

Chartbook Section 8

Health Care Providers and Service Availability

Section 8: Health Care Providers and Service Availability

- Hospital system and capacity
- Utilization of hospital services
- Hospital financial trends
- Hospital capital expenditures
- Hospital community benefit
- Availability of specific health care services at hospitals (e.g., imaging, surgery)
- Physician services

A summary of the charts and graphs contained within is provided at <u>Chartbook Summaries - Section 8</u>. Direct links are listed on each page. Please contact the Health Economics Program at 651-201-3550 or <u>health.hep@state.mn.us</u> if additional assistance is needed for accessing this information.

Hospital System and Capacity

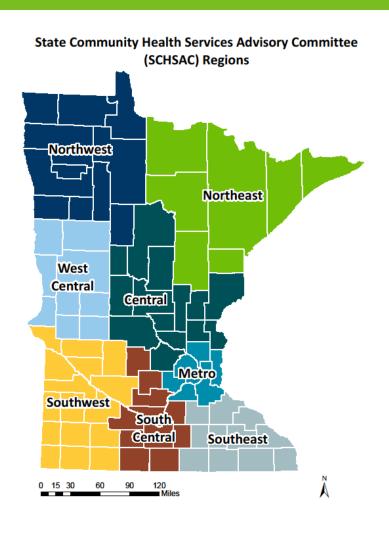
Hospital Capacity in Minnesota, 2015

Number of Hospitals	Available Beds ¹	Occupancy Rate Based on Available Beds	Licensed Beds ²	Occupancy Rate Based on Licensed Beds	Available Beds Per 1,000 Population
131	11,606	57.2%	16,268	40.8%	2.1

¹Available beds is defined as the number of acute care beds that are immediately available for use or could be brought online within a short period of time.

²Licensed beds is defined as the number of beds licensed by the Department of Health, under Minnesota Statutes, sections 144.50 to 144.58. Source: MDH Health Economics Program analysis of hospital annual reports, July 2017; U.S. Census Bureau Unless otherwise noted, all data is this section is for each hospital's fiscal year.

Minnesota Geographic Regions: Definition



Regional Hospital Capacity in Minnesota, 2015

	Number of Hospitals	Available Beds ¹	Occupancy Rate Based on Available Beds	Licensed Beds ²	Occupancy Rate Based on Licensed Beds	Available Beds Per 1,000 Population
Central	19	1,177	45.5%	1,377	38.9%	1.6
Metro	26	5,856	69.5%	8,524	47.7%	1.9
Northeast	17	1,118	48.9%	1,405	38.9%	3.4
Northwest	12	342	33.4%	420	27.2%	2.0
South Central	15	565	32.6%	761	24.2%	1.9
Southeast	10	1,640	60.2%	2,578	38.3%	3.3
Southwest	23	555	18.4%	708	14.4%	2.5
West Central	9	353	29.7%	495	21.2%	1.6
Total	131	11,606	57.2%	16,268	40.8%	2.1

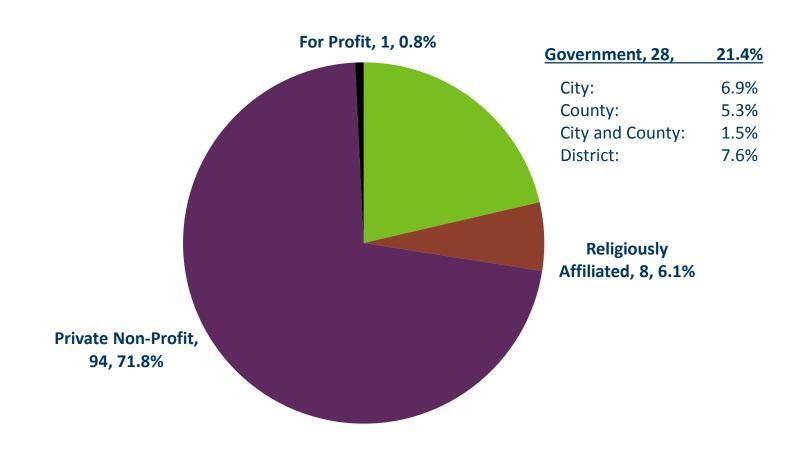
¹Available beds is defined as the number of acute care beds that are immediately available for use or could be brought online within a short period of time.

²Licensed beds is defined as the number of beds licensed by the Department of Health, under Minnesota Statutes, sections 144.50 to 144.58. Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

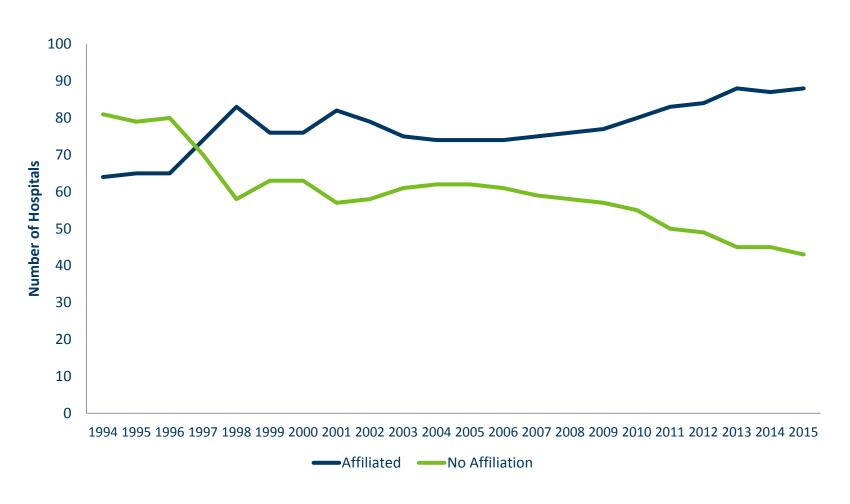
Distribution of Minnesota's Hospitals by Size and Region, 2015

	Under 25 Beds	25-49 Beds	50-99 Beds	100-199 Beds	200 or More Beds	Total
Central	10.5%	68.4%	10.5%	5.3%	5.3%	100.0%
Metro	3.8%	11.5%	23.1%	19.2%	42.3%	100.0%
Northeast	47.1%	17.6%	17.6%	5.9%	11.8%	100.0%
Northwest	50.0%	41.7%	0.0%	8.3%	0.0%	100.0%
South Central	46.7%	33.3%	13.3%	6.7%	0.0%	100.0%
Southeast	30.0%	30.0%	20.0%	10.0%	10.0%	100.0%
Southwest	47.8%	47.8%	4.3%	0.0%	0.0%	100.0%
West Central	33.3%	44.4%	11.1%	11.1%	0.0%	100.0%
Statewide	31.3%	35.9%	13.0%	8.4%	11.5%	100.0%

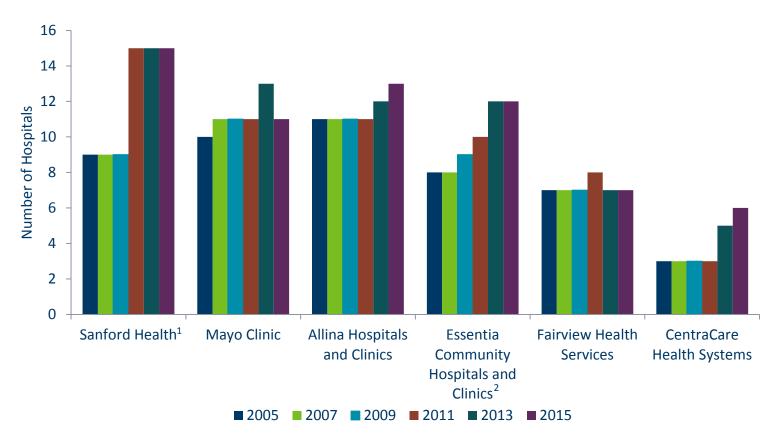
Ownership of Minnesota Hospitals, 2015 131 Total Hospitals



Minnesota Community Hospitals Affiliated with a Hospital System, 1996-2015



Largest Minnesota Hospital Systems, 2005-2015



¹Previously known as Sioux Valley. Changes in the number of hospital affiliations impact trend lines over time. ²Essentia represents the merger of Benedictine and SMDC systems and includes both systems over time. Largest hospital systems are defined as the six systems with the highest number of hospitals in 2015. Source: MDH Health Economics Program analysis of hospital annual reports, July 2017. Summary of graph

Minnesota Hospital System Ownership, 2015

	Owned	Managed	Leased	Total	Available Beds
Allina Health System	12	1	0	13	1,815
Avera Health	1	2	0	3	80
Catholic Health Initiatives	5	0	0	5	107
CentraCare Health System	6	0	0	6	595
Children's Hospitals and Clinics	1	0	0	1	279
Essentia Health	11	0	1	12	838
Fairview Health Services	7	0	0	7	1,422
HealthEast Care System	4	0	0	4	630
HealthPartners, Inc.	2	0	0	2	503
Lake Region Healthcare - Fergus Falls	0	1	0	1	10
Mayo Clinic	11	0	0	11	1,784
Ministry Health Care	1	0	0	1	20
North Memorial Health Care	2	0	0	2	441
Park Nicollet Health Services	2	1	0	3	469
Rice Memorial Hospital	0	1	0	1	18
Sanford Health	8	5	2	15	429
Select Medical Corporation	1	0	0	1	92
Total	75	12	3	90¹	9,815
Unaffiliated Hospitals				43	1,791

¹Hospitals with multiple affiliations are counted under each affiliation; for hospitals with multiple affiliations available beds are divided across systems equally.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

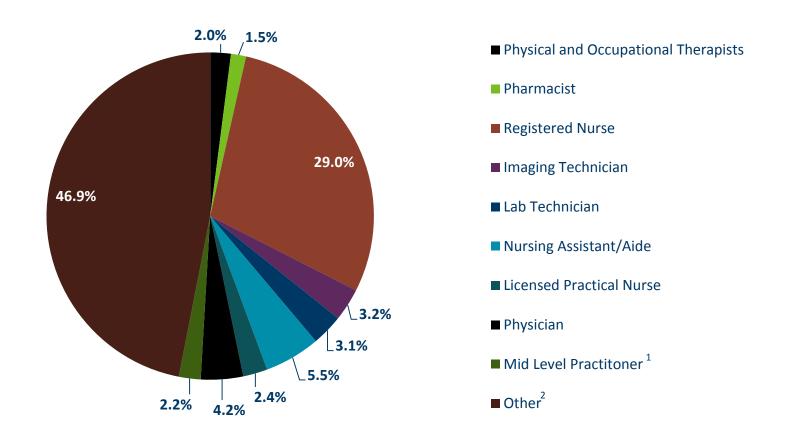
Hospital Offsite Clinics and Affiliation Status, Select Years

	2010	2015	Increase, 2010 to 2015
All Clinics	624	781	25.2%
Affiliated	452	547	21.0%
Non-Affiliated	172	234	36.0%
Locations identified as Billed by Hospital ¹	394	562	42.6%
Affiliated	258	378	46.5%
Non-Affiliated	136	184	35.3%
All other Clinics	230	219	-4.8%
Affiliated	194	169	-12.9%
Non-Affiliated	36	50	38.9%

¹ Locations identified as "Billed by Hospital" are considered hospital outpatient clinics, as they are billed under the hospital's Medicare and Medicaid provider number; revenue from these clinics is included in hospital revenue.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017

Composition of Minnesota's Hospital Workforce, 2015



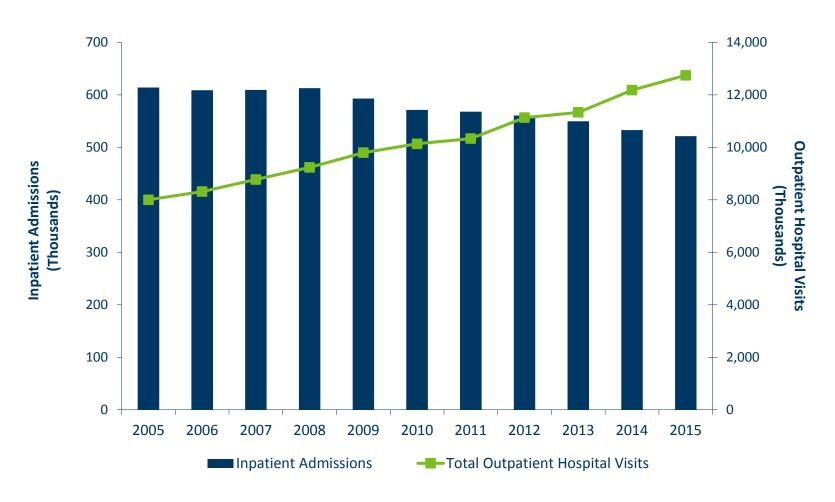
¹Includes nurse anesthetists, nurse practitioners, and physician assistants.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017. Summary of graph

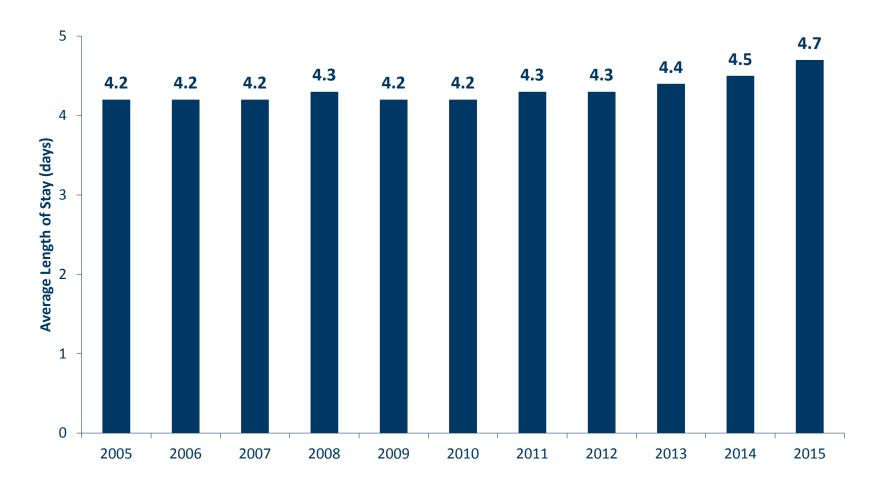
² Other is reported as grouped category of positions.

Utilization of Hospital Services

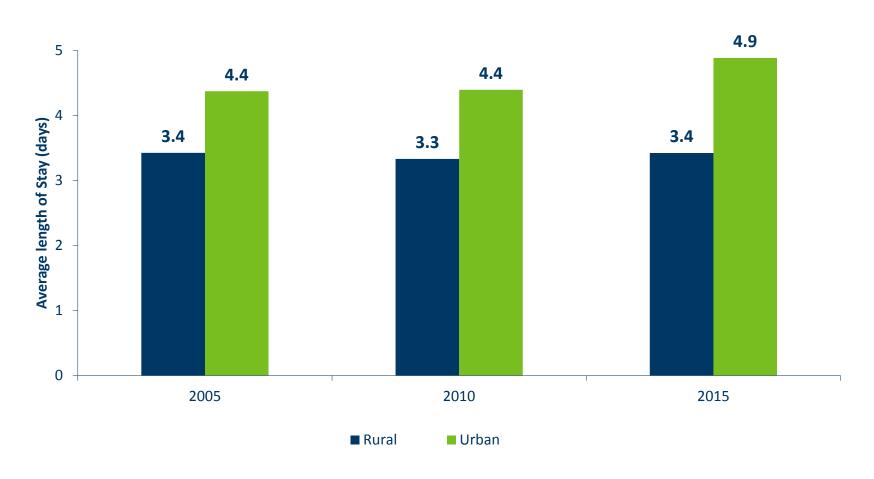
Minnesota Hospital Outpatient Visits and Inpatient Admissions, 2005 to 2015



Average Length of Stay in Minnesota Hospitals, 2005 to 2015



Average Length of Stay: Rural and Urban Minnesota Hospitals, 2005 to 2015



Minnesota Hospital Utilization by Region, 2015

	Inpatient Admissions	Inpatient Days	Average Length of Stay (days)	Outpatient Visits
Central	51,536	195,526	3.8	1,714,225
Metro	316,864	1,484,605	4.7	4,531,149
Northeast	40,874	199,673	4.9	2,017,503
Northwest	11,203	41,679	3.7	586,636
South Central	19,073	67,168	3.5	837,322
Southeast	58,686	360,084	6.1	1,720,090
Southwest	11,868	37,225	3.1	489,474
West Central	11,198	38,282	3.4	847,004
Statewide	521,302	2,424,242	4.7	12,743,403

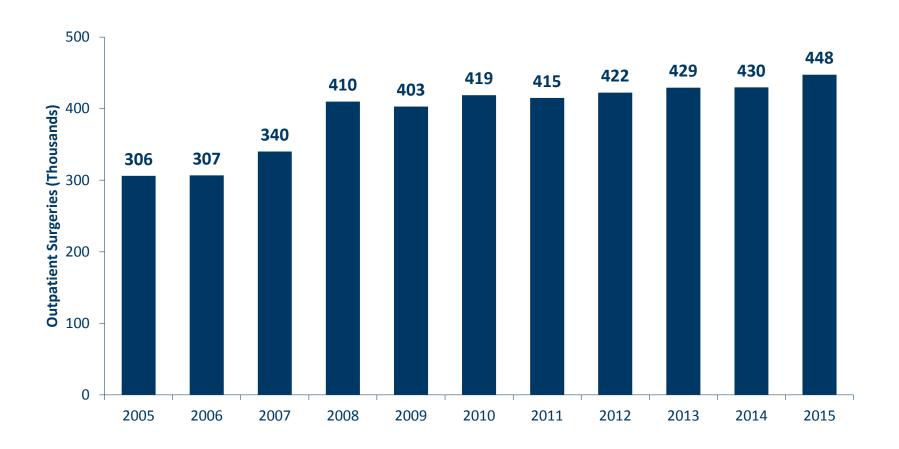
Distribution of Hospital Admissions and Inpatient Days by Type of Service, 2015

	Percent of Admissions	Percent of Inpatient Days
Medical & surgical care	35.6%	35.5%
Cardiac care	11.5%	10.6%
Obstetric care	13.7%	7.3%
Orthopedic care	13.0%	9.4%
Psychiatric care	6.6%	12.3%
Neurology care	6.4%	6.1%
Neonatal care (excluding births)	5.5%	6.4%
Chemical dependency care	1.8%	2.1%
Rehabilitation	1.0%	2.6%
Other acute care	4.8%	7.7%
Total acute care	100.0%	100.0%

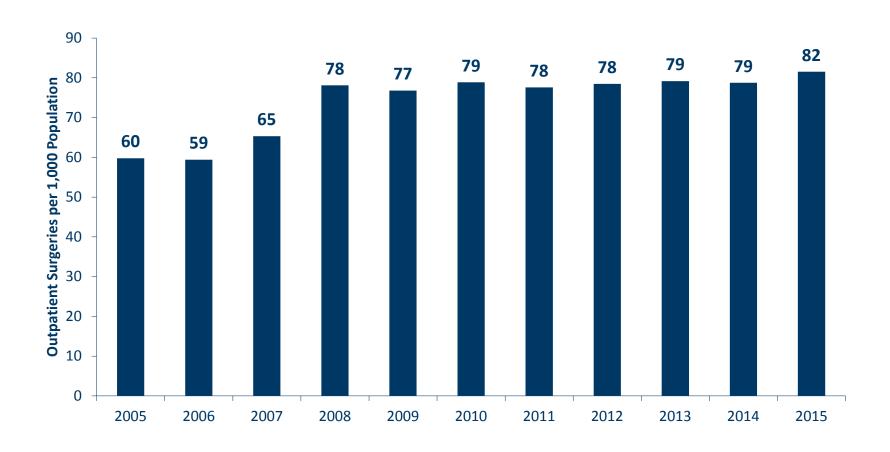
Distribution of Hospital Admissions and Inpatient Days by Type of Service, 2015

	Rı	ıral	Ur	ban
	Percent of Admissions	Percent of Inpatient Days	Percent of Admissions	Percent of Inpatient Days
Medical & surgical care	39.7%	40.5%	34.8%	34.8%
Cardiac care	9.3%	8.4%	12.0%	10.9%
Obstetric care	15.8%	10.4%	13.3%	6.8%
Orthopedic care	12.2%	11.4%	13.2%	9.1%
Psychiatric care	5.4%	12.5%	6.8%	12.3%
Neurology care	3.4%	4.1%	6.9%	6.4%
Neonatal care (excluding births)	4.9%	3.8%	5.7%	6.7%
Chemical dependency care	1.2%	2.0%	2.0%	2.1%
Rehabilitation	1.2%	4.1%	0.9%	2.4%
Other acute care	6.9%	2.8%	4.5%	8.4%
Total acute care	100.0%	100.0%	100.0%	100.0%

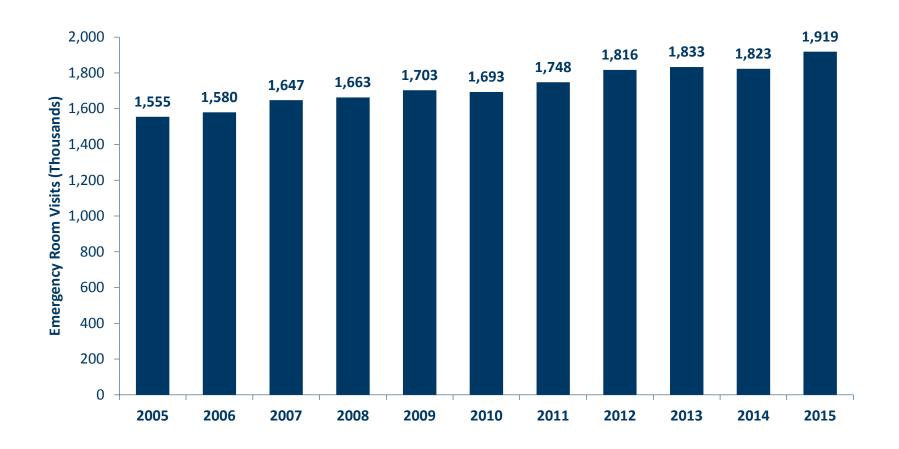
Trend in Outpatient Surgeries at Minnesota Hospitals, 2005 to 2015



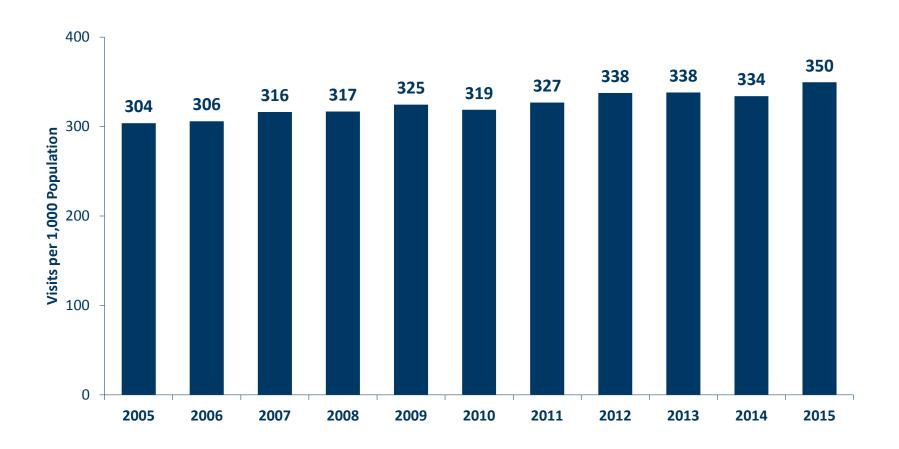
Trend in Outpatient Surgeries at Minnesota Hospitals per 1000 in Population, 2005 to 2015



Trend in Emergency Room Visits at Minnesota Hospitals, 2005 to 2015



Trend in Emergency Room Visits at Minnesota Hospitals per 1000 Population, 2005 to 2015



Hospital Financial Trends

Net Assets of Minnesota Hospitals, 2005 to 2015



Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

Net assets is an accounting term defining the total assets minus the total liabilities, and describes the hospital's financial position.

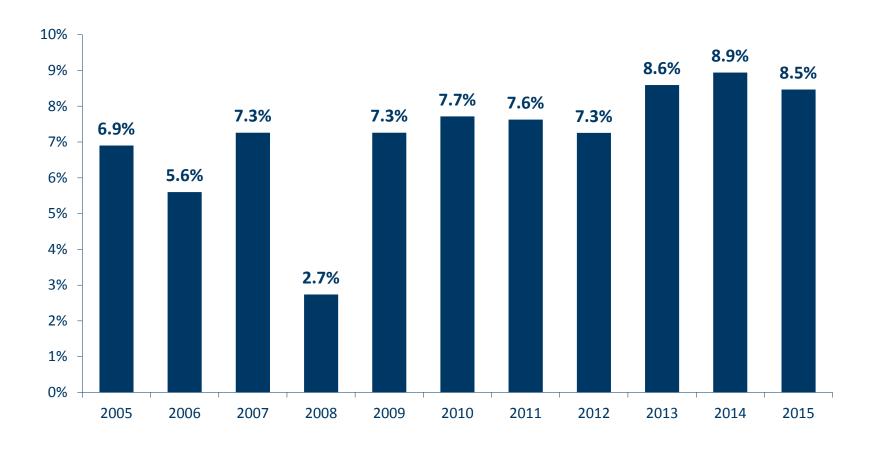
Summary of graph

Net Income of Minnesota Hospitals, 2005 to 2015



Source: MDH Health Economics Program analysis of hospital annual reports, July 2017. Summary of graph

Minnesota Hospitals' Net Income as a Percent of Revenue, 2005 to 2015



Hospital Financial Indicators by Region, 2015

	Net Income (\$ Millions)	Net Income as a % of Revenue
Central	\$130.4	7.3%
Metro	\$594.0	6.3%
Northeast	\$73.3	4.3%
Northwest	\$42.8	9.0%
South Central	\$63.2	8.7%
Southeast	\$554.9	19.7%
Southwest	\$23.4	5.1%
West Central	\$38.4	7.6%
Statewide	\$1,520.3	8.5%

Hospital Financial Indicators by Hospital Size and Type, 2015

Number of Available Beds	Net Income (\$ Millions)	Net Income as a % of Revenue
Under 25 Beds	\$49.5	7.8%
25 to 49 Beds	\$211.4	9.8%
50 to 99 Beds	\$73.0	3.9%
100 to 199 Beds	\$147.4	6.3%
200 Beds or More	\$1,039.0	9.5%
Type of Hospital ¹		
Critical Access Hospital (CAH)	\$159.4	7.8%
PPS	\$1,350.9	8.6%
Other	\$9.9	8.0%
All Hospitals	\$1,520.3	8.5%

¹A critical access hospitals is a federal designation for a rural hospital that meets certain criteria, and PPS hospitals are Medicare Prospective Payment System hospitals.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

Sources of Patient Revenue for Minnesota Hospitals, 2014-2015

	Rural Facilities			Urban Facilities		Facilities Statewide	
	2014	2015	2014	2015	2014	2015	
Medicare	39.5%	39.2%	28.9%	29.2%	31.0%	31.1%	
State Public Programs ¹	11.2%	11.5%	13.6%	16.3%	13.1%	15.3%	
Private Insurance	44.0%	44.0%	52.8%	50.1%	51.0%	48.9%	
Self-Pay	3.9%	3.9%	2.6%	2.2%	2.9%	2.5%	
Other Payers	1.4%	1.5%	2.1%	2.3%	1.9%	2.2%	
Hospital Patient Revenue, All Payers	100%	100%	100%	100%	100%	100%	

¹Includes Medical Assistance and MinnesotaCare.

Percent shown is a percent of Hospital Patient revenue

A hospital is defined as rural if it is located in a county that is not part of a metropolitan statistical area.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

Hospital Capital Expenditures

Capital Expenditure Commitments by Minnesota Hospitals, 2015

	2014	2015
Total number of capital expenditure commitments reported	94	86
Percent of Minnesota hospitals reporting major capital expenditure commitment	29.5%	24.4%
Value of major capital expenditure commitments reported (Millions)	\$576.4	\$613.7

Minnesota Hospital Capital Expenditure Commitments by Type, 2015

	Capital Expenditure Commitments (\$ Millions)	Percent of Total Capital Expenditure Commitments
Medical equipment	\$80.8	13.2%
Building and space	\$322.7	52.6%
Other	\$210.2	34.2%
All Major Capital Expenditure Commitments	\$613.7	100.0%

Minnesota Hospital Capital Expenditure Commitment by Category, 2015

	Capital Expenditure Commitments (\$ Millions)	Percent of Total Capital Expenditure Commitments
General Infrastructure	\$281.8	45.9%
Surgery	\$72.4	11.8%
Other Patient Care Services	\$59.8	9.7%
Emergency Care	\$57.7	9.4%
Diagnostic Imaging	\$41.4	6.8%
Obstetrics	\$26.2	4.3%
Mental Health	\$18.5	3.0%
Rehabilitation	\$15.9	2.6%
Cardiac Care	\$13.6	2.2%
Intensive Care (ICU or NICU)	\$10.9	1.8%
Orthopedics	\$10.8	1.8%
Radiation Therapy	\$4.6	0.7%
All Major Capital Projects	\$613.7	100.0%

Community Benefit

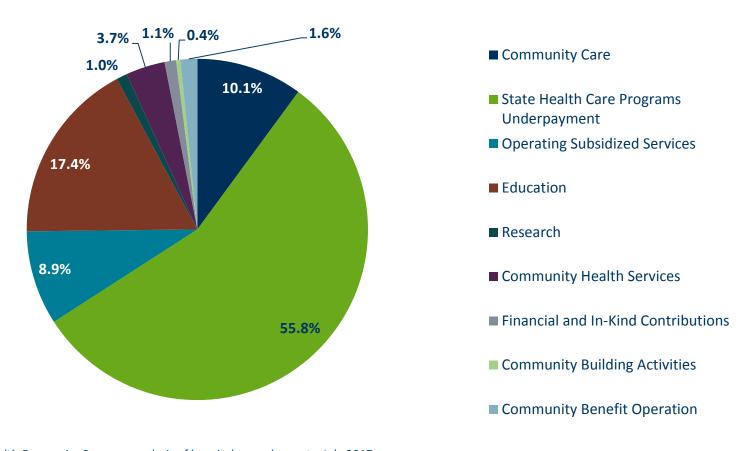
Community Benefit Provided by Minnesota Hospitals, 2015

	Community Benefit ¹ (\$ Millions)	Percent of Total Operating Expenses
Charity Care	\$103.3	0.6%
State Health Care Programs Underpayment	\$572.0	3.5%
Operating Subsidized Services	\$91.5	0.6%
Education	\$177.9	1.1%
Research	\$10.5	0.1%
Community Health Services	\$38.0	0.2%
Financial and In-Kind Contributions	\$11.2	0.1%
Community Building Activities	\$4.2	0.0%
Community Benefit Operation	\$16.3	0.1%
Total	\$1,024.9	6.2%

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

¹Community benefit refers to the contributions hospitals make outside of reimbursed patient care to the communities, for the or definitions of categories see: MDH/Health Economics Program, "Minnesota Hospital Community Benefit in 2013" June, 2016, available at http://www.health.state.mn.us/divs/hpsc/hep/publications/legislative/commbenefitsRpt2013.pdf

Distribution of Minnesota Hospitals' Community Benefit, 2015



Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

Community benefit refers to the contributions hospitals make outside of reimbursed patient care to the communities, for the or definitions of categories see: MDH/Health Economics Program, "Minnesota Hospital Community Benefit in 2013" June, 2016, available at http://www.health.state.mn.us/divs/hpsc/hep/publications/legislative/commbenefitsRpt2013.pdf
Summary of graph

Availability of Specific Hospital Services

Services Available in Minnesota Hospitals, 2015

	Number of Hospitals with Services Available ¹	Number of Hospitals with Services Not Available
Surgery		
Inpatient Surgery	124	7
Outpatient Surgery	129	2
Open-Heart Surgery Services	18	113
Organ Transplant Services	6	125
Mental Health/Chemical Dependency Services		
Outpatient Psychiatric Services	62	69
Detoxification Services	25	106
Diagnostic Radiology		
Computer Tomography (CT) Scanning Services	131	0
Magnetic Resonance Imaging (MRI) Services	129	2
Positron Emission Tomography (PET) Services	7	124
Single Photon Emission Computerized Tomography (SPECT) Services	49	82
Other Services		
Renal Dialysis Services	40	91
Cardiac Catheterization Services	25	106

¹Services are considered "available" when they are provided on site by hospital staff, on site through contracted services, or off site through shared services agreement.

Source: MDH Health Economics Program analysis of hospital annual reports, July 2017.

Physician Services

Number of Physicians Practicing in Minnesota, 2017

Number of Physicians:	16,947
Primary Care Physicians	5,265
Specialty Care Physicians	8,891
No Certification	2,791
Population for Every 1 Physician:	318
Primary Care Physicians	1,022
Specialty Care Physicians	605

Includes all physicians who have an active Minnesota license and a primary business address in Minnesota. "Primary Care" includes: General Family Medicine, General Internal Medicine, General Pediatrics. "No Certification" means there were no board certifications on the record received from the Minnesota Board of Medical Practice.

Source: Minnesota Board of Medical Practices, January 2017, population estimates RUCA 2010-2014. Analysis by MDH, Office of Rural Health & Primary Care.

Note: Due to methodology changes, past Chartbook data should not be used for comparison.

Number of Physicians¹ Practicing in Minnesota by MSA² and Non-MSA Counties, 2017

	MSA Status of County ¹				
	Rural	Small Town	Micropolitan	Metropolitan	Statewide
Number of Physicians ²	226	607	1,267	14,847	16,947
Primary Care Physicians	164	362	545	4,194	5,265
Specialty Care Physicians	21	156	525	8,189	8,891
Population for Every 1 Physician:	1,922	642	480	266	318
Primary Care Physicians	2,649	1,076	1,117	942	1,022
Specialty Care Physicians	20,686	2,497	1,160	482	605

Source: Minnesota Board of Medical Practices, January 2017, population estimates RUCA 2010-2014. Analysis by MDH, Office of Rural Health & Primary Care.

Note: Due to methodology changes, past Chartbook data should not be used for comparison. Previous data used physicians' mailing address and methodology was changed to use physicians' business practice address.

¹MSA refers to Metropolitan Statistical Area, see <u>Minnesota Health Workforce Demographics</u> (http://www.health.state.mn.us/divs/orhpc/workforce/demo/msadef.html) for more information.

²Includes all physicians who have an active Minnesota license and a primary business address in Minnesota. "Primary Care" includes: General Family Medicine, General Internal Medicine, General Pediatrics. "No Certification" means there were no board certifications on the record received from the Minnesota Board of Medical Practice.

Distribution of Number of Physicians Practicing in Minnesota by Location and Specialty, 2017

	MSA Status of County ¹				
	Rural	Small Town	Micropolitan	Metropolitan	Statewide
Primary Care Physicians	72.6%	59.6%	43.0%	28.2%	31.1%
General Facility Based	0.9%	6.6%	9.2%	11.3%	10.8%
Surgeons	3.5%	10.2%	12.5%	9.0%	9.2%
Other Specialty Physicians	4.9%	8.9%	19.8%	34.9%	32.4%
No Certification	18.1%	14.7%	15.5%	16.6%	16.5%
All Specialties ²	100%	100%	100%	100%	100%

Source: Minnesota Board of Medical Practices, January 2017, population estimates RUCA 2010-2014. Analysis by MDH, Office of Rural Health & Primary Care.

Note: Due to methodology changes, past Chartbook data should not be used for comparison. Previous data used physicians' mailing address and methodology was changed to use physicians' business practice address.

¹MSA refers to Metropolitan Statistical Area, see <u>Minnesota Health Workforce Demographics</u> (http://www.health.state.mn.us/divs/orhpc/workforce/demo/msadef.html) for more information.

²All specialties Includes all physicians who have an active Minnesota license and a primary business address in Minnesota. "Primary Care" includes: General Family Medicine, General Internal Medicine, General Pediatrics. "No Certification" means there were no board certifications on the record received from the Minnesota Board of Medical Practice.

Additional Information from the Health Economics Program Available Online

- Health Economics Program Home Page (www.health.state.mn.us/healtheconomics)
- Publications
 (www.health.state.mn.us/divs/hpsc/hep/publications/index.html)
- Health Care Market Statistics (Chartbook Updates)
 (www.health.state.mn.us/divs/hpsc/hep/chartbook/index.html)

A summary of the charts and graphs contained within is provided at <u>Chartbook Summaries - Section 8</u>. Direct links are listed on each page. Please contact the Health Economics Program at 651-201-3550 or <u>health.hep@state.mn.us</u> if additional assistance is needed for accessing this information.