

# Minnesota Health Care Spending and Projections, 2010

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Minnesota Department of Health

July, 2012



Health Economics Program  
Division of Health Policy  
PO Box 64882  
St. Paul, MN 55164-0882  
(651) 201-3550  
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*Protecting, maintaining and improving the health of all Minnesotans*

June 1, 2012

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 Abeler  
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

Dear Senator Hann, Representative Abeler and Representative Gottwalt:

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 2010. 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 2010 was \$25.77 billion. This is \$20.6 million (0.1%) *above* the projected health care spending level for 2010 (\$25.75 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 2013 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

Each year, the Minnesota Department of Health (MDH) produces an estimate of actual health care spending in the state along with projections of future health care spending to meet the requirements of Minnesota Statutes Chapter 62U.10<sup>1</sup> and evaluate the influence of Minnesota's 2008 health reform law on health care spending. The Minnesota health care spending estimate represents the total amount expended by all payers on health care goods and services for Minnesota residents throughout the state, including individuals, businesses and state and federal payers. The estimate is constructed from aggregated data collected from payers<sup>2</sup> and largely follows the methods developed by the Centers for Medicare & Medicaid Services (CMS) to estimate and project health care spending nationally.<sup>3</sup> This report presents a detailed estimate of health care spending in Minnesota in 2010, projections of future health care spending through 2020 and a comparison of actual and projected spending for calendar year 2010.

Key findings in 2010 include:

- Health care spending in Minnesota reached 37.7 billion dollars, accounting for 13.9 percent of the state's economy.
- Health care spending grew just 2.2 percent from 2009. Private spending remained nearly constant, increasing by 0.3 percent and public spending grew at a slow pace of 4.7 percent.
- Per capita spending in Minnesota reached \$7,090, well below the national per capita spending estimate.
- Health care spending in Minnesota is expected to more than double over the next decade in the absence of reforms to curb spending growth, including those passed in 2008.
- Estimated actual spending excluding Medicare and long-term care in 2010 was \$20.6 million above the projection.

## Health Care Spending in 2010

A continued deceleration of health care spending growth characterizes the 2010 estimate. As shown in Figure 1, health care spending growth has been slowing since 2007 and spending grew just 2.2 percent between 2009 and 2010. While growth has been slowing in recent years, the level of spending in the aggregate continues to rise. In 2010, spending reached \$37.7 billion in Minnesota or \$92 per capita above 2009 levels. During 2010 Minnesota was experiencing an unsteady economic recovery with mixed employment and wage indicators and a persistently high uninsurance rate estimated above 9 percent.<sup>4</sup>

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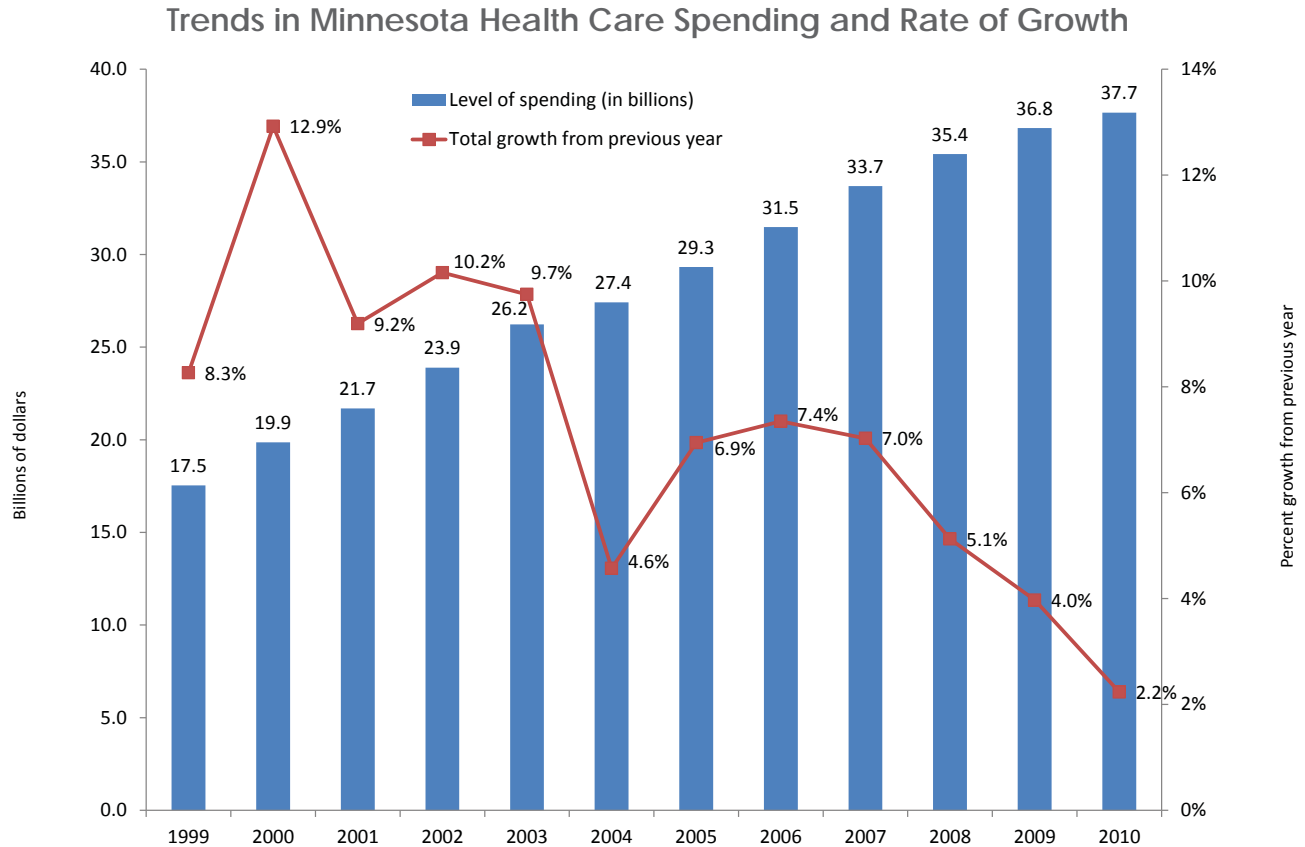
<sup>1</sup>Minnesota's 2008 health reform law was designed to slow health care spending growth in the state through a variety of initiatives including the use of health care homes, payment and quality reforms, and efforts to reduce obesity and tobacco use among residents. For more information on these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

<sup>2</sup>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, recognizing that Minnesota data to directly estimate spending from these sources is not available.

<sup>3</sup>Both MDH and CMS update historical data to reflect changes in the underlying health expenditure data and methodology. As a result, estimates presented in this report differ from earlier published estimates of historical health care spending.

<sup>4</sup>Minnesota Management and Budget, Minnesota Outlook (February 2011) available from: <http://www.mmb.state.mn.us/doc/fu/11/outlook-feb11.pdf> and Minnesota Department of Health, Health Economics Program, "Health Insurance Coverage in Minnesota: Early Results from the 2011 Minnesota Health Access Survey," March 2012.

Figure 1



Source: MDH Health Economics Program

Nationally, a recession tends to influence the health care sector with a time lag;<sup>5</sup> it appears this might also be the case in Minnesota, with lingering effects of the recession, such as flat or declining incomes likely holding down the trend in 2010. However, as illustrated in Figure 1, growth has been decelerating rapidly since 2007 suggesting other factors might also be at work. One factor often cited is the increasing prevalence in the purchase of insurance products that require increased cost sharing and have been shown to reduce the level of health care spending through reduced utilization of health care spending.<sup>6</sup>

The slowing of health care spending has occurred with both public and private spending as shown in Figure 2. In 2010, health care spending from public sources grew modestly at 4.7 percent and private spending experienced an increase of less than one-third of one percent. The slow growth in private spending was driven in large parts by decreased enrollment in private insurance and lower utilization of health care services by those who remained enrolled.<sup>7</sup> Additionally, the shifts in the coverage distribution from private plans to public programs likely has had a downward effect on cost growth overall, as reimbursement rates for public programs generally remain below those of private payers.

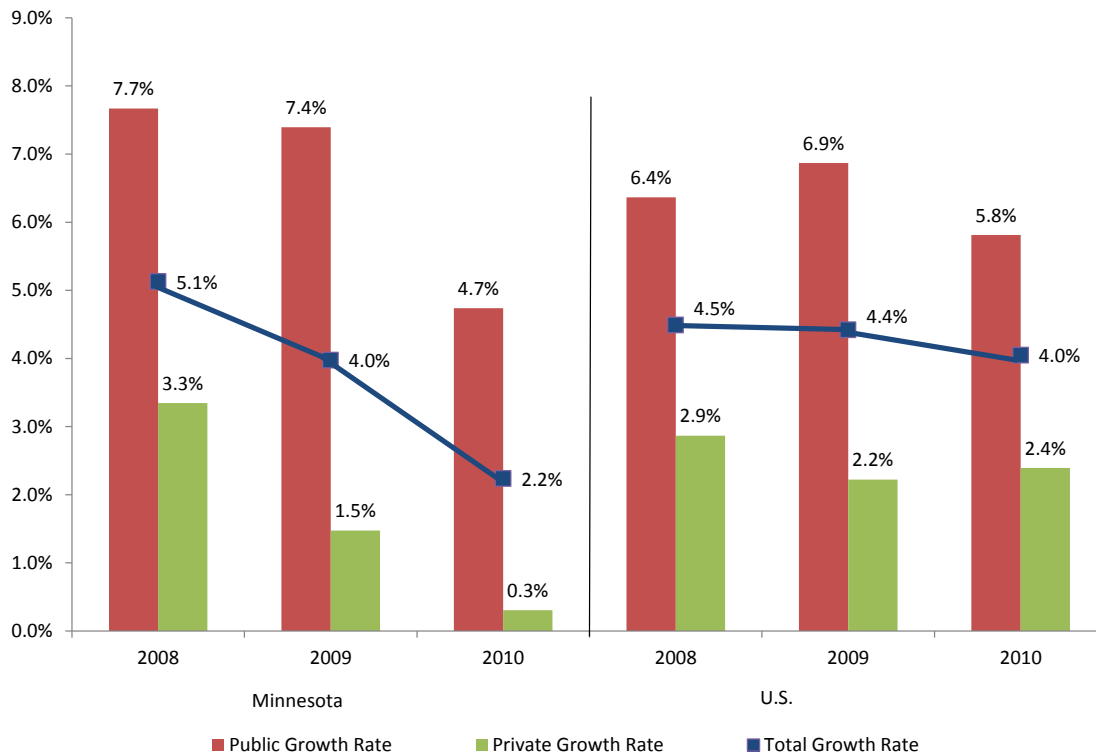
<sup>5</sup>Martin, A. et al. Growth in US Health Spending Remained Slow In 2010; Health Share Of Gross Domestic Product Was Unchanged From 2009. *Health Affairs*, 31, no.1 (2012):208-219

<sup>6</sup>Haviland, A. M. et al. Growth of Consumer-Directed Health Plans To One-Half Of All Employer-Sponsored Insurance Could Save \$57 Billion Annually. *Health Affairs*, 31, no.5 (2012):1009-1015. Cost sharing in general has been shown to be associated with reduction in care that is considered necessary as well as unnecessary. See for example: Kathleen N. Lohr, Robert H. Brook, Caren J. Kamberg, George A. Goldberg, Arleen Leibowitz, Joan Keesey, David Reboussin, and Joseph P. Newhouse. *Use of Medical Care in the RAND Health Insurance Experiment: Diagnosis- and Service-Specific Analyses in a Randomized Controlled Trial*. Santa Monica, Calif.: RAND Corporation, R-3469-HHS, December 1986.

<sup>7</sup>Minnesota Department of Health, Health Economics Program. *Health Insurance Premiums and Cost Drivers in Minnesota, 2010*



Figure 2  
Minnesota and U.S. Total Health Care Expenditure Growth



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

At the national level, health spending growth has been trending downward as well, although the deceleration has been less pronounced than in Minnesota. Similar to the trend in Minnesota, growth in spending from public sources continued to outpace private sector spending growth annually by a factor greater than two.

Resulting from the economic recession,<sup>8</sup> Minnesota experienced the largest year-over-year increase in the health care spending portion of the state's economy in 2009 as health care spending consumed 14.2 percent of Minnesota's gross state product – economic activity stagnated as health care spending continued to increase. An increase in overall economic activity following the recession in 2009,<sup>9</sup> combined with slower growth in health care spending, served to drive down the portion of the economy consumed by health spending in 2010 to 13.9 percent, just slightly above the pre-recession trend. While the same pattern is evident in the national trend, Minnesota continues to spend less on health care as a portion of the economy and per capita than the U.S. as a whole, as shown in Table 1.

In 2010, Minnesota per capita spending was \$7,090; in contrast, health care spending nationally was about \$7,900, or nearly 12 percent higher than in Minnesota.

<sup>8</sup>MDH Health Economics Program. Minnesota Health Care Spending and Projections, 2009. June 2011.

<sup>9</sup>The Minnesota economy contracted 2.9 percent from 2008 to 2009 and grew 3.2 percent from 2009 to 2010. U.S. Department of Commerce, Bureau of Economic Analysis. Accessed online May 7, 2012 [www.bea.gov](http://www.bea.gov).

Table 1

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

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

	2006	2007	2008	2009	2010
<b>Per Capita Spending:</b>					
Minnesota	\$6,165	\$6,546	\$6,773	\$6,998	\$7,090
U.S.	\$6,807	\$7,145	\$7,397	\$7,662	\$7,910
<b>Health Care Spending as a Share of the Economy:</b>					
Minnesota	12.8%	13.2%	13.5%	14.2%	13.9%
U.S.	15.2%	15.4%	15.7%	16.9%	16.8%

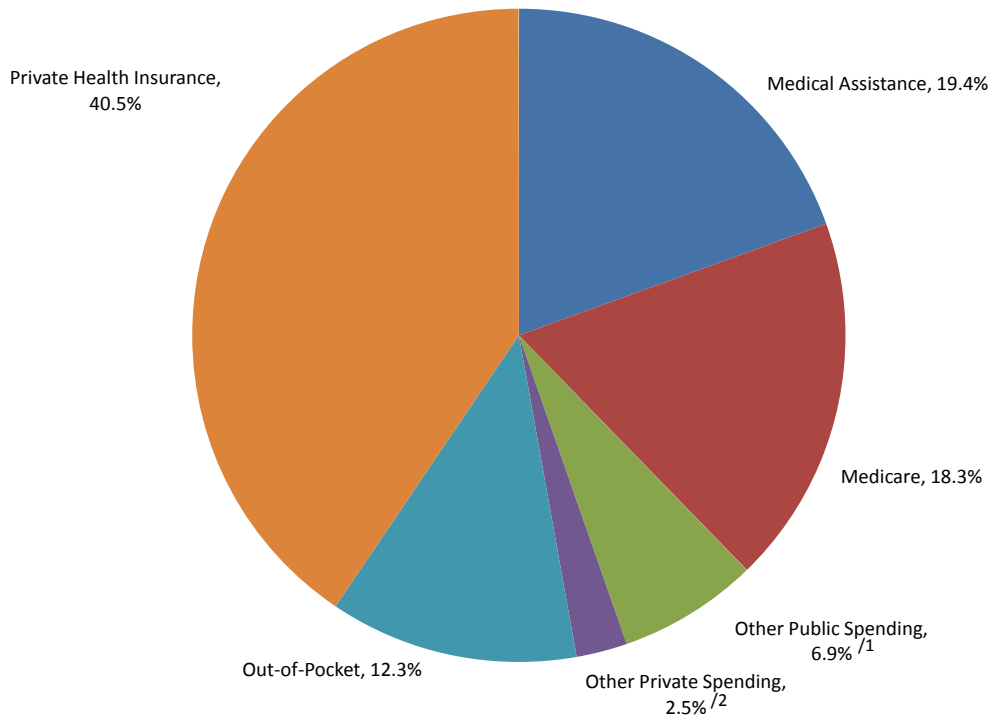
Source: MDH Health Economics Program, Centers for Medicare & Medicaid Services, U.S. Department of Commerce

## Sources of Funds

The majority of health care spending came from private funds in 2010 (55.4 percent), with private health insurance providing the largest share (40.5 percent of total spending). Patients contributed more than 12 percent of total spending out of pocket. The remaining 2.5 percent of private spending came from other sources.

Figure 3

## Minnesota Health Care Spending in 2010: Where it Came From



Source: MDH Health Economics Program

<sup>/1</sup> Includes, among others, MinnesotaCare, General Assistance Medical Care, government workers' compensation, and Veterans Affairs

<sup>/2</sup> Other major private payers include private workers' compensation and auto medical insurance

Public sources comprised the other 44.6 percent of total spending in 2010, with Medical Assistance, Minnesota's Medicaid program, accounting for 19.4 percent. Medicare, the federal program for individuals over age 65 or those who have certain disabilities, accounted for 18.3 percent of public spending. Other sources of public funding made up the remaining 6.9 percent.

The share of public spending for health has been increasing in relation to private spending for a number of years both in Minnesota and the U.S. At the national level, public and private spending splits almost evenly between public and private dollars. In Minnesota however, a majority of spending continues to come from private sources (55.4 percent of total spending), in part due to higher rates of private coverage here than nationally.

**Table 2**  
**Minnesota and U.S. Shares of Health Care Spending by Payer**

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Shares of Minnesota Health Care Spending by Payer</b>					
<b>Public Spending, Total</b>	40.5%	41.2%	42.2%	43.6%	44.6%
Medicare	17.1%	17.0%	17.4%	17.8%	18.3%
Medical Assistance	17.4%	18.1%	18.5%	19.0%	19.4%
Other Public Spending /1	6.1%	6.1%	6.3%	6.8%	6.9%
<b>Private Spending, Total</b>	59.5%	58.8%	57.8%	56.4%	55.4%
Private Health Insurance	43.0%	42.5%	41.9%	41.0%	40.5%
Out-of-Pocket	13.7%	13.6%	13.2%	12.8%	12.3%
Other Private /2	2.7%	2.7%	2.6%	2.6%	2.5%
<b>Shares of U.S. Health Care Spending by Payer<sup>/3</sup></b>					
<b>Public Spending, Total</b>	46.1%	46.4%	47.2%	48.4%	49.2%
Medicare	19.8%	20.1%	20.8%	21.3%	21.5%
Medicaid	15.8%	15.9%	16.1%	16.7%	17.2%
Other Public Spending /1	10.5%	10.4%	10.4%	10.4%	10.5%
<b>Private Spending, Total</b>	53.9%	53.6%	52.8%	51.6%	50.8%
Private Health Insurance	36.4%	36.0%	35.9%	35.3%	34.7%
Out-of-Pocket	13.4%	13.3%	13.1%	12.5%	12.3%
Other Private /2	4.0%	4.2%	3.8%	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.

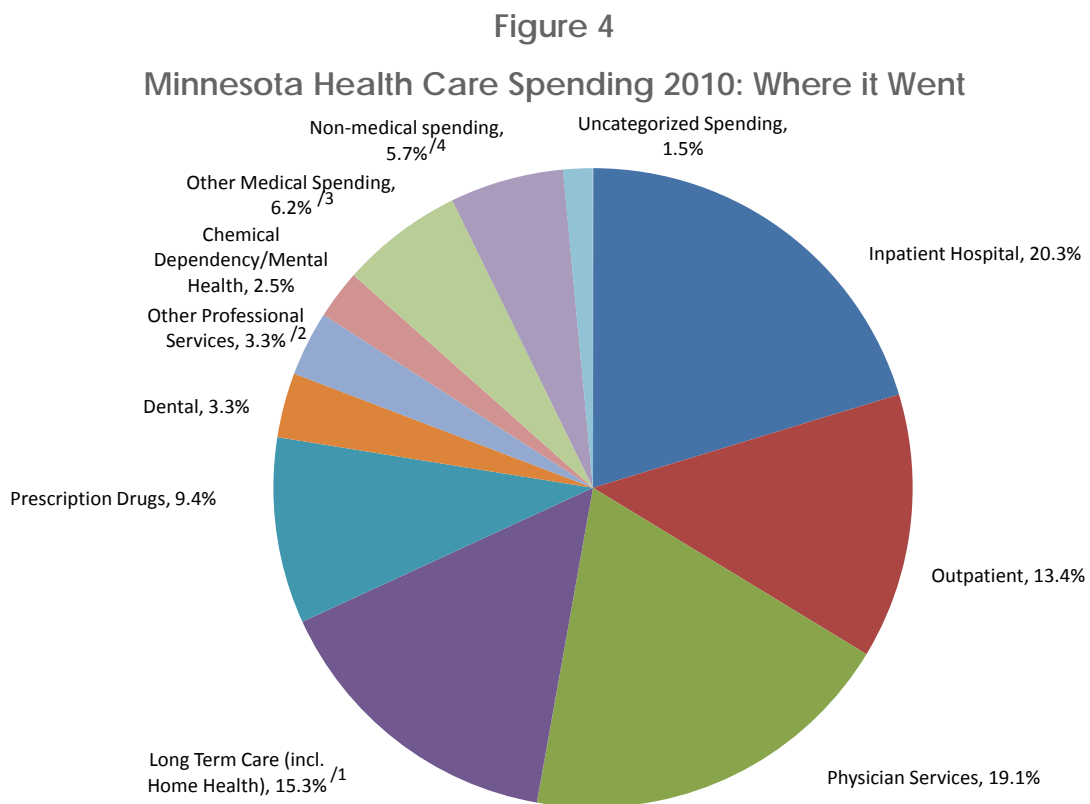
In Minnesota, the portion of spending contributed by public sources gained 1.1 percentage points due to growth in Medicare and Medical Assistance. Enrollment in both programs continued to increase in 2010. Conversely, the portion of total spending contributed by private spending fell as the portions of private health insurance and out-of-pocket spending continued to decline.

The source of funding for health care depends in large part on the distribution of health coverage in the state. Minnesota's public health care programs experienced rapid growth during the recession and growth continued into 2010.<sup>10</sup> Medicare enrollment has grown at a steady pace (2.4 percent average annually over 5 years) as a greater share of the population becomes age-eligible for Medicare benefits.

While more Minnesotans in private plans are exposed to higher deductibles and copays, the amount spent out of pocket both per capita and as a share of total spending has been declining. This is due in part to decreasing enrollment in private plans and an apparent lower utilization of health care goods and services.

### Spending by Type of Service

Inpatient and outpatient hospital services combined with physician services accounted for 52.8 percent of total spending in 2010, as shown in Figure 4. Long-term care and prescription drug spending comprised nearly one-quarter of spending, 15.3 percent and 9.4 percent, respectively.



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

Table 3 displays spending within service categories from 2006 to 2010 by dollar amounts, distribution among service categories and rates of growth. As shown, outpatient hospital spending has grown over the past five years as a portion of total spending, from 10.9 percent in 2006 to 13.4 percent in 2010, outpacing overall spending growth by a wide margin each year. Physician services and prescription drug spending have both declined somewhat over the same time period. The remaining categories of spending have been largely stable over time.

<sup>10</sup> Average monthly enrollment in Medical Assistance has increased by over 100,000 enrollees or 20.9 percent since 2007. MinnesotaCare average monthly enrollment has increased by about 23,000 enrollees or 19.8 percent since 2007. Minnesota Department of Human Services, Reports and Forecasts Division. Expenditure forecast for February 2012.

**Table 3**  
**Minnesota Health Care Spending by Type of Expense**

<u>Millions of Dollars</u>	2006	2007	2008	2009	2010
Inpatient Hospital	\$6,397	\$6,990	\$7,342	\$7,585	\$7,637
Outpatient Hospital	\$3,437	\$3,791	\$4,277	\$4,576	\$5,054
Physician Services	\$6,664	\$7,072	\$7,203	\$7,206	\$7,196
Long Term Care/1	\$4,797	\$5,082	\$5,373	\$5,635	\$5,760
Prescription Drugs	\$3,563	\$3,578	\$3,494	\$3,698	\$3,547
Dental	\$1,173	\$1,300	\$1,385	\$1,286	\$1,229
Other Professional Services/2	\$885	\$1,039	\$1,153	\$1,210	\$1,234
Chemical and Mental Health	\$698	\$741	\$826	\$915	\$937
Other Medical Spending	\$2,376	\$2,499	\$2,639	\$2,804	\$2,900
Other non-Medical Spending	\$1,493	\$1,603	\$1,731	\$1,915	\$2,158
<b>Total</b>	<b>\$31,483</b>	<b>\$33,696</b>	<b>\$35,423</b>	<b>\$36,830</b>	<b>\$37,653</b>
<u>Distribution of Spending</u>					
Inpatient Hospital	20.3%	20.7%	20.7%	20.6%	20.3%
Outpatient Hospital	10.9%	11.3%	12.1%	12.4%	13.4%
Physician Services	21.2%	21.0%	20.3%	19.6%	19.1%
Long Term Care/1	15.2%	15.1%	15.2%	15.3%	15.3%
Prescription Drugs	11.3%	10.6%	9.9%	10.0%	9.4%
Dental	3.7%	3.9%	3.9%	3.5%	3.3%
Other Professional Services/2	2.8%	3.1%	3.3%	3.3%	3.3%
Chemical and Mental Health	2.2%	2.2%	2.3%	2.5%	2.5%
Other Medical Spending	7.5%	7.4%	7.4%	7.6%	7.7%
Other non-Medical Spending	4.7%	4.8%	4.9%	5.2%	5.7%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<u>Rates of Growth</u>					
Inpatient Hospital		9.3%	5.0%	3.3%	0.7%
Outpatient Hospital		10.3%	12.8%	7.0%	10.4%
Physician Services		6.1%	1.9%	0.0%	-0.1%
Long Term Care/1		5.9%	5.7%	4.9%	2.2%
Prescription Drugs		0.4%	-2.3%	5.9%	-4.1%
Dental		10.8%	6.6%	-7.2%	-4.4%
Other Professional Services/2		17.5%	10.9%	4.9%	2.0%
Chemical and Mental Health		6.2%	11.4%	10.8%	2.4%
Other Medical Spending		5.2%	5.6%	6.3%	3.4%
Other non-Medical Spending		7.4%	8.0%	10.6%	12.7%
<b>Total</b>		<b>7.0%</b>	<b>5.1%</b>	<b>4.0%</b>	<b>2.2%</b>

Source: MDH Health Economics Program

/1 Includes home health care services

/2 Includes services provided by health practitioners who are not physicians or dentists

Dental services and prescription drug spending each declined from 2009 to 2010, by 4.4 percent and 4.1 percent, respectively. The decline in dental spending is likely attributable to income and coverage effects of the recession as patients are typically responsible for higher cost sharing for dental services and perhaps more likely to forgo these services compared to others.<sup>11</sup> In 2010, Minnesota experienced few influenza outbreaks<sup>12</sup> which in turn likely had somewhat of a downward effect on doctor visits and prescription use. Additionally, at the national level the amount of prescription drugs consumed per capita declined slightly.<sup>13</sup> In 2010, inpatient hospital spending grew just 0.7 percent. Minnesota hospital data shows declines in patient days, acute care admissions and admissions per population in 2010.<sup>14</sup>

## Health Care Spending Projections

Aligned with the goals of the Triple Aim initiative, Minnesota's 2008 health reform law was designed to slow health care spending growth in the state through a variety of initiatives including investments in population health, increased transparency in provider cost and quality, and strengthening of care coordination of the chronically ill through greater use of the health care homes concept.<sup>15</sup> 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 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 the estimates. With this narrower definition of health spending, total health care expenditures in Minnesota totaled \$25.8 billion in 2010. (Medicare expenditures accounted for \$6.9 billion and (non-Medicare) long-term care expenditures for the remaining \$5 billion of the difference to total spending.) Projections of both total spending and spending less Medicare and long-term care are reported throughout this section.

### Methodology

MDH contracted with Mathematica Policy Research to develop the baseline projection model and update the model periodically to reflect changes in the factors used to project health care spending in Minnesota.<sup>16</sup> The methods used in the baseline projections are based on those employed by CMS to project national health care expenditures. In Minnesota, the projections of public and private health care spending are estimated separately and combined to form the total spending projection. The projection of health spending from public sources is based on forecasts from the Minnesota Department of Human Services and the CMS actuary. A series of econometric models produce the projection of private health care spending by payer and spending category. The econometric models for private spending are macroeconomic projection models which extract the historical relationship between health care spending in Minnesota and relevant macroeconomic variables to forecast future health care spending in the state.<sup>17</sup>

<sup>11</sup> According to data from the Medical Expenditure Panel Survey conducted by the U.S. Agency for Healthcare Research and Quality, Midwest non-institutionalized residents paid 47.7 percent of dental costs out of pocket in 2009, the latest year for which data are available.

<sup>12</sup> Minnesota Department of Health, Archive of Influenza Statistics. [www.health.state.mn.us/divs/idepc/diseases/flu/stats/2010summary.pdf](http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/2010summary.pdf)

<sup>13</sup> IMS Health reports a per capita decline of 0.3 percent in prescription drug consumption in 2010. IMS Institute for Healthcare Informatics. The Use of Medicines in the United States: Review of 2010. Available: [http://www.imshealth.com/imshealth/Global/Content/IMS%20Institute/Documents/IHII\\_UseOfMed\\_report%20.pdf](http://www.imshealth.com/imshealth/Global/Content/IMS%20Institute/Documents/IHII_UseOfMed_report%20.pdf)

<sup>14</sup> MDH, Health Economics Program, "Trends at Minnesota Community Hospitals, 2007 to 2010," forthcoming.

<sup>15</sup> Visit: [www.health.state.mn.us/healthreform/index.html](http://www.health.state.mn.us/healthreform/index.html) for more information on these initiatives.

<sup>16</sup> Methodological detail produced by Mathematica Policy Research is available upon request.

<sup>17</sup> The aggregate private spending model builds off MDH's historical spending estimates and includes Minnesota-specific estimates of real per capita personal income, real per capita health care spending from public sources, uninsurance rate, per capita employment, gross state product, national medical price inflation and a time trend. Each payer and service type is estimated separately following the same general specification with the addition of price indices for each category.

The short historical time series of Minnesota health care spending estimates on which to base the private health care spending projections (1994 to 2008) makes the model sensitive to changes in the forecasts of the macroeconomic variables. The recent volatility in economic conditions captured by macroeconomic variables of the model has created challenges for forecasting health spending in Minnesota. To address volatility in the projections, a family of models has been developed over the course of this work that remain close to the CMS specification while accounting for characteristics of the Minnesota economy that fit the data well and are both reasonable and defensible.

To accompany the 2010 actual health care spending estimate, the baseline projection was updated with refreshed macroeconomic inputs. Additionally, the model specification was returned to more closely follow CMS's current method for projecting health expenditures and the Minnesota specifications used in 2009 and 2010.

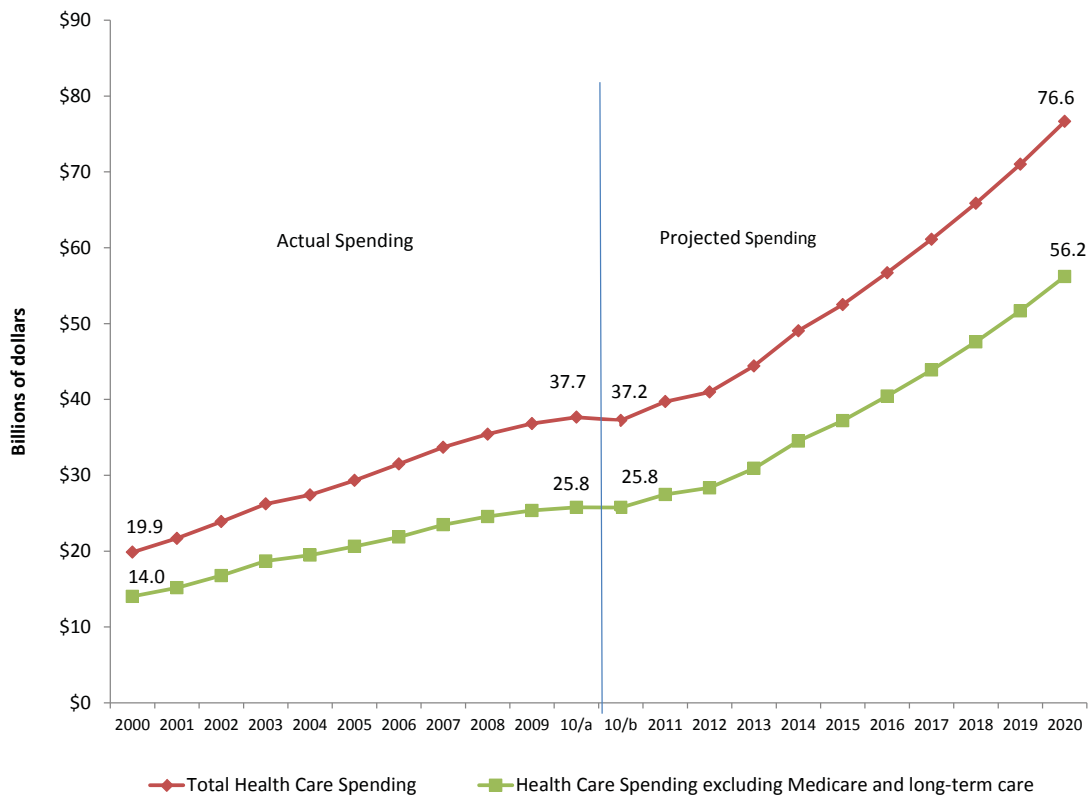
Again this year, the spending projections do not attempt to predict the impact of federal reforms on health care spending in Minnesota, recognizing that significant uncertainties remain about the shape that implementation of federal reform might take in Minnesota. Estimates with this level of uncertainty would lack sufficient precision to be valuable to policy makers.

### Baseline Projections

In the absence of Minnesota reforms, average annual health care spending growth of 7.4 percent is expected in Minnesota between 2010 and 2020 (compared to 7.9 percent for the preceding 10 years). At this rate of growth, total health care spending will more than double over the next decade to reach \$76.6 billion by 2020. Figure 5 displays actual and projected health care spending in Minnesota, both in total and excluding Medicare and long-term care.

Figure 5

#### Health Care Spending in Minnesota Without the Impact of Reform, 2000 to 2020

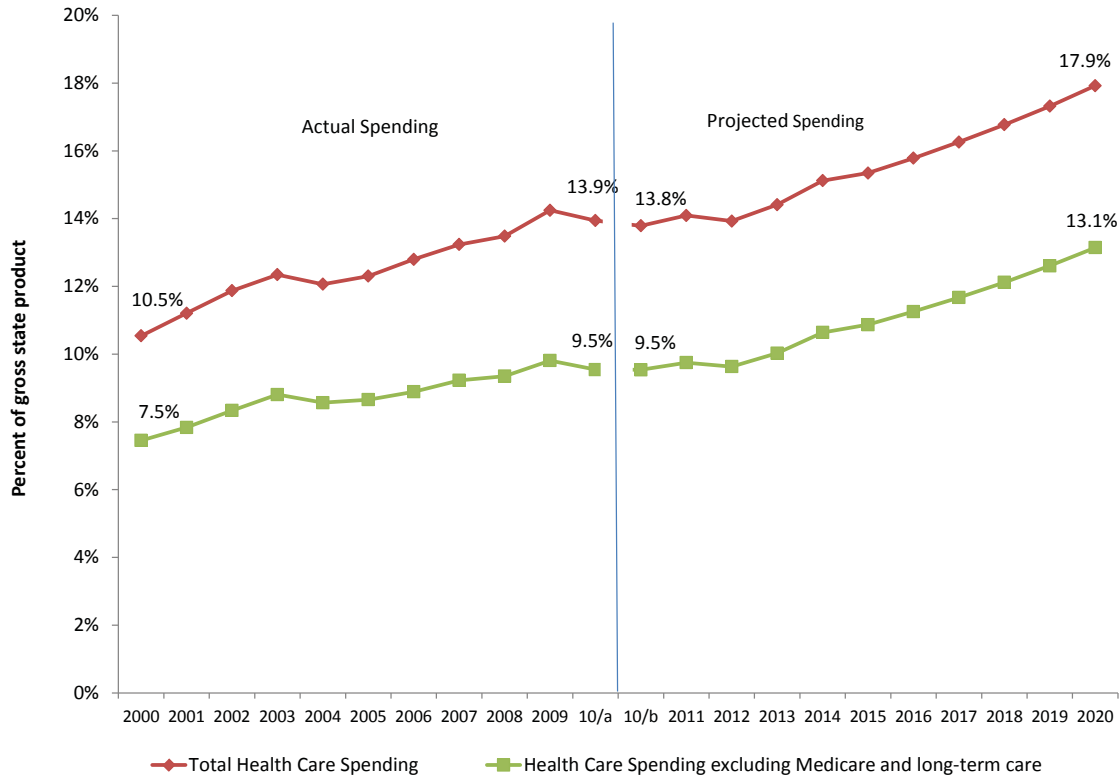


Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.

As a share of the economy, health care spending is anticipated to grow to 17.9 percent in 2020, without reform. This means, that without reforms to the status quo, one out of every six dollars of economic activity would be devoted to health care in Minnesota in 2020. As shown in Figure 6, the portion of the economy devoted to health care is expected to remain stable in the near-term and begin growing rapidly after 2013.

Figure 6

### Minnesota Health Care Spending as a Share of the Economy, 2000 to 2020 (excludes the impact of reform)



Source: MDH historical spending estimates and 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

In recent years, we have observed faster growth in public health care spending than private spending and a narrowing of the gap between public and private spending in the actual health spending estimates in Minnesota. The projection model predicts this trend to reverse somewhat over the next decade with average annual private spending growth outpacing average annual public spending. By 2020, private spending is estimated to account for 61.0 percent of total spending and public spending for the remaining 39.0 percent (see Table 4). Again, the model intentionally does not include effects of state or federal health reform.

Figure 7 displays anticipated changes in the distribution of health spending among categories of service between 2010 and 2020, both in total and excluding Medicare and long-term care. In total, the distribution appears relatively stable with the majority of spending categories in 2020 remaining within a percentage point of their positions in 2010. The exception is rapid growth in other spending (this includes non-medical spending) which is offset by decreases in the prescription drug and long-term care categories.



Table 4  
Public and Private Health Care Spending, 2000 to 2020 (billions of dollars)

	Total Health Care Spending			Spending Excluding Medicare and Long-term Care		
	Private	Public	Total	Private	Public	Total
<b>Actual</b>						
2000	\$12.4	\$7.5	\$19.9	\$11.4	\$2.7	\$14.0
2001	\$13.2	\$8.5	\$21.7	\$12.1	\$3.1	\$15.2
2002	\$14.4	\$9.5	\$23.9	\$13.2	\$3.6	\$16.8
2003	\$15.9	\$10.3	\$26.2	\$14.7	\$4.0	\$18.7
2004	\$16.5	\$10.9	\$27.4	\$15.3	\$4.2	\$19.5
2005	\$17.6	\$11.7	\$29.3	\$16.3	\$4.3	\$20.6
2006	\$18.7	\$12.8	\$31.5	\$17.4	\$4.5	\$21.9
2007	\$19.8	\$13.9	\$33.7	\$18.5	\$5.0	\$23.5
2008	\$20.5	\$14.9	\$35.4	\$19.1	\$5.5	\$24.6
2009	\$20.8	\$16.1	\$36.8	\$19.4	\$6.0	\$25.4
2010	\$20.8	\$16.8	\$37.7	\$19.4	\$6.3	\$25.8
<b>Projected</b>						
2010	\$20.4	\$16.8	\$37.2	\$19.4	\$6.3	\$25.8
2011	\$21.9	\$17.8	\$39.7	\$20.7	\$6.7	\$27.5
2012	\$22.6	\$18.4	\$41.0	\$21.4	\$7.0	\$28.3
2013	\$24.8	\$19.6	\$44.4	\$23.4	\$7.5	\$30.9
2014	\$27.9	\$21.1	\$49.1	\$26.3	\$8.2	\$34.5
2015	\$30.4	\$22.1	\$52.5	\$28.6	\$8.6	\$37.2
2016	\$33.2	\$23.5	\$56.7	\$31.3	\$9.2	\$40.4
2017	\$36.1	\$25.0	\$61.1	\$34.1	\$9.8	\$43.9
2018	\$39.3	\$26.5	\$65.9	\$37.1	\$10.5	\$47.6
2019	\$42.8	\$28.2	\$71.0	\$40.5	\$11.2	\$51.7
2020	\$46.7	\$29.9	\$76.6	\$44.2	\$12.0	\$56.2

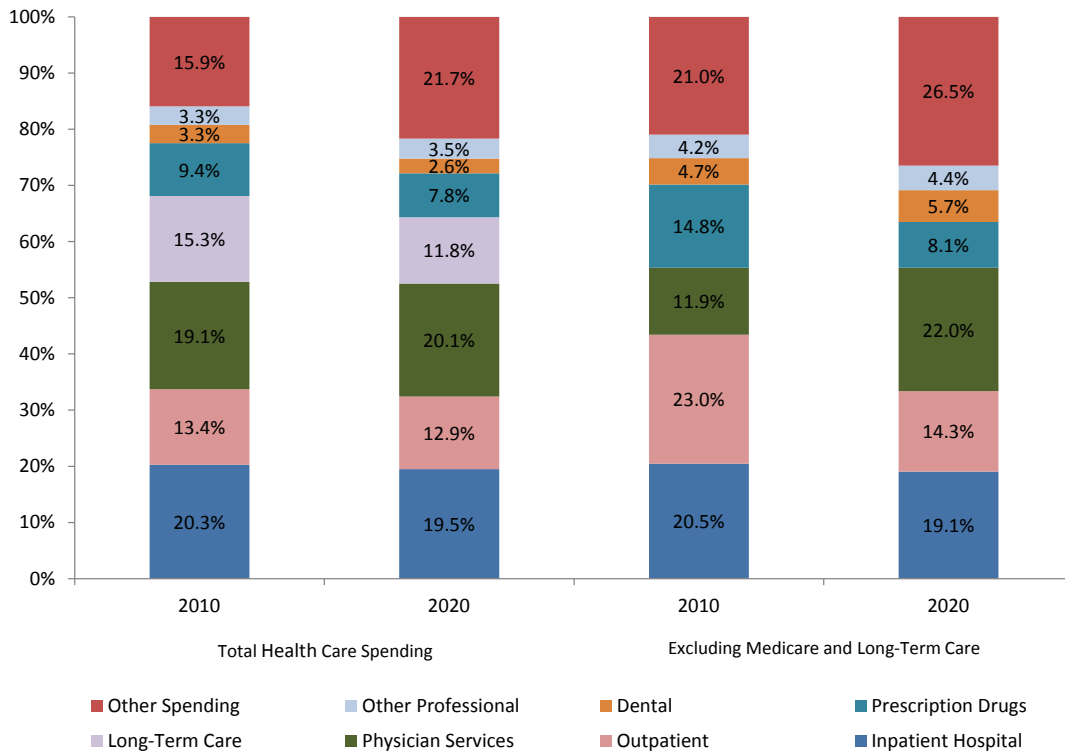
Source: MDH historical spending estimates and projections from Mathematica Policy Research, Inc.

Changes in the distribution of spending in the coming decade are most evident when long-term care and Medicare - two significant portions of public health care spending - are excluded from the analysis. Physician services and other spending grow their portions of total spending largely at the expense of outpatient hospital services and prescription drugs.

While health care spending is expected to more than double over 2010 levels by 2020, the increase is not anticipated to be uniform among the categories of service as shown in Figure 8. Other spending, that is spending on chemical dependency and mental health, as well as non-medical spending including administrative expenses is predicted to increase faster than total spending (191.1 percent) from 2010 to 2010 and contribute 26.8 percent of total health spending growth. Other professional services is expected to be the second-fastest growing category, 120.0 percent over ten years yet, this category's contribution to total growth is just 3.8 percent. Inpatient hospital services will increase 95.7 percent, more slowly than total growth, but will account for 18.9 percent of total growth from 2010 to 2020.

Figure 7

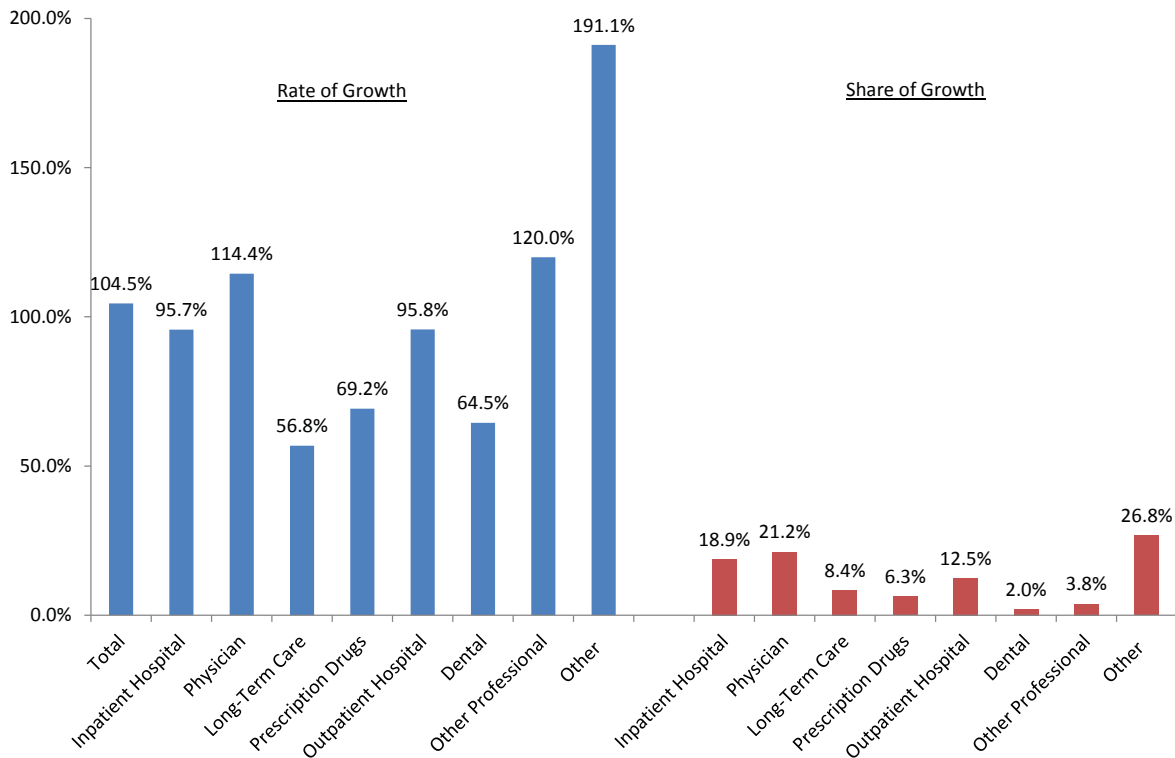
Distribution of Health Care Spending by Type of Service



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

Figure 8

Projected Health Spending Growth, 2010 to 2020



Source: MDH Health Economics Program and Mathematica Policy Research, Inc.

## Comparison of Actual and Projected Spending

As in previous years, the updated projection model was successful in projecting actual health spending, indicating in part that large scale disruptions between health spending and macroeconomic variables as a result of health reform have not yet taken place in a measurable way.

In 2010, the level of actual total spending was 1.1 percent above projected spending. The level of estimated actual spending excluding Medicare and long-term care for 2010 was just one tenth of one percent above the projected spending estimate. When actual spending falls *below* the level of projected spending, state law defines the difference as savings attributable to Minnesota health reform enacted in 2008.<sup>18</sup> As shown in Table 5, this condition was *not* met in 2010. This is consistent with findings in 2008 and 2009, when actual spending was higher than projections by a small amount.

Table 5

Difference between Actual and Projected Health Care Spending in 2010 (in millions)

	Actual Spending	Projected Spending	Actual Less Projected	% Difference
<b>Total Spending</b>	<b>\$37,653.4</b>	<b>\$37,231.8</b>	<b>\$421.5</b>	<b>1.1%</b>
Public	\$16,810.4	\$16,784.4	\$25.9	0.2%
Private	\$20,843.0	\$20,447.4	\$395.6	1.9%
<b>Total Spending less Medicare &amp; Long Term Care</b>	<b>\$25,774.6</b>	<b>\$25,753.9</b>	<b>\$20.7</b>	<b>0.1%</b>
Public	\$6,345.8	\$6,345.8	\$0.0	0.0%
Private	\$19,428.7	\$19,408.0	\$20.7	0.1%

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

If savings attributable to Minnesota health reform are identified, MDH is required to determine the portion of savings related to state-administered programs (Medical Assistance, MinnesotaCare, General Assistance Medical Care and the State Employee Group Insurance Program). In 2010, state-administered health insurance programs accounted for 21.0 percent of total spending excluding Medicare and long-term care. Table 6 details state-administered spending in 2010, excluding Medicare and long-term care.

<sup>18</sup>Minnesota Statutes Chapter 62U.10, Subd. 3 through 5.

Table 6

## Spending for State Administered Programs as a Percent of Total Spending, 2010

	Actual Spending (Billions)	Percent
<b>Total Spending /1</b>	<b>\$25.8</b>	
<b>Spending Not State Administered</b>	<b>\$20.4</b>	<b>79.0%</b>
<b>Total State Administered Programs /2</b>	<b>\$5.4</b>	<b>21.0%</b>
Medical Assistance	\$3.9	15.1%
MinnesotaCare	\$0.7	2.8%
General Assistance Medical Care	\$0.2	0.7%
State Employee Group Insurance Program	\$0.6	2.3%

Source: MDH Health Economics Program

/1 Excludes spending for Medicare and long term care

/2 Excludes spending for long term care

During 2010, state agencies continued their work to implement the provisions of Minnesota's health reform law. A greater share of patients are covered in physician clinics licensed as health care homes, implementation of State Health Improvement Program initiatives continues unabatedly, and information on provider quality in Minnesota has become more widely available. However, any savings attributable to the reform law is likely to materialize only after the law is more fully implemented and has time to produce the desired meaningful transformation in the health care delivery system needed to bend the health care spending growth curve.

## Summary

Health care spending continued to grow slowly, at a rate of 2.2 percent, in Minnesota in 2010, reaching \$37.7 billion. As a portion of the state's economy, health care spending declined from 14.2 percent in 2009 to 13.9 percent in 2010.

While we have observed slow health care spending growth in Minnesota over the past few years, our projection model predicts health spending to more than double in the next decade. Without the effect of Minnesota health system reforms, health spending is expected to reach \$76.6 billion in 2020 and consume nearly 18 percent of Minnesota's gross state product.

This was the third year MDH has compared actual health care spending to projected spending to determine whether or not the reform law is achieving its goal of curbing health care cost growth. As in the previous two years, actual spending continues to exceed projected spending by a small amount, indicating no substantial changes in the relationship of health spending and the macroeconomic variables that historically have affected spending growth.

While we have observed a slowdown in health care spending for a number of years, it is premature to celebrate a victory over persistent growth in health care spending in Minnesota. The further we move from the recession, data will become available to help determine whether the deceleration was due to the economic disruption of the recession or more permanent changes in the Minnesota health care market. Also unknown at this point is the extent to which any pent up demand from individuals forgoing needed health care services will cause health spending growth to accelerate once economic activity picks up more consistently and coverage options expand as the Minnesota health care market recovers and provisions of the federal Affordable Care Act take effect.

# Appendix A: Actuarial Certification by Towers Watson



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May 11, 2012

Mr. Stefan Gildemeister  
Director, Health Economics Program  
Minnesota Department of Health  
85 E Seventh Place, Suite 220  
Saint Paul, MN 55101

Dear Stefan:

## 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 2010 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 2010, including state-wide health care expenditures totaling \$37.7 billion and total spending less Medicare and long-term care in the amount of \$25.8 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,

A handwritten signature in black ink, appearing to read 'Stuart Alden', written in a cursive style.

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

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

**Table 1**  
**Where Minnesota Health Care Spending Came From in 2010**

Source of Funding	Total Spending (Millions)	%	Total Spending Less Medicare & LTC (Millions)	%
Medicare	\$ 6,885	18.3%		
Medical Assistance	\$ 7,322	19.4%	\$ 3,904	15.1%
Other Public	\$ 2,603	6.9%	\$ 2,442	9.5%
Private Health Insurance	\$ 15,265	40.5%	\$ 15,077	58.5%
Other Private	\$ 949	2.5%	\$ 949	3.7%
Out of Pocket	\$ 4,629	12.3%	\$ 3,402	13.2%
<b>All Sources of Funding</b>	<b>\$ 37,653</b>	<b>100.0%</b>	<b>\$ 25,775</b>	<b>100.0%</b>

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 2010**

Spending Category	Total Spending (Millions)	%	Total Spending Less Medicare & LTC (Millions)	%
Hospital	\$ 12,691	33.7%	\$ 9,088	35.3%
Physician Services	\$ 7,196	19.1%	\$ 5,920	23.0%
Long-Term Care (incl. Home Care)	\$ 5,760	15.3%		0.0%
Prescription Drugs	\$ 3,547	9.4%	\$ 3,072	11.9%
Dental	\$ 1,229	3.3%	\$ 1,213	4.7%
Other Professional Services	\$ 1,234	3.3%	\$ 1,077	4.2%
Chemical Dependency/Mental Health	\$ 937	2.5%	\$ 937	3.6%
Other Medical Spending	\$ 2,900	7.7%	\$ 2,381	9.2%
Other Non-Medical Spending	\$ 2,158	5.7%	\$ 2,087	8.1%
<b>Total Spending</b>	<b>\$ 37,653</b>	<b>100.0%</b>	<b>\$ 25,775</b>	<b>100.0%</b>

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



