MinnesotaCare: Key Trends & Challenges Julie Sonier

In 1992, Minnesota enacted a sweeping health care reform bill to improve access to and affordability of health insurance coverage, with the goal of reaching universal health insurance coverage in the state by 1997. One of the cornerstones of the 1992 legislation (originally called the Health Right Act and later renamed the MinnesotaCare Act) was the creation of MinnesotaCare, a health insurance program for low- and moderate-income working people who are not eligible for Medical Assistance or other public programs and who cannot afford private insurance coverage.¹ This article provides background information on the MinnesotaCare program and how it has changed over time, presents data on recent trends in enrollment, describes how enrollment and demographic characteristics of MinnesotaCare enrollees vary by region of the state, and discusses evidence related to whether the program has reached its target populations. It concludes with observations about some of the current challenges facing the state as it tries to ensure access to affordable health insurance and reduce the number of uninsured.

The MinnesotaCare program was enacted as just one of a series of major reforms aimed at improving health insurance availability and affordability in Minnesota. Other major components of the original MinnesotaCare legislation included the following:

- Statewide limits on health care cost growth and mechanisms to control health care capital expenditures;
- In the small employer group health insurance market, reforms guaranteeing availability of coverage, renewability

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of coverage, and restricting the degree to which premiums can vary based on factors such as age, health status, and region;

- In the individual insurance market, laws guaranteeing renewability of coverage and restricting premium variation; and
- The formation of voluntary health insurance pools for public employers and small employers.

While some of these components of health reform were later scaled back or repealed, it is important to remember that the MinnesotaCare program was part of a broad package of reforms aimed at controlling health care costs and achieving universal health insurance coverage.

MinnesotaCare History

MinnesotaCare was established in 1992 to provide a source of subsidized health insurance coverage to Minnesota's low- and moderate-income working families. MinnesotaCare replaced the Children's Health Plan, which had been established in 1987 to provide health insurance for low-income children who did not qualify for coverage through Medicaid. Beginning in October 1992, parents of children in families with incomes at or below 185% of federal poverty guidelines (FPG) became eligible to enroll in MinnesotaCare. The income limit for families was raised to 275% of

	Income limit for:			
Number of people in household	Families With Children	Adults Without Children		
1	\$26,950	\$17,150		
2	\$36,300	\$23,100		
3	\$45,650	NA		
4	\$55,000	NA		
5	\$64,350	NA		

 Table 1: Income eligibility for MinnesotaCare, 2006.

Based on 2006 HHS Poverty Guidelines. NA = not applicable. Parents in families with incomes above \$50,000 per year are not eligible to enroll in MinnesotaCare. FPG in January 1993, and in 2003, the eligibility limit for parents was changed to the lesser of 275% of FPG or annual income of \$50,000.

Adults in households without children became eligible to enroll in MinnesotaCare in October 1994, with an income limit of up to 125% of FPG. The income limit was raised to 135% of FPG in 1996 and to 175% of FPG in 1997. Table 1 summarizes current MinnesotaCare income eligibility guidelines for families and adults without children.

MinnesotaCare was not intended to replace or substitute for private health insurance coverage. Instead, it was intended to provide a source of coverage for low- and moderate-income families who do not have access to employer-sponsored health insurance. The program includes several mechanisms that are intended to reduce the potential for "crowd-out" (enrollees moving from the private insurance market to a public program). With some exceptions, a person may enroll in MinnesotaCare if he or she has been without health insurance for the previous four months and has not had access to employer-subsidized health insurance coverage through a current employer for the previous eighteen months.² ("Employer-subsidized" health insurance is defined as coverage for which an employer contributes at least 50% of the premium cost.) Households with assets exceeding certain limits (\$10,000 for a one-person household and \$20,000 for households of two or more people) are also not eligible for MinnesotaCare.³ In addition, the program's sliding scale premium structure, which requires higher enrollee premiums at higher income levels, is intended to encourage families to transition to private health insurance coverage at higher income levels.

Generally speaking, the MinnesotaCare benefit set is quite comprehensive, but there are some significant exceptions. Adults without children and parents in households with incomes above 175% of FPG have a \$10,000 annual limit on coverage for inpatient hospitalizations. In response to a state budget shortfall in 2003, benefits for adults were changed: new co-payments and higher premiums were required for all adult enrollees. In addition, a new "Limited Benefit Set" with a \$5,000 annual limit on coverage for outpatient services was implemented for adults without children with incomes between 75% and 175% of FPG. (The \$5,000 cap on outpatient services was repealed by subsequent legislation in 2005, but other aspects of the limited benefit set remain in effect.)

				Growth in:		
State Fiscal Year	Avg. Monthly Enrollment	Total Spending (\$ millions)	Avg. Monthly Spending Per Enrollee	Enrollment	Total Spending	Spending Per Enrollee
1993*	35,217	\$13	\$30			
1994	62,232	\$33	\$45	76.7%	159.6%	46.9%
1995	77,417	\$56	\$60	24.4%	69.0%	35.9%
1996	88,277	\$80	\$75	14.0%	41.7%	24.3%
1997	93,136	\$98	\$88	5.5%	23.2%	16.8%
1998	97,854	\$108	\$92	5.1%	10.5%	5.2%
1999	106,552	\$164	\$129	8.9%	51.7%	39.3%
2000	108,999	\$187	\$143	2.3%	13.8%	11.2%
2001	122,247	\$240	\$164	12.2%	28.3%	14.4%
2002	138,022	\$351	\$212	12.9%	46.3%	29.6%
2003	151,205	\$435	\$240	9.6%	23.8%	13.0%
2004	148,505	\$487	\$273	-1.8%	11.9%	14.0%
2005	141,822	\$409	\$240	-4.5%	-16.1%	-12.1%
2006	128,733	\$438	\$284	-9.2%	7.3%	18.2%

Table 2: MinnesotaCare enrollment and spending history.

Source: Minnesota Department of Human Services. Note: a change in timing of payments caused growth in total spending and spending per enrollee to be lower in 2001 and higher in 2002 than would otherwise have been the case.

*Includes Children's Health Plan.

Trends in MinnesotaCare Enrollment at the State Level

Enrollment in MinnesotaCare grew steadily through the 1990s and the early part of this decade, as shown in Table 2. In the state's fiscal year 1993, average monthly enrollment in MinnesotaCare was about 35,000. Ten years later, average monthly enrollment in the program had nearly tripled to over 151,000. Program spending grew steadily as well, from about \$13 million in fiscal year 1993 to \$435 million in 2003.⁴

Overall, about 45% of MinnesotaCare enrollees are children (under age 21), 31% are parents in households with children, and the remaining 24% are adults without children. This distribution by enrollment category has been fairly stable over time, although the percentage of enrollees who are children has declined slightly (from

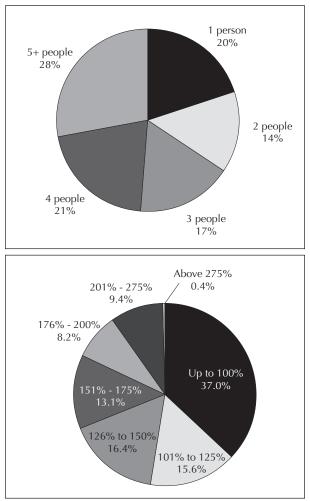


Figure 1: MinnesotaCare enrollment by household size as of July 2006.

Figure 2: Income distribution of MinnesotaCare enrollment, July 2006 (income as percent of federal poverty guidelines).

48.6% in July 2001 to 45.0% in July 2006) and the percentage who are adults without children has increased (from 19.5% in July 2001 to 23.7% in July 2006). Figure 1 illustrates how enrollment varies by household size: nearly half (49%) of enrollees are in households with four or more people; however, the share of total enrollment

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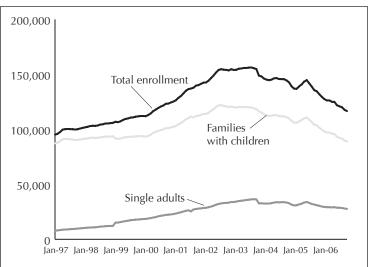
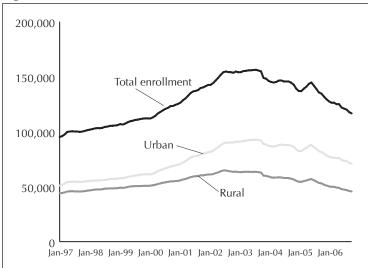


Figure 3: MinnesotaCare enrollment trends by family type.

Figure 4: Urban and rural MinnesotaCare enrollment trends.



accounted for by one-person households increased from about 13% in 2000 to 20% in 2006.

Over 90% of MinnesotaCare enrollees have family incomes below 200% of federal poverty guidelines, as shown in Figure 2. Among families with children, the income distribution of MinnesotaCare enrollees is slightly higher than for the program overall because of higher income eligibility cutoffs for this group. Still, nearly two-thirds of children in this enrollment category have incomes below 150% of FPG, the income cutoff for Medicaid eligibility. The income distribution of MinnesotaCare enrollment for families with children has been stable over the past several years, although there has been a slight increase in the share of enrollment at the upper end of the income distribution.

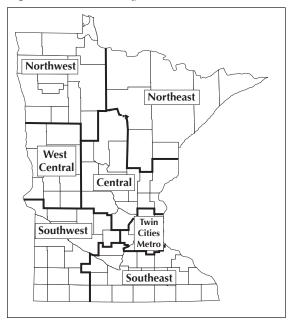
Figures 3 and 4 illustrate how enrollment in MinnesotaCare has changed over time. Figure 3 shows monthly changes in enrollment by family type (families with children and single adults), while Figure 4 shows enrollment trends in urban and rural counties.⁵ As the figures show, MinnesotaCare enrollment grew steadily among both family types and in both urban and rural parts of the state, peaking in July 2003, then steadily declining. As noted earlier, changes were made to program eligibility requirements and premiums in 2003. In addition to the eligibility and benefit changes described above, verification of continued eligibility for enrollment was changed from every 12 months to every six months. Also, mandatory verification of access to employer-sponsored insurance was implemented in April 2006. In combination, all of these changes have clearly had an impact on program enrollment.

	Share of Nonelderly Population	Share of MNCare Enrollment
Urban Counties	73.9%	60.7%
Rural Counties	26.1%	39.3%
Region		
Northeast	6.0%	9.6%
Northwest	3.1%	6.2%
Central	13.5%	19.1%
West Central	4.0%	6.4%
Southwest	5.2%	6.9%
Southeast	13.4%	11.1%
Metropolitan	54.8%	40.6%

Table 3: Regional variation in MinnesotaCare enrollment.

Data sources: MinnesotaCare enrollment data for July 2005 from Minnesota Department of Human Services, county population estimates for July 2005 from U.S. Bureau of the Census.

Figure 5: Minnesota regions.



Regional Variations in Enrollment

Previous research has documented substantial variation in the availability of employer-based health insurance by region in Minnesota. For example, the percentage of people who have employer-based health insurance coverage is highest in the Twin Cities and ranges from 44% to 67% across the state's 13 economic development regions.⁶ Employers in the Twin Cities metropolitan area are more likely to offer coverage than those in other metropolitan areas, and rural employers are the least likely to offer coverage.⁷ Because of these regional variations in access to employer-based health insurance and other factors (such as regional variation in income), it is not surprising that MinnesotaCare enrollment is concentrated more heavily in some regions than others. Table 3 presents a regional analysis of the distribution of Minnesota's nonelderly population and the distribution of MinnesotaCare enrollment. As the table shows, for example, about 26% of the state's nonelderly population lives in rural counties, but 39% of MinnesotaCare enrollment is in rural counties. Enrollment is particularly concentrated in the Northwest, where the region's share of statewide MinnesotaCare enrollment (6.2%) is about twice as high as the region's share of non-elderly population (3.1%). The difference

				Percent of total:	
	Families with Children	Single Adults	Total Enrollment	Families with Children	Single Adults
Statewide	91,601	28,453	120,054	76.3%	23.7%
Urban Counties	54,916	18,324	73,240	75.0%	25.0%
Rural Counties	36,685	10,129	46,814	78.4%	21.6%
Region					
Northeast	8,146	3,268	11,414	71.4%	28.6%
Northwest	5,855	1,489	7,344	79.7%	20.3%
Central	18,207	4,639	22,846	79.7%	20.3%
West Central	5,983	1,574	7,557	79.2%	20.8%
Southwest	6,589	1,651	8,240	80.0%	20.0%
Southeast	9,896	3,388	13,284	74.5%	25.5%
Metropolitan	36,898	12,437	49,335	74.8%	25.2%

Table 4: Enrollment by family type and region, July 2006.

Data source: Minnesota Department of Human Services

between MinnesotaCare enrollment distribution and population distribution is also particularly high in the Northeast and West Central regions (each of these regions has a share of MinnesotaCare enrollment about 1.6 times higher than its share of the nonelderly population). The map in Figure 5 illustrates the regional definitions used for this analysis.

There is also substantial variation across regions in MinnesotaCare enrollment by family type, as shown in Table 4. Statewide, families with children account for about 76% of MinnesotaCare enrollees; this proportion is slightly lower (75%) in urban counties and slightly higher (78%) in rural ones. In the Northeast, Southeast, and Metropolitan (Twin Cities) regions — which include nearly all of the counties defined as urban in this analysis — enrollment among single adults accounts for a higher share of MinnesotaCare enrollment than in other regions of the state.

Table 5 illustrates MinnesotaCare enrollment trends by region over time, in terms of both the number of enrollees and enrollment as a share of the region's nonelderly population. Statewide, MinnesotaCare enrollment as a share of the nonelderly population peaked at 3.5% in 2003, then declined to 2.6% in 2006. As the table shows, rural counties have historically had a higher share of their nonelderly populations enrolled in MinnesotaCare compared to urban counties. MinnesotaCare enrollment as a share of the

	2000	<u>2001</u>	2002	2003	2004	2005	2006
Statewide Total							
Enrollment	120,666	137,045	154,664	156,230	145,617	138,809	120.054
Enrollment as % of nonelderly population	2.8%	3.1%	3.5%	3.5%	3.2%	3.1%	2.6%
Urban Counties							
Enrollment	66,713	77,579	89,958	92,780	87,724	84,236	73,240
Enrollment as % of nonelderly population	2.1%	2.4%	2.8%	2.8%	2.7%	2.5%	2.2%
Rural Counties							
Enrollment	53,953	59,466	64,706	63,450	57,893	54,573	46,814
Enrollment as % of nonelderly population	4.7%	5.1%	5.6%	5.4%	4.9%	4.6%	4.0%
	2.6%	2.7%	2.8%	2.6%	2.3%	2.1%	1.8%
Region	2.2	2.1	2.0	1.9	1.9	1.8	1.8
Enrollment							
Northeast	13,399	14,919	16,310	15,813	14,396	13,353	11,414
Northwest	8,898	9,996	10,764	10,476	9,311	8,606	7,344
Central	22,302	25,187	28,767	29,357	27,916	26,509	22,846
West Central	9,009	9,904	10,571	10,206	9,325	8,827	7,557
Southwest	10,050	10,767	11,697	11,092	10,116	9,646	8,240
Southeast	13,507	15,122	17,182	17,548	16,081	15,436	13,284
Metropolitan	43,464	51,064	59,284	61,651	58,364	56,350	49,335
Enrollment as % of	nonelderly po	opulation					
Northeast	5.0%	5.5%	6.1%	5.9%	5.4%	5.0%	4.3%
Northwest	6.4%	7.2%	7.8%	7.5%	6.6%	6.1%	5.2%
Central	4.1%	4.5%	5.0%	5.0%	4.7%	4.4%	3.7%
West Central	5.2%	5.7%	6.0%	5.8%	5.2%	4.9%	4.2%
Southwest	4.3%	4.6%	5.0%	4.7%	4.3%	4.1%	3.5%
Southeast	2.3%	2.6%	2.9%	2.9%	2.7%	2.6%	2.2%
Metropolitan	1.8%	2.1%	2.4%	2.5%	2.4%	2.3%	2.0%

 Table 5: Regional variation in MinnesotaCare enrollment trends.

Data source: Minnesota Department of Human Services, July enrollment figures for each year. Population estimates from U.S. Bureau of the Census for July 1 each year through 2005; 2006 population was estimated using growth rates from 2004 to 2005.

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	Total Enrollment	Families with Children	Single Adults
Statewide	-23.2%	-23.6%	-21.7%
Urban Counties	-21.1%	-21.8%	-18.7%
Rural Counties	-26.2%	-26.1%	-26.6%
Region			
Northeast	-27.8%	-26.5%	-30.9%
Northwest	-29.9%	-28.7%	-34.2%
Central	-22.2%	-22.6%	-20.3%
West Central	-26.0%	-26.6%	-23.6%
Southwest	-25.7%	-26.3%	-23.1%
Southeast	-24.3%	-25.5%	-20.5%
Metropolitan	-20.0%	-20.9%	-17.3%

Table 6: Changes in MinnesotaCare enrollment, 2003 to 2006.

Data source: Minnesota Department of Human Services, enrollment data for July 2003 and July 2006.

nonelderly population is about twice as high in rural counties as in urban ones, but this difference has narrowed over time. In 2006, residents of rural counties were about 1.8 times more likely to be enrolled in MinnesotaCare than their urban counterparts. The Northwest region has historically had a higher percentage of its nonelderly population enrolled in MinnesotaCare than any other region (as high as 7.8% in 2002 but declining to 5.2% in 2006), while the Metropolitan region has historically had the lowest percentage.

Since the peak in 2003, enrollment in MinnesotaCare has declined broadly across family types and across all regions of the state, as described in Table 6. In the state as a whole, MinnesotaCare enrollment declined by about 23% between July 2003 and July 2006; enrollment declined by 24% among families with children and 22% among single adults. Enrollment declines were larger in rural counties than urban counties (-26% compared to -21%). Total enrollment declines were largest in the Northwest and Northeast regions (-30% and -28%, respectively). Each of these regions experienced larger than average declines in enrollment by families with children as well as single adults.

MinnesotaCare's Impact on Health Insurance Coverage

Several different types of research studies have attempted to evaluate MinnesotaCare's success at reaching its primary target populations, children and the low-income working uninsured. For example, one study using data on the demographics of Minnesota's uninsured population showed that although the overall rate of uninsurance in Minnesota was stable between 1990 and 1995 (before and after implementation of MinnesotaCare), children and lowincome people represented a smaller share of the uninsured in 1995 than in 1990.⁸ In addition, researchers documented a statistically significant decline between 1990 and 1995 in the share of Minnesota children who were uninsured for a year or longer.⁹ Another research study evaluated the impact of MinnesotaCare's implementation on the level of uncompensated hospital care in Minnesota, concluding that increases in MinnesotaCare enrollment had resulted in a \$58.6 million reduction in uncompensated hospital care costs from 1992 through 1996.¹⁰

Other studies have analyzed the degree to which public insurance programs like MinnesotaCare have resulted in "crowdout" of private insurance. Although most studies have found that expanding eligibility for public programs usually results in some substitution of public coverage for private insurance, findings on the size of this effect vary widely.¹¹ In general, studies that have specifically attempted to evaluate crowd-out due to MinnesotaCare have found very little evidence of it.¹²

Remaining Challenges

While the research evidence discussed above suggests that MinnesotaCare has been successful at reaching its target populations, reducing the need for uncompensated hospital care, and minimizing crowd-out of private insurance, there is still significant room for improvement. An estimated 59% of uninsured Minnesotans are potentially eligible for public insurance coverage (either MinnesotaCare, Medicaid, or General Assistance Medical Care); among uninsured children, an estimated 78% are potentially eligible for public coverage.¹³ In other words, as many as 225,000 uninsured Minnesotans are potentially eligible for public insurance programs but are not enrolled. There are many reasons why people who are eligible for public programs may not enroll: many people are either not aware of the programs or their own potential eligibility, while others may not believe they need insurance, may find the paperwork too confusing or difficult, or may consider even the subsidized sliding-scale premiums too expensive.¹⁴

There are clear tradeoffs between making it easier for people who are eligible to enroll in public programs and achieving other important goals such as minimizing private market crowd-out and maintaining program integrity (i.e., ensuring that the program only enrolls people who meet all of the requirements). A 2003 program evaluation of MinnesotaCare by the Minnesota Office of the Legislative Auditor found that eligibility determination staff made errors in determining MinnesotaCare applicants' income about one third of the time, and also that many applicants misreported information on the availability of employer-sponsored insurance.¹⁵ Recent changes in program eligibility, combined with enhanced efforts to minimize crowd-out and ensure program integrity, have increased the length of the application from four to 24 pages.

Minnesota has historically had among the lowest uninsurance rates of any state in the United States.¹⁶ One key reason for the state's low rate of uninsurance has been Minnesota's historically strong rate of private health insurance coverage. In recent years, however, the rate of private coverage has declined: between 2001 and 2004, the share of Minnesotans with private health insurance declined from 68.4% to 62.9%. During the same period, coverage in public programs rose from 21.2% of the population to 25.1%, while the rate of uninsurance rose from 5.7% to 7.4%.¹⁷ While public program enrollment was rising, the state was also facing pressure from rising costs per enrollee, similar to trends experienced in the private sector. These two trends combined were among the primary factors that led to a large state budget shortfall and the changes in program eligibility and benefits that were enacted in 2003. Maintaining and supporting the strength of private health insurance markets, while providing access to coverage for those who otherwise could not afford it, will be one of the keys to ensuring continued access to affordable health insurance coverage for Minnesotans into the future.

Finally, maintaining balance between providing access to coverage for those who lack access and encouraging reliance on private market options for higher income enrollees is also a challenge. Currently, MinnesotaCare premiums are set at 9.8% of family income at the high end of the program's income eligibility range. One recent national study found that average employee contributions to health insurance premiums are less than 5% of income for families with incomes at 300% of federal poverty guidelines.¹⁸

Families who have access to employer coverage where the employer contributes at least 50% of the premium cost are

ineligible for MinnesotaCare, but 50% of a family premium may be unaffordable for many families. Based on an average annual premium of \$11,480 for family coverage,¹⁹ a family whose employer contributes 50% of the cost would pay \$5,740 annually, or nearly \$480 a month, in health insurance premiums. For a hypothetical family of four with an income at 200% of federal poverty guidelines (\$40,000 in 2006), 50% of the family premium represents about 14.4% of the family's income. The family could also face significant out-of-pocket expenses such as deductibles, copayments, and coinsurance (which have all been increasing in recent years as employers have adopted strategies to control increases in health insurance premiums).

While there is no widely agreed-upon definition of what constitutes "affordable" health insurance coverage, it is clear that rising health care costs have placed significant pressure on family budgets in recent years, and this pressure is likely to continue into the future. Similar to the challenges that Minnesota faced in the early 1990s when the MinnesotaCare program was enacted, ensuring continued strength of private health insurance markets and ensuring that public insurance programs continue to provide a safety net of affordable coverage for those who would otherwise not have access to coverage will continue to be key strategies in efforts to increase the number of Minnesotans with health coverage.

Endnotes

¹ Medical Assistance is Minnesota's name for Medicaid, a statefederal health insurance program for certain low-income, elderly, and disabled populations.

² There is an exception to this provision for children in families with incomes below 150% of FPG, and for people transitioning from other public insurance programs.

³ The asset limit does not apply to children or pregnant women. ⁴ MinnesotaCare has three financing sources: enrollee premiums, federal matching payments for certain enrollees (since 1995), and the Health Care Access Fund, which receives revenues primarily from a 2% health care provider tax and a 1% tax on non-profit health plan premiums. In fiscal year 2006, 8% of program costs were paid by enrollee premiums, 34% by federal matching payments, and the remaining 57% by state funds.

⁵ For this analysis, urban counties are defined as counties that are part of a Metropolitan Statistical Area (MSA) as defined by the U.S. Office of Management and Budget. All other counties are defined as rural.

⁶ Minnesota Department of Health, Health Economics Program and University of Minnesota School of Public Health, "Health Insurance Coverage in Minnesota: Trends From 2001 to 2004," February 2006. ⁷Minnesota Department of Health, Health Economics Program, "Employer-Based Health Insurance in Minnesota: Results from the 2002 Employer Health Insurance Survey," Issue Brief 2005-01, March 2005.

⁸ Minnesota Department of Human Services and Minnesota Department of Health, "The MinnesotaCare Program: Transition Plan," March 1998, using data from the University of Minnesota School of Public Health's 1990 and 1995 Minnesota Health Access Surveys.

⁹ Kathleen Thiede Call, Nicole Lurie, Yvonne Jonk, Roger Feldman, and Michael Finch, "Who is Still Uninsured in Minnesota? Lessons From State Reform Efforts," *Journal of the American Medical Association*, vol. 278, no. 14, October 8, 1997.

¹⁰ Lynn A. Blewett, Gestur Davidson, Margaret E. Brown, and Roland Maude-Griffin, "Hospital Provision of Uncompensated Care and Public Program Enrollment," *Medical Care Research and Review*, vol. 60 no. 4, December 2003.

¹¹ See, for example, Julie L Hudson et al., "The Impact of SCHIP on Insurance Coverage of Children," *Inquiry*, vol 42 no. 3, Fall 2005; Thomas Buchmueller et al., "The Effect of SCHIP Expansions on Health Insurance Decisions by Employers," *Inquiry*, vol. 42 no. 3, Fall 2005; David M. Cutler and Jonathan Gruber, "Medicaid and Private Insurance: Evidence and Implications," *Health Affairs*, vol 16 no. 1, January / February 1997; Lisa Dubay and Genevieve Kenney, "Did Medicaid Expansions for Pregnant Women Crowd Out Private Coverage?" *Health Affairs*, vol. 16 no. 1, January / February 1997. ¹² These study findings are summarized in Minnesota Department of Health, Health Economics Program, "Health Care Coverage and

Financing in Minnesota: Public Sector Programs," January 2003, p. 16.

¹³ Minnesota Department of Health, Health Economics Program and University of Minnesota School of Public Health, "Health Insurance Coverage in Minnesota: Trends From 2001 to 2004," February 2006. ¹⁴ A 1997 study by researchers at the Urban Institute found that as the share of an enrollee's income paid in premiums rises, take-up of subsidized insurance declines. With premiums lower than 1% of income, participation was around 57% of eligible people; with premiums at 5% of income, participation was only 18% of eligible people. Leighton Ku and Theresa Coughlin, "The Use of Sliding Scale Premiums in Subsidized Insurance Programs," Urban Institute, April 1997.

¹⁵ Office of the Legislative Auditor, "MinnesotaCare," January 2003.
 ¹⁶ U.S. Bureau of the Census, Current Population Survey, various years.

¹⁷ Minnesota Department of Health and University of Minnesota School of Public Health.

¹⁸ Lisa Dubay, John Holahan, and Allison Cook, "The Uninsured and the Affordability of Health Coverage," *Health Affairs* web exclusive, November 30, 2006.

¹⁹ Kaiser Family Foundation and Health Research and Educational Trust, "Employer Health Benefits 2006 Annual Survey," September 2006.