

Health Care Capital Expenditures in Minnesota, 1993 to 2004

In 1992 the Minnesota legislature enacted Minnesota Statutes section 62J.17, a law that requires health care providers to file expenditure reports with the Minnesota Department of Health (MDH) for all major capital spending commitments greater than \$500,000 (\$1 million as of June 30, 2003). Under the law, capital expenditure reports undergo a retrospective review process by MDH to assess a project's appropriateness in terms of its impact on health care cost, quality, and access. Projects that fail retrospective review can be placed on prospective review for a period of five years. Under prospective review, MDH must approve all new capital projects before they can proceed.

The original intent of the law was to serve as an interim measure for restraining capital expenditures on new facilities and equipment while other health system reform measures were implemented. Although many of these reform measures were repealed in the mid-1990s, the capital expenditure reporting law has remained in effect. Over the 12 years since the law has been in effect, MDH has completed over 900 retrospective reviews of capital expenditure reports, totaling \$4.0 billion.

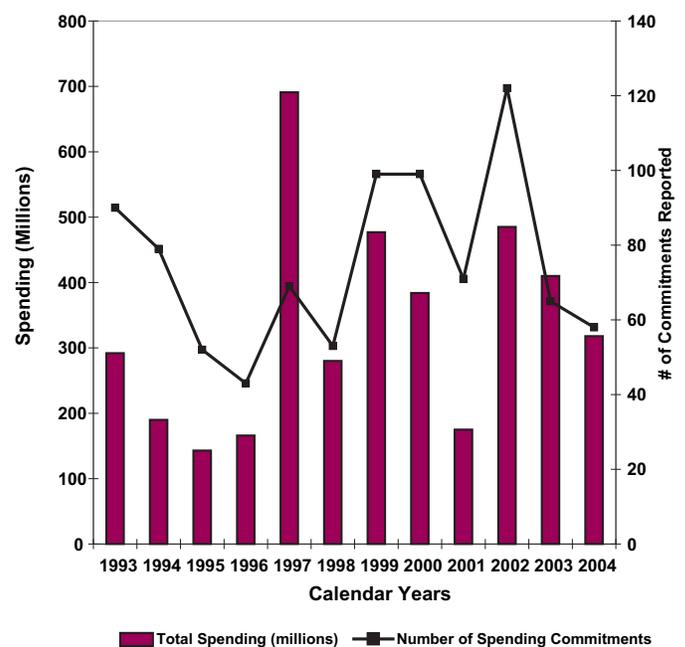
Capital Expenditure Trends

The number of commitments and amounts of expenditures reported by health care providers to MDH in each year are shown in Figure 1. The number of expenditure commitments during a calendar year was highest in 1999, 2000, and 2002, years in which the number of expenditures reported were near to or exceeded 100. One large expenditure commitment of \$398.5 million was made in 1997, which accounts for much of the unusually high total expenditures for that year. Total expenditures were

highest in 1997, 1999, 2002, and 2003, with overall capital expenditure outlays for each of those years exceeding \$400 million.

Figure 1

Health Care Capital Expenditures in Minnesota, 1993 to 2004



During this twelve-year period, 64% of all reported capital expenditures were incurred by hospitals (for both inpatient and outpatient services) and the remaining 36% was incurred by physician clinics. The total \$2.57 billion of capital spending reported by Minnesota hospitals for 1993 to 2004 (Figure 2) included \$1.81 billion reported by hospitals in urban areas and \$758 million reported by hospitals in rural areas.

Total capital spending reported by Minnesota physician clinics was \$1.55 billion for the period 1993 to 2004. This total included \$1.32 billion reported by physician clinic organizations in urban areas and \$150 million reported by physician clinic organizations in rural areas (Figure 2).

Figure 2

Hospital and Clinic Capital Expenditures in Minnesota, 1993 to 2004
(Total \$4.0 Billion)

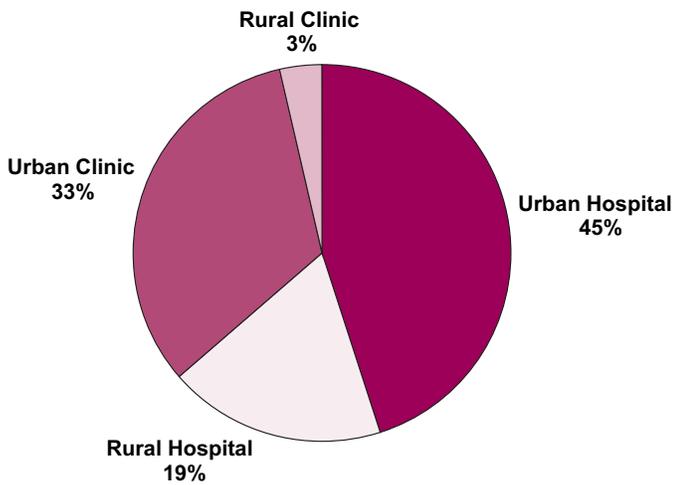


Table 1 shows the major categories of expenditures reported. The most common expenditures are projects that involved spending for property or facility acquisitions, construction, or renovation. A capital expenditure report may include more than one of these types of projects. The 1369 projects are reported from a total of 901 spending commitment reports. Unfortunately, specific cost figures for individual projects are often not provided in the reports.

Table 1

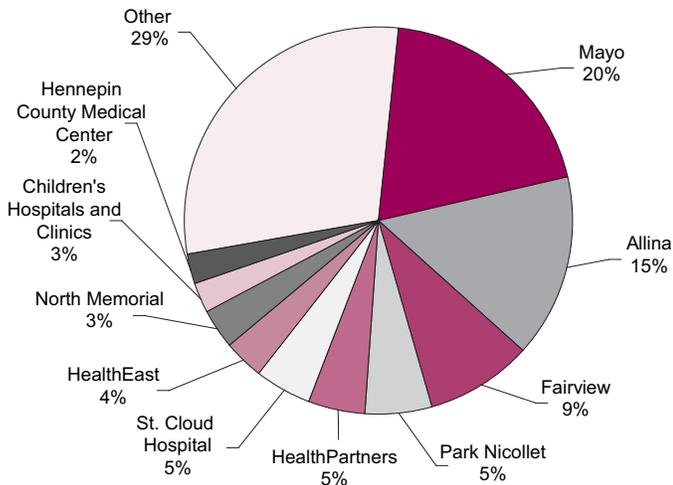
Types of Capital Spending Projects, 1993 to 2004

Types of Projects:	Number of Projects	Percent of Total Projects
Building, Renovation, or Non-Patient	326	24%
Physician Office Space	209	15%
Computer, Laboratory, Phone, or Monitoring	139	10%
Emergency Care	58	4%
Surgery Care	90	7%
Intensive Care (ICU or NICU)	24	2%
Cardiac Care	84	6%
Outpatient Surgery Center	12	1%
Radiation Therapy	41	3%
Other Imaging	121	9%
Number of New PETs	11	1%
Number of New CTs	113	8%
Number of New MRIs	141	10%
Total	1369	100%

Organizations that reported the greatest total capital spending amounts for the period 1993 to 2004 (those with greater than \$95 million total spending) are listed in Figure 3. The Mayo Foundation in Rochester reported the largest investment in capital for health care services in Minnesota over the time period 1993 to 2004, nearly \$790 million. Health care provider systems and independent hospitals in the Twin Cities metro area were also responsible for some of the largest investments in new or updated health care facilities during this period.

Figure 3

Capital Expenditures by Sponsoring Organizations, 1993 to 2004
(Total \$4.0 Billion)



These expenditure trends show a significant amount of spending on capital projects for Minnesota health care facilities over the past 12 years. The types of projects reported cover a wide range of purposes including replacement of facilities lost to fire or flood, upgrades or additions of computer systems, hospital monitoring systems, upgraded communication equipment, space remodeling and renovations, specialty care centers, primary care clinics, and the expansion and updating of hospital facilities. Many of the expansions and new facilities are related to population expansions and other demographic changes in certain areas of the state.

Imaging Services

Some categories of capital spending for health care services in Minnesota are growing more rapidly than others. Outpatient imaging, in particular, is showing a significant amount of growth in the number of new facilities.

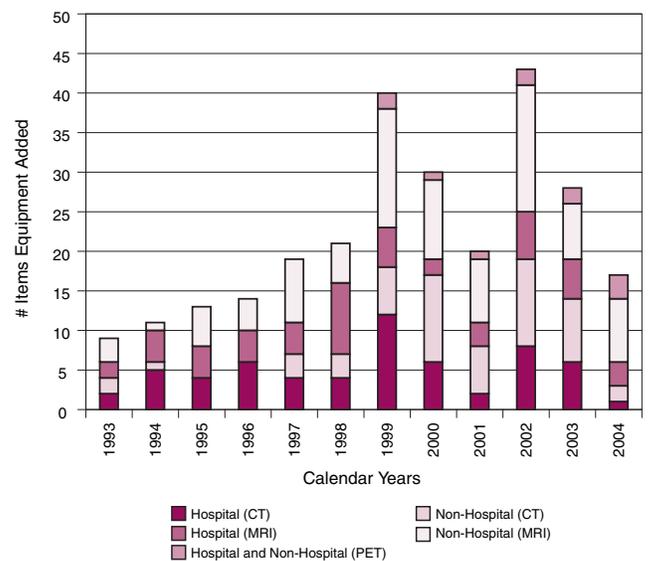
The categories of expenditures that are growing fastest are CT (computed tomography), MRI (magnetic resonance imaging), and PET (positron emission tomography) imaging equipment purchases. Table 1 on page 2 shows the total number of new units of

these types of imaging equipment reported. One capital expenditure report with imaging equipment may include the purchase of more than one machine. Many of the new imaging services that are reported are being provided in physician clinics.

Figure 4 shows trends over 12 years for the numbers of CT, MRI, and PET imaging devices purchased in Minnesota. Starting in 1999, the number of purchases of CT, MRI, and PET scanning equipment significantly increased. Purchases of imaging equipment reported by a hospital as partly or fully for use in providing outpatient services are included within the hospital category in these figures. Most notably, the annual number of imaging equipment purchases made by outpatient facilities were substantially increased in the period 1999 to 2004, compared to the number of units purchased during the prior six years of capital expenditure reporting.

Figure 4

Added Capacity for CT, MRI, and PET Machines, Minnesota, 1993 to 2004



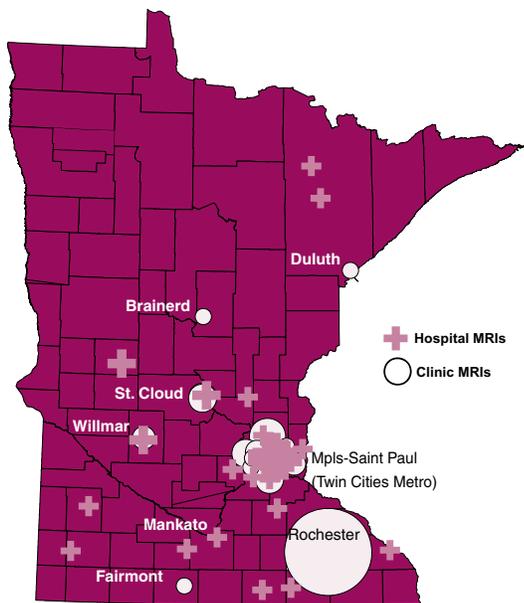
CT equipment purchases nearly tripled for 1999 to 2004, compared to the number of CT units purchased from 1993 to 1998, increasing from about 5 to 15 per year. MRI equipment was purchased at a much higher rate from 1999 to 2003, with more than 15 non-hospital based MRI units purchased in 1999

and 2002. CT and MRI purchases by outpatient facilities are far outpacing purchases by hospitals, with increases starting in 1999 for MRI equipment and in 2000 for CT equipment (Figure 4). PET scanning equipment purchases for services in the Twin Cities metro area began in 1999 (Figure 4). Early PET purchases were made by non-hospital organizations offering PET-only equipment for outpatient services. In 2002 and 2003, three Twin Cities metro area hospitals made expenditure commitments for additions of new PET/CT scanning equipment (a combined modality of PET imaging integrated with CT technology).

New MRI imaging equipment is being purchased for many areas of the state (Figure 5). In the metro area, a substantial number of new MRI machines are being added at both hospital and clinic locations, including many imaging centers (Figure 6). These maps do not include MRI replacements, comparable upgrades, or mobile equipment purchases; however, fixed equipment that is a replacement for a prior mobile service is included.

Figure 5

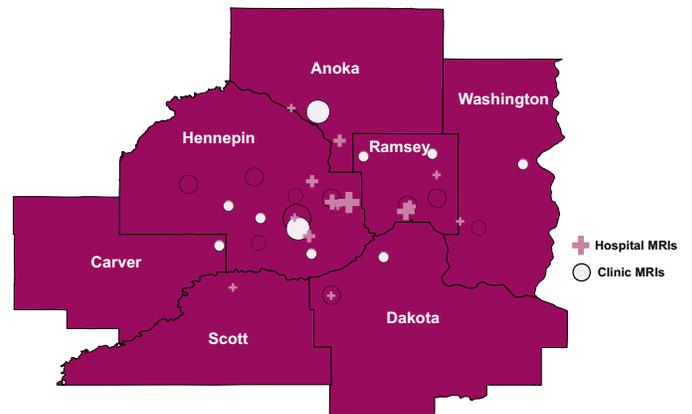
Statewide New MRIs, 1993 to 2004



Notes: Larger symbol indicates multiple MRIs at location.
Clinic MRIs are grouped in the city where the MRIs are located

Figure 6

New MRI Capacity Added in the Twin Cities, 1993 to 2004



Notes: Larger symbol indicates multiple MRIs at location.
Clinic MRIs are grouped in the city where the MRIs are located

Provider organizations' spending on capital projects in Minnesota is most notable in the rapid growth of imaging equipment purchases. Technological advances in these new pieces of equipment, and an increasing breadth of medical applications that are reimbursable through health plan coverages, are likely significant drivers of investment in new imaging equipment.

The Health Economics Program conducts research and applied policy analysis to monitor changes in the health care marketplace; to understand factors influencing health care cost, quality and access; and to provide technical assistance in the development of state health care policy.

For more information, contact the Health Economics Program at (651) 282-6367. This issue brief, as well as other Health Economics Program publications, can be found on our website at: <http://www.health.state.mn.us/divs/hpsc/hep/index.htm>

Minnesota Department of Health
Health Economics Program
85 East Seventh Place, P.O. Box 64882
St. Paul, MN 55164-00882
(651) 282-6367

