Minnesota Health Care Spending and Projections, 2009

Minnesota Department of Health

June 2011

Health Economics Program
Division of Health Policy
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Protecting, maintaining and improving the health of all Minnesotans

June 2, 2011

The Honorable David W. Hann
Chair, Health and Human Services
Committee
Minnesota Senate
Room 328, State Capitol
75 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable Jim Abler
Chair, Health Care and Human Services
Finance Committee
Minnesota House of Representatives
479 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155

The Honorable Steve Gottwalt
Chair, Health Human Services
Reform Committee
Minnesota House of Representatives
485 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155

To the Honorable Chairs:

The 2008 Legislature required the Minnesota Department of Health (MDH) to annually estimate actual total health care spending for Minnesota residents (less Medicare and long-term care), calculate a baseline of projected health care spending, and determine the difference between actual and projected health care spending. If actual spending is less than projected spending, MDH must calculate the portion of this difference attributable to state-administered programs and certify to the Commissioner of Minnesota Management and Budget (MMB) whether or not the amount meets or exceeds $50 million (2008 Minn. Laws, Chapter 363, Article 17, Section 1).

As required, MDH has performed this analysis for health care spending in 2009. The results from this analysis, which are contained in the enclosed report and have been actuarially certified, show that estimated *actual* total health care spending (less Medicare and long-term care) for Minnesota residents in 2009 was $25.7 billion. This is about 0.8 percent, or $211.7 million, *above* health care spending levels projected for 2009 ($25.4 billion).

I have certified to the Commissioner of MMB that the conditions for a transfer of funds from the General to the Health Care Access Fund, as set forth by subdivision 4 of the authorizing legislation, have not been met for the 2012 fiscal year.

Questions or comments on the report may be directed to the Health Economics Program at (651) 201-3560.

Sincerely,

Edward P. Ehlinger, MD, MSPH
Commissioner
P.O. Box 64975
St. Paul, MN 55164-0975

Enclosure

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Introduction

The Minnesota Department of Health (MDH) produces annual estimates of actual health care spending and projections of future health care spending in Minnesota to meet the requirements of Minnesota Statutes Chapter 62U.10[1] and evaluate how Minnesota's 2008 health reforms impacted health care spending in the state. The spending estimates and projections represent the total volume of resources spent on health care services and goods for Minnesota residents each year. Historic health care spending estimates date back to 1993. Although Minnesota estimates are constructed with Minnesota-specific data, largely relying on aggregated data from payers of health care spending,[2] Minnesota's estimation method generally follows the framework developed by the Centers for Medicare & Medicaid Services (CMS) to estimate health care spending in the U.S.[3]

This report contains three sections. The first section provides detailed spending estimates for Minnesota for 2009. Section two presents projections of health care spending for Minnesota residents from 2009 through 2019. The third section includes a comparison of actual and projected spending for 2009.

Key Findings Include:

- Minnesota health care spending reached $36.4 billion in 2009 as health care spending growth slowed to 3.8 percent. This is slower growth than the U.S. increase in health care spending of 4.3 percent[4] and a deceleration from Minnesota's 2008 revised rate of 5.2 percent.

- Health care spending consumed 14.1 percent of Minnesota's gross state product in 2009 and amounted to nearly $7,000 for each person in the state.

- Without the impact of health reform provisions passed in Minnesota in 2008, health care spending is expected to grow to $78.0 billion by 2019, more than double the level of spending in 2009.

- As in 2008, estimates of actual health care spending in 2009 without Medicare and long-term care spending were near projected values, *exceeding* projections by 0.8 percent. Consistent with expectations this suggests that savings related to the 2008 Minnesota reforms will not materialize until after the law is more fully implemented.

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[1] Minnesota's 2008 health reform law was designed to slow health care spending growth in the state through a variety of initiatives including the use of health care homes, payment and quality reforms, and efforts to reduce obesity and tobacco use among residents. For more information on these initiatives, visit: http://www.health.state.mn.us/healthreform/index.html

[2] The estimates rely on data from the Centers for Medicare & Medicaid Services, the Minnesota Department of Human Services, health insurance carriers in Minnesota and other payers. Estimates of out-of-pocket spending and self-insured are calculated as residuals to total spending, as Minnesota data to directly estimate spending from these sources is not available.

[3] Both MDH and CMS update historical data to reflect the most current available health expenditure data and methodology. As a result, estimates presented in this report may differ from earlier published estimates of historical health care spending.

[4] Ann Martin, David Lassman, Lekha Whittle, Aaron Catlin and the National Health Expenditure Accounts Team. "*Recession Contributes to Slowest Annual Rate of Increase In Health Spending In Five Decades.*" Health Affairs, 30, no.1 (2011):11-22.

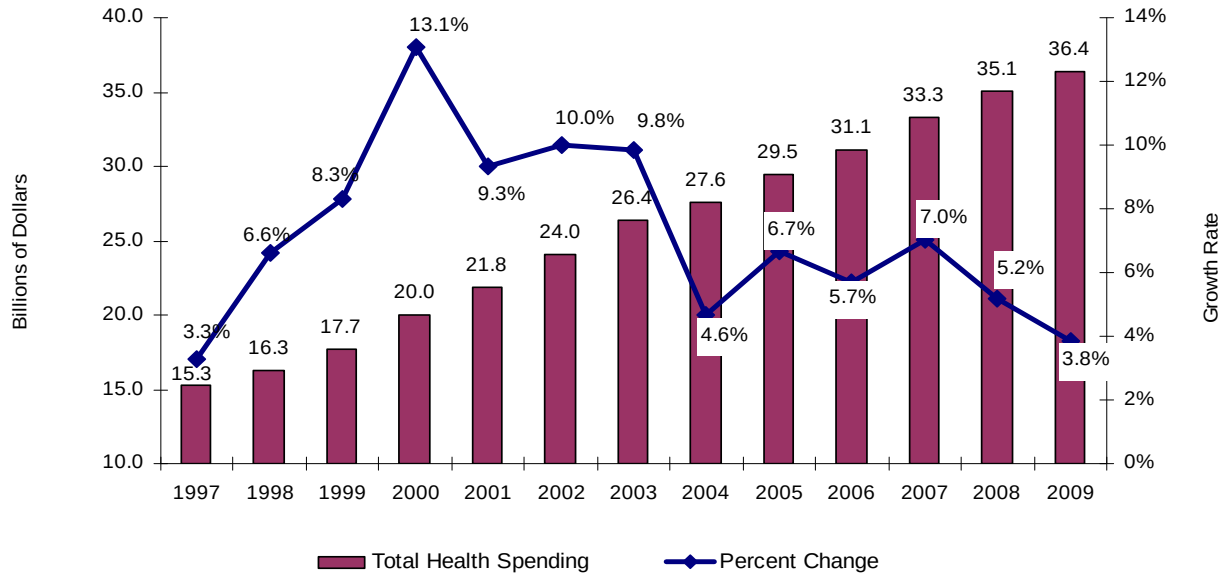
Health Care Spending in 2009

Minnesota health care spending grew 3.8 percent in 2009, to $36.4 billion, representing the slowest rate of growth since 1997 (see Figure 1).[5] Despite this historically low rate of growth in 2009, health spending as a share of the economy rose at the fastest one-year rate of increase since it was first measured in 1993, to 14.1 percent. This is largely the result of the drop in economic activity.

The profound effect of the economic downturn and slow recovery on Minnesotans and their health spending patterns strongly influenced spending trends. At the same time that economic activity continued to slow in the state and the nation, many Minnesotans reduced their use of health care goods and services, responding in part to a loss of private health insurance coverage and declines in income.[6]

Figure 1

Minnesota Health Care Spending and Growth Rate Trends



Source: Health Economics Program

The deceleration of private spending growth in Minnesota to 1.4 percent from an average annual growth rate of 7.9 percent drove the slowing of overall health spending growth in 2009. Steady growth of 7.4 percent in public sector health spending, driven in large part by recession-induced increases in eligibility and enrollment in public programs, offset some of this trend. At the national level where private spending grew 1.2 percent in 2009 and public spending by 7.7 percent, this dual trend of slowed private spending growth paired with rising growth in public program spending was also evident.[7]

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[5] Historic Minnesota health care spending estimates have been revised principally due to improved data on Medicare spending on behalf of Minnesota beneficiaries and benchmark revisions to the National Health Expenditure Accounts (NHEA). Additional information on data and methodology is available upon request.

[6] Minnesota Department of Health, Health Economics Program. "*Health Insurance Coverage in Minnesota, Updated Results from 2009.*"January, 2011.
Minnesota Department of Health, Health Economics Program. "*Health Insurance Premiums and Cost Drivers in Minnesota, 2009*." March, 2011

[7] The national comparison comes from the Centers for Medicare & Medicaid Services (CMS) National Health Expenditure Accounts (NHEA) Health Consumption Expenditures series, the subset of total expenditures most comparable to the Minnesota estimate.

Table 1

Minnesota and U.S. Total Health Care Expenditure Growth

	2007		2008		2009	
	MN	US	MN	US	MN	US
Public Spending	8.5%	6.7%	7.5%	6.8%	7.4%	7.7%
Private Spending	6.1%	5.2%	3.7%	2.7%	1.4%	1.2%
Total Spending	7.0%	5.9%	5.2%	4.6%	3.8%	4.3%

Source: MDH Health Economics Program, Centers for Medicare & Medicaid Services

After growing faster than the nation overall in 2007 and 2008, Minnesota health care spending growth slowed below the national growth rate in 2009 (3.8 percent vs. 4.3 percent, respectively). During the three years shown in Table 1, the gap between public and private spending growth has widened distinctly in both the U.S. and Minnesota, with public spending growth outpacing that of private spending. Again, the economic recession likely influenced this trend.

As shown in Table 2, Minnesota's per capita health care spending reached $6,913 in 2009, growing 3.1 percent relative to 2008, representing 14.1 percent of the economy. Per capita spending and spending as a share of the economy in Minnesota continued to remain well below national levels.

Table 2

Minnesota and U.S. Per Capita Health Care Spending and Share of Economy

	2005	2006	2007	2008	2009
Per Capita Spending:					
Minnesota	$5,770	$6,048	$6,420	$6,703	$6,913
U.S.	$6,392	$6,755	$7,080	$7,340	$7,590
Health Care Spending as a Share of the Economy:					
Minnesota	12.4%	12.7%	13.1%	13.4%	14.1%
U.S.	15.0%	15.1%	15.2%	15.5%	16.5%

Source: MDH Health Economics Program, Centers for Medicare & Medicaid Services, U.S. Department of Commerce

Despite the slow growth in aggregate spending, both Minnesota and the nation overall experienced rapid growth compared to previous years in the health care share of the economy in 2009. In large part, this is the result of growth in the health care sector in 2009 – albeit at slower rates - at a time when economic activity declined.

Sources of Funds

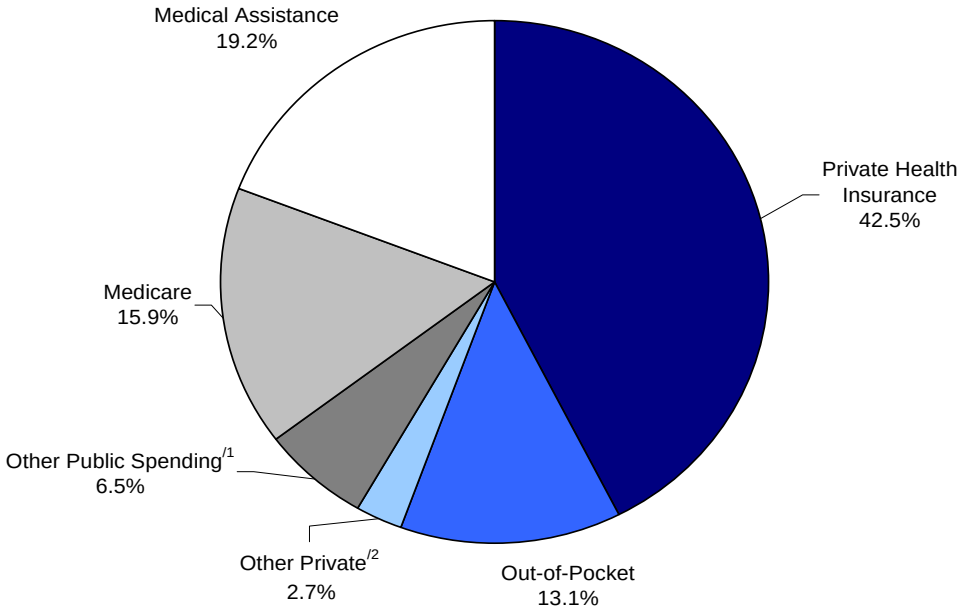
Private spending accounted for the majority of total health care spending in Minnesota in 2009 (58.3 percent). As shown in Figure 2, private health insurance contributed the largest share with 42.5 percent

of total spending. The amount Minnesotans spent out-of-pocket on health care and other private sources made up the remainder of private spending, accounting for 13.1 percent and 2.7 percent of total spending, respectively.

Public sources comprise 41.7 percent of total spending with Medical Assistance – Minnesota's Medicaid program – accounting for nearly half, 19.2 percent. Medicare spending made up 15.9 percent of spending and other public sources, which include among others, MinnesotaCare and General Assistance Medical Care, contributed 6.5 percent. Medicare continues to account for a higher portion of total health care spending in the nation than in Minnesota and the opposite is true of Medicaid (see Table 3).

Figure 2

Minnesota Heath Care Spending in 2009: Where it Came From



Source: MDH Health Economics Program
/1 Includes, among others, MinnesotaCare, General Assistance Medical Care, government workers' compensation, and Veterans Affairs
/2 Other major private payers include private workers' compensation and auto medical insurance.

Table 3 displays health care spending by payer in Minnesota and the U.S. from 2005 to 2009. While the Minnesota payer distribution has remained relatively consistent over the past few years, there were notable changes among public and private payers that occurred in 2009.

As a result of the economic downturn, private spending as a share of total health care spending fell to the lowest level since the early 1990s, when MDH began monitoring this data. Private spending accounted for the majority of spending in 2009 (58.3 percent), but the gap between private and public spending continued to narrow. Private expenditures account for a larger share of total spending in Minnesota than the nation where the gap between private and public health care spending has been narrowing more rapidly and the distribution splits almost evenly in 2009 (see Table 3).

Table 3

Minnesota and U.S. Shares of Health Care Spending by Payer

Shares of Minnesota Health Care Spending by Payer

	2005	2006	2007	2008	2009
Public Spending, Total	39.3%	38.9%	39.4%	40.3%	41.7%
Medicare	15.2%	15.5%	15.3%	15.5%	15.9%
Medicaid	18.0%	17.6%	18.3%	18.7%	19.2%
Other Public Spending /1	6.0%	5.9%	5.9%	6.1%	6.5%
Private Spending, Total	60.7%	61.1%	60.6%	59.7%	58.3%
Private Health Insurance	43.0%	44.3%	43.8%	43.3%	42.5%
Out-of-Pocket	14.7%	14.0%	14.0%	13.7%	13.1%
Other Private /2	3.0%	2.8%	2.7%	2.7%	2.7%

Shares of U.S. Health Care Spending by Payer/3

	2005	2006	2007	2008	2009
Public Spending, Total	45.2%	46.1%	46.5%	47.4%	49.0%
Medicare	18.0%	20.0%	20.2%	20.8%	21.6%
Medicaid	17.1%	16.0%	16.1%	16.1%	16.8%
Other Public Spending /1	10.2%	10.1%	10.2%	10.4%	10.6%
Private Spending, Total	54.8%	53.9%	53.5%	52.6%	51.0%
Private Health Insurance	36.9%	36.4%	35.8%	35.4%	34.4%
Out-of-Pocket	14.0%	13.5%	13.6%	13.3%	12.8%
Other Private /2	3.9%	4.0%	4.2%	3.8%	3.8%

Source: MDH Health Economics Program, Centers for Medicare & Medicaid Services
/1 Major components of other public spending are MinnesotaCare, General Assistance Medical Care, government workers' compensation and Veterans Administration
/2 Other major private payers include private workers' compensation and auto medical insurance
/3 U.S. comparison - CMS National Health Expenditure Accounts, Health Consumption Expenditures. This does not include research and investment.

Medical Assistance gained nearly a full percentage point from 2007, reaching 19.2 percent of total expenditures in 2009. However, because Medical Assistance enrollment growth outpaced expenditure growth, per enrollee spending declined in 2009.

Other public spending which includes MinnesotaCare and General Assistance Medical Care climbed to 6.5 percent of total expenditures. MinnesotaCare alone increased 24 percent from 2008 to 2009, yet remains a small portion of total spending, 1.7 percent. Medicare also increased its share of total spending in Minnesota moving from 15.3 percent in 2007 to 15.9 percent.

The portion of total spending contributed by patients out of pocket has declined since 2005 in both Minnesota and the nation. In 2009 the amount Minnesotans spent out of pocket declined by 0.6 percent, or $28 million. While this declining trend sounds counterintuitive to individuals with private health insurance who have experienced steady increases in cost sharing, it is likely the result of two factors magnified by the recession:

- First, the private spending proportion declined as individuals decreased health care utilization in response to unfavorable income trends, increased cost sharing, or the loss of private coverage.

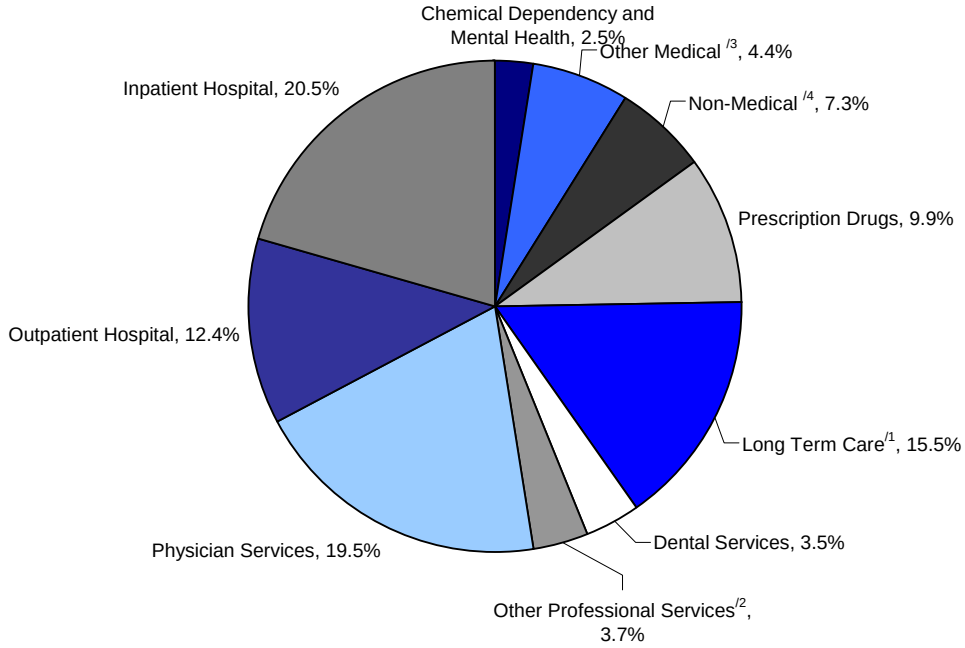
- Second, the public spending proportion increased, resulting from faster enrollment growth in public health insurance programs and growth in other public spending, both typically requiring little cost sharing.[8]

Spending by Type of Service

Figure 3 shows 2009 health care spending by service category. Hospital spending (inpatient and outpatient combined) together with spending for physician services constituted about half (52.4 percent) of total spending in 2009. Long-term care and prescription drugs also represented sizable portions of spending, 15.5 and 9.9 percent, respectively. Non-medical spending – health plan administrative expenses and the net cost of insurance – accounted for 7.3 percent of total health care spending.

Figure 3

Minnesota Health Care Spending in 2009: Where it Went



Source: MDH Health Economics Program
/1 Includes home health care services
/2 Includes services provided by health practitioners who are not physicians or dentists
/3 Includes public health, durable medical equipment, correctional facility health spending, Indian Health Services, TRICARE and not itemized spending.
/4 Includes health plan administrative expenses and revenues in excess of expenses.

[8] Minnesota Department of Health, Health Economics Program "*Health Insurance Premiums and Cost Divers in Minnesota, 2009.*" Issue Brief, March, 2011; Milliman, Inc. "*2009 Milliman Medical Index.*" May 2009. Available from: http://publications.milliman.com/periodicals/mmi/pdfs/milliman-medical-index-2009.pdf; and S. Goodell and K Swartz. "*Cost-Sharing: Effects on Spending and Outcomes*." The Robert Wood Johnson Foundation and Harvard School of Public Health. The Synthesis Project, Policy Brief No. 20. December, 2010.

In addition to trends in the distribution of spending among service categories, Table 4 displays detailed spending amounts and growth rates from 2005 to 2009. Similar to the distribution of funding sources, the distribution of spending categories has also been relatively consistent over time.

Table 4

Minnesota Health Care Spending by Type of Expense

Millions of Dollars

	2005	2006	2007	2008	2009
Inpatient Hospital	$5,889	$6,313	$6,881	$7,225	$7,479
Outpatient Hospital	$3,129	$3,388	$3,723	$4,201	$4,497
Physician Services	$6,080	$6,573	$6,959	$7,088	$7,107
Long Term Care[/1]	$4,769	$4,820	$5,099	$5,411	$5,646
Prescription Drugs	$3,468	$3,435	$3,495	$3,426	$3,601
Dental	$1,103	$1,193	$1,317	$1,392	$1,286
Other Professional Services[/2]	$928	$1,025	$1,190	$1,304	$1,356
Other Spending[/3]	$4,099	$4,390	$4,665	$5,013	$5,433
Total	$29,464	$31,136	$33,330	$35,061	$36,405

Distribution of Spending

Inpatient Hospital	20.0%	20.3%	20.6%	20.6%	20.5%
Outpatient Hospital	10.6%	10.9%	11.2%	12.0%	12.4%
Physician Services	20.6%	21.1%	20.9%	20.2%	19.5%
Long Term Care[/1]	16.2%	15.5%	15.3%	15.4%	15.5%
Prescription Drugs	11.8%	11.0%	10.5%	9.8%	9.9%
Dental	3.7%	3.8%	4.0%	4.0%	3.5%
Other Professional Services[/2]	3.1%	3.3%	3.6%	3.7%	3.7%
Other Spending[/3]	13.9%	14.1%	14.0%	14.3%	14.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Rates of Growth

Inpatient Hospital	7.2%	9.0%	5.0%	3.5%
Outpatient Hospital	8.3%	9.9%	12.9%	7.1%
Physician Services	8.1%	5.9%	1.8%	0.3%
Long Term Care[/1]	1.1%	5.8%	6.1%	4.3%
Prescription Drugs	-1.0%	1.7%	-2.0%	5.1%
Dental	8.1%	10.5%	5.7%	-7.6%
Other Professional Services[/2]	10.5%	16.1%	9.6%	4.0%
Other Spending[/3]	7.1%	6.3%	7.5%	8.4%
Total	5.7%	7.0%	5.2%	3.8%

Source: MDH Health Economics Program
[/1] Includes home health care services
[/2] Includes services provided by health practitioners who are not physicians or dentists
[/3] All other spending, including chemical dependency and mental health services, durable medical goods, and non-medical health care spending

Spending for inpatient and outpatient hospital services and physician services continued to account for more than half of spending in 2009, with growth in these categories slowing markedly compared with previous years likely as a result of the recession.[9] Declining utilization contributed to slower expenditure growth for inpatient and outpatient hospital services which fell from 5.0 percent to 3.5 percent and from 12.9 percent to 7.1 percent, respectively.[10] Spending for physician services remained nearly flat, increasing just 0.3 percent.

Following years of slow growth or decline, spending on prescription drugs increased 5.1 percent relative to 2008. Nationally, the price of pharmaceuticals and the rate at which patients filled prescriptions increased relative to 2008.[11]

Spending on dental care decreased 7.6 percent in 2009. Dental spending is more sensitive than other categories to the impact of a recession because consumers are typically responsible for a greater share of total dental spending than other services.[12] Nationally, dental spending declined slightly by 0.1 percent.[13]

Growth in outpatient hospital, long-term care and other professional services spending each slowed markedly compared to 2008 yet outpaced overall growth. Growth in other spending, which includes chemical dependency, mental health, durable medical goods and non-medical spending, was the only category to accelerate in 2009, from 7.5 percent in 2008 to 8.4 percent.[14]

[9] A. Lusardi, D. Schneider, and P. Tufano. "*The Economic Crisis and Medical Care Usage*." NBER Working Paper 15843. National Bureau of Economic Research. Cambridge, MA. March, 2010.
[10] In 2009, Minnesota hospital admissions, inpatient days and outpatient surgeries fell by 3.2 percent, 5.3 percent and 1.7 percent, respectively; outpatient visits continued to increase. Minnesota Department of Health, Health Economics Program, unpublished analysis of annual hospital reports.
[11] IMS Health. "*IMS Health Reports U.S. Prescription Sales Grew 5.1 Percent in 2009, to $300.3 Billion*." Press Release April 1, 2010. Available from: http://www.imshealth.com/portal/site/imshealth/menuitem.a46c6d4df3db4b3d88f611019418c22a/?vgnextoid=d690a27e9d5b7210VgnVCM100000ed152ca2RCRD&vgnextfmt=default
[12] According to the U.S. Agency for Healthcare Quality's Medical Expenditure Panel Survey (MEPS), Midwest non-institutionalized residents paid 48 percent of total dental expenditures out-of-pocket in 2008, the latest year for which data was available.
[13] See note 1.
[14] Historical data does not allow for a comparable representation of other spending shown in greater detail in Figure 3.

Health Care Spending Projections

Minnesota's 2008 health reform law was designed to slow health care spending growth in the state through a variety of initiatives including the use of health care homes, payment and quality reforms, and efforts to reduce obesity and tobacco use among residents.[15] To evaluate the effect of Minnesota's health reform law, MDH is required to establish baseline health care spending projections for Minnesota and annually compare them to estimated actual spending, beginning with estimates for calendar year 2008. The projections predict what health care spending in Minnesota would have been had health care reform not taken effect. Thus, differences between estimated actual spending and projections reported in this section form the basis for estimating savings associated with the enacted reforms.

For this analysis, MDH is required to exclude Medicare and long-term care from its estimates. With this narrower definition of health spending, total health care expenditures in Minnesota totaled $25.7 billion in 2009. Medicare spending accounted for $5.8 billion dollars of the difference to total spending and (non-Medicare) long-term care for the remaining $5.0 billion. Projections of both total spending and spending less Medicare and long-term care are discussed throughout this section.

Methodology

MDH contracted with Mathematica Policy Research to develop the baseline projection model and make periodic updates to reflect changes in the factors used to project health care spending.[16] The methods used in these baseline projections are similar to those employed by CMS to project national health care expenditures. In Minnesota, the projections of health care spending derive from two sources: 1) a series of econometric models of private health care spending,[17] and 2) public health care spending projections based on forecasts from the Minnesota Department of Human Services and the CMS actuary. The econometric models for private spending are macroeconomic projection models - they extract the historical relationship between health care spending in Minnesota and relevant macroeconomic variables to forecast future health care spending in the state.

In considering the results associated with health care spending projections, it is important to note that econometric models, such as the ones employed for this analysis, rely on the structural relationships among variables continuing into future years. Volatility during the economic downturn in the macroeconomic variables used in the projection changed these relationships, thereby complicating predictions of future spending. In addition, inherent uncertainty associated with future macroeconomic trends (e.g., in Minnesota employment and the gross state product), could as well affect the accuracy of expenditure projections.

MDH published initial baseline health care spending projections through 2018 in June of 2009 and updated the projections in June 2010 to capture the effects of the recession and recovery. In conjunction with the 2009 actual health care spending estimate, the projection baseline has been extended to 2019 and revised to refresh data inputs to the model and make necessary refinements to account for volatility

[15] For more information on these initiatives, visit: http://www.health.state.mn.us/healthreform/index.html
[16] Further methodological detail produced by Mathematica is available upon request.
[17] The aggregate private spending model builds off MDH's historical spending estimates and includes U.S. nominal private health care spending and Minnesota-specific estimates of nominal per capita gross state product, real per capita income, per capita employment, percent uninsured; included is also a time trend variable. Each service category and payer is estimated separately, with spending category models generally following the specification of the total spending model to which price indices for each category are added.

in macroeconomic trends caused by the recession. CMS has also made changes to their national health care spending projection model.[18]

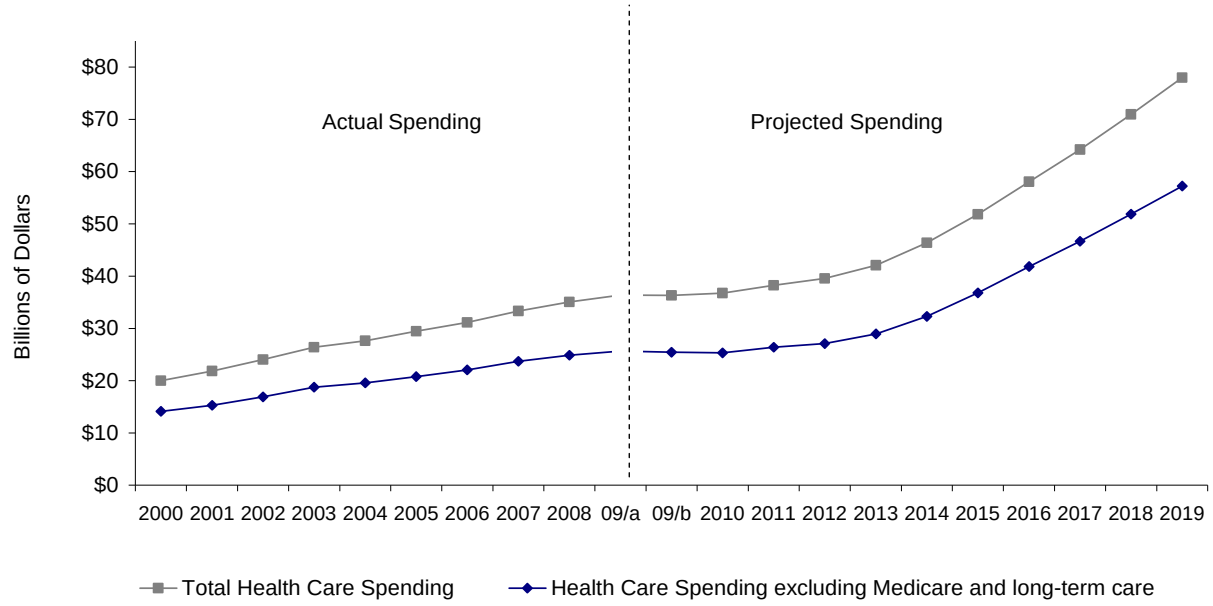
Although the MDH baseline spending projections were designed to incorporate the effect associated with external factors unrelated to Minnesota health reform, at this point they do not incorporate the potential impact of federal health reform legislation in Minnesota through the "Patient Protection and Affordable Care Act," (ACA). Given that there are state decisions yet to be made regarding the specific implementation of the ACA in Minnesota, it is premature to estimate the influence of the ACA on health care spending in the state.

Baseline Projections

Figure 4 examines actual and projected total health care spending and spending excluding Medicare and long-term care from 2000 to 2019. The figure contains both an actual and a projected value for 2009. The model predicts total health care spending in Minnesota to increase at an average annual rate of 7.9 percent from 2009 to 2019 compared to an average annual growth rate of 8.6 percent observed over the past 10 years. The model predicts spending growth to remain slow in the near-term as the recession and slow recovery continue their downward pressure on utilization patterns.[19] Growth is anticipated to rebound in later years as recovery takes a stronger hold on the economy. Spending is projected to reach $78.0 billion by 2019, more than double the rate of spending in 2009.

Figure 4

Health Care Spending in Minnesota Without the Impact of Reform, 2000 to 2019



Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.
/a Actual spending; /b Projected spending

[18] CMS updated national health spending projections in June, 2010 to account for the Children's Health Insurance Reauthorization Act (CHIPRA) and the American Recovery and Reinvestment Act (ARRA). In September, 2010 the projection model was updated again to include adjustments for the anticipated effects of the ACA.

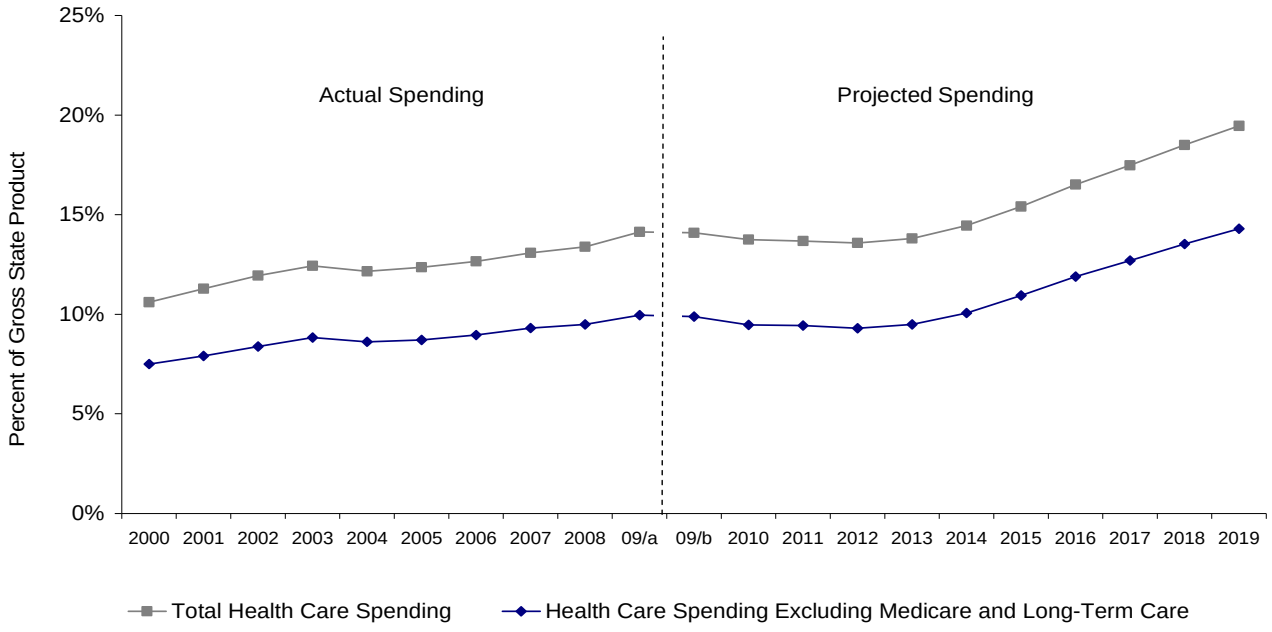
[19] PWC Health Research Institute. *"Behind the Numbers: medical cost trends for 2012."* p.11, May 2011.

Health care spending excluding Medicare and long-term care (the lower line) is anticipated to reach $57.3 billion by 2019, also more than double the current level of spending. This represents average annual growth of 8.5 percent, the same rate of growth over the past ten years.

Health care spending as a share of the economy is expected to remain steady in the near-term and then accelerate in 2014 and beyond, reaching 19.5 percent for total expenditures and 14.3 percent for non-Medicare and non-long-term care in 2019 (see Figure 5).[20]

Figure 5

Minnesota Health Care Spending as a Share of the Economy, 2000-2019 (Excludes the Impact of Reform)



Sources: Spending estimates - MDH historical spending estimates; projections from Mathematica Policy Research. Gross state product - historical data from the U.S. Department of Commerce, Bureau of Economic Analysis; projections use nominal U.S. GDP projection.
/a Actual spending; /b Projected spending

As shown in Table 5, whether or not Medicare and long-term care are excluded from the analysis, private spending remains the primary source of health care spending in Minnesota throughout the projection period. However, the share of total spending from private sources continues its persistent decline, from 58.3 percent in 2009 to 56.5 percent in 2019. Growth in public health care spending is projected to remain stable throughout the next decade, whereas private spending growth will fluctuate, starting slow in the near-term but outpacing public spending growth beginning in 2014.

[20] The analysis applies growth in U.S. GDP projections to historical estimates of the gross state product for Minnesota produced by the U.S. Department of Commerce, Bureau of Economic Analysis to project future values of Minnesota gross state project.

Table 5

Public and Private Health Care Spending, 2000 to 2019 (billions of dollars)

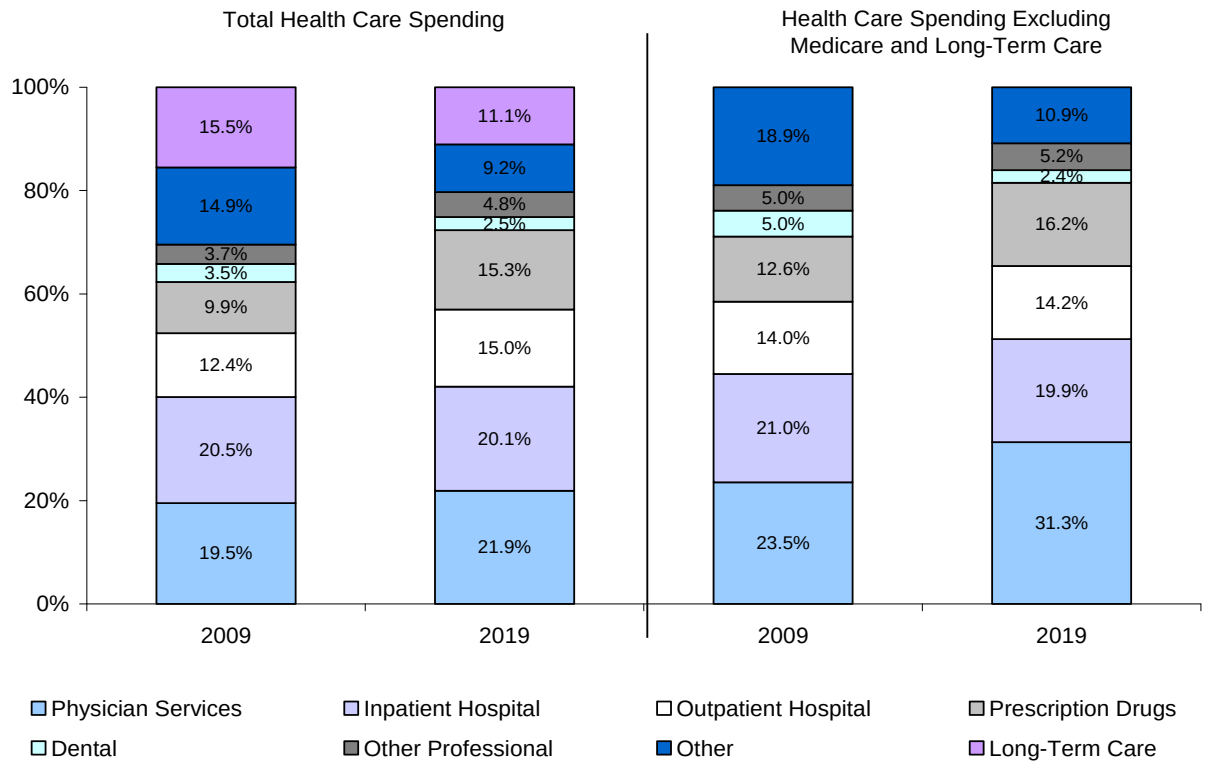
	Total Health Care Spending			Spending Excluding Medicare and Long-term Care		
	Private	Public	Total	Private	Public	Total
Actual						
2000	$12.6	$7.4	$20.0	$11.5	$2.6	$14.1
2001	$13.4	$8.4	$21.8	$12.3	$3.0	$15.3
2002	$14.6	$9.4	$24.0	$13.4	$3.5	$16.9
2003	$16.1	$10.3	$26.4	$14.8	$3.9	$18.7
2004	$16.8	$10.8	$27.6	$15.5	$4.1	$19.6
2005	$17.9	$11.6	$29.5	$16.5	$4.2	$20.8
2006	$19.0	$12.1	$31.1	$17.7	$4.4	$22.0
2007	$20.2	$13.1	$33.3	$18.8	$4.9	$23.7
2008	$20.9	$14.1	$35.1	$19.5	$5.4	$24.8
2009	$21.2	$15.2	$36.4	$19.8	$5.9	$25.7
Projected						
2009	$21.1	$15.2	$36.3	$19.5	$5.9	$25.4
2010	$20.7	$16.1	$36.8	$19.2	$6.1	$25.3
2011	$20.8	$17.4	$38.2	$19.3	$7.1	$26.4
2012	$20.5	$19.1	$39.6	$19.1	$7.9	$27.1
2013	$21.4	$20.7	$42.1	$20.0	$8.9	$28.9
2014	$23.9	$22.5	$46.4	$22.5	$9.8	$32.3
2015	$27.7	$24.2	$51.8	$26.1	$10.8	$36.8
2016	$31.9	$26.2	$58.1	$30.1	$11.7	$41.8
2017	$35.8	$28.5	$64.2	$33.8	$12.8	$46.7
2018	$39.9	$31.1	$71.0	$37.9	$14.0	$51.9
2019	$44.1	$33.9	$78.0	$41.9	$15.4	$57.3

Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.

Spending across service types for both total health care spending and spending less Medicare and long-term care are found in Figure 6. The shares of health care spending for physician services and prescription drugs are expected to increase from 2009 to 2019 both in total and excluding Medicare and long-term care. The model predicts shares of inpatient hospital, long-term care and other spending to decrease over the next decade.

Figure 6

Distribution of Health Care Spending by Type of Service



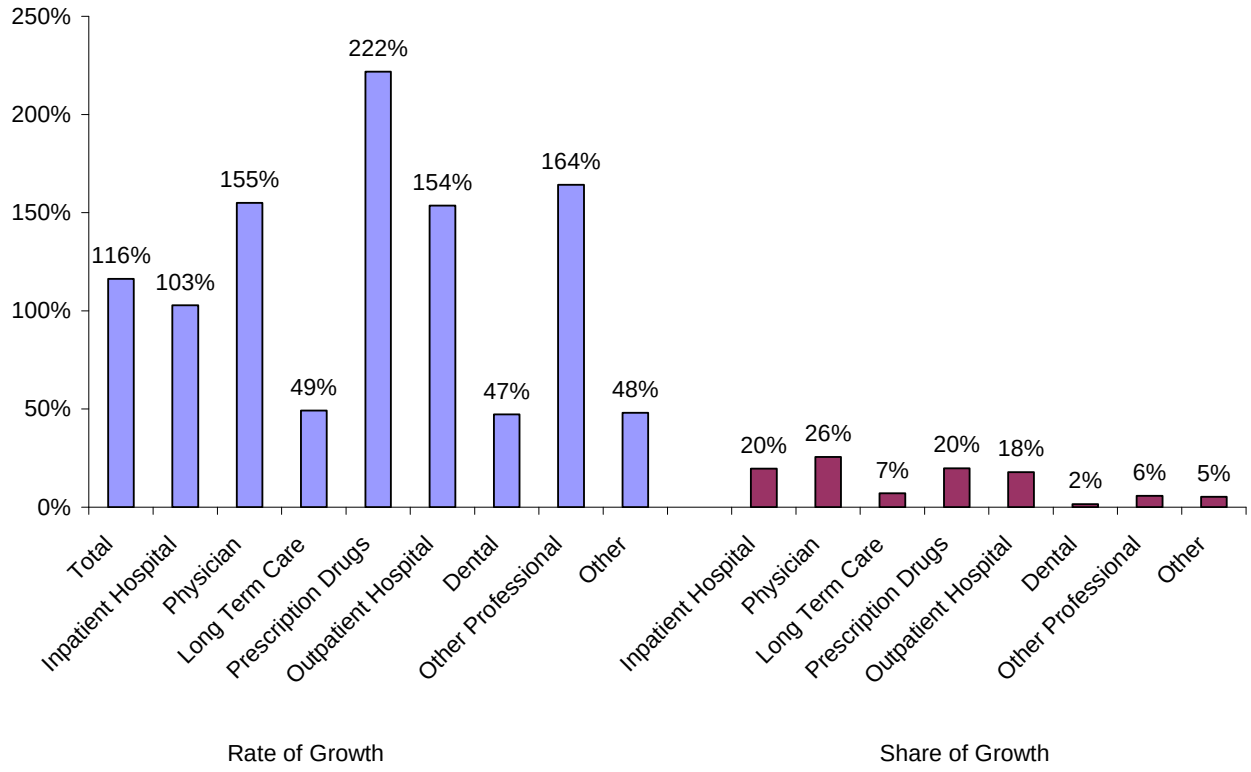
Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.

To further examine trends in spending growth among service types, Figure 7 illustrates the growth rate from 2009 to 2019 within each spending category and the contribution of each to total growth over that period.

In total, spending is expected to increase 116 percent in the next decade. Prescription drugs, other professional services and physician services are anticipated to experience the strongest growth, 222 percent, 164 percent and 155 percent, respectively. The proportion of total spending (Figure 6), in addition to the rate of growth within the spending category (first set of bars in Figure 7), influence the contribution to total growth. For instance, while the growth rates in spending for inpatient hospital services are somewhat moderate in comparison to other categories, these two combined will contribute one-third of total growth by 2019, because they account for about one-third of total spending. Together with physician spending, spending for hospital services accounts for more than 60 percent of growth between 2009 and 2019.

Figure 7

Projected Health Spending Growth, 2009 to 2019



Source: MDH Health Economics Program

Comparisons of Actual and Projected Spending

When actual spending falls below projected levels, state law defines this difference as savings attributable to Minnesota health reform enacted in 2008.[21] As in 2008, actual health care spending in Minnesota in 2009, both in total and total less Medicare and long-term care, marginally exceeded the 2009 projection, by $119.1 million, or a difference of 0.3 percent, and $212 million, or 0.8 percent, respectively (see Table 6). By this analysis, the impact of the Minnesota 2008 reforms did not produce measurable savings in 2009. This is consistent with the implementation schedule of the Minnesota health reform law, which anticipates full implementation of components of the law following 2009.

Table 6

Difference between Actual and Projected Health Care Spending in 2009 (in Millions)

	Actual Spending	Projected Spending	Actual Less Projected	%
Total Spending	**$36,404.9**	**$36,285.8**	**$119.1**	**0.3%**
Public	$15,178.4	$15,178.4	$0.0	0.0%
Private	$21,226.5	$21,107.4	$119.1	0.6%
Total Spending less Medicare & Long Term Care	**$25,651.0**	**$25,439.3**	**$211.7**	**0.8%**
Public	$5,892.0	$5,892.0	$0.0	0.0%
Private	$19,759.0	$19,547.3	$211.7	1.1%

Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.

For years in which actual spending remains below what was projected, MDH is required to determine the proportion of the difference attributable to state-administered programs. Although this condition was not met, Table 7 details the state-administered portion of health care spending in 2009, excluding Medicare and long-term care which would be used to determine the public share of savings in 2009. Medical Assistance, MinnesotaCare, General Assistance Medical Care and the State Employee Group Insurance Program combined account for one-fifth ($5.1 billion) of health care spending less Medicare and long-term-care.

[21] Minnesota Statutes Chapter 62U.10, Subd. 3 through 5.

Table 7

Spending for State Administered Programs as a Percent of Total Spending, 2009

	Actual Spending (Billions)	Percent
Total Spending [/1]	**$25.7**	
Spending Not State Administered	**$20.5**	**80.0%**
Total State Administered Programs [/2]	**$5.1**	**20.0%**
Medical Assistance	$3.7	14.3%
MinnesotaCare	$0.6	2.3%
General Assistance Medical Care	$0.3	1.3%
State Employee Group Insurance Program	$0.5	2.1%

[/1] Excludes spending for Medicare and long term care
[/2] Excludes spending for long term care

Source: MDH Health Economics Program

Summary

The recent recession and slow recovery influenced Minnesota health care spending in 2009. Health care spending grew at a historically slow pace of 3.8 percent over the 2008 estimate, bringing total health care spending in Minnesota to $36.4 billion in 2009. Despite the low rate of growth in 2009, health spending as a share of the economy rose at the fastest one-year rate of increase since it was first measured in 1993, to 14.1 percent, as total economic activity declined.

The Minnesota projection model predicts continued slow health care spending growth in the state for 2010 through 2012, both in total and less Medicare and long-term care. Nonetheless, health care spending is projected to more than double in the coming decade, absent the effects of state reform (and not considering federal reform implementation). By 2019, total health care spending is expected to reach $78.0 billion and account for 19.5 percent of the Minnesota economy.

In the two years MDH has compared actual to projected health care spending, actual spending has exceeded the projection by a small margin. Consistent with expectations, this suggests that savings related to Minnesota health reform enacted in 2008 will not materialize until the law is more fully implemented.

Appendix A: Actuarial Certification by Towers Watson

TOWERS WATSON

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May 23, 2011

Ms. April Todd-Malmlov
Director, Health Economics Program
Minnesota Department of Health
85 E Seventh Place, Suite 220
Saint Paul, MN 55101

Dear Ms. Todd-Malmlov:

Actuarial Certification

Over the course of the past several weeks Towers Watson has provided actuarial review of the final estimates of state-wide health expenditures in Minnesota developed by the Minnesota Department of Health (MDH). Our review considered the extensive tables that MDH provided, presenting sources of funding and categories of state health care expenditures for 2009 and previous years. Our review also included examination of supporting documentation, discussion of data sources and methodologies, and requests for additional documentation and clarification.

Based on this review, we find that the data sources and methodologies that MDH has used are valid and reasonable. We further certify that the health spending estimates for 2009, including state-wide health care expenditures totaling $36.4 billion and total spending less Medicare and long-term care in the amount of $25.7 billion, are reasonable based on our review of the data used, the methodologies employed, and health care spending trends observed nationally. The tables on the following page summarize these estimates.

Best Regards,

Stuart H. Alden, FSA, MAAA, FCA
Towers Watson

cc: Deborah Chollet – Mathematica Policy Research
Roland McDevitt – Towers Watson

Table 1
Where Minnesota Health Care Spending Came From in 2009

Source of Funding	Total Spending (Millions)	%	Total Spending Less Medicare & LTC (Millions)	%
Medicare	$ 5,788,064	15.9%	*n/a*	
Medical Assistance	$ 7,006,425	19.2%	$ 3,662,652	14.3%
Other Public	$ 2,383,924	6.5%	$ 2,229,312	8.7%
Private Health Insurance	$ 15,467,352	42.5%	$ 15,260,617	59.5%
Other Private	$ 981,767	2.7%	$ 981,767	3.8%
Out of Pocket	$ 4,777,379	13.1%	$ 3,516,625	13.7%
All Sources of Funding	**$ 36,404,911**	**100.0%**	**$ 25,650,974**	**100.0%**

Major sources of "other public" include the state public health programs (MinnesotaCare, and General Assistance Medical Care) public workers compensation, public health spending, and Veterans Administration

"Other Private" includes private workers compensation and auto medical insurance.

Table 2
Where Minnesota Health Care Dollars Were Spent in 2009

Spending Category	Total Spending (Millions)	%	Total Spending Less Medicare & LTC (Millions)	%
Hospital	$ 11,976,283	32.9%	$ 8,969,847	35.0%
Physician Services	$ 7,106,834	19.5%	$ 6,035,614	23.5%
Long-Term Care (inc. Home Care)	$ 5,646,252	15.5%	*n/a*	
Prescription Drugs	$ 3,600,959	9.9%	$ 3,236,834	12.6%
Dental	$ 1,285,912	3.5%	$ 1,276,754	5.0%
Other Professional Services	$ 1,355,614	3.7%	$ 1,272,221	5.0%
Other Spending	$ 5,433,057	14.9%	$ 4,859,703	18.9%
Total Spending	**$ 36,404,911**	**100.0%**	**$ 25,650,974**	**100.0%**

"Other professional services" includes spending for services by private-duty nurses, chiropractors, podiatrists and other health practitioners who are not physicians or dentists.

"Other spending" includes spending for durable medical goods, chemical and mental health, administration and the net cost of insurance.

Source: MDH Health Economics Program


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