State Health Expenditure Accounts: Minnesota's Perspective

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Minnesota's approach to the development and use of State health expenditure accounts (SHEAs) was developed to assist State policymakers with decisions regarding health care reform. The accounts are based on an annual survey of third-party payers and summary Medicaid and Medicare data. Summary data are presented along with a discussion of data collection methodology, estimation, and dissemination. Minnesota's experience demonstrates that the ability of States to conduct detailed analysis of health care spending and to use these estimates to change State policy, inform national policy debate, conduct impact analysis, educate policymakers. and monitor market trends.

INTRODUCTION

Estimates of State health care spending have become increasingly important to private industry and government as costs continue to rise and analysts struggle to understand the dynamics of a changing health care system. Although national estimates of health care spending are useful for understanding aggregate trends, State level data can provide policymakers and industry analysts the detailed information needed to describe the unique elements of

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local markets. Several States have developed State-level data collection strategies to document trends in health care spending, describe distribution of health insurance coverage, and analyze spending patterns by provider type and geographic States have used a variety of approaches and data sources to develop their own spending accounts and have used the information generated from the accounts to achieve various State objectives for information and analysis (Florida Agency for Health Care Administration, 1997; Vermont Health Care Authority, 1995; New York Center for Health Statistics, 1995; Maryland Health Care Access and Cost Commission, 1998).

Minnesota has also developed its own State health accounts spurred in part by the health care reform initiatives of the early 1990s (Minnesota Department of Health, 1995; Minnesota Department of Health, 1998b). Minnesota's approach to the development of State spending estimates is unique in two key ways. First, the estimates are based on primary data collection using newly developed annual surveys of thirdparty payers. Second, the information generated from the accounts is widely disseminated and used by policymakers, stakeholders, and consumers. Minnesota's experience also highlights the point that the development of SHEAs is an ongoing process that requires a long term commitment of State resources. The accounts are built upon existing structures with new data collection and estimation methodology added and improved over time.

This article provides a description of Minnesota's approach to the development and use of SHEAs and includes: a discussion of the historical context and the development of SHEAs in Minnesota; a summary of the methods used to develop the accounts including a description of primary data collection activities; State level estimates of health care spending and trend; and a discussion of the usefulness of SHEAs and strategies for dissemination.

BACKGROUND

Health reform initiatives in Minnesota in the early 1990s included cost containment objectives and legislation establishing limits on future increases in health care spend-Policymakers looked for reliable spending estimates that could be used to implement the legislative mandate to reduce health care spending by 10 percent per year over a 5-year period (Blewett, 1994). At the time, there were limited Statelevel data on health care spending. HCFA produced State estimates in 1982 and many States simply used these estimates with a trending factor to reflect present day spending (Levit et al., 1985). The Lewin Group, for Families USA, also prepared State estimates for use in policy discussions based primarily on national sources of data extrapolated to State-level spending using State population demographics and other factors (Families USA Foundation, 1990). HCFA also produced 1991 estimates of State spending using provider-based estimates of hospital, physician, and prescription drug spending and 1993 estimates using all personal health care spending (Levit et al., 1993; Levit et al., 1995).

HCFA has developed State-level estimates that now cover the periods 1980-1993 with 1 year of overlap with Minnesota's estimates. Direct comparisons between the two estimates are difficult because of the different methods used for data collection and the inability to allocate several of Minnesota's spending categories to HCFA's personal health care spending accounts, highlighting a key drawback to State-generated accounts. For example, HCFA estimated Minnesota's 1993 spending at \$14.2 billion for personal health care expenditures while Minnesota's 1993 estimate of \$13.1 billion is for spending on health services and supplies. In order to compare these estimates, one would need to adjust HCFA's estimate upward to reflect the comparable category of health services and supplies (based on the ratio between personal health care services and health services and supplies from the health accounts) to \$15.6 billion and then adjust down to account for border crossing. using Minnesota Medicare border crossing estimates to arrive at \$14.1 billion. A tenuous comparison shows a 7-percent difference between Minnesota's estimate of \$13.1 billion and HCFA's adjusted estimate of \$14.1 billion for 1993 spending for health services and supplies.

HCFA's State accounts provide consistent State estimates over time and are critical to conducting interstate comparisons. For aggregate trend and total spending estimates, HCFA's State estimates are useful to State and national analysts alike. However, States interested in more indepth analysis of local spending patterns and policy development may find the national accounts lacking in the level of detail required for State analysis. This was certainly the case during the early 1990s when State health care reform was a critical issue and comprehensive data on local health care markets were simply not available. As a result, many States developed

¹Refer to Minnesota Statute 1998, Chapters 62J.041, 62J.301, and 62J.38 for current data collection authority and expenditure limit enforcement language. Also refer to Minnesota Statute 1998, Chapter 60A.15 for incentive mechanism for complying with cost containment provisions. Note 1993 Laws of Minnesota, Chapter 345, Article 2, Section 4; Article 3, Sections 1-3; Article 5, Section 7; and Article 6, Section 6 for original legislative authority.

health reform initiatives in the absence of detailed information about their health care system. Others, like Minnesota, developed data collection initiatives as part of their health reform package in an effort to measure and monitor health care spending over time.

The Minnesota legislature was convinced of the need for more detailed information on Minnesota's health care market and, as part of the health care reform efforts of the early 1990s, gave the Minnesota Department of Health broad data collection authority to estimate State health care spending and track trends over With the financial assistance of RWJF's State Initiative in Health Care Reform Program, the Department's Health Economics Program has collected aggregate revenue and expenditure information from private and public purchasers of health care services on an annual basis since 1993. These data are used to estimate total health care spending in Minnesota, the distribution of spending by category of health care services, as well as the distribution of insurance coverage for the population of Minnesota.

It is unclear how many States are doing this detailed level of analysis. Eight States produced health accounts for at least 1 year as part of a project providing technical assistance by researchers from RAND and Price Waterhouse, also funded by RWJF's State Initiatives Program. The eight States were Alaska, Colorado, Florida, Minnesota, New Mexico, Oregon, Vermont, and Washington (Long, Marquis, and Rogers, 1998). This SHEA project was designed to assist States in the development of State accounts using a common methodology and develop and disseminate educational tools on the development of State-generated health accounts (Long, Marquis, and Rogers, 1995). The project identified four general needs of policymakers that information from SHEAs could address the ability to: (1) monitor the health system, (2) evaluate the effects of past policy changes, (3) contain rising health care costs, and (4) design policy proposals for the future.

Researchers produced a step-by-step approach to the development of State estimates that could be used by States with limited resources. While a uniform methodology was proposed, it became clear that State approaches would vary depending upon the data available, resources devoted to developing the accounts, support and interest of policymakers, as well as salient State policy issues. The advantage of Statespecific estimates is that it allows States to develop consistent reporting and analysis functions that are responsive to changing needs for information. The disadvantage is the inability to produce interstate comparisons or valid State to national comparisons. Participating States shared a common interest in developing State estimates and sharing strategies for data collection and estimation but were less committed to a common methodology. Most States were comfortable using national estimates to assess the relative difference between States in health care spending. In addition to the eight States that participated in this development formal SHEA Maryland and Hawaii have also developed State-level estimates of health care spend-(Maryland Health Care Access and Cost Commission, 1998; Levit et al., 1994).

DATA COLLECTION AND METHODOLOGY

The framework for establishing Minnesota's health accounts was based on HCFA's National Health Accounts (NHAs) which form the structure for maintaining health information for the United States

(Levit et al., 1994). The Minnesota approach focused on the development of accounts for health services and supplies which includes spending for personal health care plus government public health, administration, and insurance net cost. The Minnesota approach excludes spending estimates for research and construction which are required to yield the full health expenditure estimates comparable to HCFA (Levit et al., 1997). Spending for health services and supplies accounts for 97 percent of the The objectives of data collection NHA. the the **Federal** were same as Government's: the estimates were intended to be accurate, timely, and descriptive of the unique aspects of the State's health care system (Levit et al., 1994).

The data collection process started in 1993 and continues to evolve as analysts gain more experience with data sources and estimation techniques. The process has improved as well and the estimates have become more routine and more reliable. It should be noted that a consistent and dedicated staff is key not only to maintenance but to continued quality improvement in any State's effort to develop SHEAs. This is an ongoing process requiring a long-term commitment of State resources.

Minnesota's estimates of health spending and development of its SHEAs are based on data collected through: (1) a new Group Purchaser Survey (GPS) of private payers, (2) aggregate data from public programs, and (3) estimates of out-of-pocket spending. In addition, the State collects hospital and physician clinic data to monitor trends in the provider market. The provider data is not used to develop the State accounts but is considered an important component of Minnesota's data collection strategy to monitoring trends in health care spending.

Group Purchaser Survey

Private third-party payers are surveyed on an annual basis using a newly-developed Group Purchaser Survey (GPS). Entities surveyed include all health maintenance organizations (HMOs) in the State, Blue Cross and Blue Shield of Minnesota (BCBSM), commercial insurers, community integrated service networks² (CISNs) and self-insured plans (on a voluntary basis). The survey requests detailed data on premium revenue, expenditures by category of service (e.g., hospital, physician, prescription drugs, etc.) and number of covered lives for individual and family coverage. Participation in the survey is mandated by State statute with penalties for non-compliance. Although the State is not able to mandate that selfinsured plans submit expenditure data because of the Federal Employment Retirement Income Security Act (ERISA) of 1974, a survey was sent to all third-party administrators in the State of Minnesota requesting information on a voluntary basis. In addition, Blue Cross and Blue Shield (BCBS) and the large HMOs in the State provide aggregate data on their selfinsured business on a voluntary basis.

The annual GPS for insurance companies that do business in Minnesota was modeled after annual insurance data reported in the annual statement collected by the National Association of Insurance Commissioners (NAIC) from all health plan companies. The NAIC form includes data on health insurance combined with disability and life insurance by plan. Minnesota's GPS requests gross revenue and expenditure data (by type of service),

 $^{^2}$ CISN is a State licensure category for HMOs with 50,000 members or fewer. CISNs have different net worth, solvency and other requirements which were designed to increase health plan offerings in rural areas. There were four CISNs licensed in Minnesota in 1996.

enrollment by type of product (Medicare supplemental, indemnity, public programs) for health products and Minnesota residents only. Data definitions and survey directions were developed by a working group made up of health plans and State analysts.

Health plans respond to the survey based on explicit instruction and definitions of what is to be included in each requested category.

The response rate to the GPS has improved over time. Minnesota's most recent estimates of spending are based on payer data representing 100 percent of covered lives in public programs, 100 percent of the covered lives in nine HMOs and four CISNs, 80-85 percent of the commercial/BCBSM, and an estimated 85-95 percent of the self-insured market. Missing values in the private market were few and were primarily due to the fact that health plan companies with less than \$3 million in premium revenue in Minnesota are allowed to file an abbreviated report which excludes the detailed spending categories. These missing values represent a small proportion of the total commercial business (less than 2 percent of total premium) and data collected from private payers are used to estimate spending by service category for missing values.

Public Program Data

Public data come from secondary data sources including aggregate reports from the Minnesota Department of Human Services which provides detailed information on public programs including Medical Assistance (Medicaid) and two State-subsidized programs, General Assistance Medical Care, and MinnesotaCare,³ the subsidized insurance program for the uninsured. Data are also collected on expenditures from: the State high-risk pool, the Minnesota Comprehensive Health Association (MCHA);⁴ the Medicare program; the Department of Veterans Affairs; Civilian Health and Medical Program of the Uniformed Services; the Department of Corrections; the Public Health Service; and the Indian Health Service.

Out-of-Pocket Spending

The estimate of out-of-pocket costs is perhaps one of the most difficult items in estimating both national and State health accounts. Minnesota's approach was similar to that used by HCFA which is a "bottoms up" approach based on provider and consumer data components using national benchmarks to develop our estimate. Wherever possible, we relied on State-specific data to generate estimates of out-ofpocket spending. For example, member liability under private insurance was estimated using data from the GPS. In some cases, data from national studies were combined with State-specific information to estimate a component of out-of-pocket For example, we used data spending. from studies of out-of-pocket spending by Medicare beneficiaries (American Association of Retired Persons, 1997; American Association of Retired Persons, 1994) combined with State-specific data on Medicare enrollment patterns to estimate Medicare beneficiaries' out-of-pocket spending net of private supplemental insurance. Similarly, information from a national study was used to estimate spending for care of those not covered by third-party payers (Long and

³ MinnesotaCare is a State subsidized and administered insurance program that provides health coverage to enrollees meeting eligibility and other requirements related to lack of prior access to health insurance and residency. The program is funded by a 1.5 percent provider assessment and enrollee monthly premiums (subsidized based on sliding scale up to 8.8 percent of gross family income).

⁴ The MCHA is a State health insurance risk pool established in 1976 that provides a source of coverage for persons unable to purchase health insurance at standard market rates or without restrictive clauses due to pre-existing conditions. Premium rates may not exceed 125 percent of the weighted average of premiums charged in the individual market for a similar plan. The program is funded by enrollee premiums, annual assessment on health plan companies, and State subsidy in 1997 and 1998.

Marquis, 1994) which was combined with State-specific data on the uninsured. In cases where no State-specific data were available, we derived State-specific estimates by relying on HCFA's national spending estimates. For example, we assumed that Minnesota's share of spending on overthe-counter drugs and other medical nondurables is a constant share of national spending, and calculated the State share of national spending from earlier State-specific spending estimates produced by HCFA (Levit et al., 1995).

Since there is no single authoritative source of data for estimating many of the components of out-of-pocket spending, for some components we found it useful to approach the issue from multiple angles. For example, total spending on prescription drugs was estimated using two different approaches. The first approach assumed that State spending is a constant share of national spending (as described previously); the second used a trend model developed by RAND as part of the SHEA project. Total spending on prescription drugs was estimated by averaging the results of these two approaches, and out-ofpocket spending on prescription drugs was then calculated as a residual.

Provider Survey Data

In addition to the GPS, the State developed a physician-clinic survey to supplement existing hospital financial information in an effort to track provider-level spending. The provider data are not used to estimate total spending but have been used to measure and monitor provider spending over time. The annual physician clinic survey, mandated by State law, was modeled after traditional hospital cost reports and collects data on revenue by source of payer and expenditure by category of service. The intent of the survey

was to collect data not available through the GPS, specifically data on uncompensated care and the impact of policy changes on rural versus urban providers, an issue of importance to many Minnesota legislators. It was also the intent to use this provider-level data to cross-check spending information collected from payers but the data have proved less useful in the development of SHEAs partly because of the exclusion of staff model physician spending and the fact that smaller clinics are able to fill out an abbreviated form resulting in many more missing values than initially anticipated.

MINNESOTA'S UNIQUE APPROACH TO SHEAS

HCFA's framework helped the State define its data elements and its data collection efforts. However, individual State policy interests, as well as the availability of existing data, drove many decisions regarding Minnesota's health accounts and important diversions from HCFA's approach. The key difference between HCFA and Minnesota is in the data collection approach and account building. The national estimates are based on data collected from providers. These data are then aggregated to determine how much was spent within service categories and to attribute spending to the various payers in the market. In contrast, the Minnesota estimates are developed from data collected from payers and then allocations are made into service cate-Minnesota's approach to data collection was, in part, based on the availability of existing data sources and the political feasibility of new data collection efforts.

This approach has allowed Minnesota to pursue several areas of detailed tracking and analysis not available with the national estimates of State spending. The payer source approach allows us to separate inpatient and outpatient hospital services which is not possible with the HCFA Similarly, the data provides approach. additional opportunities to track long-term care (LTC) expenditures in ways that we could not otherwise do. **Because** Minnesota's approach to data collection is service-based as opposed to providerbased, the State is able to provide more detail on location of LTC expenditures than the national accounts. For example, with the national accounts, analysts are unable to separate out LTC services provided by hospital-based nursing homes; these expenditures are included in the hospital totals. Minnesota's LTC category includes the hospital-based LTC expenditures including both home health and nursing home services. This issue is important to policymakers and Minnesota now has its own State-level information that isn't available elsewhere.

Prior to the development of SHEAs in Minnesota, there was a lack of basic understanding of the distribution of coverage and spending patterns by public and private payers. The data provided by SHEAs has been critical to understanding the impact that State policy decisions, including decisions regarding Medicaid, will have on the market. The payer level data also provides an opportunity to monitor spending by type of payer over time to look at patterns and trends. For example, the data allow analysts to look at variations in spending patterns by category of service for HMOs versus commercial insurance or for fully insured versus self-insured products. More importantly, perhaps, is that SHEAs provide ready access to more recent data to State analysts. Minnesota is currently completing its 1997 and 1998 estimates and the most recent national State estimate is for 1993 (Levit et al., 1995).

Methodological Issues

There are some methodological issues that have emerged from using a payerbased approach to estimation that must be mentioned. One issue is in regard to estimation of border crossing when trying to develop a Minnesota-specific estimate. There are many health plans provided in the State that do not necessarily cover services sold in the State, and other plans that include enrollees who are not residents of Minnesota. The State requires plans to provide data for Minnesota residents only. although from many carriers this would be impossible. Plans typically represent products sold to employers and while the employer may be located in Minnesota, its employees may reside in one Minnesota's many border communities. Carriers are required to make reasonable efforts to pull out their Minnesota products and estimate the premium and expenditure data for Minnesota residents. In other cases, we used a border-crossing adjustment of 10 percent, based on Medicare data for Minnesota residents and payments to Minnesota providers (Basu, Lazenby, The border crossing and Levit, 1995). issue does make creating a balanced expenditure matrix of types of services and funding sources difficult to construct and the consistency in approach becomes critical in making comparisons over time.

For many States, the self-insured data will be a major obstacle to pursuing a payer-based approach to the development of their SHEAs. Because of Federal ERISA pre-emption, self-insured plans are not regulated by the State and States cannot mandate data submission. In addition, there is no centralized list of self-insured plans to facilitate a mailing to enlist voluntary compliance. Minnesota has developed, over time, a good mailing list of self-insured plans based on a

winnowed down list of licensed third party administrators for health plans in Minnesota. This coupled with the voluntary data collection from BCBSM and the large HMOs provide an estimate of between 85-95 percent of self-insured covered lives up from an estimated 30-40 percent in our first years of data collection. Through voluntary compliance of the large health plans, who are increasing their share of the self-insured business, Minnesota has been able to achieve a high response rate.

Another issue with regard to using a payer approach is that many commercial carriers do not keep good data on either covered lives or expenditures. Many have information on subscribers, but do not have details on whether the subscriber purchased individual or family coverage and if family coverage was purchased, the number of dependents enrolled. Because of this, commercial carriers are required to make an actuarial estimate of the total premium revenue and total expenditure per member per month and the State relies on these estimates in their calculations of coverage. In Minnesota, the commercial carrier market is relatively small but in other States this could be a larger share of the private market.

There are limitations to any approach in large scale estimation using a variety of sources for data collection. The response rate has increased for the self-insured and commercial products as has the analysts' experience in cross-checking and validating estimates over time. This experience has contributed to the analysts' confidence in the figures and the ability to draw conclusions on health expenditures and trends.

MINNESOTA HEALTH CARE SPENDING ESTIMATES

The following section highlights the Minnesota accounts and the ability of States to estimate health care spending over time. The health care spending estimates presented here generally follow the framework developed by HCFA; however, the majority of the information used by the Department of Health to estimate spending is derived from Minnesota-specific data. The information presented here represents estimates of spending for health services and supplies using data collected in Minnesota and the changes in spending between 1993 and 1996.

National spending for health services and supplies⁵ increased to more than \$1.0 trillion in 1996 representing an increase of 4.9 percent from 1995, the lowest rate of growth in health care spending in more than 30 years (Levit et al., 1998). Table 1 shows Minnesota estimates compared with national spending estimates for 1996. Minnesota, spending on health services and supplies was an estimated \$15.7 billion in 1996 with a 5.0-percent increase from 1995. Minnesota per capita health care spending consistently tracks below the national average (\$3,367 and \$3,664, respectively in 1996) and health spending on health services and supplies as a percent of gross State product has also remained constant since 1993 averaging 11.2 percent over the 4-year period. State health accounts may also be organized by aggregate spending, per capita spending

Table 1
Spending for Health Services and Supplies,
Minnesota and United States: 1996

Spending Measure	Minnesota	United States	
Total (in Billions) Per Capita	\$15.7	\$1,010.6	
Per Capita	,	3,367 3,664 Percent	
Portion of Economy Spending Growth	11.1	13.2	
Total	5.0	4.9	
Public	5.9	5.9	
Private	4.3	4.2	

SOURCES: Minnesota Department of Health, Health Economics Program, 1998; (Levit et al., 1998).

⁵ The expenditures for health services and supplies include spending for personal health care plus government public health, administration, and net cost of insurance. This category does not include the research and construction expenditure categories of the national health expenditures.

Table 2
Minnesota Expenditures for Health Services and Supplies, by Source of Funds: 1993-1996

Source of Funds	1993	1994	1995	1996
		Amount	in Millions	
Total	\$13,064	\$13,779	\$14,912	\$15,652
Private	7,990	8,343	9,047	9,440
Public	5,074	5,436	5,865	6,211
Federal	3,561	3,700	4,094	4,365
State and Local	1,514	1,638	1,769	1,847
		Per	Capita	
Total	2,888	3,017	3,241	3,367
Private	1,766	1,827	1,966	2,031
Public	1,122	1,190	1,275	1,336
Federal	787	832	890	939
State and Local	335	359	384	397
		Percent of Gro	ss State Product	
Total	11.4	11.1	11.3	11.1
		Rate of Gro	wth in Percent	
Total	5.5	8.2	5.0	6.2
Private	4.4	8.4	4.3	5.7
Public	7.1	7.9	5.9	7.0

SOURCE: Minnesota Department of Health, Health Economics Program, 1998.

and rates of growth for public and private payers. This information is presented in Tables 2 and 3 and includes estimates for 1993 to 1996. Public health care spending in Minnesota grew at an annual average rate of 7.0 percent from 1993 to 1996, compared with overall growth of 6.2 percent. Nationally, public spending growth from 1993 to 1996 (7.8 percent per year) also exceeded total growth (5.1 percent per year). In Minnesota, Medicare grew by 7.8 percent, Medicaid by 7.3 percent, and all other public spending (including MinnesotaCare) by 4.1 percent during this period.

Table 3

Average Annual Growth in Spending for Health Services and Supplies, Minnesota and United States: 1993-1996

Spending Measure	Minnesota	United States	
	Pei	Percent	
Total	6.2	5.1	
Private	5.7	3.1	
Public	7.0	7.8	

SOURCES: Minnesota Department of Health, Health Economics Program, 1998; (Levit et al., 1998).

Personal Health Care Spending, 1993-1996

Table 3 shows the average annual rate of growth in health spending comparing Minnesota with the United States and includes trends for public and private spending. Minnesota's average trend of 6.2 percent is higher than the U.S. trend of 5.1 percent and reflects the differences in spending growth for public and private payers. Minnesota's public growth is slightly lower than the U.S average but considerably higher for private spending. This may be the result of recent increases in managed care penetration across the country resulting in slower growth in private health spending. Minnesota had already achieved a mature managed care market and savings due to managed care were likely to have been realized in earlier years.

Table 4 provides a further breakdown of health care spending by payer and includes estimates of additional compo-

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	Amount in Millions			
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Public	5,074	5,436	5,865	6,211
Private	7,990	8,343	9,046	9,440
Federal				
Medicare	1,910	2,001	2,189	2,396
Medicaid	1,243	1,370	1,461	1,509
Other	408	427	444	461
State				
Medicaid	1,022	1,136	1,237	1,293
General Assistance and Medical Care	159	155	155	149
MinnesotaCare	23	45	68	90
Other	162	164	169	165
Local	147	138	139	150
Private Health Insurance				
Health Maintenance Organizations	1,218	1,232	1,443	1,625
Commercial/BCBSM	1,114	1,105	1,119	1,112
Self-Insured	1,560	1,790	1,889	1,070
Medicare Supplement	340	331	353	368
Out of Pocket	2,876	3,023	3,247	3,327
Other Private	882	862	995	938

NOTE: BCBSM is Blue Cross and Blue Shield of Minnesota.

SOURCE: Minnesota Department of Health, Health Economics Program, 1998.

nents such as Minnesota-specific expenditures for Medicaid and State-sponsored programs General Assistance Medical Care (GAMC) and MinnesotaCare. MinnesotaCare is the State's subsidized insurance program for the uninsured. Enrollment in MinnesotaCare almost doubled between 1993 and 1996 increasing from 49,000 to 90,000 members. Current enrollment is over 108,000 individuals Department of Human (Minnesota Service, 1999). Other unique features include allocations for self-insured and Medicare supplemental plans which are not included in the national accounts.

Source of Minnesota Spending by Payer

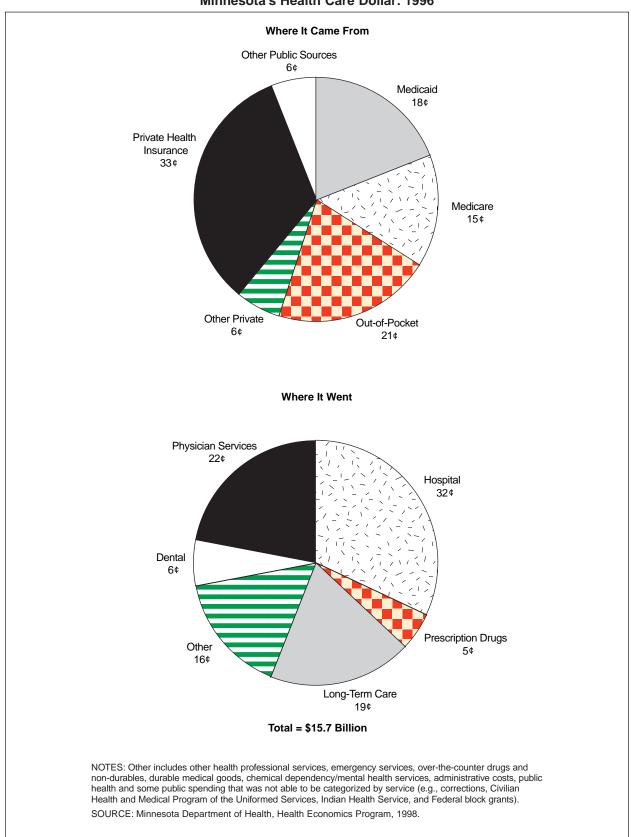
Figure 1 shows the percent of spending on health care services in Minnesota by payer source developed by the Minnesota's SHEAs. Total spending by public health care programs accounted for approximately 40 percent, or \$6.2 billion of

Minnesota's total in 1996. Private dollars paid for approximately 60 percent of the total, or almost \$9.5 billion. The ratio of public to private spending has remained stable between 1993 to 1996. Out-of-pocket spending has also remained stable in Minnesota as a percentage of total health care spending, varying between 21 and 22 percent. All of these breakdowns suggest a relatively stable health care market in Minnesota.

Distribution of Spending by Service

Figure 1 also represents estimates of the distribution of health care spending in Minnesota by type of service. Spending for hospitals and physician services account for more than one-half (54 percent) of health care dollars; spending on LTC services accounted for another 19 percent of personal health care spending in 1996. While most spending categories have remained relatively stable from 1993-

Figure 1
Minnesota's Health Care Dollar: 1996



MA. GAMC. MNCare Medicare 10% 14% **MCHA** Uninsured 6-9% Commercial/ **BCBSM** 17% Self-Insured 26-29% Fully-Insured HMO 21% NOTES: MA is Medicaid, GAMC is general assistance and medical care, MNCare is MinnesotaCare, MCHA is Minnesota Comprehensive Health Association, BCBSM is Blue Cross and Blue Shield of Minnesota, HMO is health maintenance organization.

SOURCE: Minnesota Department of Health, Health Economics Program, 1998.

Figure 2

Distribution of Minnesota Population by Primary Source of Insurance Coverage: 1996

1996, there has been a slow shift in service delivery from hospitals to physician-based services.

Distribution of Population by Coverage Source

Another benefit of annual data collection is the ability to track changes in the distribution of primary source of coverage. Data are collected on the number of covered lives by primary payer providing the ability to estimate insurance status. The distribution of coverage comes directly from the GPS and is an important byproduct of the SHEAs. Figure 2 shows the distribution of coverage for 1996. Private insurance covered two-thirds of all Minnesotans, while one out of every four Minnesotans was covered by a public program. Self-insured

plans covered nearly one of every three Minnesotans. In 1996, between 6 to 9 percent of Minnesotans were uninsured or approximately 430,000 individuals at the high end (Minnesota Department of Health, 1998a; Zuckerman and Brennan, 1999; Call et al., 1997; U.S. Bureau of the Census, 1997).

To account for individuals who have more than one source of insurance coverage, we have made adjustments so that our distribution of coverage estimates reflect only the primary source of coverage. For public programs, we obtained information on dual coverage from the Minnesota Department of Human Services; in cases where an individual is covered by Medicare and another public program, Medicare is used as the primary source of coverage. For private insurance, we esti-

mated the extent of dual coverage using Minnesota data from the 1993 RWJF Family Survey on Health Insurance.

SHEA APPLICATIONS

The data and analysis generated from Minnesota's SHEAs has been used by State analysts and policymakers in a variety of policy forums. The following examples help demonstrate the usefulness of State data on health care spending in a policy context. It should be noted that these data have become central components of State policymaking in Minnesota. The legislature provides a core budget, including two full-time employee analysts and additional resources for publication and distribution. The dissemination and distribution has given the program and the data widespread visibility and there are few debates in Minnesota regarding health care costs and trend which do not rely on the information generated from these accounts.

Although the data collection was initiated during the early 1990s with the State's interest in establishing and enforcing State expenditure limits, the needs and use of the information generated from the accounts has changed over time. The pressure for health reform subsided and State regulation and cost containment gave way to information and analysis as the central driving force in the continued collection of data. However, the legislature has developed an appreciation for the value of the data that can be used to guide any future discussions of cost containment or market reform.

Changing State Policy

Data on growth in health spending showed that there had been a significant moderation in spending levels from the double-digit rates of growth in the early 1990s to a more moderate rate of growth of 5-6 percent in later years. This moderation in the rate of growth was used to support the repeal of legislation that had established spending growth limits on private payers. Arguments were advanced, using SHEA data on spending growth, to show that the market was working to address cost concerns and that regulation was no longer needed.

Informing National Policy Debate

A more specific example highlights the ability to do subanalysis on different aspects of health care spending. This particular example involves mental health coverage and the impact of changes to Minnesota's law that mandated mental health parity 2 years prior to passage of the Federal law. The data collected over time allowed for analysts to look at the distribution of spending on mental health services and saw virtually no change in spending patterns countering arguments at the national level that parity mandates would significantly increase health care spend-Although data on mental health spending are not typically included in presentations on aggregate health care spending, the ability to look at different expenditure categories and trends in spending is possible.6

Impact Analysis

Although the provider data, collected from hospitals and clinics, have not been used in the development of State spending estimates, the data and information are considered part of Minnesota's oversight of market conditions and trend. The annual provider data generated the information

⁶ The information on mental health spending in Minnesota was presented at national conferences both by legislators and staff (Blewett, 1997).

needed to estimate the impact of changes in the Medicare program presented in 1996 and passed as part of the Balanced Budget Act of 1997. A report highlighting the impact by region for both hospitals and clinics was completed and used to provide background information during State budget discussions and education of providers throughout the State on changes that were taking place at the national level (Minnesota Department of Health, 1996).

Education of Policymakers

The ability to track the distribution of insurance coverage, which was almost a byproduct of the spending estimates, has proven to be an added benefit for tracking trends in coverage. An example to relay the usefulness of this information occurred around discussion of State-mandated benefit of 48 hour coverage of maternity stays. Our data indicate that 43 percent of the privately insured market is covered by a selfinsured plan and would not be affected by a State mandate. State policymakers were surprised to know that their policies would not affect such a significant proportion of the market. Having a two-page handout with the key pie chart was an effective educational tool. It should be noted that regardless of the data presented, Minnesota did pass its own version of 48-hour mandated maternity coverage but policymakers made an informed decision and have since asked for more detail about self-insurance. ERISA. and the State's role in insurance mandates.

Monitoring Market Trends

A key function of having the detailed State data is to monitor trends in the market. The State uses the GPS but also the clinic and hospital data and data from public programs to monitor changes in health spending. An interesting change that has

been noted over time is in the increase in HMOs offering self-insured coverage. While total enrollment in self-insured plans was relatively stable from 1993 to 1996, the share of the self-insured market that was administered by HMOs grew rapidly. In 1996, 43 percent of enrollees in self-insured plans were in plans administered by HMOs, compared with just 20 percent in 1993. This is an interesting market trend that will be carefully monitored and evaluated in terms of its impact on State policy. Are HMOs moving away from fully-covered plans? What impact does this have on State regulatory authority? Is this change having any impact on changing spending patterns?

Medicare and Medicaid Applications

One of the major contribution of SHEAs is the ability of State analysts to point out the relative roles that the Federal Government programs and private sector play in health care spending. The fact that public programs (primarily Medicaid and Medicare) make up 40 percent of health care spending in the State has been a critical piece of information when discussing cost containment policies and the impact that Medicaid spending has on overall spending. SHEA data, including the hospital and clinic data, also allow analysts to look at the disproportionate effects that changes in Medicare and Medicaid policies will have on providers in rural and urban communities.

DISSEMINATION

How useful SHEAs are at the State level depends on how they are used and disseminated. States may, in fact, have more data or more detailed data than HCFA is able to obtain. Maryland and Hawaii, for example have access to third-party claims that can be used to build State health expenditure accounts from the "bottom up." (Levit, 1994). While not all States have the ability or resources to develop and maintain such a rich data source, States that have claims data are in a unique position to develop detailed State health accounts. But again, resources are needed not only for data collection but also for the analysis and dissemination functions.

HCFA uses this journal for national dissemination of its spending estimates which are used and cited widely. Minnesota has developed its own dissemination strategy that has been fairly successful. Based on information generated from SHEAs, the Department of Health distributed nearly 7,000 issue briefs and reports in 1996 and more than 2,200 copies of the Minnesota Health Care Market Report, a comprehensive report of Minnesota's health care sys-(Minnesota Department of Health, 1995). In addition, the Department of Health hosted seminars throughout the State to inform health care providers and the public of current health care trends and changes in the market and now provides an annual legislative briefing on health care in Minnesota for new and returning State legislators.

The Technical Note provides a list of selected topics of issue briefs and papers prepared by the Minnesota Department of Health's Health Economics Program. The issue briefs are two pages back-to-back that include summary data and analysis on specific topics. The four-six page issue papers provide a more indepth discussion and analysis of key policy topics that are relevant in Minnesota policy debates. The data also provide the opportunities for quick turnaround analysis that are used on a day-to-day basis during the legislative session.

SUMMARY

The health care industry continues to experience change in financing and service delivery structures. Analysts will require consistent methods to track health spending in order to describe patterns and to project future spending levels. Reliable and consistent State estimates of health care spending allow State analysts to fulfill this function by reflecting the unique characteristics of local markets and meeting the information needs of both policymakers and stake holders. Minnesota's spending estimates are one example of what States can do to provide a comprehensive view of local health care markets and provide reliable information to policymakers. estimates have been developed over a period of several years and have improved significantly as analysts gain more experience and as data sources are refined.

Minnesota's health care market has stabilized in recent years. Spending growth for health services and supplies has moderated and spending as a proportion of the State's economy has also leveled off. With the development of State health expenditure accounts in Minnesota, analysts now have the data needed to monitor future changes, to evaluate factors influencing spending growth, and to evaluate policy options in terms of their impact on health care spending. As delivery systems and policy issues change, the importance of producing sound estimates of health care spending persists. While calls for global change in the health care system have subsided, State-specific spending estimates are valuable tools for policymakers and legislators that pursue incremental reform. With a continued commitment to producing State-level estimates, consistency can be established and quality can be improved. While Minnesota's unique methods of developing State estimates do not allow for reliable interstate comparisons, they provide invaluable information and analysis capabilities for State policymakers. The Health Economics Program of the Minnesota Department of Health will continue to monitor this State's health care spending, along with other market trends, to provide important information in the formation of health policy in Minnesota.

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TECHNICAL NOTE

Select Health Issue Brief Topics

Date	Title	Overview
1999	Distribution of Insurance Coverage: 1997	Annual estimates of the distribution of insurance coverage of Minnesotans for 1997 including recent trends.
1998	Consolidation in Minnesota's Health Care Market	Summary of consolidation of payers and providers in Minnesota and discussion of general issues and trend.
1998	Minnesota Physician Clinic Spending and Trend	Presents overview of physician revenue and spending patterns for 1997.
1998	Minnesota Health Care Expenditures and Trends, 1996	Provides estimate of health care spending and growth of spending in Minnesota.
1997	Questions and Answers on Health Insurance Premiums	Answers to common questions about increasing health insurance premiums and trends over time.
1997	Minnesota Health Care Expenditure and Trends	Summary of health care expenditures by category of spending and by type of payer.
1997	Provider Financial and Statistical Report: Dental Clinics	Overview of financial and statistical report for dental clinics in Minnesota based on one-time survey of 1994 data.
1997	Provider Financial and Statistical Report: Chiropractic Clinic	Overview of financial and statistical report for chiro- practic clinics in Minnesota based on one-time survey of 1994 data.
1996	Uncompensated Care in Minnesota	Overview of the costs of uncompensated care for hospitals and physician clinics. Trends for hospitals are presented from 1986 to 1994.

Select Health Issue Paper Topics

Date	Title	Overview
1997	Self-Funding of Health Care Benefits	A detailed definition of self-funded health plans; a discussion of State regulatory authority and Minnesota trends.
1997	Federal Health Reforms	Detail presented on the Health Insurance Portability and Accountability Act changes and implications for Minnesota.
1996	Measuring Trends in the Number of Uninsured in	
	Minnesota	Discusses three major surveys that estimate the num- ber of uninsured in Minnesota and why the methodolo- gies produce different estimates.
1996	Long-Term Care Insurance	gioo produce amorem commutes.
		A general discussion about the increasing costs of long-term care and the potential role of a long-term care insurance for state employees.
1996	Medical Savings Accounts	
		Provides information on what medical savings account are and how they would work. Cost/benefit implications are included.
1996	Non-Profit and For-Profit HMOs	
		Provides detail on the distinctions between nonprofit and for-profit health maintenance organizations and the policy implications for Minnesota's market.
1996	Direct Contracting	Discusses the legal and regulatory implications of direct contracting and trends in Minnesota's business community toward the use of direct contracting when
		purchasing health care for employees.

SOURCE: Minnesota Department of Health, Health Economics Program, Division of Health Policy and Systems Compliance, 1996-1999.

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