninsured

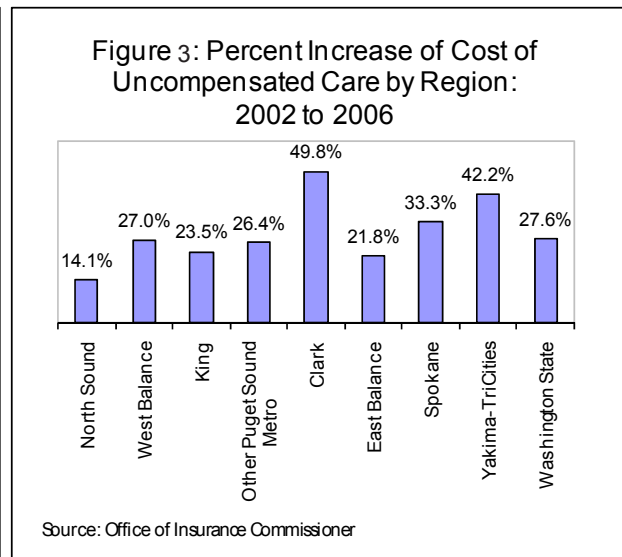
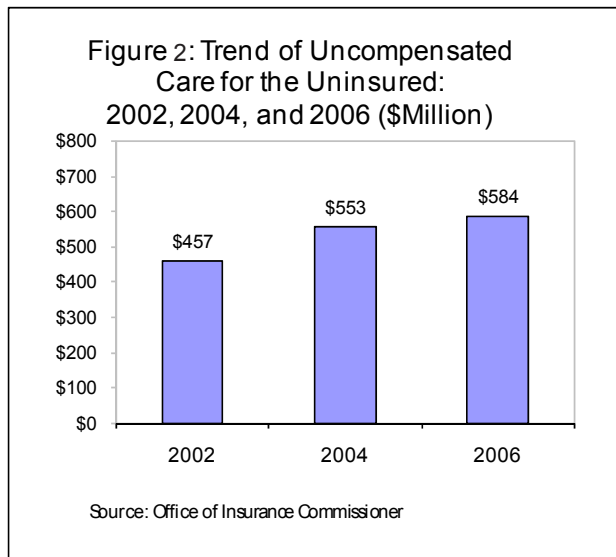
The cost of uncompensated care reported here is for health care services that uninsured people receive from all providers, but is not paid for by the uninsured themselves, by a third party such as federal, state, or local programs, or by private sources. When the uninsured receive care, some costs of the care are paid for by the uninsured themselves. Public and other private sources pay some of the remaining unpaid cost. The residual cost, called uncompensated care, is in general passed on to people with private health insurance through higher premiums (cost shifting).

In 2006, the total cost of uncompensated care for the uninsured population in Washington State reached \$584 million, an increase of \$31 million from the previous year. The cost of uncompensated care continues to show a rising trend since the Insurance Commissioner’s Office first began reporting it (Figure 2).

While, in general, the cost of uncompensated care is rising, the impacts on regions and counties are not balanced. Clark County has the fastest rising trend while North Sound shows a slow rising trend. Figure 3 shows this disparity in increasing percentages of uncompensated care by region from 2002 to 2006.

⁵ These reports are based on federal Medical Expense Panel Survey (MEPS) data.

⁶ These reports are based hospital reports required by federal and state laws.



Uncompensated Hospital Care Cost

In 2006, Washington State hospitals provided uncompensated care services totaling \$493 million. This is care that went to not just the uninsured but the insured as well. Table 2 shows charity care and bad debt in terms of both charge and cost from 1991 to 2006.

The cost of hospital uncompensated care includes bad debt and charity care. Bad debt consists of services for which the hospital anticipated but did not receive payment. In contrast, charity care, consists of services for which the hospital did not expect to receive payment. In Washington State, hospital bad debt and charity care are reported to the Department of Health. Reported hospital data of uncompensated care are expressed in terms of hospital charges. The uncompensated care for hospitals in this report is expressed in terms of cost of services. In other words, bad debt and charity care are added together and the sum is multiplied by the hospital's cost-to-charge ratio.

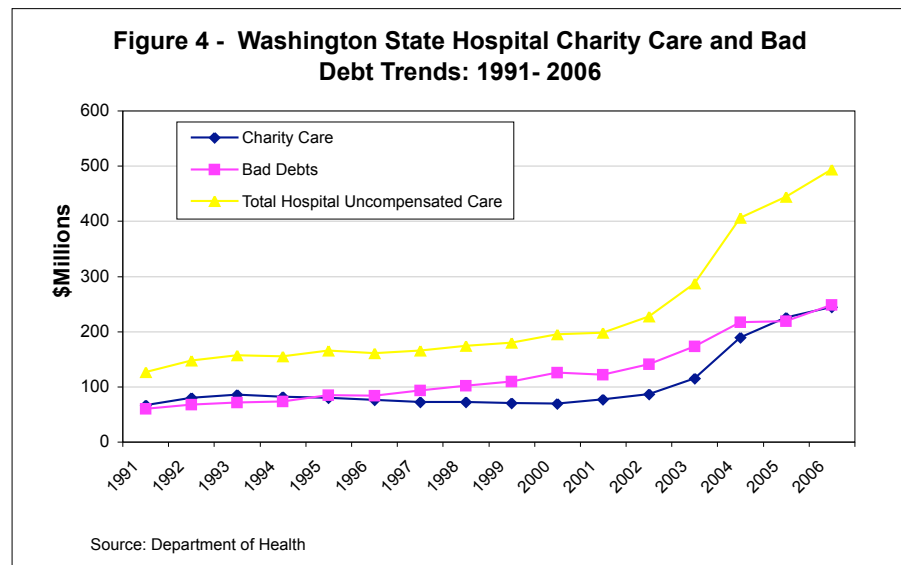
Table 2: Hospital Charity Care and Bad Debt. Washington State 1991-2006

Year	Bad Debts (Charge)	Charity Care (Charge)	Charge/Paid Ratio	Bad Debts (Paid)	Charity Care (Paid)	Total Hospital Uncompensated Care
1991	\$78,099,492	\$86,883,567	77%	\$59,862,045	\$66,594,902	\$126,456,947
1992	\$90,558,127	\$107,230,469	75%	\$67,466,184	\$79,887,149	\$147,353,334
1993	\$97,687,028	\$117,269,462	73%	\$71,260,182	\$85,545,065	\$156,805,246
1994	\$100,326,372	\$111,871,691	73%	\$73,064,437	\$81,472,518	\$154,536,955
1995	\$116,800,703	\$110,169,791	73%	\$84,979,664	\$80,155,269	\$165,134,933
1996	\$116,736,458	\$105,767,242	72%	\$84,126,123	\$76,221,158	\$160,347,281
1997	\$132,352,243	\$102,992,342	70%	\$92,914,386	\$72,303,045	\$165,217,430
1998	\$152,759,011	\$108,361,233	67%	\$102,035,060	\$72,379,658	\$174,414,718
1999	\$174,314,614	\$112,574,686	63%	\$109,360,979	\$70,626,768	\$179,987,747
2000	\$213,562,393	\$117,707,786	59%	\$125,766,992	\$69,318,170	\$195,085,162
2001	\$214,297,583	\$135,140,421	57%	\$121,510,789	\$76,627,179	\$198,137,968
2002	\$257,166,006	\$158,602,333	55%	\$140,705,390	\$86,777,423	\$227,482,813
2003	\$330,099,594	\$218,716,343	52%	\$172,970,180	\$114,606,034	\$287,576,214
2004	\$431,692,483	\$377,659,432	50%	\$216,382,392	\$189,298,759	\$405,681,151
2005	\$446,417,516	\$460,789,979	49%	\$218,374,061	\$225,404,639	\$443,778,699
2006*	\$517,296,702	\$510,084,854	48%	\$248,302,417	\$244,840,730	\$493,143,147

Source: Derived by OIC staff using DOH Hospital Financials data.

* 2006 data are based on information provided by the Wa. State Hospital Association.

A notable trend (Figure 4) is that the increase of uncompensated care has accelerated significantly since 1999. Between 1991 and 1998, the total cost of hospital uncompensated care in Washington State increased at an annual rate of 4.5 percent. However, from 2000 to 2006, total hospital uncompensated care increased at a rate of 16.7 percent a year. The fast growth of hospital uncompensated care is a reflection of rising health care costs and its cumulative impacts on our health care system and economy.



Source: Department of Health

* 2006 data is based on information provided by the WSHA.

Increasingly, rising health insurance costs make providing health coverage a heavy burden for employers rather than a perk on which to build a quality labor force. By increasing deductibles and copayments, reducing benefits, or dropping health coverage, employers are ceding their role as a major payer in the state and national health care systems. Increases in employees' share of health care costs accelerate hospitals' costs of uncompensated care because of the increased inability of patients to pay their share.

How Uninsurance and Uncompensated Care Threaten Washington's Health Security

The Institute of Medicine and its Committee on the Consequences of Uninsurance identified three general areas that are negatively impacted by large numbers of uninsured in any given community: access to health services, impact on local and state economies, and public or community health.

Access to Health Services and the Uninsured

Large numbers of uninsured affect everyone – insured and uninsured alike – in accessing:

- Their local emergency rooms. In many urban and rural areas, hospital emergency rooms are often filled beyond capacity. Overcrowding adversely affects the quality of care for all patients, by causing longer wait times to be seen and admitted, and longer transport times to the hospital if some emergency rooms have been temporarily closed.
- Hospital-based inpatient or outpatient care, including fewer beds in more urban areas for psychiatric services, and alcohol and chemical dependence treatment; and fewer beds in more rural areas for services such as intensive care, transplants, magnetic resonance imaging (MRI), and radiation therapy.

One certain outcome of a high uninsurance rate and rising uncompensated care costs is higher health insurance costs to insured individuals, either paid by themselves or through their employer-based coverage. Given the complex fragmentation of our insurance market, varying schedules as to cost of services, and often low operating margins, many hospitals and health care institutions engage in cost shifting between one payer and another. The result is that hospitals may seek to “make up” for the uncompensated care they provide by charging more to insured or covered patients.

Impact on Local and State Economies

The health care sector is a key part of most local economies, particularly in rural areas, where hospitals serve as economic anchors. Spending by hospitals and spending by hospital employees as residents can have a significant impact on the local economy separate from the dollars spent directly on health care. If a hospital is forced to close or reduce its services, it can mean a loss of jobs and revenue for surrounding businesses as well as the hospital itself.

Community residents subsidize care for the uninsured through their tax dollars. An increasing number of uninsured in a community could result in two situations affecting the entire community: either taxes would be raised to address the increasing costs, or other public services would be cut in order to make limited tax dollars available for uncompensated health care costs.

Public Health

Because areas with relatively high uninsured rates are likely to have greater burdens of disability and disease, their need for population-based public health

services are anticipated to be greater, and the accompanying financial pressures on state and local health departments considerable. As a result, funds might be diverted to support personal health services for uninsured residents, thus leaving budgets for public health activities squeezed, including disease and immunization surveillance, community-based health education and behavioral interventions, and environmental health, which benefit all members of a community.

In addition to keeping the overall health of a community safe, the role of a strong public health and preventive care component in a community's health plan can have a dramatic impact on the cost of uncompensated care as well. In November 1999, the regional health board in Vancouver, British Columbia undertook a mass pneumococcal vaccination campaign in the downtown east side of Vancouver, vaccinating 7,114 people in five weeks. St. Paul's Hospital is the primary facility that serves this community. The result was a 25 percent decrease in admissions for pneumonia through the emergency department in the post-vaccine period. This allowed hospital resources that would have gone towards treating pneumonia to assist other patients instead.

Securing Washington's Health

The current unacceptable number of uninsured, the rising numbers of underinsured and the uncompensated care costs associated with both significantly impede the state's ability to create a better environment for all of its residents. Solving the health care crisis in our state will go a long way towards securing a healthy future for our state's economy.

Commissioner Kreidler will propose a health insurance reform plan during the 2008 legislative session, bringing together the public and private aspects of our system that work. It manages the risk of providing health care to all – regardless of age or health status – rather than avoiding it. It will improve the business climate for small employers, and treat all Washingtonians with compassion in their real life struggle to access and afford health care insurance.

Commissioner Kreidler's plan will cover all Washington residents for catastrophic and preventive care through a guaranteed benefit plan.

The result will be more affordable, routine care health insurance for all residents. In addition, depending on funding, subsidies could be made available on a sliding scale to further assist families in purchasing additional health insurance benefits.

Washington State can and should protect families and businesses against catastrophic events, including health care emergencies. Our state can and should play a role in ensuring that all Washingtonians have access to preventive care such as annual check-ups, immunizations and cancer screenings.

Health insurers will be successful, not by avoiding risk, but by managing health care delivery well and by competing on quality and service.

Appendix I: data tables

Table I: Uninsured Population by County, Washington State 2006

Region	County	Population (1)	Uninsured					
			Low Estimate (2)		High Estimate (3)		Middle Point	
			Number Uninsured	As % of Population	Number Uninsured	As % of Population	Number Uninsured	As % of Population
North Sound	Island	77,200	6,600	8.5%	8,980	11.6%	7,790	10.1%
	San Juan	15,700	1,330	8.5%	1,810	11.5%	1,570	10.0%
	Skagit	113,100	12,050	10.7%	16,410	14.5%	14,230	12.6%
	Whatcom	184,300	18,060	9.8%	24,590	13.3%	21,325	11.6%
	Regional Sum	390,300	38,040	9.75%	51,790	13.27%	44,915	11.51%
West Balance	Clallam	67,800	7,710	11.4%	8,970	13.2%	8,340	12.3%
	Cowlitz	96,800	11,650	12.0%	13,550	14.0%	12,600	13.0%
	Grays Harbor	70,400	8,720	12.4%	10,150	14.4%	9,435	13.4%
	Jefferson	28,200	3,030	10.7%	3,530	12.5%	3,280	11.6%
	Klickitat	19,800	2,460	12.4%	2,870	14.5%	2,665	13.5%
	Lewis	72,900	8,890	12.2%	10,350	14.2%	9,620	13.2%
	Mason	53,100	6,210	11.7%	7,230	13.6%	6,720	12.7%
	Pacific	21,500	2,560	11.9%	2,980	13.9%	2,770	12.9%
	Skamania	10,600	1,190	11.2%	1,380	13.0%	1,285	12.1%
	Wahkiakum	3,900	420	10.8%	490	12.6%	455	11.7%
Regional Sum	445,000	52,840	11.87%	61,500	13.82%	57,170	12.85%	
King	King	1,835,300	140,150	7.6%	194,000	10.6%	167,075	9.1%
	Regional Sum	1,835,300	140,150	7.64%	194,000	10.57%	167,075	9.10%
Other Puget Sound Metro	Kitsap	243,400	19,590	8.0%	26,700	11.0%	23,145	9.5%
	Pierce	773,500	65,130	8.4%	88,770	11.5%	76,950	9.9%
	Snohomish	671,800	53,890	8.0%	73,450	10.9%	63,670	9.5%
	Thurston	231,100	24,390	10.6%	33,240	14.4%	28,815	12.5%
	Regional Sum	1,919,800	163,000	8.49%	222,160	11.57%	192,580	10.03%
Clark	Clark	403,500	37,810	9.4%	47,640	11.8%	42,725	10.6%
	Regional Sum	403,500	37,810	9.37%	47,640	11.81%	42,725	10.59%
East Balance	Adams	17,300	2,910	16.8%	4,010	23.2%	3,460	20.0%
	Asotin	21,100	2,140	10.1%	2,950	14.0%	2,545	12.1%
	Chelan	70,100	8,430	12.0%	11,620	16.6%	10,025	14.3%
	Columbia	4,100	410	10.0%	570	13.9%	490	12.0%
	Douglas	35,700	4,070	11.4%	5,600	15.7%	4,835	13.5%
	Ferry	7,500	1,000	13.3%	1,380	18.4%	1,190	15.9%
	Garfield	2,400	210	8.8%	290	12.1%	250	10.4%
	Grant	80,600	11,390	14.1%	15,700	19.5%	13,545	16.8%
	Kittitas	37,400	3,620	9.7%	4,990	13.3%	4,305	11.5%
	Lincoln	10,200	900	8.8%	1,230	12.1%	1,065	10.4%
	Okanogan	39,800	5,980	15.0%	8,250	20.7%	7,115	17.9%
	Pend Oreille	12,300	1,280	10.4%	1,770	14.4%	1,525	12.4%
	Stevens	42,100	4,220	10.0%	5,820	13.8%	5,020	11.9%
	Walla Walla	57,900	6,380	11.0%	8,790	15.2%	7,585	13.1%
Whitman	42,800	3,840	9.0%	5,290	12.4%	4,565	10.7%	
Regional Sum	481,300	56,780	11.80%	78,260	16.26%	67,520	14.03%	
Spokane	Spokane	443,800	46,200	10.4%	53,670	12.1%	49,935	11.3%
	Regional Sum	443,800	46,200	10.41%	53,670	12.09%	49,935	11.25%
Yakima-TriCities	Benton	160,600	17,240	10.7%	22,960	14.3%	20,100	12.5%
	Franklin	64,200	11,180	17.4%	14,890	23.2%	13,035	20.3%
	Yakima	231,800	37,400	16.1%	49,830	21.5%	43,615	18.8%
	Regional Sum	456,600	65,820	14.42%	87,680	19.20%	76,750	16.81%
Washington State	6,375,600	600,640	9.42%	796,700	12.5%	698,670	11.0%	

(1) Office of Financial Management (2007): Intercensal Estimates of the Total Resident Population by County with 2001 through 2006 Postcensal Estimates

(2) Estimated by Office of Insurance Commissioner (2007) based on State Population Survey 2006, U.S. Census Bureau CPS data 2004-2006, and U.S. Census Bureau Small Area Health Insurance data.

(3) Estimated by Office of Insurance Commissioner (2007) based on data from U.S. Census Bureau Small Area Health Insurance data Employment Security Department annual employment reports, and Office of Financial Management published data.

Table 2: Trend of Uninsured Population by County, 2002, 2004 and 2006

Region	County	Year 2002	Year 2004	Year 2006
North Sound	Island	9,215	8,615	7,790
	San Juan	1,830	1,725	1,570
	Skagit	16,080	15,325	14,230
	Whatcom	24,190	23,245	21,325
	Regional Sum	51,315	48,910	44,915
West Balance	Clallam	8,735	8,340	8,340
	Cowlitz	10,710	12,765	12,600
	Grays Harbor	10,180	9,525	9,435
	Jefferson	3,420	3,270	3,280
	Klickitat	2,945	2,735	2,665
	Lewis	10,270	9,620	9,620
	Mason	6,995	6,550	6,720
	Pacific	3,000	2,835	2,770
	Skamania	1,295	1,265	1,285
	Wahkiakum	490	475	455
Regional Sum	58,040	57,380	57,170	
King	King	174,505	186,935	167,075
	Regional Sum	174,505	186,935	167,075
Other Puget Sound Metro	Kitsap	24,385	25,860	23,145
	Pierce	78,645	83,650	76,950
	Snohomish	64,065	68,795	63,670
	Thurston	28,795	30,670	28,815
Regional Sum	195,890	208,975	192,580	
Clark	Clark	36,110	45,340	42,725
	Regional Sum	36,110	45,340	42,725
East Balance	Adams	3,710	3,985	3,460
	Asotin	2,730	3,045	2,545
	Chelan	10,585	11,570	10,025
	Columbia	600	625	490
	Douglas	5,065	5,385	4,835
	Ferry	1,280	1,405	1,190
	Garfield	285	320	250
	Grant	14,220	15,435	13,545
	Kittitas	4,335	4,925	4,305
	Lincoln	1,205	1,330	1,065
	Okanogan	7,855	8,575	7,115
	Pend Oreille	1,645	1,820	1,525
	Stevens	5,395	5,930	5,020
	Walla Walla	8,075	8,885	7,585
Whitman	4,620	5,275	4,565	
Regional Sum	71,605	78,510	67,520	
Spokane	Spokane	47,880	53,090	49,935
	Regional Sum	47,880	53,090	49,935
Yakima-TriCities	Benton	17,935	18,255	20,100
	Franklin	10,470	10,315	13,035
	Yakima	40,215	40,750	43,615
	Regional Sum	68,620	69,320	76,750
Washington State		703,965	748,460	698,670

* Numbers of uninsured are midpoints of low estimates based on State Population Survey Data and high estimates based on U.S. Census Bureau data.

Table 3: Cost of Uncompensated Care by County, Washington State 2006

Region	County	Uninsured (1)	Cost of Uncompensated Care			
			Low Estimate (2)	High Estimate (3)	Midpoint	As % of State Total Cost of Uncompensated Care
North Sound	Island	7,790	\$4,953,211	\$8,075,600	\$6,514,405	1.1%
	San Juan	1,570	\$998,147	\$1,627,710	\$1,312,928	0.2%
	Skagit	14,230	\$9,043,362	\$14,757,304	\$11,900,333	2.0%
	Whatcom	21,325	\$13,553,785	\$22,113,474	\$17,833,629	3.1%
	Regional Sum	44,915	\$28,548,504	\$46,574,087	\$37,561,296	6.4%
West Balance	Clallam	8,340	\$5,786,250	\$8,066,607	\$6,926,429	1.2%
	Cowlitz	12,600	\$8,743,167	\$12,185,342	\$10,464,255	1.8%
	Grays Harbor	9,435	\$6,544,242	\$9,127,766	\$7,836,004	1.3%
	Jefferson	3,280	\$2,273,974	\$3,174,484	\$2,724,229	0.5%
	Klickitat	2,665	\$1,846,197	\$2,580,954	\$2,213,576	0.4%
	Lewis	9,620	\$6,671,824	\$9,307,623	\$7,989,724	1.4%
	Mason	6,720	\$4,660,521	\$6,501,847	\$5,581,184	1.0%
	Pacific	2,770	\$1,921,245	\$2,679,876	\$2,300,561	0.4%
	Skamania	1,285	\$893,079	\$1,241,016	\$1,067,048	0.2%
	Wahkiakum	455	\$315,204	\$440,651	\$377,928	0.1%
	Regional Sum	57,170	\$39,655,703	\$55,306,167	\$47,480,935	8.1%
King	King	167,075	\$105,180,675	\$174,461,729	\$139,821,202	24.0%
	Regional Sum	167,075	\$105,180,675	\$174,461,729	\$139,821,202	24.0%
Other Puget Sound Metro	Kitsap	23,145	\$14,702,029	\$24,010,970	\$19,356,500	3.3%
	Pierce	76,950	\$48,879,182	\$79,829,730	\$64,354,456	11.0%
	Snohomish	63,670	\$40,443,714	\$66,052,649	\$53,248,182	9.1%
	Thurston	28,815	\$18,304,364	\$29,892,309	\$24,098,336	4.1%
	Regional Sum	192,580	\$122,329,290	\$199,785,658	\$161,057,474	27.6%
Clark	Clark	42,725	\$28,375,892	\$42,842,045	\$35,608,969	6.1%
	Regional Sum	42,725	\$28,375,892	\$42,842,045	\$35,608,969	6.1%
East Balance	Adams	3,460	\$2,183,916	\$3,606,142	\$2,895,029	0.5%
	Asotin	2,545	\$1,606,041	\$2,652,897	\$2,129,469	0.4%
	Chelan	10,025	\$6,326,601	\$10,449,718	\$8,388,159	1.4%
	Columbia	490	\$307,699	\$512,594	\$410,147	0.1%
	Douglas	4,835	\$3,054,480	\$5,036,009	\$4,045,244	0.7%
	Ferry	1,190	\$750,486	\$1,241,016	\$995,751	0.2%
	Garfield	250	\$157,602	\$260,793	\$209,198	0.0%
	Grant	13,545	\$8,548,041	\$14,118,810	\$11,333,425	1.9%
	Kittitas	4,305	\$2,716,761	\$4,487,443	\$3,602,102	0.6%
	Lincoln	1,065	\$675,438	\$1,106,123	\$890,781	0.2%
	Okanogan	7,115	\$4,487,909	\$7,419,120	\$5,953,514	1.0%
	Pend Oreille	1,525	\$960,623	\$1,591,738	\$1,276,181	0.2%
	Stevens	5,020	\$3,167,053	\$5,233,852	\$4,200,452	0.7%
	Walla Walla	7,585	\$4,788,103	\$7,904,735	\$6,346,419	1.1%
	Whitman	4,565	\$2,881,868	\$4,757,230	\$3,819,549	0.7%
	Regional Sum	67,520	\$42,612,620	\$70,378,221	\$56,495,421	9.7%
Spokane	Spokane	49,935	\$34,672,474	\$48,264,747	\$41,468,610	7.1%
	Regional Sum	49,935	\$34,672,474	\$48,264,747	\$41,468,610	7.1%
Yakima-TriCities	Benton	20,100	\$12,938,386	\$20,647,636	\$16,793,011	2.9%
	Franklin	13,035	\$8,390,438	\$13,390,387	\$10,890,413	1.9%
	Yakima	43,615	\$28,068,193	\$44,811,484	\$36,439,839	6.2%
	Regional Sum	76,750	\$49,397,017	\$78,849,507	\$64,123,262	11.0%
Washington State		698,670	\$450,772,175	\$716,462,162	\$583,617,168	100.0%

(1) Numbers of uninsured are midpoints of low estimates based on State Population Survey data and high estimates based on U.S. Census Bureau CPS data.

(2), (3) Average estimate of OIC (2003) and Family USA (2006) adjusted for health care cost inflation. See methodology section for more details.

Table 4: Trend of Cost of Uncompensated Care for Uninsured by County, 2002, 2004, 2006

Region	County	Year 2002	Year 2004	Year 2006	Percentage Increase 2002-2006
North Sound	Island	\$5,911,821	\$6,356,972	\$6,514,405	10.19%
	San Juan	\$1,173,910	\$1,272,982	\$1,312,928	11.84%
	Skagit	\$10,316,150	\$11,307,906	\$11,900,333	15.36%
	Whatcom	\$15,519,109	\$17,151,846	\$17,833,629	14.91%
	Regional Sum	32,920,990	36,089,705	37,561,296	14.10%
West Balance	Clallam	\$5,624,983	\$6,180,678	\$6,926,429	23.14%
	Cowlitz	\$6,896,729	\$9,460,004	\$10,464,255	51.73%
	Grays Harbor	\$6,555,626	\$7,059,091	\$7,836,004	19.53%
	Jefferson	\$2,202,389	\$2,423,418	\$2,724,229	23.69%
	Klickitat	\$1,896,614	\$2,026,907	\$2,213,576	16.71%
	Lewis	\$6,613,538	\$7,129,260	\$7,989,724	20.81%
	Mason	\$4,504,388	\$4,854,119	\$5,581,184	23.91%
	Pacific	\$1,931,941	\$2,101,046	\$2,300,561	19.08%
	Skamania	\$833,931	\$937,330	\$1,067,048	27.95%
	Wahkiakum	\$315,619	\$352,159	\$377,928	19.74%
	Regional Sum	37,375,759	42,524,012	47,480,935	27.04%
King	King	\$113,245,109	\$138,139,929	\$139,821,202	23.47%
	Regional Sum	113,245,109	138,139,929	139,821,202	23.47%
Other Puget Sound Metro	Kitsap	\$15,866,004	\$19,099,245	\$19,356,500	22.00%
	Pierce	\$51,169,733	\$61,780,618	\$64,354,456	25.77%
	Snohomish	\$41,683,369	\$50,809,079	\$53,248,182	27.74%
	Thurston	\$18,735,308	\$22,651,395	\$24,098,336	28.63%
	Regional Sum	127,454,414	154,340,338	161,057,474	26.36%
Clark	Clark	\$23,764,774	\$33,324,325	\$35,608,969	49.84%
	Regional Sum	23,764,774	33,324,325	35,608,969	49.84%

Region	County	Year 2002	Year 2004	Year 2006	Percentage Increase 2002-2006
East Balance	Adams	\$2,403,233	\$2,928,025	\$2,895,029	20.46%
	Asotin	\$1,768,547	\$2,237,558	\$2,129,469	20.41%
	Chelan	\$6,857,029	\$8,501,399	\$8,388,159	22.33%
	Columbia	\$388,572	\$459,426	\$410,147	5.55%
	Douglas	\$3,281,136	\$3,956,772	\$4,045,244	23.29%
	Ferry	\$829,259	\$1,032,060	\$995,751	20.08%
	Garfield	\$184,730	\$235,011	\$209,198	13.25%
	Grant	\$9,211,619	\$11,341,377	\$11,333,425	23.03%
	Kittitas	\$2,808,019	\$3,618,492	\$3,602,102	28.28%
	Lincoln	\$780,616	\$977,113	\$890,781	14.11%
	Okanogan	\$5,088,482	\$6,300,911	\$5,953,514	17.00%
	Pend Oreille	\$1,065,530	\$1,337,240	\$1,276,181	19.77%
	Stevens	\$3,494,821	\$4,357,281	\$4,200,452	20.19%
	Walla Walla	\$5,230,939	\$6,528,639	\$6,346,419	21.32%
	Whitman	\$2,992,749	\$3,876,007	\$3,819,549	27.63%
	Regional Sum	\$46,385,281	\$57,687,312	\$56,495,421	21.80%
Spokane	Spokane	\$31,117,884	\$39,094,383	\$41,468,610	33.26%
	Regional Sum	31,117,884	39,094,383	41,468,610	33.26%
Yakima-TriCities	Benton	\$11,786,687	\$13,701,791	\$16,793,011	42.47%
	Franklin	\$6,880,587	\$7,742,131	\$10,890,413	58.28%
	Yakima	\$26,428,562	\$30,585,950	\$36,439,839	37.88%
	Regional Sum	45,095,837	\$52,029,872	\$64,123,262	42.19%
Washington State		457,360,049	\$553,229,876	\$583,617,168	27.61%

* Costs of uncompensated care are based on OIC/Mercer 2002 data and Families USA Cost Estimates for Uncompensated Care 2005, U.S. Census Bureau data, and OIC county model. All estimates are adjusted for health inflation.

Table 5: Population in Washington State by County, 2000 - 2006

County	Census 2000	2001	2002	2003	2004	2005	2006
Adams	16,428	16,600	16,600	16,600	16,700	17,000	17,300
Asotin	20,551	20,700	20,700	20,600	20,700	20,900	21,100
Benton	142,475	144,800	147,600	151,600	155,100	158,100	160,600
Chelan	66,616	67,100	67,600	67,900	68,400	69,200	70,100
Clallam	64,179	64,454	64,900	65,300	65,900	66,800	67,800
Clark	345,238	352,600	363,400	372,300	383,300	391,500	403,500
Columbia	4,064	4,100	4,100	4,100	4,100	4,100	4,100
Cowlitz	92,948	93,900	94,400	94,900	95,300	95,900	96,800
Douglas	32,603	32,800	33,100	33,600	34,200	34,700	35,700
Ferry	7,260	7,300	7,300	7,300	7,300	7,400	7,500
Franklin	49,347	50,400	51,300	53,600	57,000	60,500	64,200
Garfield	2,397	2,400	2,400	2,400	2,400	2,400	2,400
Grant	74,698	75,900	76,400	77,100	78,300	79,100	80,600
Grays Harbor	67,194	68,500	68,400	68,800	69,200	69,800	70,400
Island	71,558	72,400	73,100	74,000	74,800	76,000	77,200
Jefferson	26,299	26,446	26,600	26,700	27,000	27,600	28,200
King	1,737,046	1,758,312	1,774,312	1,779,300	1,788,300	1,808,300	1,835,300
Kitsap	231,969	233,400	234,700	237,000	239,500	240,400	243,400
Kittitas	33,362	34,000	34,800	35,200	35,800	36,600	37,400
Klickitat	19,161	19,300	19,300	19,300	19,300	19,500	19,800
Lewis	68,600	69,500	70,200	70,400	70,700	71,600	72,900
Lincoln	10,184	10,200	10,200	10,100	10,200	10,100	10,200
Mason	49,405	49,600	49,800	50,200	50,800	51,900	53,100
Okanogan	39,564	39,700	39,800	39,600	39,600	39,600	39,800
Pacific	20,984	21,000	21,000	20,900	21,000	21,300	21,500
Pend Oreille	11,732	11,800	11,800	11,800	11,900	12,200	12,300
Pierce	700,818	713,398	724,998	733,700	744,000	755,900	773,500
San Juan	14,077	14,400	14,600	14,800	15,100	15,500	15,700
Skagit	102,979	104,100	105,100	106,700	108,800	110,900	113,100
Skamania	9,872	9,900	9,900	9,900	10,100	10,300	10,600
Snohomish	606,024	618,600	628,000	637,500	644,800	655,800	671,800
Spokane	417,939	422,400	425,600	428,600	432,000	436,300	443,800
Stevens	40,066	40,300	40,400	40,600	40,700	41,200	42,100
Thurston	207,355	210,200	212,300	214,800	218,500	224,100	231,100
Wahkiakum	3,824	3,800	3,800	3,800	3,800	3,900	3,900
Walla Walla	55,180	55,200	55,400	55,800	56,700	57,500	57,900
Whatcom	166,826	170,600	172,200	174,500	177,300	180,800	184,300
Whitman	40,740	40,300	40,600	41,000	41,700	42,400	42,800
Yakima	222,581	224,500	225,000	226,000	227,500	229,300	231,800
Washington State	5,894,143	5,974,910	6,041,710	6,098,300	6,167,800	6,256,400	6,375,600

Source: Office of Financial Management 2007

Note: Totals may not add due to rounding.

Appendix 2: methodology

Uninsured Population

Two major data sources are frequently used for health care coverage analysis in Washington State. They are the Washington State Population Survey (WSPS) administered by the Washington State Office of Financial Management, and the Current Population Survey (CPS) administered by the U.S. Census Bureau. The CPS data for the uninsured rates are significantly higher than those of the WSPS for all comparable data years. This data discrepancy resulted in some confusion and inconsistency when analyzing the uninsured population. The discrepancy of estimates from the two different data sources is caused by the different ways in which insurance questions are asked in the two surveys.

The WSPS asks only about coverage at a time (time point) while the CPS supports annual (time period) uninsured estimates. In WSPS questions, respondents are asked whether members of their household had any of each source of coverage at the current time. Any coverage at the time point would be interpreted as being insured for the year in later analysis. In CPS questions, respondents are asked whether members of their household had any of each source of coverage at any time in the previous year, and those who responded that they have no coverage would be interpreted as reporting that they were uninsured for the entire year. Therefore, those who have only a part of period coverage during a year could count as either insured or uninsured, depending on which survey question was asked. In reality, there are some people who are covered only part of the year. Either including them as full-time insured or excluding them as uninsured is not correct. Therefore, both WSPS and CPS have methodological biases.

Based on an analysis of different data sources on health insurance coverage, the State Planning Grant Consultation Team recommended that Washington use the Washington State Population Survey as its core population survey source for profiling the problem of the uninsured and analyzing policy options; other data sources should be used to fill gaps in the WSPS. The Current Population Survey, however, should be used to benchmark coverage in Washington with levels and trends in other states and the U.S. as a whole⁷. Based on this recommendation, in this county level report, we developed estimates of uninsured profiles by county, based on both WSPS data (Low Estimates) and CPS data (High Estimates). Users should select appropriate estimates based on the analytical contexts.

High Estimates

Staff in the Insurance Commissioner's Office estimated the number of people with health insurance coverage for 2002 and 2004 based on data developed by the U.S. Census Bureau's Small Area Health Insurance Estimates (SAHIE). The SAHIE model uses the approximately 1,200 counties along with CPS sample cases to estimate the equation parameters⁸. The proportion insured in the dependent variable is a three-year average of county-level observations from the Annual Social

⁷ Planning Grant Consultant Team: University of Washington Health Policy Analysis Program, Rutgers University Center for State Health Policy, RAND, William M. Mercer, Incorporated, and The Foundation for Health Care Quality. 2002. Data for Assessing Access to Health Insurance Coverage in Washington State. Research Deliverable 1.0 submitted to Washington State Planning Grant on Access to Health Insurance.

⁸ U.S. Census Bureau Small Area Health Insurance Estimates Program. 2004. Model-based Estimates for Counties and States.

and Economic Supplement (ASEC) of the Current Population Survey (CPS). The SAHIE model used a group of demographic and socioeconomic variables available from various data sources to estimate the insured and uninsured by county. We used SAHIE model data as the dependent variable and fitted the logistic regression model using a group of demographic and socioeconomic variables. The model was then used to estimate county share of insured and uninsured in Washington State.

The following is the logistic model we developed for county analysis:

$$\log\left(\frac{UI}{IN}\right) = a + b*(POP*EMP) + c*MAA + d*HISP + e*RUR + \square$$

Where:

UI = Uninsured population

IN = Insured population

a, b, c, d, and e = Fitted model parameters

POP = County population as percent of state population

EMP = Employed persons as percent of total county population

MAA = Medicaid clients as percent of total county population

HISP = People of Hispanic origin as percent of total county population

RUR = Metro / rural area indicator

IND = Indication for outliers

\square = Random error

The model fits the data well and has a coefficient (r) equal to 0.95. The model is highly statistically significant (P-value <0.0001). Since this model is based on CPS data that generates a higher uninsured rate, we call the estimates high estimates.

Low Estimates

Low estimates were derived from WSPS data. WSPS has a larger sample size that leads to more accurate estimates. Unfortunately, the survey estimates are only significant at eight demographic regions. To estimate the numbers of uninsured people for a specific county, we used the county share of uninsured within a specific region estimated by the OIC model multiplied by the regional totals from WSPS. The following is the formula used to distribute regional numbers of uninsured to counties:

$$UI_{ij}^{WSPS} = \left(\frac{UI_{ij}^{Model}}{UI_i^{Model}}\right) * UI_i^{WSPS}$$

Where:

UI_{ij}^{WSPS} = Estimated uninsured population for county j in region i based on WSPS data

$\frac{UI_{ij}^{Model}}{UI_i^{Model}}$ = Model estimate of uninsured in county j as percent of region i uninsured population.

UI_i^{WSPS} = Regional data for uninsured from Washington State Population Survey

Cost of Uncompensated Care for the Uninsured Population⁹

Uncompensated care is care that uninsured people receive from health care providers, but which is not entirely paid for by the uninsured themselves, by a third party such as federal, state, and local programs, or by private sources. When uninsured people receive care, some costs of the care are paid for by the uninsured themselves; public and other private sources also pay some of the remaining unpaid cost. The costs left over are called uncompensated care and those costs in general are passed on to people with private insurance through higher premiums (cost shifting). There are two published estimates of uncompensated care for Washington State.

Office of Insurance Commissioner Data

In 2003, the Let's Get Washington Covered task force had a shared interest in understanding the effect of uninsured individuals and their uncompensated care on the market for private health insurance. At the task force meeting in July 2003, OIC staff presented information on uninsured individuals and the cost of their care. The presentation used a recent national study about uncompensated care published in *Health Affairs* (2003) by Jack Hadley and John Holahan. OIC staff also presented a preliminary estimate of the cost of uncompensated care in Washington State by using Medical Expenditure Panel Survey (MEPS) data. The task force requested additional information on the cost of services performed for uninsured individuals in the state. Several task force members from insurance companies, medical providers, and consumer groups joined the study team. Under the task force members' guidance, OIC staff developed a study outline to clarify the concepts and needs of the task force ([Cost for the Uninsured and Cost of the Uninsured](#)). The OIC then contracted with Mercer, Inc. to conduct the study requested by the Task Force.

James Matthisen, a senior actuary with Mercer Inc., worked with Dr. George Xu, OIC's senior economist, in estimating the cost of uncompensated care and cost-shifting within the health care system of Washington State. Using the National Association of Insurance Commissioners' (NAIC) database, Medical Expenditure Panel Survey (MEPS), and the State Population Survey (SPS) as primary data sources, they began by deriving the average medical spending for uninsured individuals. An estimate of the amount reimbursed by public and private assistance programs followed. The amount paid by uninsured individuals out-of-pocket was then estimated. The residual – what is not paid for by anyone – is classified as the cost of uncompensated care. They then developed a ratio of uncompensated and compensated care for uninsured individuals. Based on the 2002 uninsured population, they estimated that the uncompensated care for uninsured individuals in Washington State is \$318 million or, on average, \$580 per uninsured individual in 2002. Their research findings ([Uncompensated Care and Cost Shifting](#)) were well-received by the task force members at their October 2003 retreat.

⁹ Notes: 1) The cost of uncompensated care is estimated for the uninsured only. Providers of health care also provide uncompensated services to some insured individuals (unpaid deductible or co-payment, etc.); 2) The cost of uncompensated care is estimated using true transaction values of similar services provided to insured individuals, not the amount billed by providers.

Families USA Uncompensated Care Data

The estimates were developed by Dr. Kenneth Thorp of Emory University¹⁰ in 2005. Basing the estimates on the Medical Expenditure Panel Survey-Household Component (MEPS-HC) for the year 2002, and using methods similar to those developed by Jack Hadley and John Holahan¹¹, Dr. Thorp developed an estimate of uncompensated care by simulation models that link two important federal datasets—the Medical Expenditure Panel Survey-Household Component (MEPS-HC) and the Current Population Survey (CPS). The MEPS is a nationally representative survey of the non-institutionalized population that provides detailed information on insurance coverage, health care spending, and other demographic and financial information.

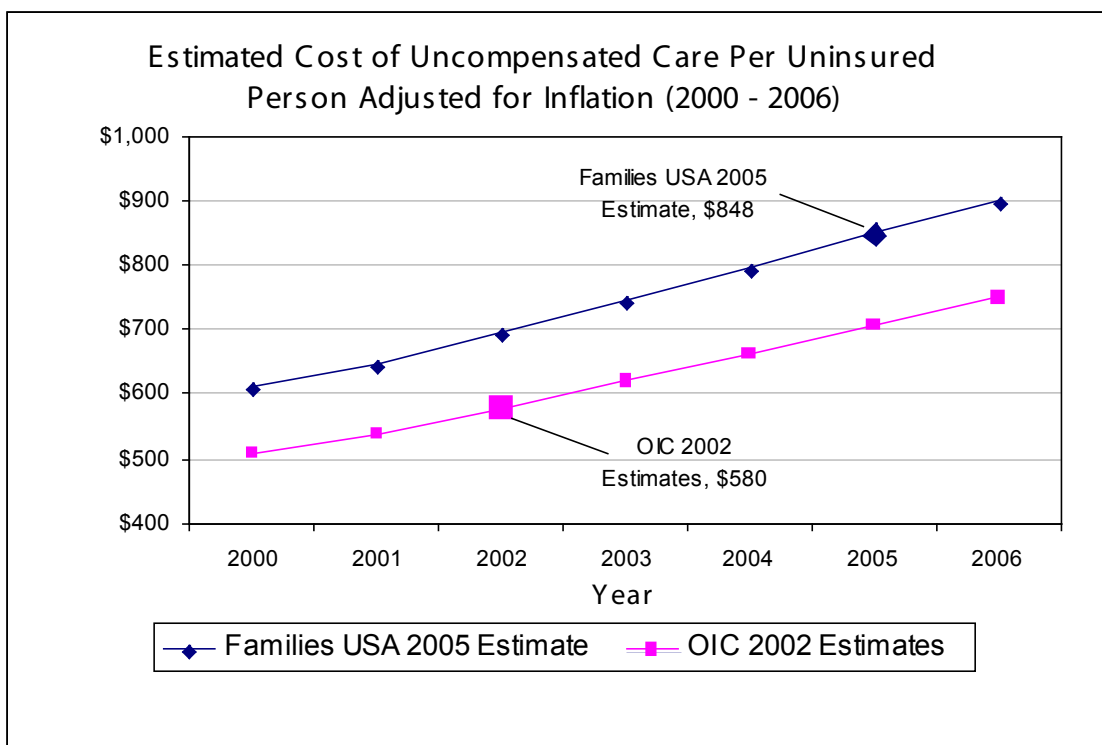
Using their statistical models, Dr. Thorp applied the results to the entire CPS sample using the March 2004 CPS. By plugging in the characteristics of the uninsured in the CPS (age, family income, education, health status, and employment), Dr. Thorp allocated the national uncompensated care cost across the 50 states based on the actual characteristics of the uninsured in each state. It is important to note that the methodology for estimating the cost of uncompensated care does not rely on the amount that hospitals or providers charge the uninsured for their health care services. Rather, in order to avoid inappropriately inflating the value of the health care services and to ensure that the estimate of what providers will need to recoup is a conservative one, Dr. Thorp adjusted the total charges to the uninsured to reflect what the privately insured would pay, on average, in the state for the same health care services. This estimate is based on a question from the MEPS that asks, “How much would providers have been paid if the uninsured had been covered by private insurance?” Following a previous estimate made by Jack Hadley and John Holahan, the difference between the per capita spending among the uninsured (which will exclude spending financed by private or public insurance during periods of the year they may have insurance) provides an estimate of uncompensated care. By Dr. Thorp’s estimate, the cost of uncompensated care is \$726 million for Washington State or, on average, \$848 per uninsured individual in the year 2005.

Comparison of Two Estimates

Staff in the Insurance Commissioner’s office adjusted both estimates for the health care inflation index published by CMS and found that Dr. Thorp’s estimate for Families USA is about 20 percent higher than those of the Insurance Commissioner’s Office (OIC). This indicates that the OIC’s estimates are more conservative. Both estimates are used for establishing a range of cost of uncompensated care. The OIC estimate is used as the low boundary and Dr. Thorp’s estimate is used as the high boundary.

¹⁰ Dr. Thorpe is the Robert W. Woodruff Professor and Chair of the Department of Health Policy & Management in the Rollins School of Public Health of Emory University, Atlanta, Georgia. He was a Vanselow Professor of Health Policy and Director, Institute for Health Services Research. Dr. Thorpe received his Ph.D. from the RAND Graduate School, an M.A. from Duke University, and his B.A. from the University of Michigan.

¹¹ Jack Hadley and John Holahan, *The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending?* Issue Update, op.cit.



Uncompensated Care within Each County

The Insurance Commissioner's office produced county-level estimates of the number of uninsured individuals and the cost of their uncompensated care in 2004. Various groups are interested in county-level reporting because it can help analyze the impact of the health care reform proposals that reduce the numbers of uninsured people in Washington State.

To estimate the cost of uncompensated care for each county, OIC staff first estimated the number of uninsured individuals within each county. They then estimated the total cost of uncompensated care by assigning the average cost to the uncompensated care of the uninsured individuals in each county.

Hospital Cost of Uncompensated Care

Hospital cost of uncompensated care is an overall measure of hospital care provided, for which no payment was received from the patient or insurer. It is the sum of a hospital's "bad debt" and the charity care it provides. Charity care is care for which hospitals never expect to be reimbursed. A hospital incurs bad debt when it cannot obtain reimbursement for care provided. This happens when patients who did not apply for charity care are unable or unwilling to pay their bills.

Generally, uncompensated care data are expressed in terms of hospital charges, but charge data can be misleading, particularly when comparisons are being made among types of hospitals, or hospitals with very different payer mixes. The American Hospital Association suggested that data on hospitals' uncompensated care are expressed in terms of costs¹².

In this report, uncompensated care is first calculated on a hospital-by-hospital basis and reported as charges to the Department of Health. These two numbers – charity care and bad debt – are added together and then multiplied by the hospital's cost-to-charge ratio, or the ratio of total expenses to gross patient revenue and other operating revenue.

1. Bad debt charges + charity care charges = uncompensated care charges
2. (Total expenses exclusive of bad debt = cost-to-charge ratio) / (Gross patient revenue + other operating revenue) = cost-to-charge ratio
3. Uncompensated care charges x cost-to-charge ratio = uncompensated care costs

12 AHA. 2006. Uncompensated Hospital Care Cost: Fact Sheet. <http://www.aha.org/aha/content/2006/pdf/uncompensatedcarefs2006.pdf>

Appendix 3: data sources

Department of Health. Hospital Financials 2007.

<http://www.doh.wa.gov/EHSPHL/hospdata/Financial.htm>

Office of Financial Management. 2007. Intercensal Estimates of the Total Resident Population by County with 2001 through 2006 Postcensal Estimates.

<http://www.ofm.wa.gov/pop/coseries/default.asp>

Office of Financial Management 2007. State Population Survey 2002, 2004 and 2006

<http://www.ofm.wa.gov/sps/>

Office of Financial Management 2007. Counties with Population Density Less Than 100 Persons per Square Mile.

<http://www.ofm.wa.gov/popden/rural.asp>

Office of Financial Management 2007. Race & Minority Data.

<http://www.ofm.wa.gov/pop/race/default.asp>

U.S. Census Bureau 2007. Small Area Health Insurance Estimates.

<http://www.census.gov/hhes/www/sahie/>

Agency for Healthcare Research and Quality, Department of Health and Human Services. 2006. Medical Expenditure Panel Survey Insurance Component 1996 – 2003).

<http://meps.ahrq.gov/MEPSNet/IC/MEPSnetIC.asp>

Families USA. 2005. Paying a Premium: The Added Cost of Care for the Uninsured. Washington, DC 2005.

Department of Social and Health Services, RDA. 2005. DSHS Clients Counts and Service Costs. <http://www1.dshs.wa.gov/rda/research/clientdata/default.shtm>

Hadley, J. and J. Holahan 2004. The Cost care for the uninsured: What do we spend, who pays, and what would full coverage add to medical spending. Kaiser Family Foundation Issue Update 2004.

Washington State Department of Employment Security. Labor Force Statistics 2000-2006. <http://www.workforceexplorer.com/cgi/dataanalysis/AreaSelection.asp?tableName=Labforce>

Washington State Department of Employment Security. Size of Firm by County Distribution. http://www.workforceexplorer.com/admin/uploadedPublications/3283_size-firm-041.xls

Centers for Medicare & Medicaid Services. 2006. [National Health Expenditures by type of service and source of funds, CY 1960-2004 \(ZIP, 36 KB\)](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp). http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp

Planning Grant Consultant Team (University of Washington Health Policy Analysis Program, Rutgers University Center for State Health Policy, RAND, William M. Mercer, Incorporated, and The Foundation for Health Care Quality). 2002. Data for Assessing Access to Health Insurance Coverage in Washington State. Research Deliverable 1.0 submitted to Washington State Planning Grant on Access to Health Insurance.



