

Chartbook Section 8A

Health Care Providers and Service Availability: Hospitals

Section 8A: Health Care Providers and Service Availability: Hospitals

- Hospital capacity, services offered, and system affiliation
- Utilization of hospital services
- Hospital financial trends, capital expenditures, and community benefit

This slide deck is part Minnesota's Health Care Markets Chartbook, an annual review of key metrics in health care access, coverage, market competition and health care costs ([MN Statutes, Section 144.70](#))

Due to Hospital Annual Report revisions, data may not match previously published numbers.

A summary of the charts and graphs contained within is provided at [Chartbook Summaries – Section 8A](#). Direct links are listed on each page. Please contact the Health Economics Program at 651-201-4520 or health.hep@state.mn.us if additional assistance is needed for accessing this information.

Hospital Capacity, Services, and System Affiliation

Hospital Capacity in Minnesota, 2020

Number of Hospitals¹	Available Beds²	Available Beds Per 1,000 Population	Occupancy Rate Based on Available Beds	Licensed Beds³	Occupancy Rate Based on Licensed Beds
127	11,308	2.0	55.6%	16,131	39.0%

¹Between 2019 and 2020, Mayo Clinic Health System in Springfield closed. This hospital had 10 available beds and 24 licensed beds in 2019.

²Available 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.

³Licensed beds is defined as the number of beds licensed by the Department of Health, under Minnesota Statutes, sections 144.50 to 144.58.

Sources: 2020 American Community Survey 5-year Estimates and MDH Health Economics Program analysis of hospital annual reports, June 2022.

Regional Hospital Capacity in Minnesota, 2020

	Number of Hospitals ¹	Available Beds ²	Available Beds Per 1,000 Population	Occupancy Rate Based on Available Beds	Licensed Beds ³	Occupancy Rate Based on Licensed Beds
Central	18	1,069	1.4	45.7%	1,360	36.0%
Metro	24	5,800	1.9	68.8%	8,550	46.6%
Northeast	17	1,121	3.5	48.9%	1,377	39.8%
Northwest	12	335	2.0	27.3%	410	22.3%
South Central	14	489	1.7	34.9%	745	22.9%
Southeast	10	1,624	3.2	52.3%	2,528	33.6%
Southwest	23	547	2.5	14.9%	685	11.9%
West Central	9	323	1.4	22.0%	476	14.9%
Total	127	11,308	2.0	55.6%	16,131	39.0%

¹Between 2019 and 2020, Mayo Clinic Health System in Springfield closed.

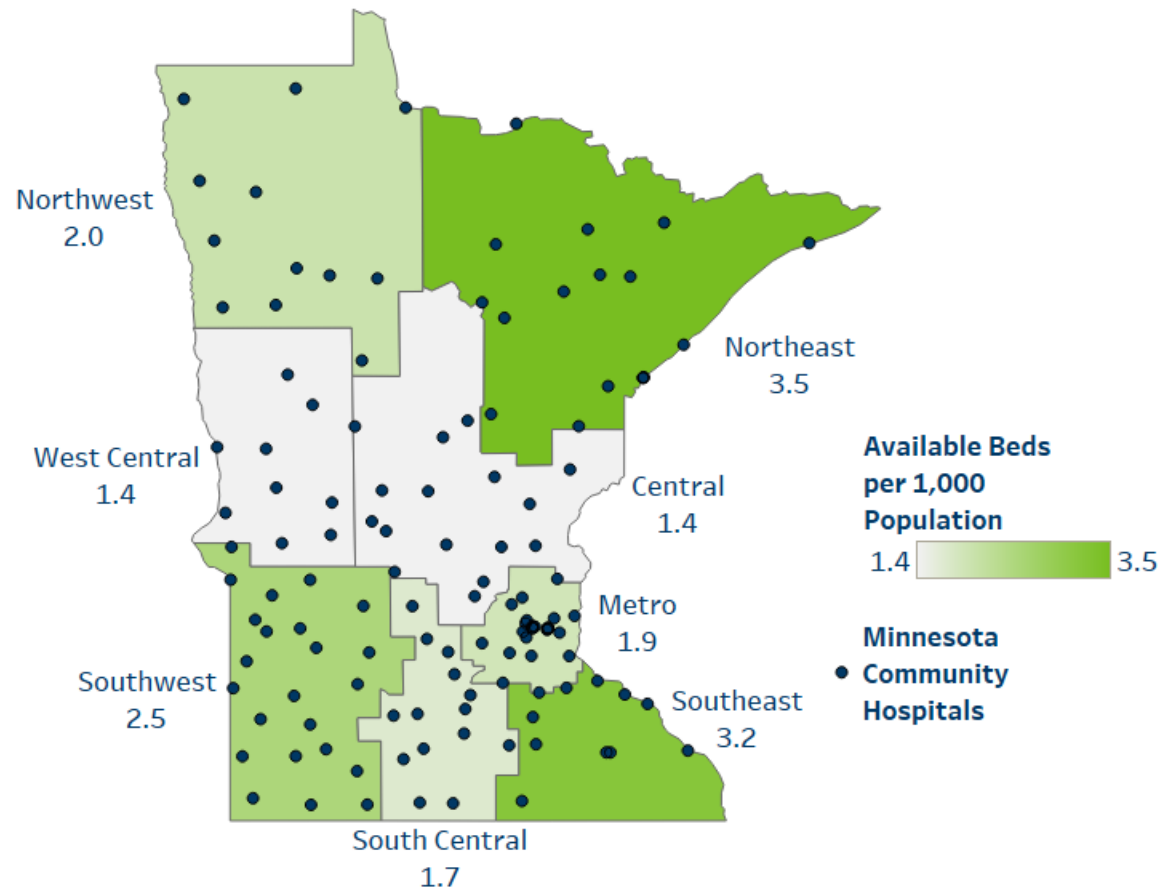
²Available beds is defined as the number of acute care beds that are immediately available for use or could be brought online within a short period of time.

³Licensed beds is defined as the number of beds licensed by the Department of Health, under Minnesota Statutes, sections 144.50 to 144.58.

Regions are defined from the State Community Health Services Advisory Committee found here: <http://www.health.state.mn.us/schsac/>.

Sources: 2020 American Community Survey 5-year Estimates and MDH Health Economics Program analysis of hospital annual reports, June 2022.

Available Minnesota Hospital Beds per 1,000 Population by SCHSAC Region, 2020

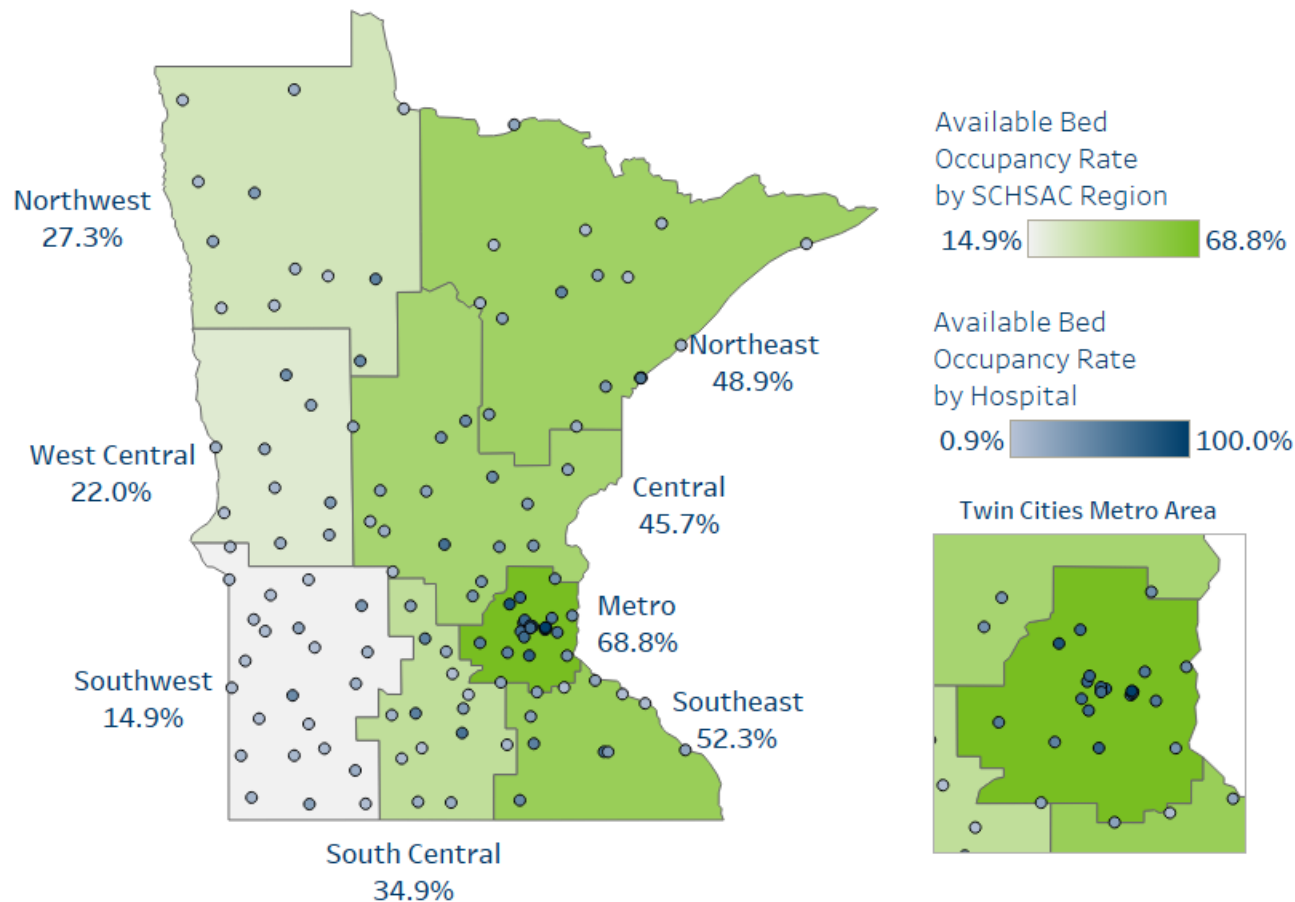


Regions are defined from the State Community Health Services Advisory Committee found here: <http://www.health.state.mn.us/schsac/>.
Sources: 2020 American Community Survey 5-year Estimates and MDH Health Economics Program analysis of hospital annual reports, June 2022.
[Summary of image](#)

Distribution of Minnesota's Hospitals by Size and Region

Number of Hospitals by Available Beds in 2020						
	Under 25 Beds	25-49 Beds	50-99 Beds	100-199 Beds	200 or More Beds	Total (%)
Central	4	10	2	1	1	18 (14.2%)
Metro	2	2	6	3	11	24 (18.9%)
Northeast	8	3	3	1	2	17 (13.4%)
Northwest	5	6	0	1	0	12 (9.4%)
South Central	5	7	1	1	0	14 (11.0%)
Southeast	3	4	2	0	1	10 (7.9%)
Southwest	12	10	1	0	0	23 (18.1%)
West Central	4	3	2	0	0	9 (7.1%)
Statewide (%)	43 33.9%	45 35.4%	17 13.4%	7 5.5%	15 11.8%	127 100%

Available Minnesota Hospital Bed Occupancy Rate by Region and Hospital, 2020



Shade of the blue dots indicate the occupancy rate of individual hospitals. Shade of the green regions indicate the overall occupancy rate of all hospitals in that region.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of image](#)

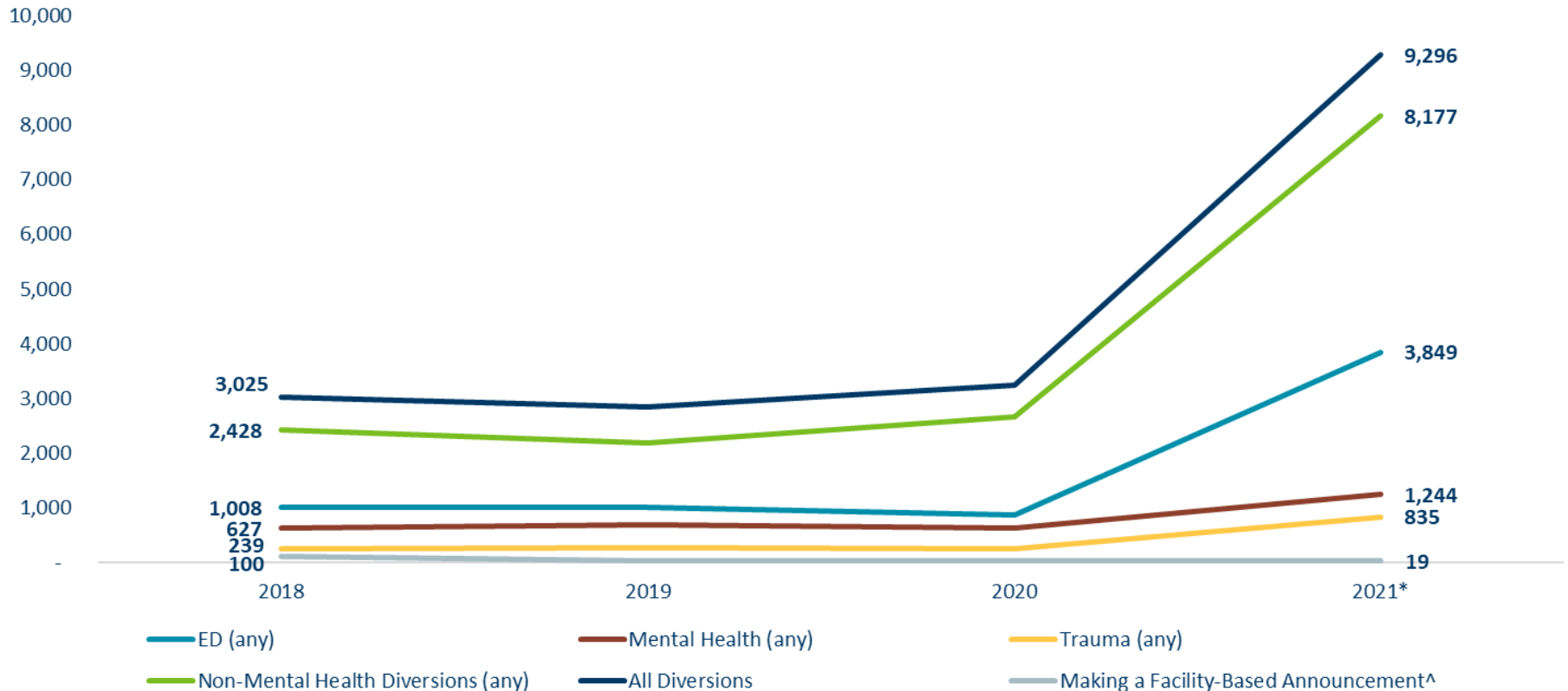
Services Available in Minnesota Hospitals, 2020

	Number of Hospitals with Services Available ¹	Number of Hospitals with Services Not Available
Surgery		
Inpatient Surgery	117	10
Outpatient Surgery	124	3
Open-Heart Surgery Services	18	109
Organ Transplant Services	5	122
Mental Health/Chemical Dependency Services		
Outpatient Psychiatric Services	69	58
Detoxification Services	26	101
Diagnostic Radiology		
Computer Tomography (CT) Scanning Services	127	0
Magnetic Resonance Imaging (MRI) Services	125	2
Positron Emission Tomography (PET) Services	8	119
Single Photon Emission Computerized Tomography (SPECT) Services	59	68
Other Services		
Renal Dialysis Services	37	90
Cardiac Catheterization Services	25	102

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.

Trends in Minnesota Hospital Ambulance Diversions

Minnesota Hospital Diversions 2018-2021



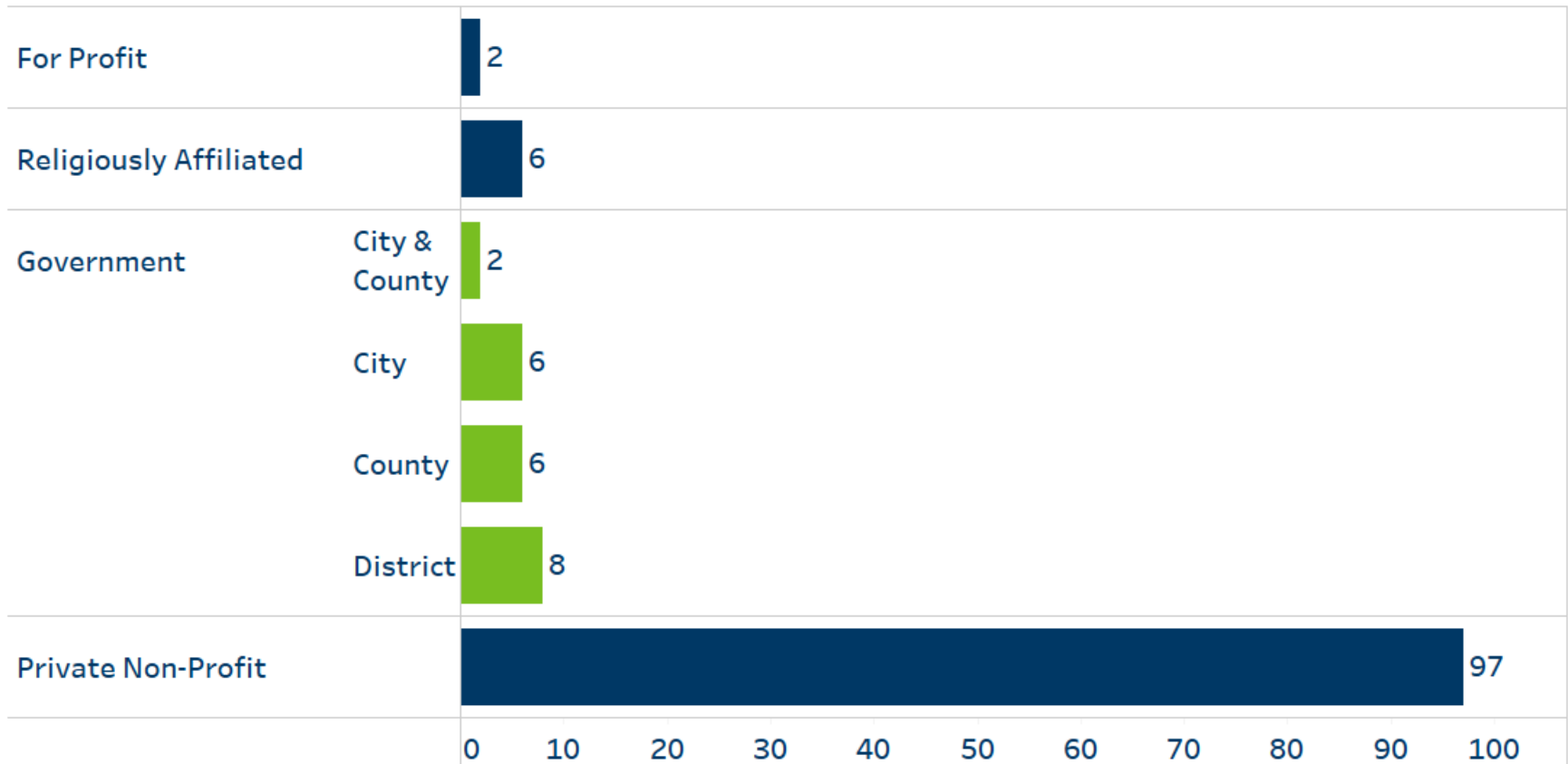
* In 2021 there were 12 diversions of critical patients due to equipment failure. These are not counted in diversion numbers.

^ Making a Facility-Based Announcement is an alternative to diversion that hospitals can use to indicate they are unable to receive certain categories of patients without going on diversion. These are not included in diversion numbers.

Source: MDH Health Economics Program analysis of MN Trac Data, May 2022. Ambulances may be diverted for multiple reasons. See the MDH MN Trac website for additional information on this data source here: <https://www.health.state.mn.us/communities/ep/coalitions/mntrac.html>
[Summary of graph](#)

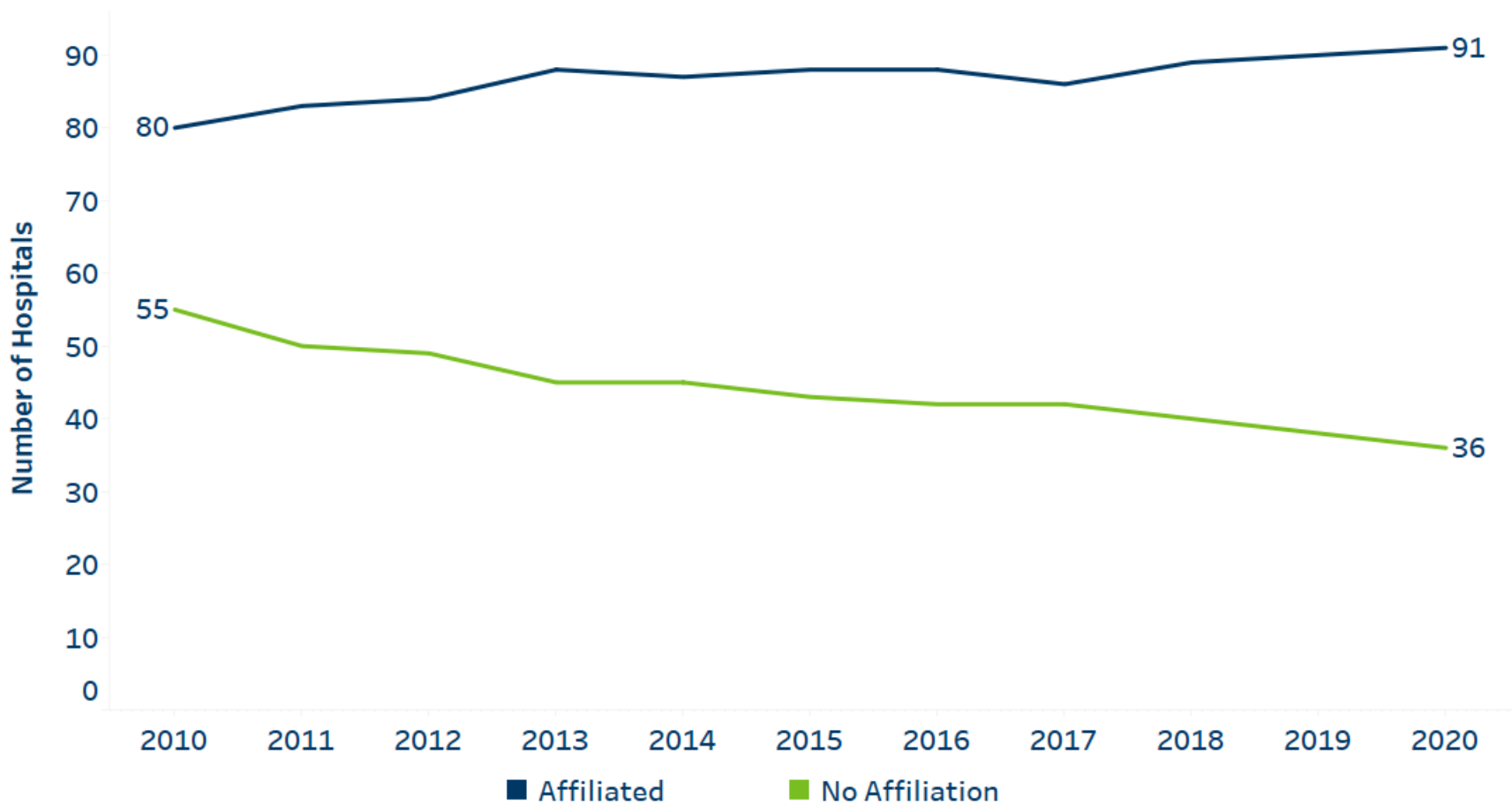
Ownership of Minnesota Hospitals, 2020

Total Hospitals: 127



Note: Between 2019 and 2020, Mayo Clinic Health System in Springfield closed.
Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.
[Summary of graph](#)

Minnesota Hospitals Affiliated with a Health Care System



Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Minnesota Hospital System, 2020

	Owned	Managed	Leased	Total	Available Beds
Sanford Health	7	5	3	15	413
M Health Fairview	11	0	0	11	1,966
Essentia Health	10	0	1	11	772
Allina Health System	10	0	0	10	1,838
Mayo Clinic	10	0	0	10	1,704
CentraCare Health System	5	1	3	9	700
HealthPartners, Inc.	4	0	0	4	600
Avera Health	3	1	0	4	105
Catholic Health Initiatives	4	0	0	4	90
Park Nicollet Health Services	2	1	0	3	428
Ridgeview Medical Center	3	0	0	3	123
North Memorial Health Care	2	0	0	2	458
St. Luke's Hospital, Duluth	1	1	0	2	283
Other ¹	4	0	0	4	398
Total	75²	9	7	91²	9,878
Unaffiliated Hospitals				36	1,430

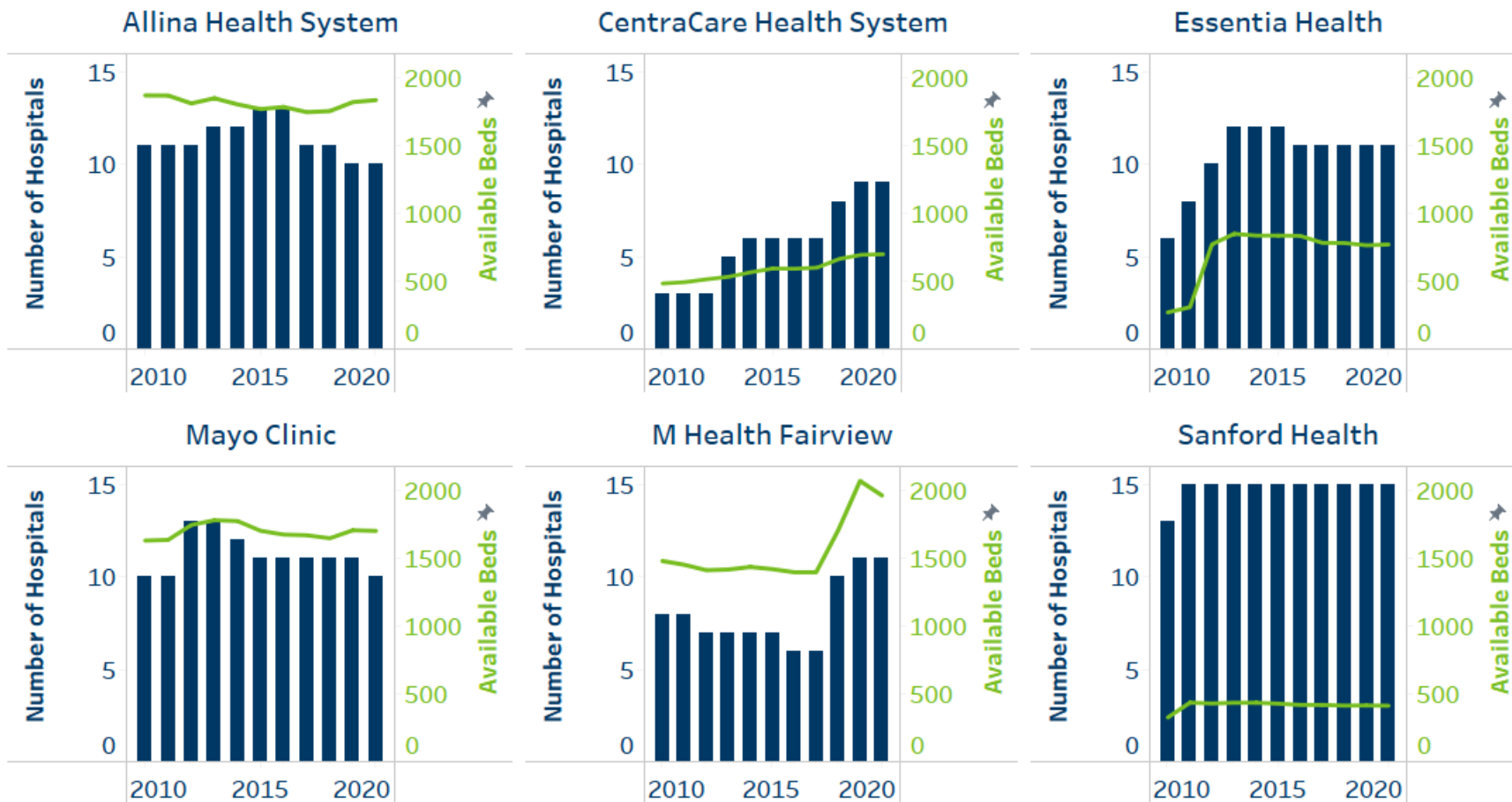
¹Systems with only one hospital each, including: Lake Region Healthcare - Fergus Falls, Children's Hospitals and Clinics, Ascension Health, and Select Medical Corporation.

²Co-owned hospitals with multiple affiliations are counted under each affiliation and available beds are divided across systems equally.

Health care systems are ordered by total number of hospitals in descending order.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Available Minnesota Hospital Beds by Health System Affiliation, 2010-2020

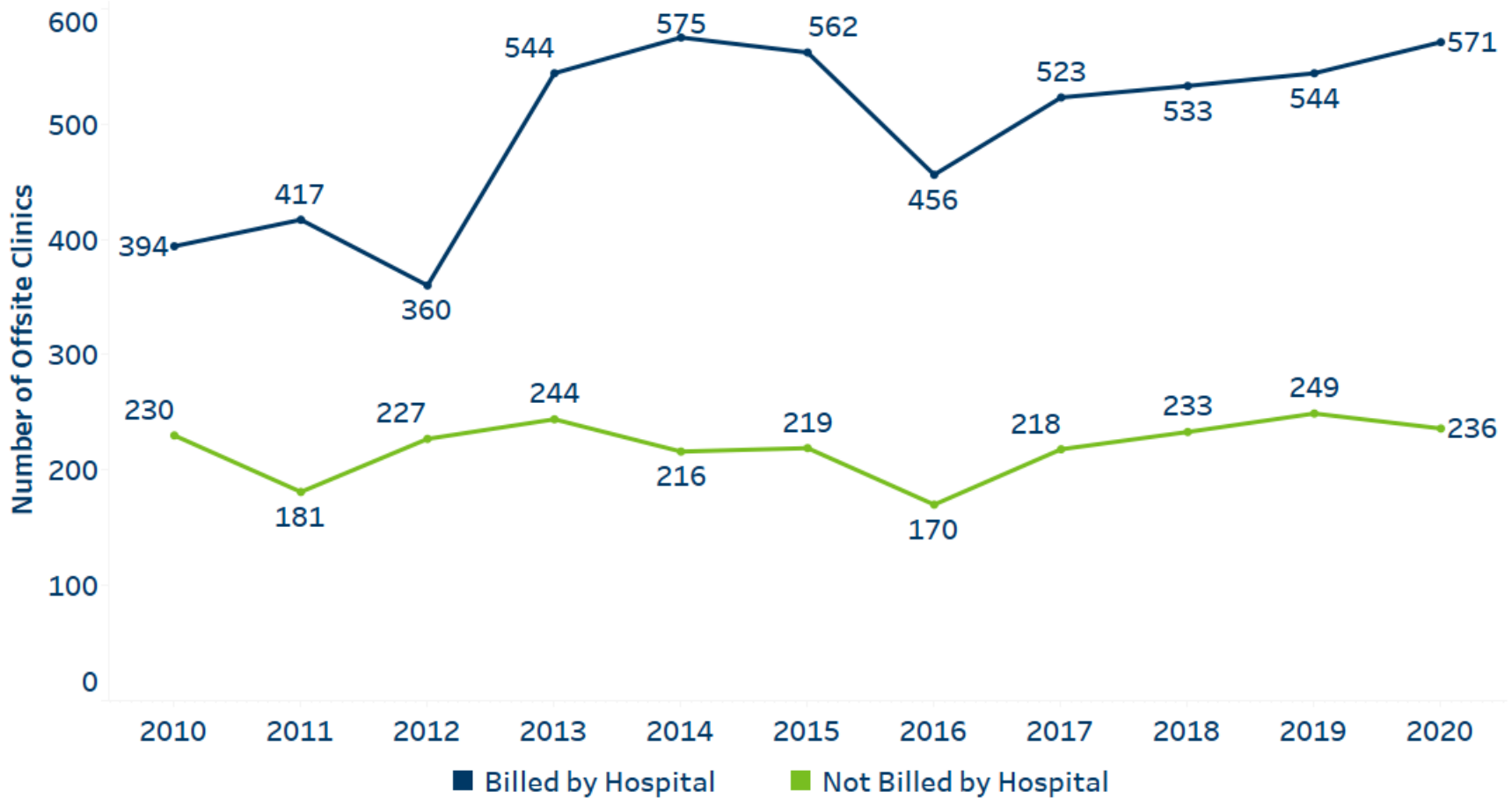


Only includes systems with five or more hospitals in 2020.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Minnesota Hospital Offsite Clinics, 2010-2020

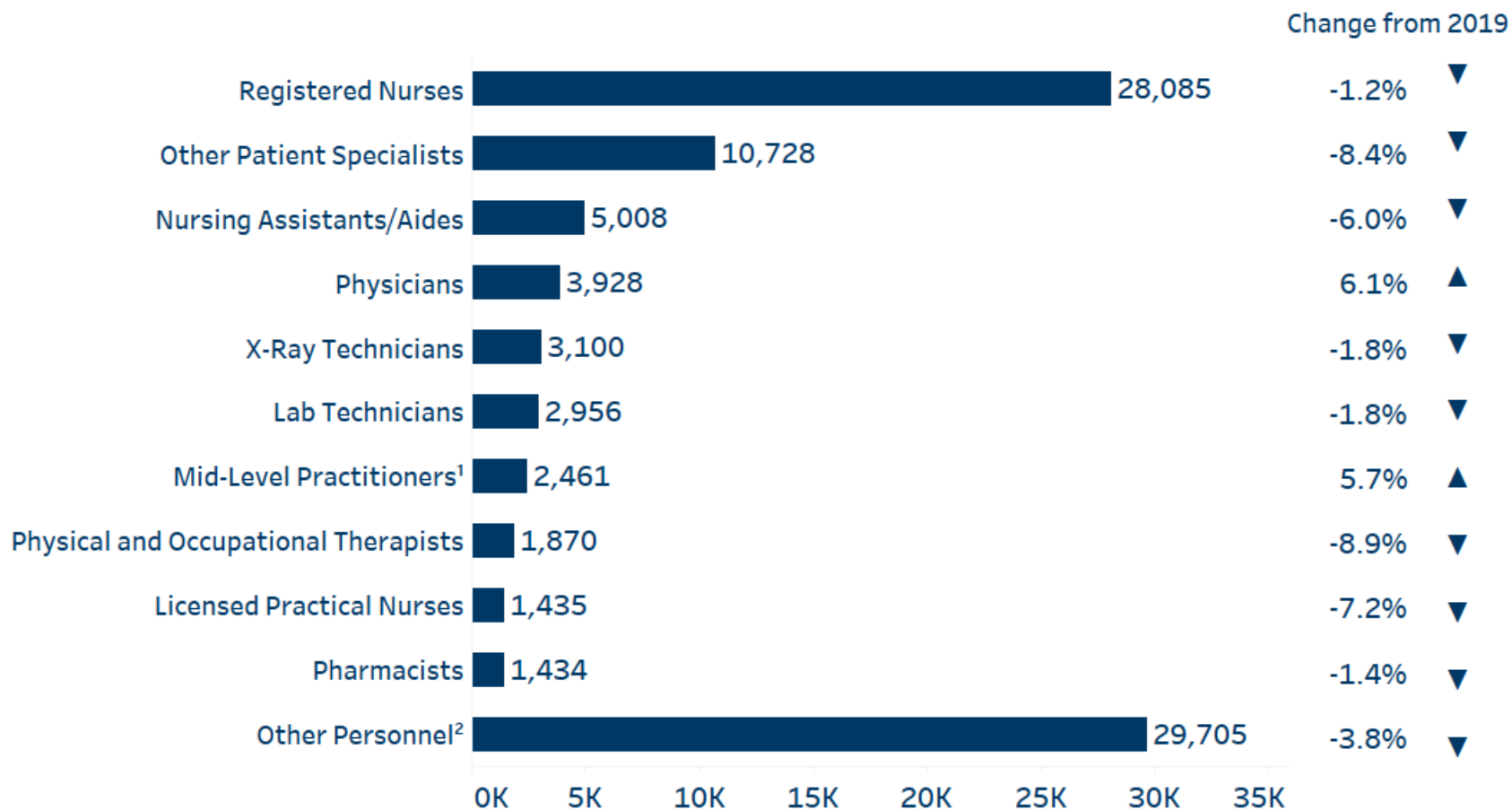


Note: Locations identified as "Billed as a Hospital" are considered hospital outpatient clinics, as they are billed under the hospital's Medicare and Medicaid provider number; revenue from these clinics is included in hospital revenue.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Composition of Minnesota's Hospital Workforce, 2020



¹ Mid-level practitioners includes nurse anesthetists, nurse practitioners, and physician assistants.

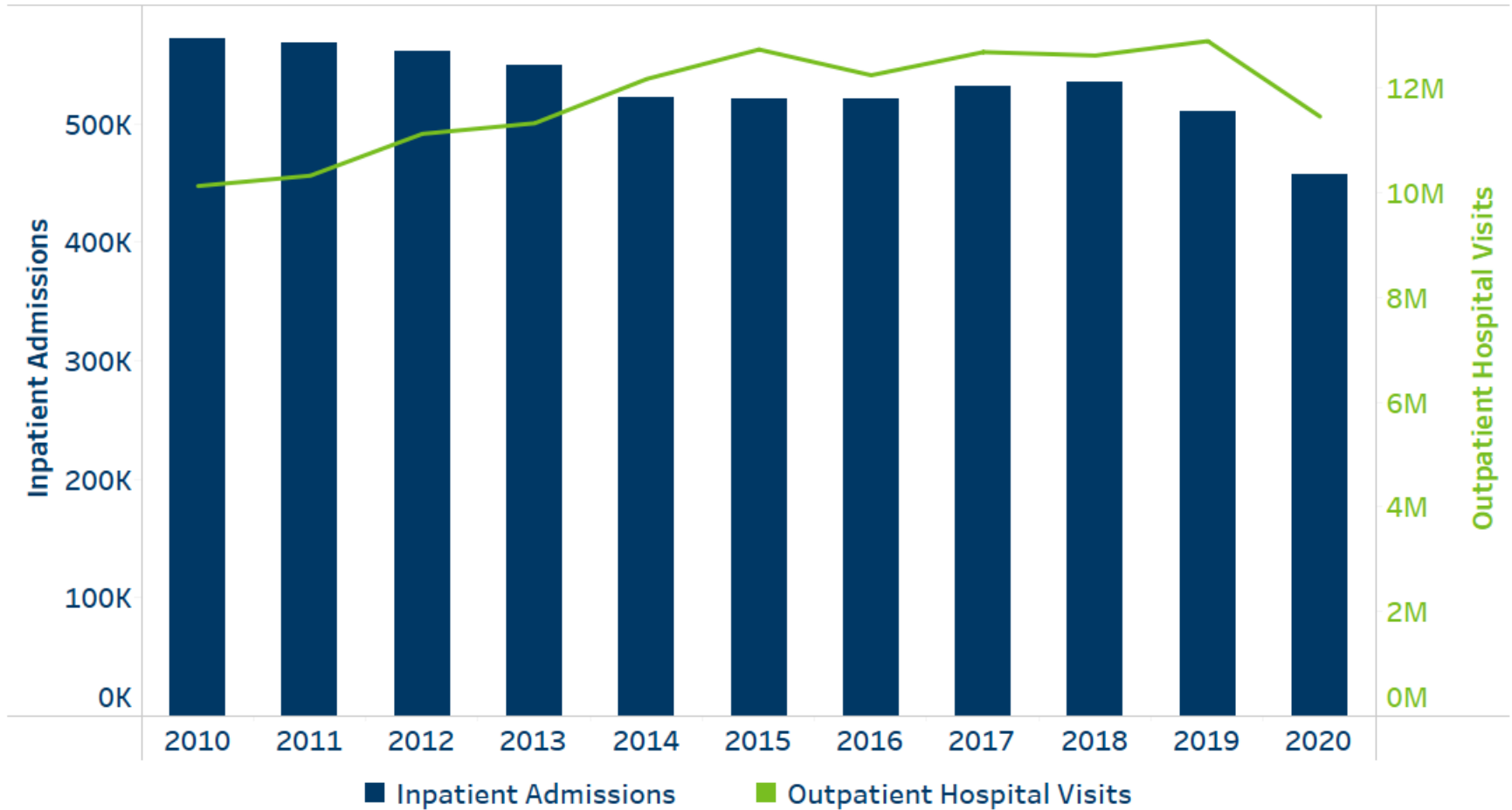
² Other Personnel includes non-patient facing positions such as hospital administrative staff, dietary staff, housekeeping, etc.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Utilization of Hospital Services

Minnesota Hospital Outpatient Visits and Inpatient Admissions

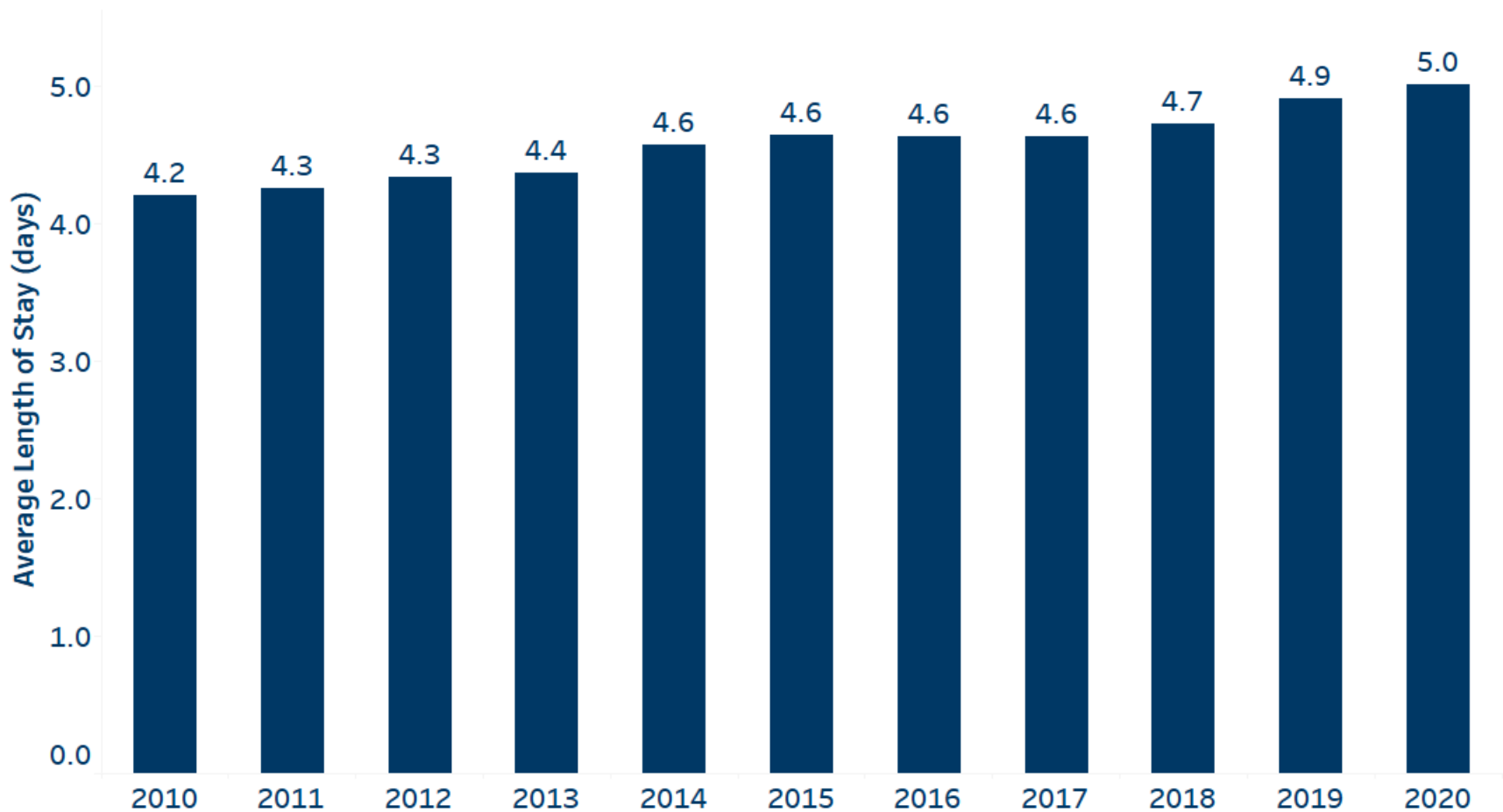


In 2020, Inpatient Admissions decreased 10.3% and Outpatient Hospital Visits decreased 11.2%, compared to the previous year.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

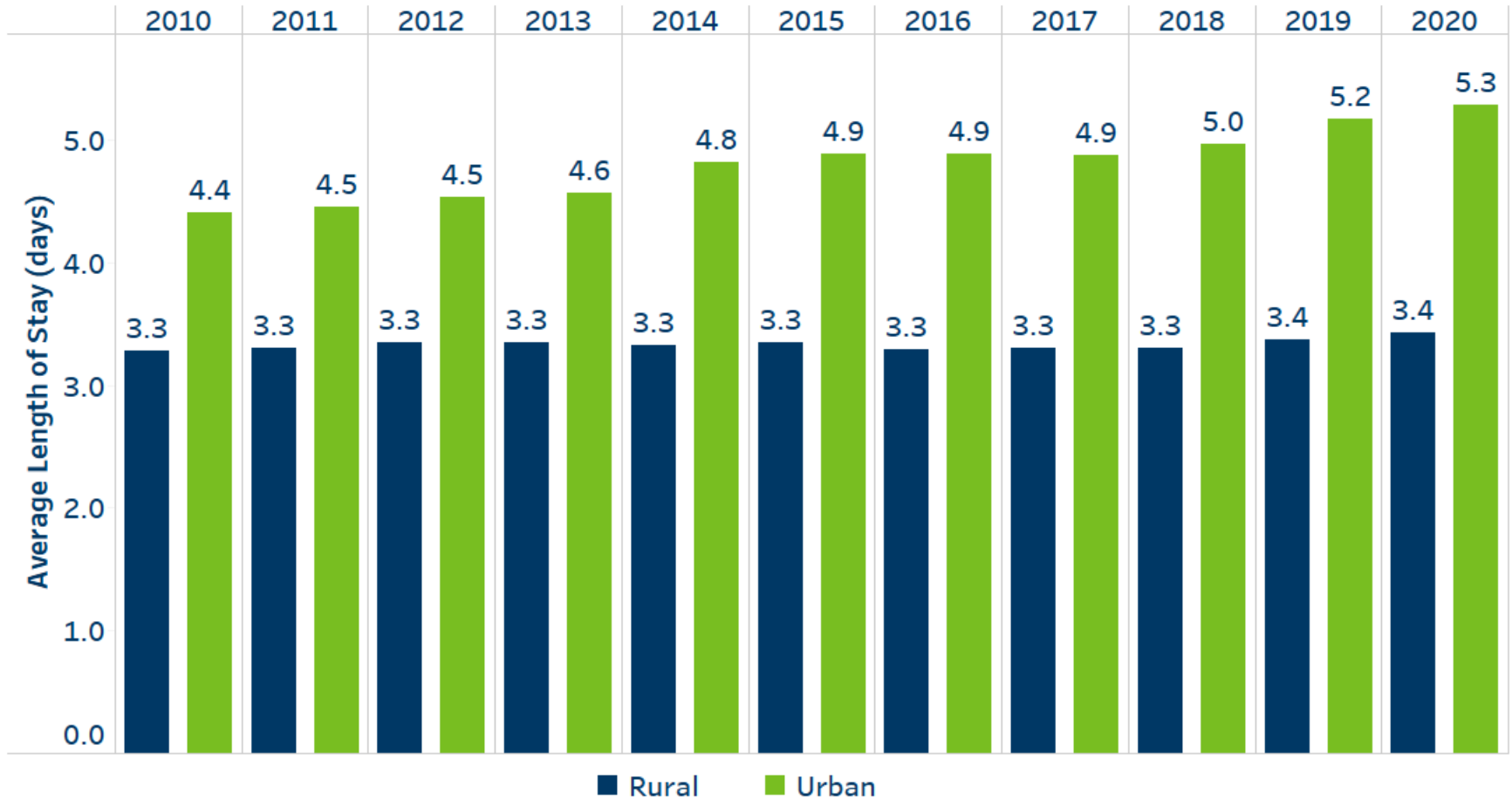
[Summary of graph](#)

Average Length of Stay in Minnesota Hospitals



Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.
[Summary of graph](#)

Average Length of Stay: Rural and Urban Minnesota Hospitals



Hospital rural/urban classification is based on hospital location in relation to [Rural-Urban Commuting Areas](#). Isolated rural, small rural town, and large rural city are combined under the “Rural” category.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

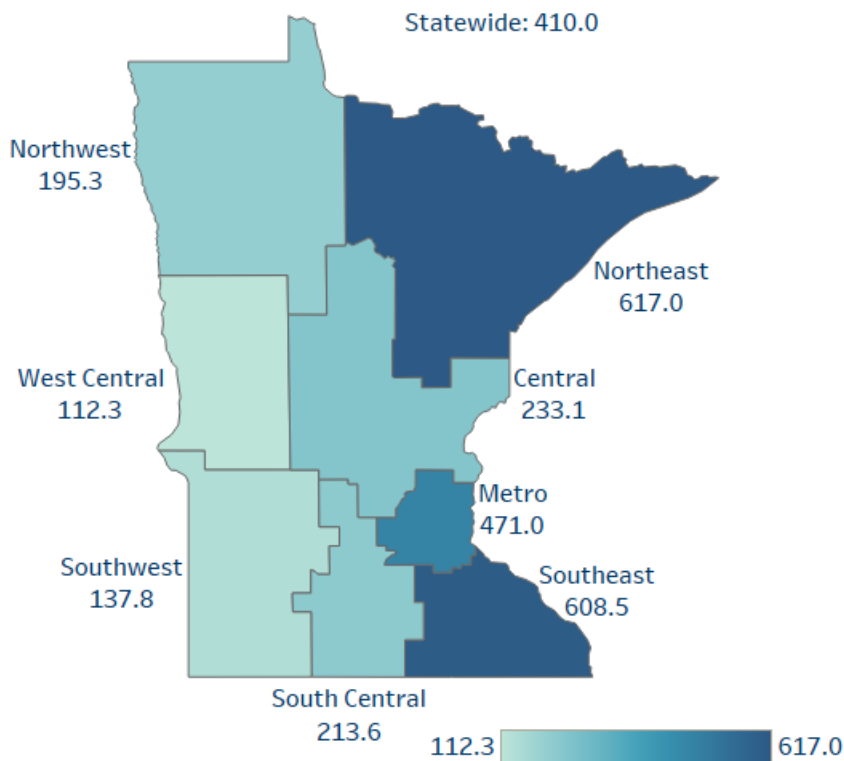
[Summary of graph](#)

Minnesota Hospital Utilization by Region, 2020

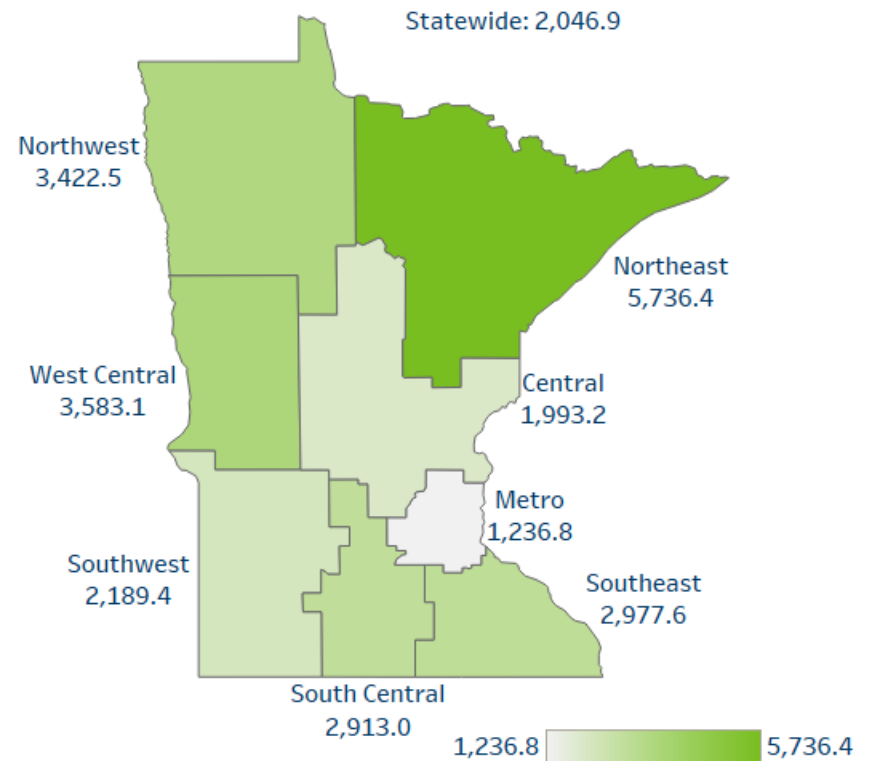
	Inpatient Admissions	Inpatient Days	Average Length of Stay (days)	Outpatient Visits
Central	46,715	178,458	3.8	1,526,017
Metro	282,999	1,455,774	5.1	3,822,720
Northeast	38,544	200,239	5.2	1,861,698
Northwest	9,081	33,403	3.7	585,413
South Central	16,066	62,334	3.9	850,229
Southeast	45,982	309,874	6.7	1,516,310
Southwest	9,690	29,802	3.1	473,399
West Central	8,447	25,939	3.1	827,246
Statewide	457,524	2,295,823	5.0	11,463,032

Total Inpatient Days and Outpatient Visits in SCHSAC Regions, 2020

Total Inpatient Hospital Days in SCHSAC Regions per 1,000 Population, 2020



Total Outpatient Hospital Visits in SCHSAC Regions per 1,000 Population, 2020



Note: Total Inpatient Hospital Days and Total Outpatient Hospital Visits are based on the location of the hospital, rather than the location of the patient.

Source: 2020 American Community Survey 5-year Estimates and MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of images](#)

Distribution of Rural & Urban Hospital Admissions by Type of Service, 2020

	Rural Percent of Admissions ¹	Urban Percent of Admissions ¹	Statewide Percent of Admissions ¹
Medical & surgical care	40.8%	35.6%	36.5%
Obstetric care	16.8%	12.3%	13.0%
Cardiac care	8.2%	12.5%	11.8%
Orthopedic care	12.4%	9.8%	10.2%
Other acute care	6.3%	8.5%	8.2%
Neurology care	3.0%	7.1%	6.4%
Neonatal care (excluding births)	5.6%	6.2%	6.1%
Psychiatric care	5.5%	5.5%	5.5%
Chemical dependency care	1.5%	2.3%	2.2%
Rehabilitation	0.0%	0.1%	0.1%
Total Acute Care	100%	100%	100%

¹Total Acute Care Admissions do not include inpatient transfers to different services during a hospital stay. Columns may not total 100% due to rounding.

Hospital rural/urban classification is based on hospital location in relation to [Rural-Urban Commuting Areas](#). Isolated rural, small rural town, and large rural city are combined under the “Rural” category.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Distribution of Rural & Urban Inpatient Days by Type of Service, 2020

	Rural Percent of Inpatient Days ¹	Urban Percent of Inpatient Days ¹	Statewide Percent of Inpatient Days ¹
Medical & surgical care	42.7%	38.4%	38.9%
Obstetric care	10.1%	6.0%	6.5%
Cardiac care	7.7%	11.5%	11.1%
Orthopedic care	10.0%	7.1%	7.5%
Other acute care	5.8%	8.4%	8.1%
Neurology care	4.0%	8.0%	7.5%
Neonatal care (excluding births)	3.9%	7.0%	6.6%
Psychiatric care	13.2%	11.0%	11.2%
Chemical dependency care	2.6%	2.2%	2.2%
Rehabilitation	0.1%	0.3%	0.3%
Total Acute Care	100%	100%	100%

¹Total Acute Care Inpatient Days do not include inpatient transfers to different services during a hospital stay. Columns may not total 100% due to rounding.

Hospital rural/urban classification is based on hospital location in relation to [Rural-Urban Commuting Areas](#). Isolated rural, small rural town, and large rural city are combined under the “Rural” category.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Trend in Outpatient Service Utilization at Minnesota Hospitals

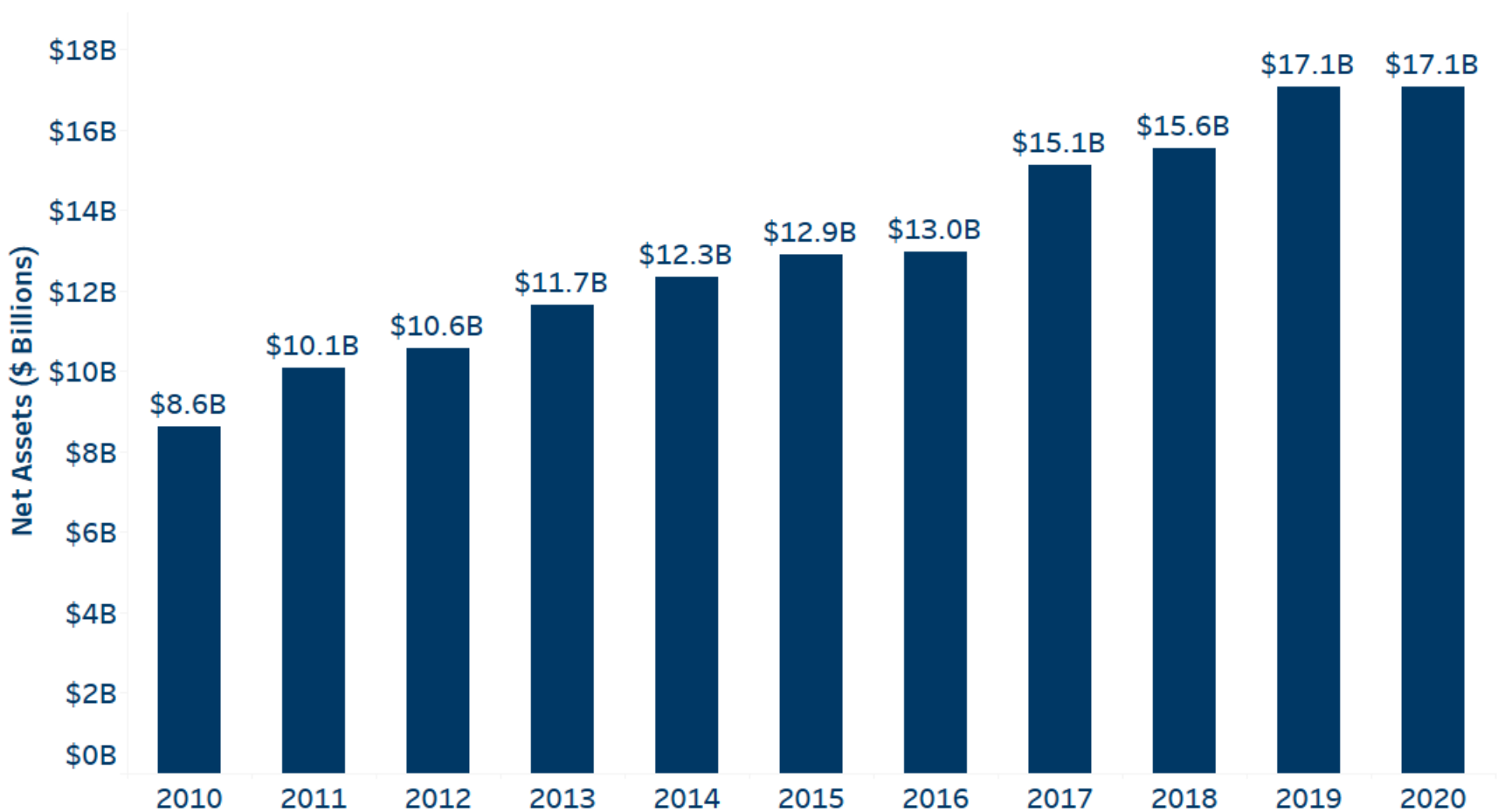
Year	Outpatient Surgeries (Thousands)	Outpatient Surgeries per 1,000 in Population	ED visits (Thousands)	ED visits per 1,000 in Population
2010	419	80	1,693	323
2011	415	79	1,748	331
2012	422	79	1,816	342
2013	429	80	1,833	343
2014	392	73	1,823	339
2015	407	75	1,919	354
2016	397	73	1,918	352
2017	409	75	1,918	349
2018	423	76	1,952	353
2019	416	75	1,967	354
2020	348	62	1,669	298

Sources: 2010-2020 American Community Survey 5-year estimates and MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Hospital Financial Trends

Net Assets of Minnesota Hospitals

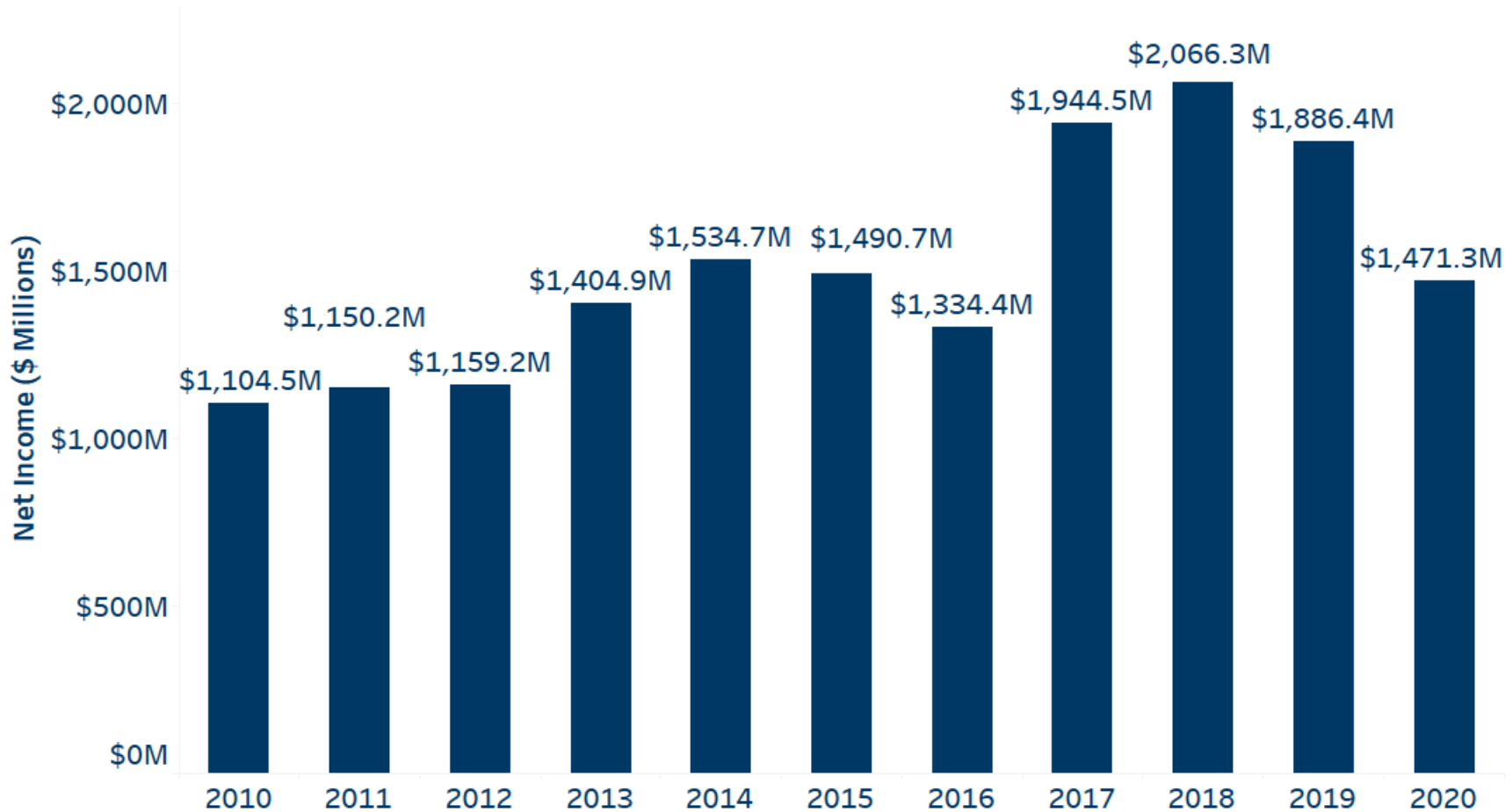


Net assets is an accounting term defining the total assets minus the total liabilities, and describes the hospital's financial position.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

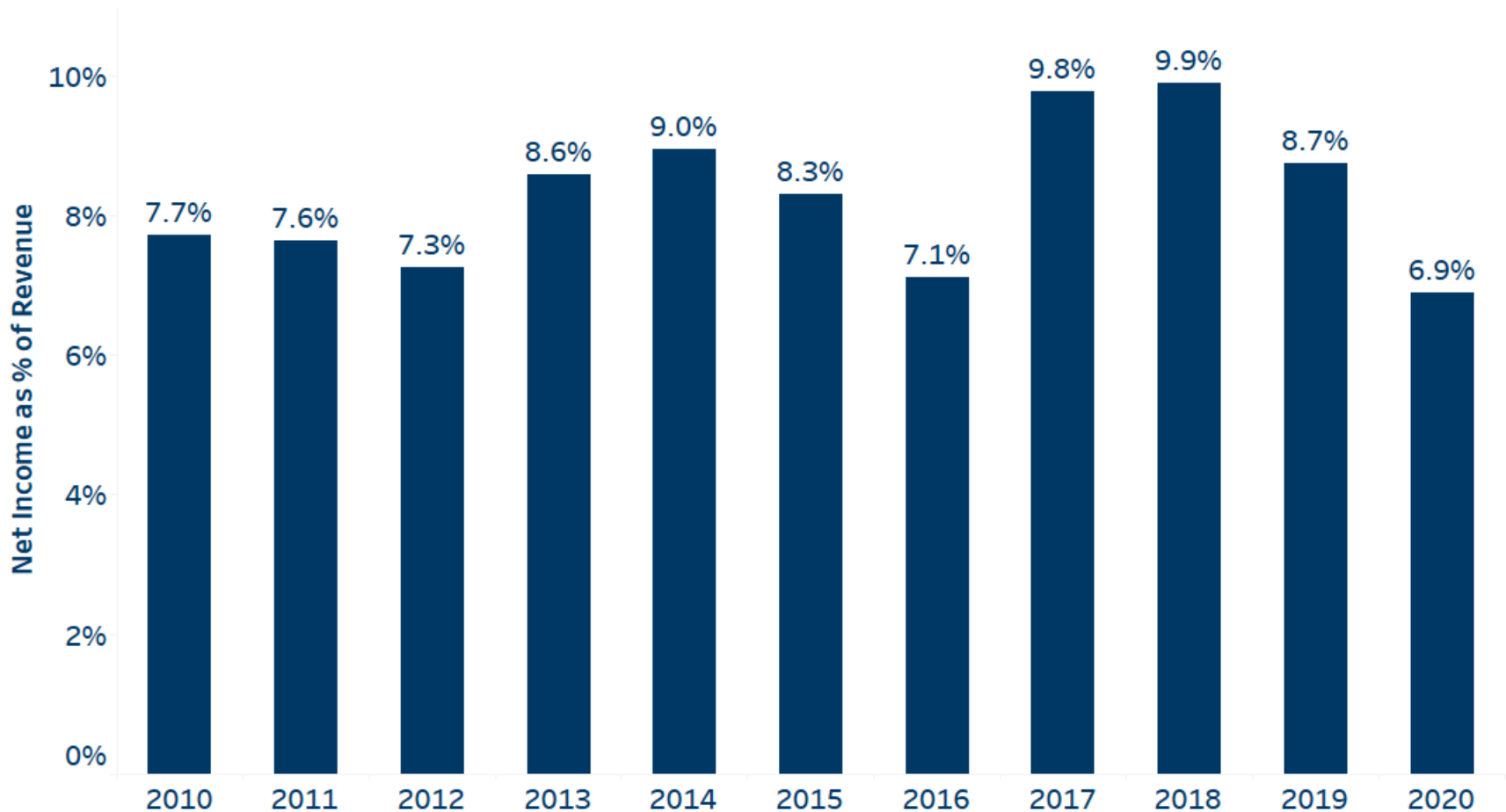
Net Income of Minnesota Hospitals



Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Minnesota Hospitals' Net Income as a Percent of Revenue



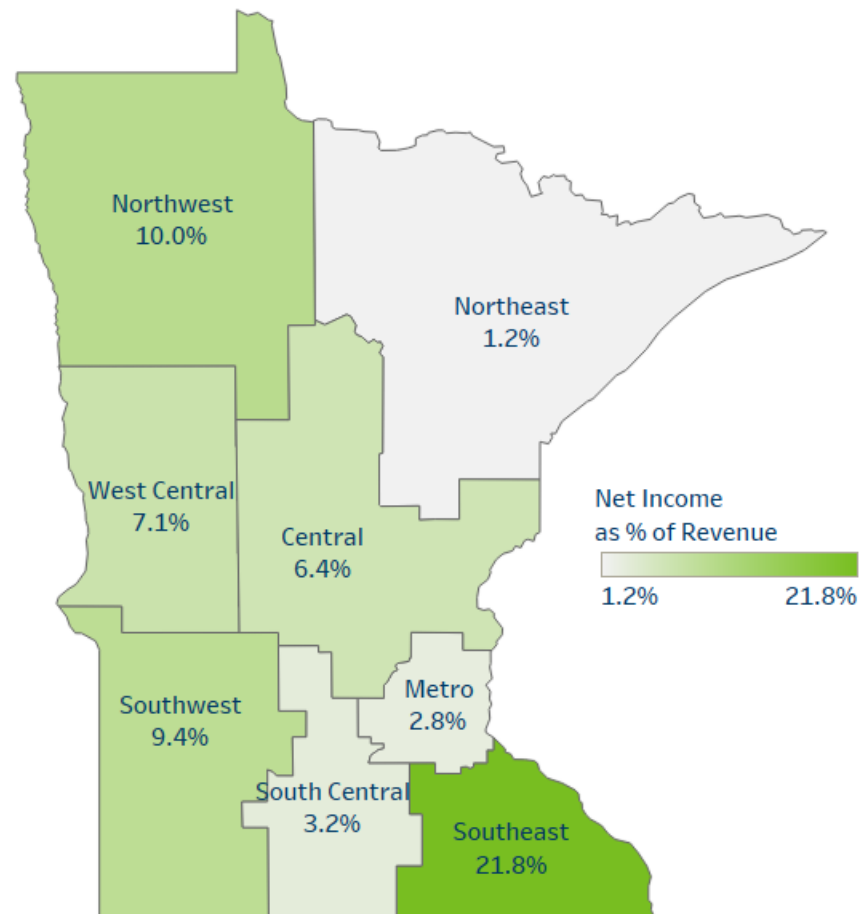
Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Minnesota Hospital Financial Indicators by Region, 2020

	Net Income (\$ Millions)	Net Income as a percent of Revenue
Central	\$133.5	6.4%
Metro	\$308.1	2.8%
Northeast	\$24.6	1.2%
Northwest	\$59.2	10.0%
South Central	\$29.2	3.2%
Southeast	\$815.0	21.8%
Southwest	\$58.4	9.4%
West Central	\$43.4	7.1%
Statewide	\$1,471.3	6.9%

Minnesota Hospital Net Income as a Percent of Revenue by Region, 2020



Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of image](#)

Minnesota Hospital Financial Indicators by Hospital Size and Type, 2020

Number of Available Beds	Net Income (\$ Millions)	Net Income as a percent of Revenue
Under 25 Beds	\$73.8	8.8%
25 to 49 Beds	\$190.6	7.2%
50 to 99 Beds	\$36.6	1.6%
100 to 199 Beds	\$69.2	3.4%
200 Beds or More	\$1,101.1	8.2%
Type of Hospital		
Critical Access Hospital (CAH) ¹	\$234.6	9.5%
Other Hospitals	\$1,236.7	6.5%
All Hospitals	\$1,471.3	6.9%

¹A critical access hospital is a federal designation for a rural hospital that meets certain criteria.
Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Sources of Patient Revenue for Minnesota Hospitals, 2019-2020

	Rural Facilities		Urban Facilities		Facilities Statewide	
	2019	2020	2019	2020	2019	2020
Medicare	40.5%	41.5%	30.6%	31.3%	32.6%	33.4%
State Public Programs¹	11.2%	11.5%	13.5%	13.8%	13.0%	13.3%
Private Insurance	42.5%	41.8%	51.9%	50.6%	50.0%	48.8%
Self-Pay	3.3%	3.6%	2.8%	2.7%	2.9%	2.9%
Other Payers	2.6%	1.7%	1.2%	1.6%	1.5%	1.6%
Hospital Patient Revenue, All Payers	100%	100%	100%	100%	100%	100%

¹Includes Medical Assistance and MinnesotaCare.

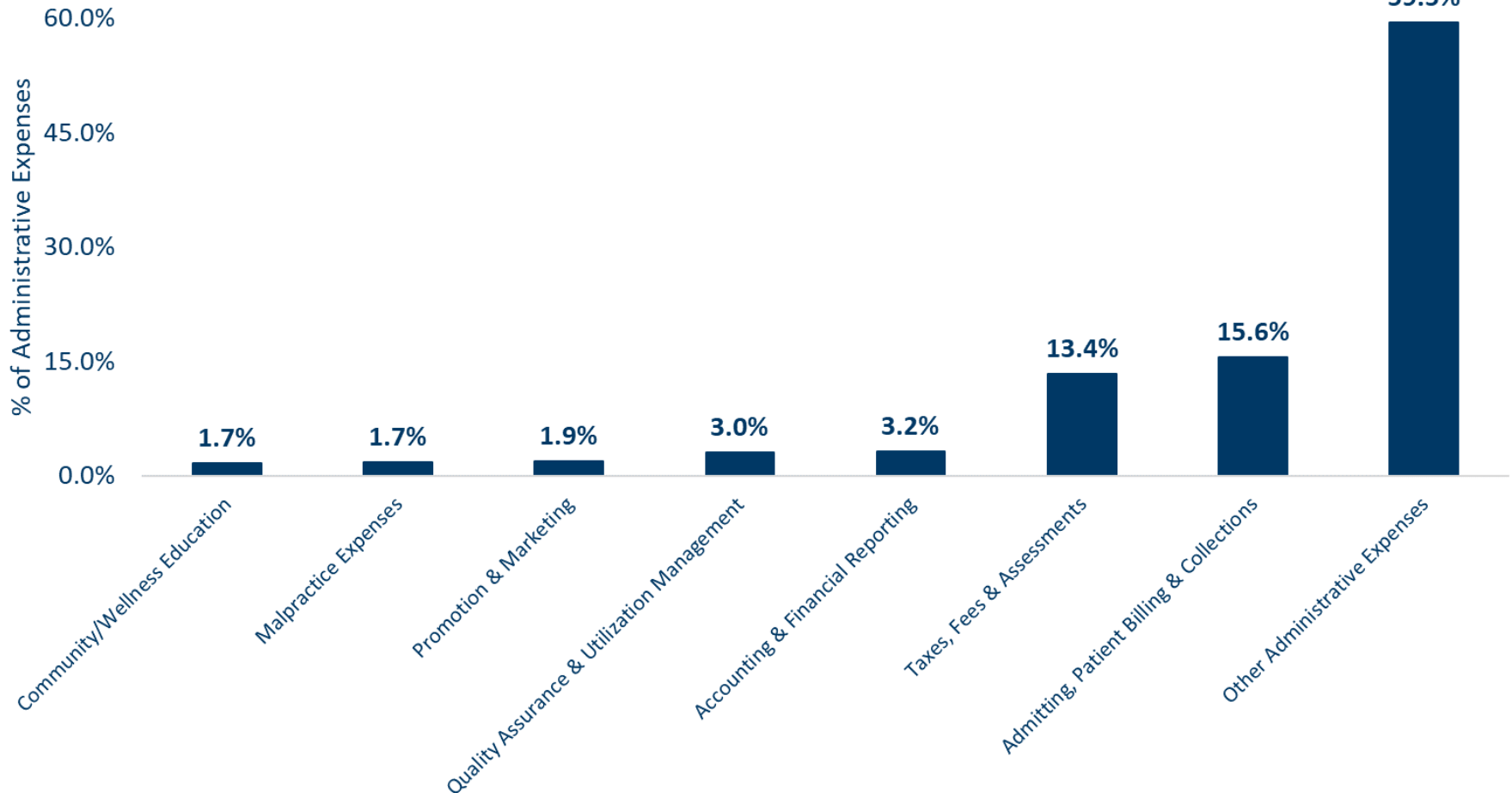
Percent shown is a percent of Hospital Patient revenue.

Hospital rural/urban classification is based on hospital location in relation to [Rural-Urban Commuting Areas](#). Isolated rural, small rural town, and large rural city are combined under the “Rural” category.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Administrative Expenses, 2020

Total Hospital Administrative Expenses: \$2.97 Billion



Capital Expenditure Commitments by Minnesota Hospitals, 2017-2020

	2017	2018	2019	2020
Total number of capital expenditure commitments reported	73	92	102	80
Number of Minnesota hospitals reporting major capital expenditure commitment	39	37	37	34
Value of major capital expenditure commitments reported (Millions)	\$664.0	\$1,326.5	\$535.6	\$415.5

Major spending commitments that are reportable under 62J.17 include expenditures in excess of \$ 1 million.

A small portion of capital expenditure data may belong to earlier reporting periods.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Minnesota Hospital Capital Expenditure Commitments by Type, 2020

	Capital Expenditure Commitments (\$ Millions)	Percent of Total Capital Expenditure Commitments
Medical equipment	\$91.6	22.0%
Building and space	\$302.0	72.7%
Other	\$21.9	5.3%
All Major Capital Expenditure Commitments	\$415.5	100%

Minnesota Hospital Capital Expenditure Commitment by Category, 2020

	Capital Expenditure Commitments (\$ Millions)	Percent of Total Capital Expenditure Commitments
General Infrastructure	\$142.2	34.2%
Other Patient Care Services	\$80.5	19.4%
Surgery	\$50.1	12.1%
Cardiac Care	\$31.7	7.6%
Emergency Care	\$29.0	7.0%
Diagnostic Imaging	\$28.8	6.9%
Radiation Therapy	\$14.7	3.5%
Rehabilitation	\$14.1	3.4%
Intensive Care (ICU or NICU)	\$11.0	2.6%
Mental Health	\$10.3	2.5%
Neurology	\$3.3	0.8%
All Major Capital Projects	\$415.5	100%

Major spending commitments that are reportable under 62J.17 include expenditures in excess of \$1 million.

Categories are ordered by commitment amount (\$) in descending order.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Community Benefit Provided by Minnesota Hospitals, 2020

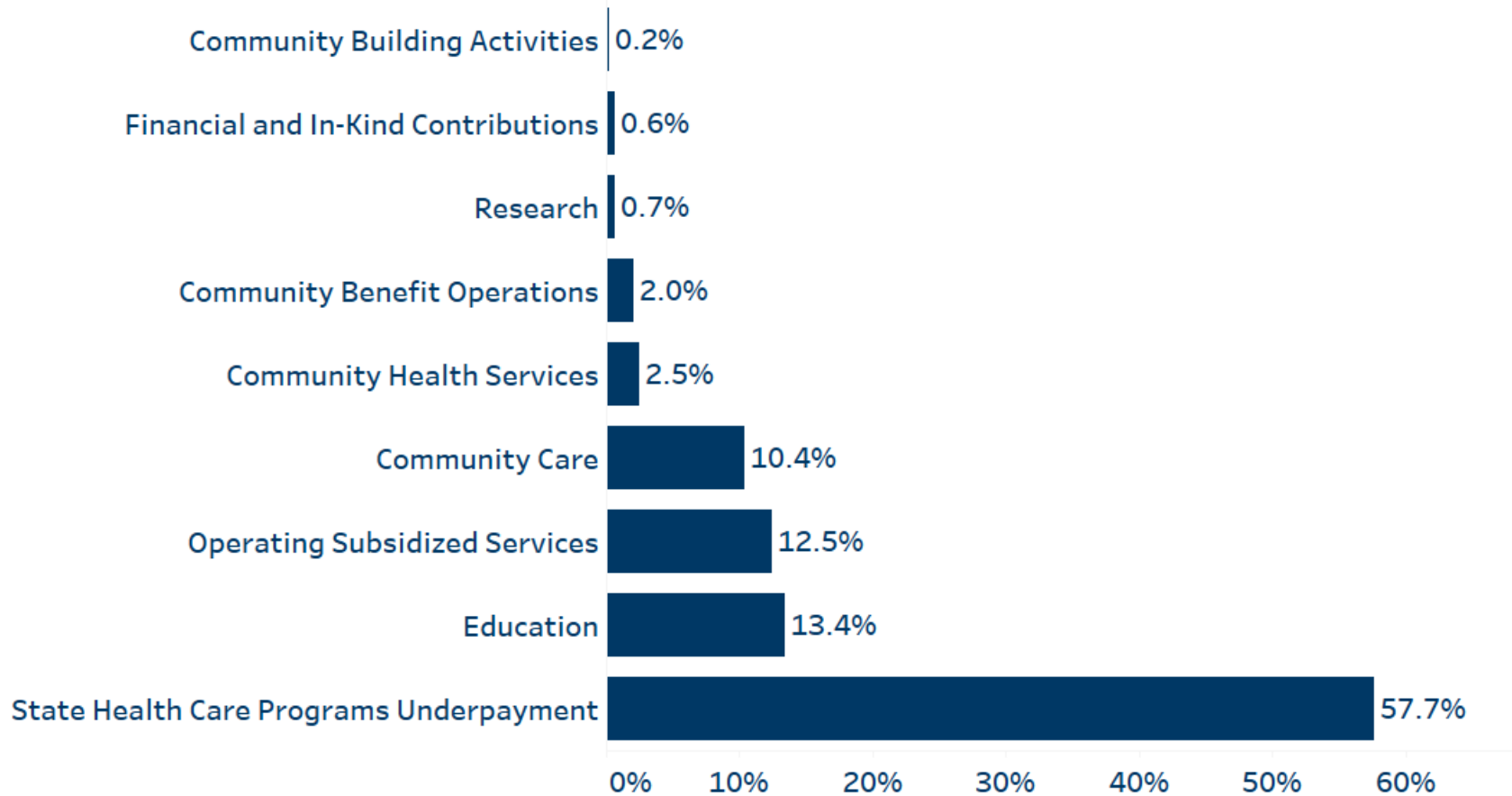
	Community Benefit ¹ (\$ Millions)	Percent of Total Operating Expenses
Direct Patient Care or Unreimbursed Services	\$1,182.1	6.0%
State Health Care Programs Underpayment	\$821.5	4.2%
Operating Subsidized Services	\$177.4	0.9%
Community Care	\$147.4	0.7%
Community Health Services	\$35.8	0.2%
Research & Education	\$200.6	1.0%
Education	\$191.2	1.0%
Research	\$9.4	0.0%
Community Activities	\$32.0	0.1%
Community Benefit Operation	\$28.9	0.1%
Community Building Activities	\$3.1	0.0%
Financial and In-Kind Contributions	\$9.1	0.0%
Total	\$1, 423.8	7.2%

¹Community benefit refers to the contributions hospitals make outside of reimbursed patient care to the communities, for the definitions of categories see: MDH/Health Economics Program, "Hospital Community Benefit Spending in Minnesota, 2016 to 2019" March 2022, available at <https://www.health.state.mn.us/data/economics/docs/hospcomtybenefitrpt.pdf>

Types of community benefit are grouped and ordered by benefit amount (\$) in descending order.

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

Distribution of Minnesota Hospitals' Community Benefit, 2020



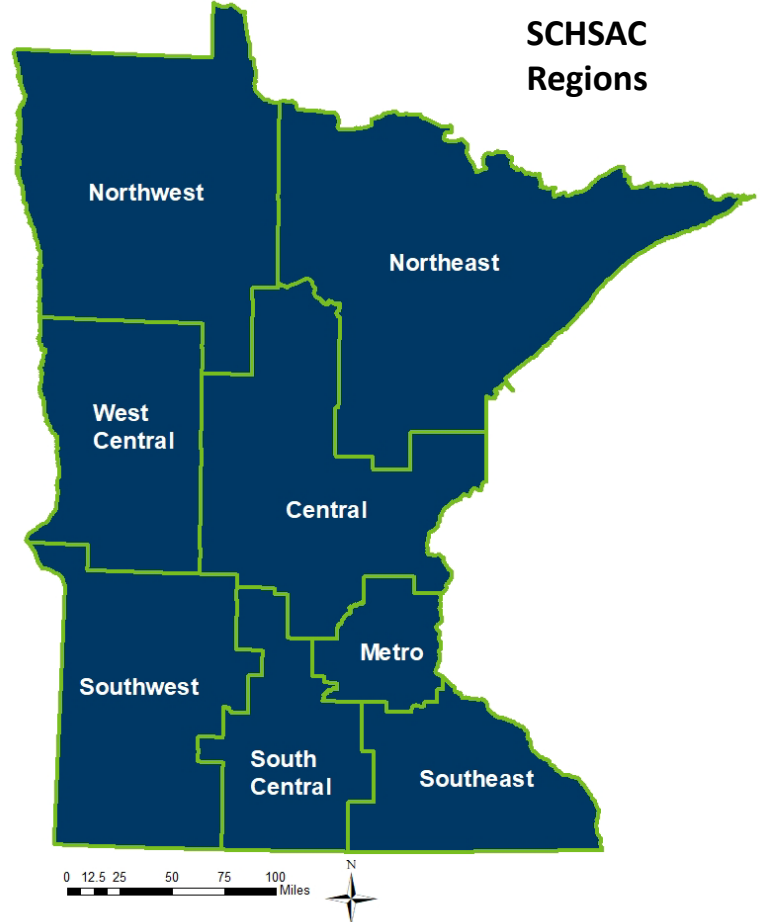
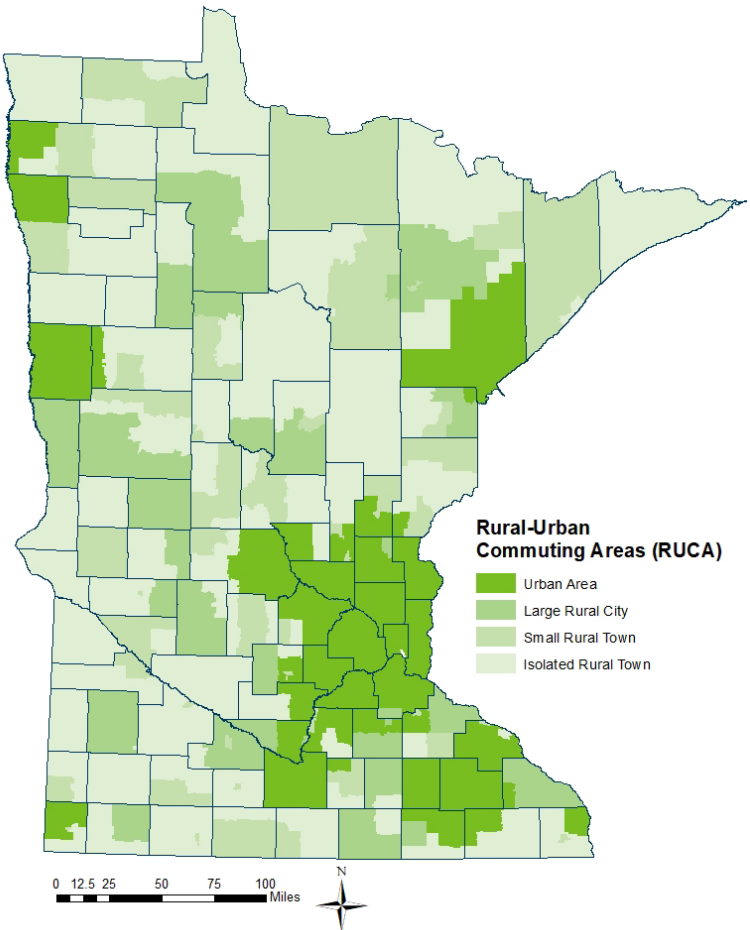
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<https://www.health.state.mn.us/data/economics/docs/hospcomtybenefitrpt.pdf>

Source: MDH Health Economics Program analysis of hospital annual reports, June 2022.

[Summary of graph](#)

Rural-Urban Commuting Areas (RUCA) & State Community Health Services Advisory Committee Regions (SCHSAC)



Rural and urban areas are identified using the Rural-Urban Commuting Areas (RUCA). For more information on RUCA, visit: www.health.state.mn.us/data/workforce/method.html#ruca [Summary of images](#)

Minnesota counties are grouped into State Community Health Services Advisory Committee (SCHSAC) Regions for state and local public health cooperation. For more information on SCHSAC, visit: www.health.state.mn.us/schsac/

Additional Information from the Health Economics Program Available Online

- Health Economics Program Home Page
(www.health.state.mn.us/healtheconomics)
- Publications
(<https://publications.web.health.state.mn.us/?publishType=HEP>)
- Health Care Market Statistics (Chartbook Updates)
(www.health.state.mn.us/data/economics/chartbook/index.html)

A summary of the charts and graphs contained within is provided at [Chartbook Summaries – Section 8A](#). Direct links are listed on each page. Please contact the Health Economics Program at 651-201-4520 or health.hep@state.mn.us if additional assistance is needed for accessing this information.