WHY MILWAUKEE HEALTH CARE COSTS ARE HIGH: WHAT TO DO ABOUT IT

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provided or self-funded savings accounts. It is important that consumers be encouraged to apply their own money, even if it is in the form of an employer-funded savings account, to pay for their health care decisions. Well-informed consumers who have skin in their health care decisions hold the potential to revolutionize the health care market.

I. Introduction

There is no shortage of evidence that Wisconsin's health care prices have risen far more rapidly than average over the last two decades. A 2005 United States Government Accountability Office (GAO) report using 2001 Federal Employees Health Benefit Program (FEHBP) claims data from "several large PPOs" found that found that 8 of the 10 highest-priced metro areas were in Wisconsin. A similar ranking of hospital prices put Milwaukee and La Crosse at 5th and 10th respectively.[1]

- In August, 2004, the GAO issued a preliminary report on the geographic variations and pricing in the Federal Employees Health Benefits Program (FEHBP), a collection of insurance plans from which government employees may select their health insurance coverage.[2] The report analyzed spending and prices using 2001 claims data for people under 65 enrolled with the largest national insurers participating in the FEHBP in over 200 metropolitan statistical areas. Some services, including drugs and laboratory charges, were excluded. It concluded that health care spending and prices in Milwaukee were higher than average: hospital inpatient prices were 63 percent higher, physician prices were 33 percent higher, and total spending was 27 percent higher.
- In 2003, Mercer Health and Benefits found that Milwaukee health care costs were 39 percent higher than in other areas of the Midwest.[3] A 2003 report by Merton D. Finkler [4] comes to similar conclusions using different data.
- In March of 2002, the 16th annual Mercer/Foster Higgins National Survey of Employer-Sponsored Health Plans reported that the cost of health care in southeastern Wisconsin was 55% higher than in metropolitan areas of the Midwest.
- In 1990, FEHBP expenses for HMO membership were below the median, putting Milwaukee at number 14 in a group of 20. By 2000, Milwaukee's premiums had risen by almost 97 percent putting it second in the rankings.[5] This trend suggests rapidly rising costs.

Although the GAO adjusted for differences in age and sex distributions across enrolled metropolitan statistical area populations in creating an expected spending rate for each area, it ignored marriage, education, income, and job

characteristics. Its study population included only federal employees who chose to enroll in national preferred provider organizations (PPOs); it is possible that this population differs in important ways from the total insured population in a given area. The data were adjusted using Medicare cost data for such things as the labor-related costs for a specific service. If Wisconsin providers use a mix of labor and capital health care inputs that differs from that assumed in the Medicare cost adjustments, their costs could be over or under estimated.

The GAO also excluded enrollees with high total health care spending because "spending for those enrollees could distort average spending in an area with low enrollment." The question is whether such high cost patients were equally distributed across all Metropolitan Statistical Areas or whether the groupings were endogenous products of regional variations in medical care.

The GAO study made no attempt to account for any possible health care outcome differences. An increasingly sophisticated literature on quality differences suggests that in addition to far lower waiting times, the high intensity health care practiced in many parts of the U.S. may have previously unsuspected benefits for patients. If superior medical care is more costly but delivers better results, it is possible that the higher hospital costs in Wisconsin are offset by faster recoveries or lower death and disability rates.

Nevertheless, in August, 2005, the GAO published a more complete study of the prices paid by the FEHBP, *Competition and Other Factors Linked to Wide Variation in Health Care Prices*.[6] It concluded that "less competition and less HMO capitation were associated with higher prices."

Though each of these reports has limitations, when combined with other indicators they suggest that Wisconsin hospital charges have lately climbed in the national rankings.

Evidence on cost from the individual insurance market

Prices for individual health insurance also suggest that Wisconsin is an expensive place to purchase health care. Table 1 shows the monthly premium for a 37 year-old man interested in purchasing an Assurant Health OneDeductible PPO health insurance policy in various cities. The prices quoted are those shown on the Assurant website in late May, 2007. Assurant Health is a major underwriter for individual health policies. Its prices are quoted simply because it has a website that makes it easy to compare the same policy across different zip codes. Assurant does not offer policies in states that have destructive insurance market regulation. This explains why there are no quotes from New York, Massachusetts, New Jersey, and several other states.

Although it is possible that 37 year-olds consume different amounts of medical care in different regions of the United States, it is more likely that the price differences for individual policies reflect differences in medical cost, differences in the ability to overcharge private payers in an effort to make up for government underpayments, and differences in regulatory environments.

The quoted OneDeductible PPO price is for a fairly rich policy. It qualifies for a health savings account. The prices quoted are for people in excellent health who are willing to select the least expensive PPO network in a given area. Higher deductibles apply for out-of-network charges. In some areas there is only one network, in others there are as many as five networks. For comparison, Table 1 also gives the price for a much more limited plan designed to make insurance accessible to people on more limited budgets. The RightStart PPO has a $1,000 deductible, no office copays, 50 percent coinsurance to an annual maximum out-of-pocket amount of $2,000, a lifetime maximum of $2 million and an annual maximum of $100,000.

Table 1: Representative Assurant Health Individual Policy Rates (Non-Smoking 37 year old man in excellent health)

	OneDeductible	RightStart	State Mandates (number)	Minnesota plan limits
Miami	$331.15	$151.11	47	
Houston	$211.82	$123.63	52	
Milwaukee	**$170.53**	**$91.81**	33	OneDeductible: $130.59 RightStart: $89.44
Indianapolis	$153.13	$77.66	34	
Atlanta	$150.44	$76.50	41	
Kansas City	$148.45	$74.68	37	
Denver	$146.20	$80.67	46	
Chicago	$143.22	$76.98	39	
Phoenix	$128.32	$70.69	29	
Minneapolis*			63	OneDedictible: $131.54 RightStart: $105.26

*Minnesota regulations prevent offering a comparable plan. The prices quoted in Minneapolis are for a $2,850 deductible and a 6 million dollar limit. The Minnesota plan limits prices for

Milwaukee have the same deductible but a plan limit of $ 3 million for the OneDeductible Plan. The RightStart plan limits are the same. Source: AssurantHealth.com as of late May, 2007; Health Insurance Mandates in the States, 2007. Council for Affordable Health Insurance.

State regulatory environments matter because some insurance and provider mandates add significantly to insurer costs. Smoking cessation treatments, available the local Wal-Mart, are far more expensive when insurers are required to provide them adding, according to an estimate by The Council for Affordable Health Insurance, 1 to 3 percent to policy costs. Other expensive regulations include mandates requiring that dentists be included in plans, and mandates that require insurers to cover contraceptives, in-vitro fertilization, prescription drugs, rehabilitation, and well-child care.

Wisconsin is also expensive when estimated health insurance costs for large employers are compared. The Kaiser Family Foundation publishes average premiums for a single person enrolled in an employer provided plan at StateHealthFacts.org. Table 2 gives those rates for 2005 in the states given above. Overall, Wisconsin is expensive, ranking 13th behind Alaska, Rhode Island, the District of Columbia, Massachusetts, Maine, New Hampshire, and Vermont. Costs in Alaska are $5,088. Costs in Vermont are $4,392. The U.S. average is $3,991.

Table 2: Average Cost for Single Employee in an Employer Insurance Plan, 2005

	Annual Employer Costs, 2005	Rank in Table 1 (1 is highest cost)
Arizona	$4,294	9
Wisconsin	**$4,223**	**3**
Texas	$4,108	2
Illinois	$4,049	8
Indiana	$4,042	4
Florida	$4,003	1
US average	**$3,991**	
Minnesota	$3,932	NA
Colorado	$3,891	7
Georgia	$3,861	5
Kansas	$3,755	6

Source: Medical Panel Expenditure Survey, 2006
via StateHealthFacts.org. Accessed May 2, 2008.

Costs also vary within Wisconsin. Table 3 compares Assurant Health costs for the same 37 year-old in a variety of Wisconsin zip codes. Note that in 2007 the most expensive premium rates tend to cluster in areas controlled by integrated health systems. The Marshfield Clinic controls care in the middle of the state. Aurora Health Care runs an extensive and expanding integrated network in the southeast.

Table 3: Assurant Health Individual Policy Premiums (Monthly, non-smoking 37 year old man in excellent health)

	OneDeductible	RightStart	Networks available
Milwaukee	$170.53	$89.44	2
Rhinelander	$165.12	$79.38	1
Marshfield	$165.06	$88.48	1
La Crosse	$161.65	$88.30	1
Rice Lake	$159.92	$77.39	3
Eau Claire	$159.92	$77.39	3
Superior	$159.92	$77.39	3
Madison	$155.72	$87.68	2
Prairie du Chien	$153.77	$81.73	1
Woodville	$151.48	$74.01	3
Green Bay	$147.80	$79.38	2
Beloit	$141.25	$79.71	2
Badger Care (Income < $1,439.29 per month)			$71.76 or 5% of income whichever is lower.

Source: AssurantHealth.com as of late May, 2000.

II. What not to blame for Wisconsin's Higher Health Care Costs

Over the last decade, analyses of Wisconsin health care costs have generally assumed that Wisconsin's problems are identical to those at the national level. They have prescribed nationally popular remedies, generally policies that load the private sector with regulations designed to make people do what health policy analysts want.

Health reformers often cite particular population risk factors as drivers of high health care costs. As the following sections show, Wisconsin fares well with

respect to a number of populaton risk factors. Since the state is roughly average, these factors likely are not good explanations for its recent cost increases.

An aging population

A simple comparison of Wisconsin demographics to those of other states suggests that if Wisconsin does have much higher than average health care costs, the higher costs are likely not related to differences in the age of its population. Wisconsin does have a higher fraction of elderly people aged 65-74, the peak years for health care spending. However, its elderly residents appear to fare reasonably well on standard health risk measures.

Figure 1 shows the relative age distributions for Wisconsin, Minnesota, the United States, Utah, and Florida. Utah has the youngest population in the United States. About 34 percent of its people are under 18. Florida has the largest proportion of people over 65, 9 percent. About 6 percent of Wisconsin residents are 75 years old or older, 7 percent are 65-74, 61 percent are 19-64, and 26 percent are 18 or under. In Minnesota, the same age groups account for 5, 5, 64, and 26 percent of the population. This suggests that people leave Minnesota as they age and that Minnesota has a substantially larger proportion of working age adults, a group that typically uses less health care. For the United States as a whole, the percentages of the population over 75, aged 65-74, aged 19-64, and 18 and under are 6, 6, 61, and 27.

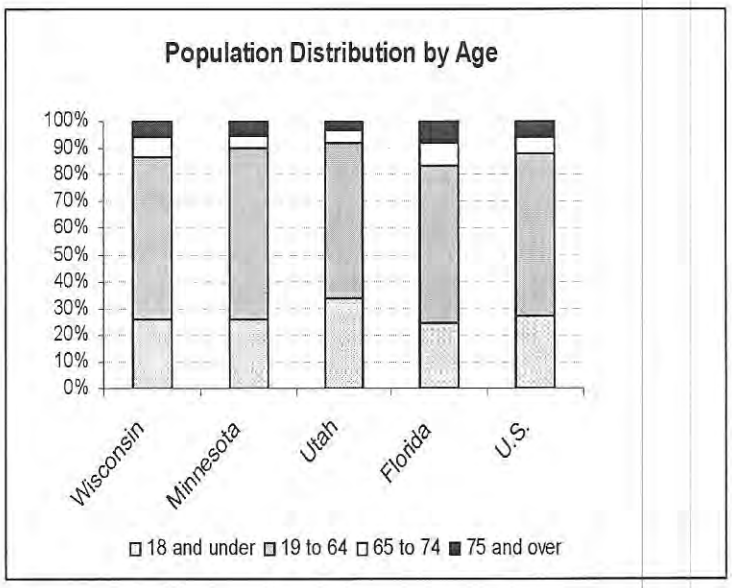

Figure 1: Population by Age

Because populations vary, people in different circumstances have different demands for health care. Geography affects health care costs through population movement, varying occupational injury rates in local industries, and differential likelihoods of automobile accidents. Pathogens vary with location. Plague is endemic in Western rodents, and cases of Lyme disease cluster along the northern Atlantic seaboard and Great Lakes.[7]

Health risk factors

In almost every state, energetic reformers blame high health costs on unhealthy population behaviors. As Table 4 shows, Wisconsin's population is not particularly unhealthy. It has an average proportion of smokers, couch potatoes, and exercisers. The proportion of the population that is obese is moderate, lower than the proportion in Minnesota, and roughly in the middle of the 50 states. The number of diagnosed diabetes cases is also low, 45th among the 50 states in 2002. Though a higher proportion of Wisconsin residents likely have more than two drinks a day than in any other state, its motor vehicle death rates are only slightly above the national average, possibly due to its age structure. Wisconsin is below average in the proportion of its population classified as disabled. Neighboring Minnesota has a slightly younger population, and it is therefore not surprising that fewer Minnesotans report having no leisure-time physical activity. What is surprising is that Minnesota reports both a higher proportion of disabled people than Wisconsin, and a more active population.

Wisconsin has average rates of overweight and an average proportion of smokers. It is average or below average on the number of obese people in its population. It has below average hospitalization rates for stroke, below average use of illegal drugs, and a low murder rate.

Being born to an unmarried mother is a health risk factor for infants. Wisconsin's infant mortality rate is below average, as is its proportion of births to unmarried mothers. The high infant mortality rate for Wisconsin's black infants, almost 19 per 1,000 births in 2002, is considerably above the national average of 14.4. This may reflect the fact that in 2003 an estimated 82.3 percent of Wisconsin's black infants were born to unmarried mothers, the highest rate in the United States.

On the negative side, Wisconsin's suicide rate is almost double the national average, though still significantly below rates prevailing in the West. It also has an elevated accidental death rate. In 2001, Cox, Tseng, and Powell reported that Wisconsin's age-adjusted mortality rates for poisoning, drowning, and burns had improved relative to national averages over the 10 years from 1986 to 1996. Although Wisconsin's age-adjusted rates for deaths due to falls had increased by

38 percent at a time when the national average was relatively stable,[8] the authors concluded that most of the increase was due to falls by elderly people.

To those who equate the quality of state services with spending, Wisconsin also performs well. It ranked 12th in the nation in total state expenditures per capita in 2006, spending almost 33 percent more per person than the national average of $4,529.

Table 4

Comparative health statistics for U.S. states.

	Wisconsin	Minnesota	U.S.	Highest	Lowest
Percentage of population using any illicit drug, 2002-3 [sa]	7.5	7.6	9.2	12.0 Alaska	6.3 Utah
Suicide rate per 100,000 resident population, 2002[sa]	11.5	9.9	6.1	21.1 Wyoming	6.4 NY, NJ
Homicide rate per 100,000 resident population, 2002[sa]	3.5	2.5	6.1	13.5 LA	1.9 Iowa
Motor vehicle accident death rate per 100,000 resident population, 2002[sa]	16.0	14.8	15.7	31.5 Wyoming	8.8 MA, NY
Accidental deaths per 100,000 resident population, 2002[sa]	41.8	38.4	37.0	59.6 New Mexico	22.0 Massachusetts
Percent diagnosed diabetes per 100 adults, 2002*	5.2 rank=45	4.6 rank=50	6.7	8.9 Alabama	4.6 Minnesota
Age adjusted stroke hospitalizations per 1,000 Medicare population, 2000	14.6 rank=30	14.5	16.3	21.9 Mississippi	12.3 VT, CT, ME,UT
Percent of Medicare beneficiaries over 64 hospitalized with strokes who died the in hospital, 2000+	9.0 rank=22	8.9	8.7	11.3 Hawaii	7.0 Ohio
Estimated percentage of people reporting no leisure-time physical activity+	18.8	15.0	NA	30.6 Kentucky	15.0 Minnesota
Estimated percentage of people reporting vigorous physical activity+	30.2	26.4	NA	34.6 Alaska	16.3 Kentucky
Estimated percentage of people averaging more than two drinks per day in preceding month, 2003+	8.6	5.6	NA	8.6 Wisconsin	2.2 Tennessee
Estimated percentage of people who are overweight, BMI≥25.0 and ≤99.8, 2003+	60.0	60.9	NA	64.9 Mississippi	50.0 Hawaii
Estimated percentage of	20.9	23.0	NA	28.4	16.0

people who are obese, BMI≥30.0 and ≤99.8,2003+				Alabama	Colorado
Estimated percentage of people who smoke, 2003[sa]	22.1	21.1	22.1	30.8 Kentucky	12.0 Utah
State funded health spending as a percent of gross state product, 2002*	2.7 rank=43	3.3 rank=24		5.8 Mississippi	1.7 Nevada
Total per capita state expenditures. SFY 2003*	$5,803 rank=8	$4,561 rank=14	$3,909	$10,020 Alaska	$2,567 Nevada
Live births, 2003[NCHS]	70,040	70,050	4,089,950	NA	NA
White	54,845	54,074	2,321,904	NA	NA
Black	6,421	5,251	576,033	NA	NA
Infant mortality rates, deaths per 1,000 live births, 2002[sa]	6.9	5.4	7.0	10.3 LA, MS	4.4 Maine
White	5.6	5.0	5.8	8.5 (WV)	4.2 (AK)
Black	18.9	10.3	14.4	21.1 (CO)	9.1 (MA)
Percent of live births to unmarried mothers, 2003[NCHS]	30.4	27.7	34.6	48.4 New Mexico	17.2 Utah
White	24.7	23.9	29.4	44.6 (NM)	16.5(UT)
Black	82.3	56.4	68.2	82.3 (WI)	24.5 (HI)
Percentage of total births paid for by Medicaid, 2000* (CO,KS,ME,NJ unavailable)	35.5 rank=26	31.3 rank=32	NA	55.2 WV	20.8 NH
Certified nursing facility residents, percent of the population over 65, 2003*	4.9 rank=11	5.2 rank=7	3.8	6.4 ND	1.4 Alaska
Estimated percentage of people ≥65 years old who received flu vaccine during preceding year, 2003+	72.1	80.3	NA	83 Minnesota	60.0 Nevada
Percent of persons with disability, 2003*	17.5 rank=37	21.7 rank=8	18.3	26.4 WV	11.2 Hawaii
Cancer deaths per 100,000, 2002*	189.3 rank=31	184.5 rank=38	193.5	228.0 Kentucky	144.2 Utah
Cancer incidence per 100,000, 2001* (data unavailable DE, MD, MI, ND, SD, TN, VA)	475.7 rank=17	481.3 rank=13	461.6	521.0 New Jersey	389.4 New Mexico

Demographics

Income, education, marriage, and urban residence are among the many factors positively correlated both with the demand for health care and with good health outcomes. As Table 5 shows, Wisconsin does well on a variety of social measures historically correlated with better health. It has roughly average income and a slightly below average number of children living with single parents, few immigrants, low unemployment and a slightly above average fraction of the population employed.

Wisconsin does have a relatively heavy tax burden. While its median household income is higher than average, per capita disposable income, the income left after taxes, is lower than average. Wisconsin ranks 13th in per capita state government tax collections in 2005. Although Wisconsin's 2-year-average real median household income was unchanged between 2002-2003 and 2003-2004, it was one of only seven states in which the average poverty rate increased by 1.9 percent. According to the Tax Foundation, Wisconsin was projected to be 14th in total tax burden in early 2008 with a rate of about 33 percent compared to a national average of 32.7 percent. At 12.3 percent, its state and local tax burden is exceptionally heavy, ranking 7th among the states. The national average is 11.0 percent. While its sales tax is below average, its gasoline tax is the 8th highest in the United States.[1]

After being cut in 2000-2003, Wisconsin's total tax burden has risen from 30.2 percent in 2003 to 33.3 percent in 2007.[9] In general, the proportion of people living below the federal poverty level in Wisconsin is lower than the proportion for the U.S. as a whole. While Wisconsin's 2-year-average real median household income was unchanged between 2002-2003 and 2003-2004, it was one of only seven states in which the average poverty rate increased by 1.9 percent.

Table 5: Comparative income, employment, and family structure data.

	Wisconsin	Minnesota	United States	Highest (state)	Lowest (state)
Percent of population in metropolitan area, 2003-2004*	73% rank=27	74% rank=26	83%	100% NJ	28% VT, MT
Median annual household income, 2002-2004*	$47,220 rank=15	$55,914 rank=5	$44,473	$57,352 NH	$32,589 West Virginia
Average annual wage, 2003#	$33,425	$38,610	$37,756	$48,328 Connecticut	$26,907 Montana
Per capita personal income, 2004[sa]	$32,157	$35,816	$32,937	$45,398 Connecticut	$25,650 Mississippi
Per capita disposable personal income, 2004[sa]	$28,645	$31,702	$29,404	$38,559 Connecticut	$22,832 Mississippi
Per capita state government tax collections, 2004*	$2,275 rank=12	$2,889 rank=4	$2,025	$3,048 Hawaii	$1,367 Texas
Percent of population employed, annual average	68.1	71.0	62.3	71.6 Nebraska	51.8 West

[1] The Tax Foundation. 2008. The Facts on Wisconsin's Tax Climate. http://www.taxfoundation.org/research/topic/67.html, accessed Mary 2, 2008.

2004#					Virginia
Unemployment rate, percent, average annual rankings 2004#	5.0 rank=21	4.8 rank=15	5.5	3.4 HI, ND	7.6 Oregon
Percent of total employed represented by unions, 2004 (1983)[sa]	16.9 (26.9) rank=12	18.3 (25.9) rank=7	13.8 (23.3)	26.4 New York	3.6 NC
Percent of children living with single parent, 2004^	25	19	27	38 Louisiana	15 Utah
Percent of children with immigrant parents, 2004^	5	6	16	40 California	1 MT, WV
Percentage of people in poverty, 2002-2004, 90% confidence interval[Census]	9.1-11.3	6.1-7.9	12.2-12.6	NA	NA

Sources: * is Kaiser StateHealthFacts.org, various tables. Ranks exclude District of Columbia. + is Centers for Disease Control and Prevention. December 2, 2005. Surveillance for Certain Health Behaviors Among States and Selected Local Areas—Behavioral Risk Factor Surveillance System, United States, 2003. In Surveillance Summaries, MMWR, 54, No. SS-8, various pages. (Online version, accessed December 2005, http://www.cdc.gov/mmwr/pdf/ss/ss5408.pdf). # Bureau of Labor Statistics. March 10, 2005, State and Regional Unemployment, 2004 Annual Averages, http://www.bls.gov/lau/table14full04.pdf . State unemployment ranking, http://www.bls.gov/lau/lastrk04.htm, and Statistical Abstract of the United States. ^National Center for Children in Poverty, Rate of Children in low-Income Families Varies Widely by State, Columbia University. September, 2004. [sa] 2004-2005 Statistical Abstract of the United States. [Census] Carmen Denavas-Walt, Bernette D. Proctor, Cheryl Hill Lee. August 2005. *Income, Poverty and Health Insurance Coverage in the United States: 2004.* Current Population Report No. P60-229, U.S. Census Bureau.

Lack of access by the uninsured

A number of people argue that insuring the uninsured should be the focus of all health policy. They say that people without health insurance lack access to the U.S. health care system. This claim is patently false. U.S. law requires that emergency rooms treat people with serious conditions, U.S. and state and local governments fund a variety of free or low cost clinics for primary care, and U.S. hospitals and physicians provide a large amount of charity care. As a group, the uninsured pay for about half of their health care. They also tend to need less health care because they are younger than the population as a whole. The young typically need less health care than the middle aged or elderly.

The uninsured also can pay cash or borrow for the medical care that they need. In a 2006 article in the *New England Journal of Medicine,* Asch *et al.* reported on the

percentage of recommended health care received by people with different demographic characteristics. For people who had made at least one visit to a health care provider in the previous two years, they concluded that health insurance status made little difference in the percentage of recommended care received, whether that care was acute, chronic, or preventive.[10]

Activists often attribute high health care costs to inappropriate emergency room use by people who are uninsured and are said to have no other access to care. While some people without insurance do use emergency rooms, actual data on emergency room use suggest that the uninsured use emergency rooms at about the same rate as everyone else.[11] The big users of emergency rooms tend either to be sick, or on government programs that make it difficult to see providers because their reimbursement rates are so low that physicians refuse to see people on those programs, or both. The most expensive emergency room users are people who have third party coverage, usually through Medicaid or Medicare.

There is no evidence that an increase in the number of uninsured can explain the recent rise in Wisconsin health care costs. Wisconsin has one of the lowest rates of uninsured in the United States. According to the Wisconsin Department of Health and Family Services, 92 percent of Wisconsin residents under age 65 are insured, 96 percent of children aged 0-17 are insured, and 99 percent of people aged 65 and older are insured. These rates are considerably below the U.S. average.

As nationwide health care costs rose in the late 1990s, several studies were commissioned to study the cost of health care and health insurance in Wisconsin. When results from the U.S. Census Bureau's Current Population Survey suggested that the number of Wisconsin Uninsured had risen from 8 percent to 11.8 percent, Joe Leean, Secretary of the state Department of Health and Family Services, cited the Wisconsin Family Health Survey to refute claims that welfare reform was increasing the number of uninsured.[12]

According to the 2004 Family Health Survey, Wisconsin had 5.3 million residents. At any given time 377,000 reported being uninsured, about 7 percent of the population. The largest fraction of the uninsured are under 30 years of age and probably need relatively little health care. About 20 percent of the uninsured have incomes that are at or above the average income for the state, which would presumably make them candidates for the Wisconsin high risk insurance pool if they were otherwise uninsurable.
A third of Wisconsin's uninsured of working age are not in the labor force. Unless these people have substantial assets, it will be impossible to insure them without hefty subsidies. The empirical question for taxpayers is whether a

program to insure these people could end up costing more than the alternative approach of funding uncompensated care at various safety net providers.

Table 6: Wisconsin uninsured by age

Age	Number Uninsured	Percent uninsured
0-17	55,000	4
18-29	139,000	17
30-44	103,000	8
45-64	77,000	6
65+	3,000	<1

Source: Eleanor Cautley. March 7, 2006. Who are the Uninsured in Wisconsin. Data from the 2004 Family Health Survey.

Table 7: Wisconsin uninsured by race/ethnicity

Race/Ethnicity	Number	Percent
Hispanic	64,000	34
African-American*	45,000	15
American Indian*	14,000	15
White*	246,000	5

* is Non-Hispanic. Source: Eleanor Cautley. March 7, 2006. Who are the Uninsured in Wisconsin. Data from the 2004 Family Health Survey.

Table 8 : Wisconsin uninsured by income

Federal Poverty Level	Number	Percent
Less than 150% ($10,210*)	134,000	16
150-199% ($10,210-$20,318*)	66,000	11
200-299$% ($20,420-$30,527*)	68,000	8
≥300% (≥ $30,630*)	80,000	3
Unknown	30,000	7

*Represents 2007 Poverty Guideline for one person. Source: Eleanor Cautley. March 7, 2006. Who are the Uninsured in Wisconsin. Data from the 2004 Family Health Survey.

Table 9: Wisconsin uninsured by labor force status

Uninsured, ages 18-64	Number	Percent of Total
Employed full time	133,000	42
Employed part-time	37,000	12
Self-employed	36,000	11
Not in labor force	106,000	33
Total	319,000	

*Represents 2007 Poverty Guideline for one person. Source: Eleanor Cautley. March 7, 2006. Who are the Uninsured in Wisconsin. Data from the 2004 Family Health Survey.

The Family Health Survey results were in accord with national insurance data from the 1998 Medical Expenditure Panel Survey (MEPS) which would reflect roughly the same period. It was done by Wisconsin Department of Health and Family Services in 2001 using earlier data. They showed that Wisconsin was above average in the number of businesses offering health insurance. Of those

who were offered health insurance coverage and accepted it, 79 percent were insured by large employers, businesses with more than 50 employees. Voluntary enrollment in health insurance when it was offered, the take-up rate, was below the national average.[13] On average, employees of small businesses paid a few hundred dollars more than those in large ones. Based on data from the 1998 MEPS, the Department concluded that the statewide average annual premium for family coverage was $5,537 in 1998. Nationwide, the average cost of family coverage was $5,590. Premiums in Wisconsin were not statistically different from the national average.[14]

As Table 10 shows, this high rate of coverage is achieved despite the fact that in 2003 Wisconsin had the second highest level of employee cost for coverage for a single individual in the United States. The state ranked 12th in employee cost for family coverage. About $1,300 separates the highest and lowest average employee cost for family health coverage. These differences may or may not be significant as only about $700 separates the highest and lowest state averages for employee out-of-pocket costs for insurance, and some of the items that add cost to health insurance premiums—first dollar coverage for eyeglasses and routine office visits—have relatively little effect on population health.

Wisconsin's average health insurance premiums and high coverage rates are in accord with other available indicators of its payments for health care finance and general outcomes. Relative to people in other states, Wisconsin residents working for large employers pay less in premiums for family coverage than in most other states. Surprisingly, their share of premium payments was stable from 2003 to 2005.

Wisconsin residents are more likely to have health insurance than the residents of other states. The U.S. Census Bureau estimates that the fraction of the Wisconsin population covered by health insurance remained unchanged from 2002-2003 to 2003-2004.[15] The estimated 3 year average of the percentage uninsured from 2004 to 2006 was among the lowest in the United States at 9.4 percent. This percentage was not statistically different from the percentage of uninsured in Minnesota, Iowa, or Maine, the three states with lower measured percentages of uninsured. Given that foreign-born residents are far less likely to have health insurance than the native born, it comes as no surprise that Census Bureau estimates suggest that 95.8 percent of Wisconsin residents were native born U.S. citizens in 2003. In Texas, the state with the highest proportion of uninsured, the native born percentage was estimated to have been 84.4 percent.[2]

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[2] U.S. Census Bureau. American Community Survey, 2003. Table 1.17a, Population by State and U.S. Citizenship Status, With Percentages by U.S. Citizenship Status: 2003. http://www.census.gov/population/socdemo/foreign/ST023/tab1-17a.xls, accessed May 2, 2008.

Statistically, the estimated fraction of the population covered by health insurance in Wisconsin is as high as any state in the country with the exception of Minnesota. This suggests that efforts to increase coverage will be expensive at best and impossible at worst. Despite passing a law requiring everyone to purchase health insurance coupled with generous subsidies designed to help those determined to be unable to afford it, Massachusetts authorities had to face the fact that it simply was not feasible to force the estimated 60,000 people with low and moderate incomes to buy insurance or pay a penalty. By April 2007, the Massachusetts plan was expected to exempt almost 20 percent of uninsured adults from the state's individual mandate.[16]

Table 10[abc1]

Selected health care structure, financing, and outcome measures, by state.

	Wisconsin	Minnesota	United States Average	Highest State	Lowest State
Cost of single coverage employer based health insurance, 2005*	$4,223 rank=6	$3,932 rank=26	$3,991	$5,088 Alaska	$3,339 North Dakota
Employee cost	$859 rank=7	$809 rank=12	$723	$965 New Hampshire	$302 Hawaii
Average annual cost of employment-based Health insurance for family coverage, 2005*	$10,938 rank=16	$10,846 rank=22	$10,728	$11,924 Rhode Island	$8,334 North Dakota
Employee cost	$2,251 rank=41	$2,488 rank=14	$2,283	$2,872 Maine	$1,554 West Virginia
Total Medicaid payments per enrollee, FY2005, DSH not included*	$4,505	$6,974	$4,662	$7,733 New York	$2,701 California
Children	$1,137 rank=50	$2,415 rank=6	$1,617	ME $4,155	LA $1,044
Elderly	$9,981 rank=38	$14,938 rank=7	$11,839	AK $21,821	SC $5,491
Blind, Disabled	$14,351 rank=24	$22,772 rank= 4	$13,524	AK $26,661	AL $6,029
Estimated average percentage of people without health insurance coverage, 2004-2006 average (±90 percent CI)*Census*	9.4 (±0.8) Rank=47 statistically same as 50th	8.5 (±0.7) Rank=50 (lowest)	15.3 (±0.1)	10.4 (±0.7) Minnesota	24.1 (±0.6) Texas
Hospital admissions per 1,000 population by ownership for community hospitals, 2003*					
State/local government owned (Government	0.3	12.0	13.3	62.3 Wyoming	0.2 Pennsylvania

admissions zero or NA in DE,MD,NH,ND,RI,and VT)					
Non-Profit	99.5	88.0	73.8	100 DE,RI, ND,VT	27.8 Wyoming
For-Profit (Zero in DE,HI,IA,MN,MT,ND, RI and VT.)	0.2	NA	12.9	46.1 Nevada	0.2 Wisconsin
Certified nursing facility residents, percent of the population over 65, 2003*	4.9 rank=11	5.2 rank=7	3.8	6.4 ND	1.4 Alaska
Percent of population in HMOs, 2004 (No HMOs in Alaska)*	28.2 rank=9	26.3 rank=13	NA	47.8 California	0.1 Mississippi

Sources: *StateHealthFacts.org as of May 2, 2008.

III. Does Lack of Competition Drive Wisconsin's Costs?

Although Wisconsin is average in its population characteristics and measured population health risks, it differs from other states in two important respects. One is a relatively high level of unionization. In 2006, an estimated 16.1 percent of Wisconsin' employed population was represented by a union.[17] The states with the highest rates of union representation were Alaska, Hawaii, Michigan, New Jersey, New York, and Washington, with rates ranging from 25.9 percent in Hawaii to 20.4 percent in Michigan. The states with the lowest rate of union representation were North Carolina, Arkansas, South Carolina, Tennessee, Texas, Utah, and Virginia, with rates ranging from 4.1 percent in North Carolina to 6.8 percent in Tennessee. Historically unions have also bargained for richer, more expensive, health plans than normally prevail in the private sector.

Buchmeuller *et al.* investigated the effects of union representation on health insurance benefits. They found that unionization increases the probability that firms with fewer than 25 employees will offer health insurance. In larger firms, where health insurance is universally offered, unionization reduces required employee contributions, increasing the likelihood that an individual employee will choose to buy it. Unions also substantially increase the probability that a firm offers retiree health coverage.[18]

John W. Budd, a professor at the University of Minnesota has reported preliminary results suggesting that "jobs that are represented by a union have total expenditures on nonmandatory benefit items that are 25- to 50- percent higher than similar nonunion jobs. Unionized workers are 16.4 percent more likely to purchase employer-provided health plans and 18.8 percentage points more likely to participate in employer provided retirement.[19] Abundant evidence

suggests that people tend to spend more on health care when they are spending other people's money, suggesting that, all else equal, populations in states in which more people are covered by union health insurance plans will likely exhibit a higher demand for health care.

Wisconsin also stands out for the lack of competition in its health care services. In North Dakota, Rhode Island, and Vermont, 100 percent of all hospital admissions were to non-profit hospitals in 2003. Those states had no other kind of hospitals. Among states that also had government and for-profit hospitals, Wisconsin stands out for the fact that 99.5 percent of its hospital admissions were to non-profit hospitals. In some areas of Wisconsin hospital networks employ unusually large fractions of the state's primary care physicians.[20] Physicians employed by integrated hospital systems may be used to shield certain hospital networks from the effects of competition if their contracts obligate them to send their patients to the hospitals that own their practices.

Government erects barriers to entry

In the 1980s, Wisconsin policy makers heeded health policy experts and began developing state health policy around the notion that increased spending on health care was the result of a "medical arms race" in which providers sought to attract patients by building unnecessary new hospitals, stuffing them with fancy new equipment, and hiring specialists to run the facilities. The theory was that excess capacity was paid for by encouraging unnecessary medical care and by billing third party payers for the cost of systems that added to excess capacity. The way to stop this, the experts said, was to promote managed care to control unnecessary utilization, to institute centralized rate setting, and to require facility approval for new and existing hospitals that wanted to acquisition new capital equipment.

An August 2002 brief from the Wisconsin Legislative Reference Bureau by Legislative Analyst Daniel R. Ritsche outlined the three decade history of the State of Wisconsin's efforts to do just that.[21]

Hospital rate setting began with a voluntary rate review program organized by the Wisconsin Hospital Association (WHA) and Blue Cross/Blue Shield of Wisconsin in 1972. The program limited rate increases to one a year. After auditing the program in 1980, the Legislative Audit Bureau concluded that the voluntary agreement was not controlling costs. The Wisconsin legislature created a program to "review a hospital's total expenditures and revenues, approve its annual budget based on what appeared to be necessary financial requirements, and set the maximum rates for the coming year."

Success in any venture of this sort requires that those approving the budget know at least as much as the organization presenting the budget. As economists who study rent seeking behavior have consistently pointed out, this is almost never the case. Rate setting commissions routinely add to costs rather than control them because those running the systems under review have enormous incentives to go to great lengths to craft accounting systems that both pass review and achieve their spending and revenue goals.

The rate review program was replaced in 1983 by the Hospital Rate-Setting Commission. It was to implement a government-managed mandatory rate setting system applicable to all Wisconsin hospitals to be run by three full-time commissioners empowered to set the maximum rates that the state's 168 hospitals would be allowed to charge their private-pay patients. Hospitals exceeding the maximum limits could be fined. As has become usual practice in health care policy, a separate advisory council was established to represent the various group interests thought to be politically important.

Consolidated health networks reduce competition

Whether by accident or design, Wisconsin health care consolidated to an extraordinary extent over the next 20 years. The unusual vertical integration of Wisconsin health care has been noted by a number of commentators. In a 2004 article on family physicians' job satisfaction, Beasley *et al.* commented that "most family physicians in Wisconsin are employed by large health care organizations."[22] Baleway, Davis *et al.*, in a paper on the epidemiology of lupus, commented that in the Marshfield Epidemiologic Study Area in northwest Wisconsin, "nearly all residents obtain their health care from a large clinic system."[23] That clinic is the Marshfield Clinic, a large group practice covering primarily rural areas in north and central Wisconsin. With 41 clinics, a laboratory, and revenues of $750,536,000 and 678 full-time equivalent physicians according to its 2004 System Review,[24] the Marshfield clinic is one of the largest physician groups in the United States.

In a survey of a small, nationally representative, sample of physicians from 1996 to 2001, Casalino *et al.* estimated that fewer than 3 percent of physicians in private practice in metropolitan areas were members of groups with 100 or more doctors. More than 80 percent of physicians were in practices of fewer than 10 doctors. Of the physicians surveyed, 58 percent thought that leverage with health plans was the major benefit of large medical group practices. Only 7 percent of physicians surveyed thought that large medical group practices improved quality. Those interviewed also commented that single-specialty groups were "able to gain negotiating leverage with health plans" at sizes smaller than

multispecialty groups, while avoiding conflict between primary care and specialties over income distribution.[25]

In many areas, patients see independent physicians with admitting privileges at one or more hospitals and with referral relationships with several specialist groups. Those physicians work for the patient, subject to controls that may be exerted by the patient's insurer. A physician's referrals and hospital admissions may be limited by a third party payer via contracts that make the doctor an "in network" provider, but in most cases neither the physician's payment nor the physician's job directly depends upon who he refers a patient to, and the patient can refer himself outside the network if he feels that it is in his best interests and is willing to bear the added cost.

Existing hospitals may manipulate regulatory programs to control spending on health care buildings and equipment by claiming that new entrants increase spending on unnecessary plant and equipment and that prices will have to be raised to cover the increased costs. This position focuses attention on costs, and essentially argues that increasing the number of producers increases costs. The problem with this position is that it ignores price.

In markets in which individual producers have a great deal of power to set prices, regulators who protect a single competitor lose their power to evaluate costs. The existing provider has incentives to overstate its costs. Without a standard of comparison it is impossible to know the extent of any overstatement. Single producers also typically pay less attention to costs because it is difficult and because it is unnecessary provided they can do sloppy cost management and then set prices for services as a simple multiple of costs. In effect, single providers can more easily adopt the Blue Cross hospital pricing scheme pioneered during the Depression. When costs are ignored, prices may end up being higher than necessary even though the producers in the market do not seem to be making extraordinary profits. Rather than providing lower costs, the provider may run its business for the benefit of employees, providing them with easier working conditions, more vacation, and richer benefits.

In competitive markets, more competitors usually create lower prices because each individual producer has a more limited ability to raise prices, and lowering costs may be one of the few ways to increase profit. In order to increase profits or, in the case of nominal non-profits, the money available for discretionary spending, producers must either increase the demand for their services by making themselves more attractive to consumers or decrease their costs by paying close attention to their business operation.

For-profit and non-profit hospitals also differ in their propensity to shift costs, their willingness to charge more to payers that will pay more in order to make up for care delivered to payers who will not. In Wisconsin, where an extraordinarily high fraction of the hospitals are non-profit, the hospital association attributes the high prices charged private payers to low Medicare reimbursements. The implication is that because Medicare does not cover patient costs, some costs are shifted to private payers.

Using data for California hospitals from the late 1990s, Friesner and Rosenman suggest that non-profit hospitals are more likely to cost shift than for-profit profit providers. Both non-profit and for-profit providers also reduce service intensity when reimbursements for specific diagnoses are reduced by third party payers. If one believes that hospital services help patients, at some point arbitrarily lowering reimbursements to reduce costs is likely to harm patients.[26]

If cost-shifting is extensive, prices become meaningless and no one has any idea what any hospital service actually costs. This is a particular problem when large fractions of hospital revenues are dependent on the prices set by Medicare and Medicaid. As Fresner and Roseman point out in a paper on cost-shifting between inpatient and outpatient services, "If government policy can be used to shift the burden of paying for care onto private groups without overtly taxing them, it may wish to do so. Of course, government policy makers claim the motivation for setting prices low is to force providers to be more efficient. Cost shifting occurs because the provider is unwilling (or unable) to respond to lower government reimbursement with efficiency gains. Thus, to some extent cost shifting and efficiency are tradeoffs. Consequently, it may be desirable to discourage inpatient-outpatient cost shifting, just as it would be desirable to discourage other types of behavior if it hurts the efficiency of providing health care."[27]

Managers of for-profit hospitals face a different set of incentives. In general, for-profit firms appear to manage their earnings to avoid small earnings decreases, as managers in for-profit settings are constantly evaluated by whether or not they increase their firms' stock prices. This suggests that the accounting statements from for-profit and not-for-profit hospitals may not be strictly comparable.

While the "competitors increase costs" argument may have had some force until events in the 1980s ended the cost plus Blue Cross reimbursement system, it has far less force in an era in which third party payers pay hospitals flat fees for common procedures and for-profit hospitals are built and capitalized by stockholders who stand to lose their entire investment if their venture fails. It is

also less persuasive in an era when staffing costs are significant and labor saving equipment can reduce costs.

Several recent studies suggest that type of ownership makes little difference when it comes to exploiting market power: non-profit and for-profit hospitals both exploit opportunities to raise prices in the absence of competition. In a 2005 paper examining hospital entry and competition in 613 geographically isolated United States cities with populations larger than 5,000, Abraham, Gaynor, and Vogt present evidence that entry of a new hospital "leads to a significant increase in competition in the hospital markets we examine. Their sample included data on 490 hospitals, about 9.1 percent of the U.S. total, and covered roughly 4.4 percent of the U.S. population. This corroborates the results from price-based studies of hospital competition...competition increases consumer welfare" and "most of the effect on competition comes from the entry of a second and third hospital."[28] This effect appears to occur even if a market has only two competing hospitals and the second is considerably smaller. In markets with three competing hospitals, for example, the median difference between the bed share of the smallest and largest hospitals was 60%.

Theory meets practice in Southeastern Wisconsin

In 1995 the trade journal *Hospitals and Health Networks* reported on changes in the health care market in Milwaukee. At the time, three hospital-based health care systems, Aurora Health Care, Covenant Health Care, and Horizon Health Care, were competing to build networks in the area. Aurora was described as the largest and most aggressive, with over 70 feeder clinics and 2,300 affiliated physicians, including 300 that were clinic-based. Its self-proclaimed goal was to develop a network that could provide care within 15 minutes of every resident of southeast Wisconsin.

Blithely unconcerned with the long-term effects of concentrated market power, Marvin Neeley, then president of the Hospital Council of the Greater Milwaukee Area, reportedly commented that "full clinical integration" was missing, but that it would develop as capitation and price competition evolved."[29]

As clinical integration proceeded, competitive threats diminished. So did patient choice. Bargaining power shifted to the hospital systems. In 1997, Aurora severed its relationship with PrimeCare Health Plan, the Milwaukee area's largest insurer. It moved to bolster the reputation of its flagship hospital, St. Luke's Medical Center, by announcing that it had coronary bypass outcomes were 2.5 times better than the competing St. Francis Hospital. It opened a clinic in Racine, and sued the All Saints Healthcare System in Racine when the physicians affiliated with it were refused privileges at All Saints' two hospitals. It expanded

its hospital network through strategic alliances, employing nearly 450 physicians in a network of 75 clinics that fed patients to 12 hospitals. When the split occurred, PrimeCare lost about 40,000 enrollees, roughly 15 percent of its business "as employers switched to plans that contracted with Aurora."[30] Horizon Health Care ceased operations in 2001.

By 2005, Aurora Health Care was Wisconsin's largest health care provider. Although it had repeatedly maintained that "its doctors would be free to admit patients to whichever hospital they considered better," the *Milwaukee Journal Sentinel* reported that one year after Aurora built a new hospital in Two Rivers, the physicians on its payroll announced that they would "no longer see patients at the competing Holy Family Memorial Hospital."[31]

David Hoover, a veteran hospital executive who took over the operations of the failing Milwaukee Heart Hospital in July of 2004, summed up the competitive situation caused by 20 years of focus on clinical integration for the trade journal *Modern Healthcare*. "Milwaukee is such a tough market for outsiders reliant on referrals from primary-care physicians," he said. "The heart hospital had 25 cardiologists and 20 surgeons on staff, but 'We were independent in a town where 85% to 90% of primary-care physicians are employed or affiliated with one of the hospitals.'"[32]

Milwaukee cardiologist Bruce C. Wilson, a physician who had a stake in the Milwaukee Heart Hospital gave more details on the tactics used when he described his experience in a 2006 *Wall Street Journal* op-ed. "About 90% of the primary-care doctors in southeastern Wisconsin are owned by the hospitals here," he wrote, "Historically, the average loss to a hospital of owning doctors is about $100,000 per doctor, per year. But the reason so many hospitals own primary-care physicians is so they can direct referrals into their own hospitals. That is where the real money is made."[33]

According to Dr. Wilson, "the large hospitals in Milwaukee went to the 'owned' physicians and told them whom they could and could not use as their heart specialists. They removed my partners from their emergency room on-call lists, and in some cases instructed the ER doctors to call other cardiologists, even if the patient was under the care of one of us. They came to us individually and asked if we had a financial interest in the Heart Hospital. If we said yes, we were told face-to-face that we would never again receive referrals from 'their' doctors with whom we previously had very close relationships...Pressure was exerted by the general hospitals on large insurance companies to exclude coverage for services provided at our hospital."

Aurora's ability to limit competition by controlling referral practices likely provided a price umbrella allowing its remaining competitors to increase their prices. In 2005, Larry Rambo, chief executive of Humana's operations in Wisconsin and Michigan commented on pricing implications of a new contract between Aurora and United Healthcare. Noting that that Aurora had been recently added to Humana's network, he reportedly commented that "Others have increased pricing...And Aurora has become more competitive."[34]

Competitive health care markets reduce costs

The economics literature on hospital markets supports the notion that since 1990, "competition [has] unambiguously improved social welfare"[35] by lowering both costs and adverse outcomes. In a 2005 paper on insurer-provider networks in health care markets, Katherine Ho found that hospitals in systems "capture markups of approximately 19 percent of revenues, in contrast to non-system, non-capacity constrained providers...[T]hese high markups imply an incentive for hospitals to under-invest in capacity despite a median benefit to consumers of over $330,000 per new bed per year."[36]

In interviews with directors of hospital systems, Ho was told that in areas where hospitals compete for insurer contracts, negotiated prices may be no higher than marginal costs. In areas with little hospital competition, hospitals with strong reputations can virtually dictate their prices. Hospitals dominate pricing in areas where hospitals control strong health care systems and in markets where hospital capacity is low. Insurers dominate in high-capacity markets with few organized hospital systems. [37]

Zwanzinger and Mooney looked at the prices paid by HMOs contracting with hospitals in New York State after price controls were abolished in 1996. The price controls apparently did little other than protect producers. The mean case-mix adjusted cost per case fell 5 percent the year after the controls were lifted, and had decreased by 12 percent two years later in 1998. HMOs paid hospitals roughly 10 percent more in less competitive markets. As prices began falling, hospitals responded by joining networks, and mergers between potential competitors tended to decrease competitiveness in many markets.[38]

Cuellar and Gertler used data from Arizona, Florida, and Wisconsin from 1994 to 1998 to estimate the effect of various kinds of hospital integration on performance. They tested whether integration led to efficiency gains and lower prices or whether the drive to integrate is better explained by the fact that integration increases market power and allows providers to charge higher prices. They found that "integration has little effect on efficiency, but is associated with an increase in prices, especially when the integrated organization is exclusive

and occurs in less competitive markets."[39] In what is a clear break with the traditional wisdom, they conclude that "Public programs, such as Medicare and Medicaid, may want to refine their policies that promote physician-hospital strategic alliances."

Non-profit hospitals facing little competition also appear to be slow to respond to financial incentives. In 1990, California changed its Disproportionate Share program in a way that increased hospitals' financial incentives to treat Medicaid patients. Rewards for treating uninsured patients were left unchanged. Public hospitals, California's provider of last resort for its Medicaid and uninsured population, that had non-profit or for-profit competitors located within 10 miles of them immediately began losing the suddenly more lucrative Medicaid patients to non-profit and for-profit hospitals. In a 2002 paper, Duggan demonstrated that the behavior of "not-for-profit hospitals [did] vary systematically with the share of competing hospitals that [were] organized as profit-maximizing firms. Not-for-profits in for-profit intensive areas [were] much more responsive to financial incentives than are other not-for-profit hospitals."[40]

In short, modern hospitals clearly do respond to financial incentives. One response that is frequently overlooked in health policy discussions is that hospitals can reduce the intensity of patient care. Doyle used Wisconsin's Crash Outcome Data Evaluation System to compare patient outcomes following severe automobile accidents from 1992 to 1997. Hypothesizing that hospitals regard the uninsured as likely candidates for uncompensated care, he attempted to control for hospital characteristics, crash severity, geographic location, type of insurance, and facility charges. He found that the uninsured were characterized by facility charges that were 22 percent lower and had and average of 20 percent fewer days of care. At the average, this translates into costs that were $3,300 less and a stay that was 1.8 days shorter. HMOs were associated with slightly less treatment, a difference roughly similar to the 5 percent less that Medicare "often pays" HMOs.

Medicaid patients received more care. Compared to them, the uninsured generated $9,800 less in facility charges and spent 5.7 fewer days in care. Doyle attributes this to the possibility that Medicaid patients are likely to have poorer underlying health , to the possibility that patients covered by Wisconsin Medicaid received cost-based reimbursement via 'outlier' payments, and to the fact that mandated benefits in Wisconsin's Medicaid program "appear[ed] to be generous" in the time period studied.

Patient mortality rates reflected payment differences. The uninsured had a 1.5 percentage point higher mortality rate, suggesting that additional medical care improved results for these trauma cases. This conclusion does not support the

common assertion that there is a great deal of waste in hospital care and that it can be wrung out by arbitrarily lowering prices.

Hospitals that provided more charity care had results similar to the overall sample in Doyle's study. Hospitals with more resources, more intensive-care-unit beds, and higher returns on assets had slightly larger treatment differences between the insured and uninsured. Differences were largest at Wisconsin's teaching hospitals, possibly because "hospitals with more resources may have the ability to provide costly, life-saving care to the insured." Only the subset of hospitals that were religiously affiliated nonprofits appeared to treat the insured and uninsured similarly. In those hospitals, treatment differences were smaller and there was no mortality difference.[41]

Other evidence that hospitals in a competitive environment adjust service intensity in response to reimbursement comes from California. Gowrisankaran and Town looked at outcome differences for pneumonia and heart attack patients in California from 1989 to 1993. Their results suggest that "the incentives for hospitals to reduce mortality rates differ according to the method of reimbursement." Broadly speaking, they found that competition for HMO patients led to lower prices and higher quality. But when hospitals competed for patients "whose costs are controlled by the government," as in Medicare, "hospital quality was reduced." They conclude that the relationship between higher mortality and a "vigorous" competition for Medicare patients suggests that "Medicare margins are small." If this is the case, arbitrary cuts in Medicare reimbursement schedules can be expected to increase age-adjusted mortality among the elderly.[42]

Wisconsin employers move to challenge integrated networks

These results are of more than passing interest in Wisconsin given that a group of Wisconsin's largest employers have elected to challenge the area's vertically integrated hospital networks by imitating Medicare price controls and "capping reimbursement for 7,600 coded medical procedures at 150 percent of the Medicare reimbursement level."[43]

In June 2005, Humana and the Business Health Care Group of Southeast Wisconsin announced that they had developed a new health insurance plan designed to control health care costs by promoting "consumer engagement" and a unified front when bargaining with area providers as part of a "unified strategy to bring Southeast Wisconsin health care costs in line with the rest of the Midwest, whereas now they are significantly higher." Humana, a pioneer on consumer directed insurance, expected double-digit cost savings in the plan's first year.[44]

The Business Health Group says that imitating Medicare price controls will "reward providers who are offering efficient care." This may be the case, particularly if Wisconsin's low levels of competition have created hospitals that are relatively inefficient. But it should also be remembered that hospitals will adjust service intensity to match reimbursement levels and that as Medicare reimbursement levels drift downwards, without careful management the Business Health Group's emphasis on price controls could end up harming its employees.

The WEA Trust is the insurance agency established by the Wisconsin Education Association Council, the state's largest teachers union. It has taken a slightly different approach to the problems of hospital costs. Its customers include about 80 percent of Wisconsin's school districts. In 2003, apparently in response to Aurora's pricing, the Trust began offering a plan called Trust Select in areas that it determined had alternatives to the Aurora system. Trust Select treats the Aurora hospitals and clinics as out of network providers. It requires that school district employees who want to use Aurora hospitals and clinics as their primary provider pay a higher premium. By November 2005, the Trust Select plan had been in force for two years in the Port Washington-Saukville School District. Superintendent Michael Weber reportedly said that "only a few employees [had] chosen Aurora as their primary health care provider,[45] suggesting consumers would opt for lower prices when given the choice.

IV. Consumer Directed Health Care: Cost Control and Comprehensive Reform

Given that Wisconsin employers operate in a hospital environment in which suppliers appear to have unusual market power, the known facts suggest that they can reduce costs by doing two things.

The first is to push for a free market for health care suppliers. In order to avoid referral practices designed to maximize a hospital system's income, people must have the ability to go to competing facilities. This requires that the area be made more hospitable to health care entrepreneurs, a process that will likely require hacking through thickets of regulation and the promotion of other choices for hospital care.

The second is to move aggressively towards true consumer directed health care plans, plans that use new benefit designs that provide coverage while encouraging consumers to spend more of their own money. These plans often couple high deductibles and an employer or self-funded savings account with balances that roll over from year to year and are an employee's to keep even if he

loses his job. Insurers are currently experimenting with various plan designs, and results are encouraging.

Nationwide, there were an estimated 4.5 million people covered by high deductible health insurance plans by the end of 2006. By January 2008, an estimated 6.1 people in the United States were covered by policies that qualified for federally qualified Health Savings Accounts. About 210,000 of them were in Wisconsin. They constituted about 5.6 percent of the people in the state who were under 65 and privately insured.[3] An unknown number of people were covered by high deductible plans not eligible for health savings accounts and by high deductible plans associated with Health Reimbursement Accounts.

Early results suggest that consumer directed health plans have the potential to accelerate health care streamlining by unleashing millions of experienced, highly trained, and dedicated American shoppers on an industry that has been insulated from those it is supposed to serve since the 1930s. They also help consumers build financial assets that can be used to purchase future health care. In view of the strained financial condition of public programs like Medicaid and Medicare, these assets provide some assurance that individuals will be able to pay for their health care when they can no longer work.

Manitowoc County was the first county in Wisconsin to experiment with a higher deductible plan that includes a health savings account. For single employees, the county began by contributing $1,500 a year to a health savings account for each person who elected the new plan. The county said that it thought that it would save up to $825 per employee.[46] In a 2008 news release, the county reported that actual savings over the old plan were $2,126.70 per year for employees and $5,941.80 per year for the county.[4]

Critics of high deductible plans dismiss them as only appropriate for the healthy and wealthy. They tend to focus on the deductible only, forgetting that the high deductible plans typically cost less because they dramatically reduce claims overhead by reducing billing costs and the necessity for some of the administrative overhead that insurers have traditionally deployed to control utilization. When consumers are spending their own money, there is less need to block access to specialists or expensive medications.

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[3] AHIP Center for Policy and Research. April 2008. *January 2008 Census shows 6.1 Million People Covered by HSA/High-Deductible Health Plans.*

[4] Bob Ziegelbauer, County Executive. 2008. Economic Impact of Manitowoc County Health Savings Accounts. http://www.legis.state.wi.us/assembly/asm25/news/HSA_Economic_Impact_01_2008.pdf, accessed May 2, 2008.

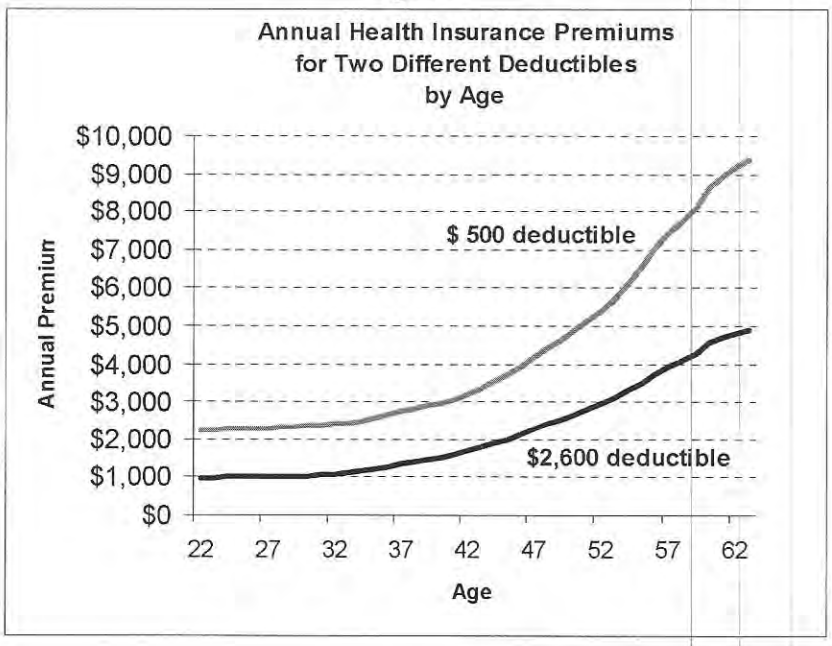
Under federal rules, individuals own their health savings accounts (HSAs). Health reimbursement accounts (HRAs) are owned by an employer. HSA deposits are tax free and can either be used to pay for routine medical expenses or can be invested and saved for large expenses. The money in the account can be used for any medical expense recognized by the Internal Revenue Service. This means that funds in Health Savings Accounts can pay for things not usually covered by standard health insurance, including caring for a disabled dependent, eye surgery to correct defective vision, in vitro fertilization, long-term care expenses, braces and other dental expenses, and changes necessary to make a home safe for someone who has become disabled.[47]

Experience with high deductible accounts suggests that they change people's attitudes towards health care in addition to saving money. In a study of 8,724 people whose employer switched them from a traditional health maintenance organization plan to a high deductible plan, Wharam *et al.* reported that while the high deductible plan did little to change the rate of first visits to emergency rooms, repeat visits in the high deductible group decreased from 334.6 to 255.3 visits per 1,000 members. There was no immediate evidence of harm, though the authors state that more research is needed to assess the risks and benefits of high-deductible coverage relative to clinical outcomes.[48]

For people who are organized and have the resources to handle a higher deductible, high deductible plans linked to savings accounts may substantially reduce lifetime medical costs. Most people have relatively small health care costs in any given year. According to the Medical Expenditure Panel Survey, median out-of-pocket costs for non-elderly people who had health care expenses in 2004 were $255 for those with private insurance, $8 for those with public insurance, and $225 for those with no insurance. By age, expenditures at the 90th percentile were $611 for children, $1,089 among adults aged 18 to 34, $1,735 among adults aged 35 to 54, and $2,810 among adults aged 55 to 64. Median out-of-pocket expenses were much lower, $59 for children, $179, $310, and $636 among the 3 groups of adults.[49]

Higher deductible policies offer significant savings when compared to traditional, low deductible, policies. Figure 2 shows the difference in annual premiums for a non-smoking man in excellent health for two current Humana insurance policies each year from age 22 to age 63. One policy, the high deductible policy (HD), is a health savings account qualified policy with a $2,600 deductible. The other, the low deductible (LD) policy, is the company's least expensive policy with a $500 deductible.

Figure 2



Three simple spending scenarios are summarized in Table 11. They are designed to give an idea of how lifetime spending might compare with high and low deductible policies over a person's working life. Total spending was calculated as annual premium payments plus out-of-pocket amounts up to the deductible. Total out-of-pocket spending under the lower deductible policy is assumed to be $500 a year for all covered medical care. Out-of-pocket spending under the $2,600 deductible policy is any amount under $2,600. Co-pays and coinsurance amounts are ignored. This gives an advantage to the lower deductible policy. Many high deductible policies have no co-pays or coinsurance after the deductible amount is reached. Most low deductible policies do.

Table 11: Assumptions underlying the simple comparison of lifetime spending with high and low deductible health insurance policies shown in Figure 3.

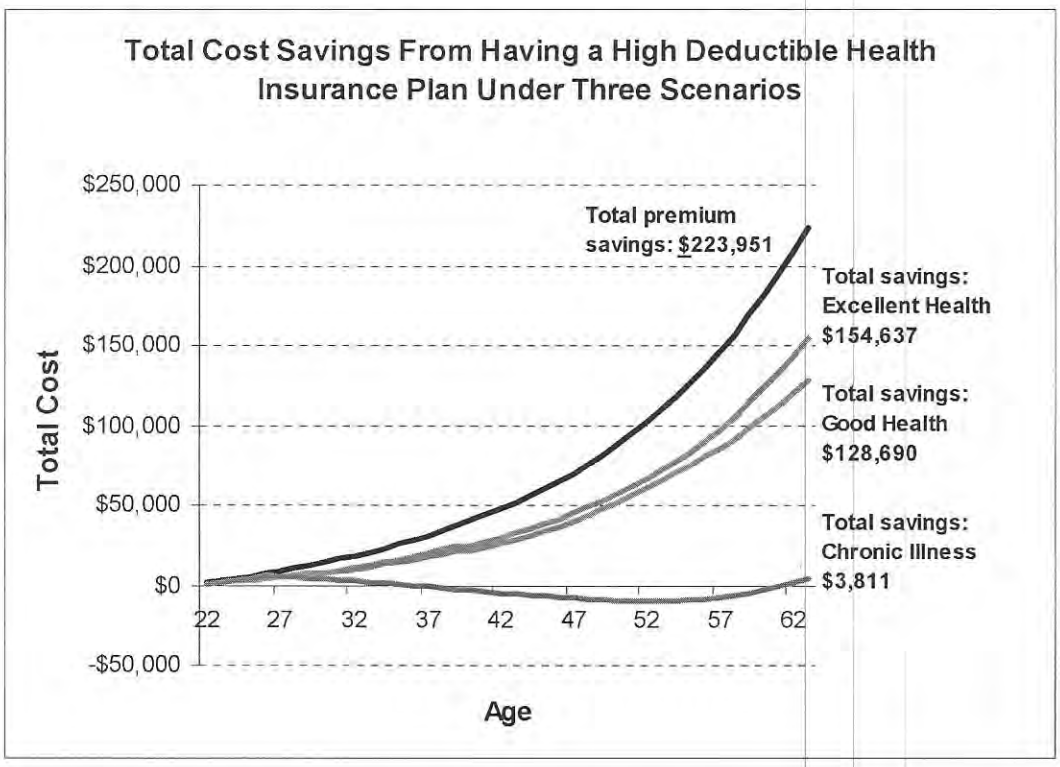
Excellent Health: Low Spending	Out-of-pocket spending is $700 a year from age 22 through age 39. There are major health events at age 25, 30, and 46 which result in out-of-pocket spending up to the deductible in that year. From age 41 to age 63 out-of-pocket spending rises to $1,000 a year.
Good Health: Medium Spending	From age 22-24 spending is $700 a year. At 25, a major health event requires spending up to the deductible of $2,600. After that, spending is $1,000 a year until age 40 when another major health event requires spending up to the deductible. Spending drops back to $1,000 a year until age 55 when the person is assumed to spend the deductible

	amount every year until age 63.
Chronically Ill: High Spending	From age 22-25 out-of-pocket spending is assumed to be routine at $700 a year. At age 26, the person becomes chronically ill and reaches his deductible each year with the result that out-of-pocket spending is $2,600 for the high deductible policy, and $500 for the low deductible policy. If the chronic illness occurs at age 24 or earlier, choosing the high deductible policy results in a net loss.

Figure 3 shows the mounting premium savings from having a high deductible policy along with how much could be saved by opting for it under the three different spending scenarios described above. The calculation assumes that any savings are invested in an account that earns 5 percent interest, compounded annually.

The savings suggest that higher deductible policies can save money even for those with severe chronic illnesses. Savings are largest for health. Over 40 years they can pay more than $100,000 less with a high deductible policy. For the chronically ill, people who become ill three years after purchasing a high deductible policy and spend their deductible each year thereafter, the savings are far smaller, less than $4,000. But because the simple model used assumes that the lower deductible policy has no copayments after an annual deductible of $500, it is likely that the higher deductible policy saves more.

Figure 3



Though people delight in denigrating the utility of health savings accounts for people with relatively low incomes, even a person who saves very little can be better off with a high deductible policy and a health savings account. Suppose someone purchases the less expensive low deductible policy and puts just 10 dollars a month into a health savings account. By age 34 he will have saved enough to fund the higher deductible. If he leaves his savings untouched and continues to save $10 a month, he will still have saved $16,000 in cash by retirement without counting the premium savings. This would be enough to help with Medicare premiums and drug costs during retirement. It does not count the money he saved in premiums and put to other uses.

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Designing policies that encourage consumers to spend their own money has potential advantages far beyond lower health insurance costs and possible declines in utilization. Public program and traditional insurance policies give people no incentive to consider either the cost or the quality of their health care. When a third party pays for everything people don't look for fraud, treat medical care like a scarce good, or seek innovative ways to solve their problem.

Often the rules governing third party payment make doing the sensible thing difficult. Nowhere is this more apparent than in Colorado's Consumer-Directed Attendant Support (CDAS) program, a voluntary arrangement for people who

are severely disabled and dependent on Medicaid for home care. Rather than relying on Medicaid approved agencies to send out someone to do home care, CDAS allows the people in it to hire their own attendants. They are given a budget, counseled on how to follow it, shown how to file the necessary paperwork for having an employee, and allowed to pay anyone but a spouse for home care services. They also keep half of any savings they generate for Medicaid. By hiring their own attendants, participants have cut attendant care costs by roughly 20 percent. They have used the extra funds to purchase necessary equipment like voice activated telephones and report that their own hires given them much more flexibility and better care.[50]

In 2006, Aetna published a report on four years of data on the 1.6 million people who were enrolled in consumer-directed Aetna insurance plans. It found that the plans consistently produced lower medical costs and either maintained or improved levels of chronic and preventive care.

Whole Foods, a specialty food retailer, has had considerable success with its consumer directed health plan. Before 2003 it had a typical corporate health plan offering a choice of a catastrophic insurance plan, a comprehensive insurance plan, and an HMO. The catastrophic plan was extremely successful, but the other two plans required $7 million of cash infusions to keep them solvent. The $7 million shortfall meant that premiums were going to have to be raised by 30 to 35 percent.

When the IRS ruling on health reimbursement accounts came out in July of 2002, Whole Foods put everyone into its catastrophic plan. It paid 100% of the premiums for full-time employees. Initial deductibles were $1,000 for medical costs and $500 for prescription drugs, and a $3,500 out-of-pocket maximum. Deposits in employees' personal wellness accounts, which function like health savings accounts, are a function of hours worked. After a full year of work, $1,500 will be deposited in an employee's account. The accounts are accessible with a MasterCard debit card.

The results were stunning. In the first year, medical costs per employee fell 42.8 percent. Even when the wellness account deposits were included costs fell by about 25 percent. About $14.2 million were rolled over into the next year. Expenditures increased substantially in the next year, as employees began using the new plan. Over the two years of big decline and big utilization growth from the low level, costs have grown at a compounded annual rate of 3.3 percent rather than the 12 percent rate for the rest of the industry. An unexpected benefit was that turnover at Whole Foods plummeted.[51]

Wendy's International, Inc. shifted to an HSA based health insurance plan in 2005. It contributes about 60% of the deductible to each employee's deductible, and covers preventive care at 100%. The percentage of employees who had had a physical increased from 50 percent in 2004 to 75 percent in 2005. Participation rates have remained the same, and 60 percent of participants contributed personal funds to their HSAs. At the end of 2005, 90% of the HSA accounts had balances of about $600. By the middle of 2006, the average balance was $760. In the first year of operation Wendy's health care claims decreased by 14 percent. Costs, including deposits to employee HSAs, increased by 1 percent in 2005.[52]

Larry Lutey, Vice President of Human Resources of Lutheran Social Services of Illinois (LSSI) in Des Plaines, testified that high deductible health insurance coupled with a full replacement HSAs saved LSSI from uninsurability. In the late 1998s, LSSI enrolled a mix of low and high risk individuals in a traditional HMO plan. As health care costs increased, LSSI had to raise the employee share of health premiums, increase deductibles, and reduce coverage. Eventually, low risk individuals left the plan either shifting to spousal coverage or purchasing coverage on their own. The high utilization people who were left raised rates higher as LSSI's claims history worsened. Both employee and employer health costs escalated by 12 to 15 percent a year. Plan participation dropped significantly, especially among those making less than $30,000 a year. In 2005, LSSI moved to a HSA plan only because it thought it had no other choice. It contributes 50 percent of the deductible, $2,500, to the HSA of each participating employee. In the first two years, premium increases were held to 5 percent a year. In the first year, 42 employees left the HSA plan, while 33 people who had left the older HMO plan returned. Some employees like the plan, some do not. Mr. Lutey notes that it is difficult for employees with lower income to contribute their funds to the plan. Some employees find it expensive and complex.[53]

Although detractors believe that consumer-directed plans cut costs only by forcing consumers to defer needed medical care, it is clear that people seeking to save their own money are much more diligent about ensuring that the medical care they get is a good value. Anecdotal reports suggest that people with HSAs are more likely to question hospital bills, shop for less expensive prescription drugs and tests, and be more selective about the tests that they pay for. Some people with severe chronic illness report that they prefer high deductible plans because the 100% coverage offered after the deductible has been met leaves them free of insurance hassles.[54]

In 2005, *The Business Journal* reported that Wisconsin companies were slow to offer consumer-directed health plans and that employees were unlikely to enroll in them. In the article, Jim Mueller, the president of Frank F. Haack & Associates, a Wauwatosa insurance brokerage explained that the richness of Wisconsin

employer benefits, $9,321 versus a U.S. average of $7,089 with employee premiums of $70 for a PPO in Wisconsin versus $96 nationally, retards employee adoption. "The benefits are so rich and employees don't contribute at the same level as other parts of the country," Mueller said. "Why take a chance if the employers' plan is so rich?" [55]

Expanded access to consumer-directed health plans offers a promising corrective to the high health care costs created by rich health care plans. Because consumer-directed plans reduce ties to any particular health care network, they may help further a gradual process of deregulation. Consumer-directed plans also have the potential to encourage competition for high priced networks that use restrictive referral policies to protect against competitive threats. The proper corrective for the bureaucratic stranglehold that cripples American health care is sensible deregulation and consumers armed with cash and ready to shop for health care.

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