



# Rural Health Care in Minnesota: Data Highlights

Division of Health Policy, MDH

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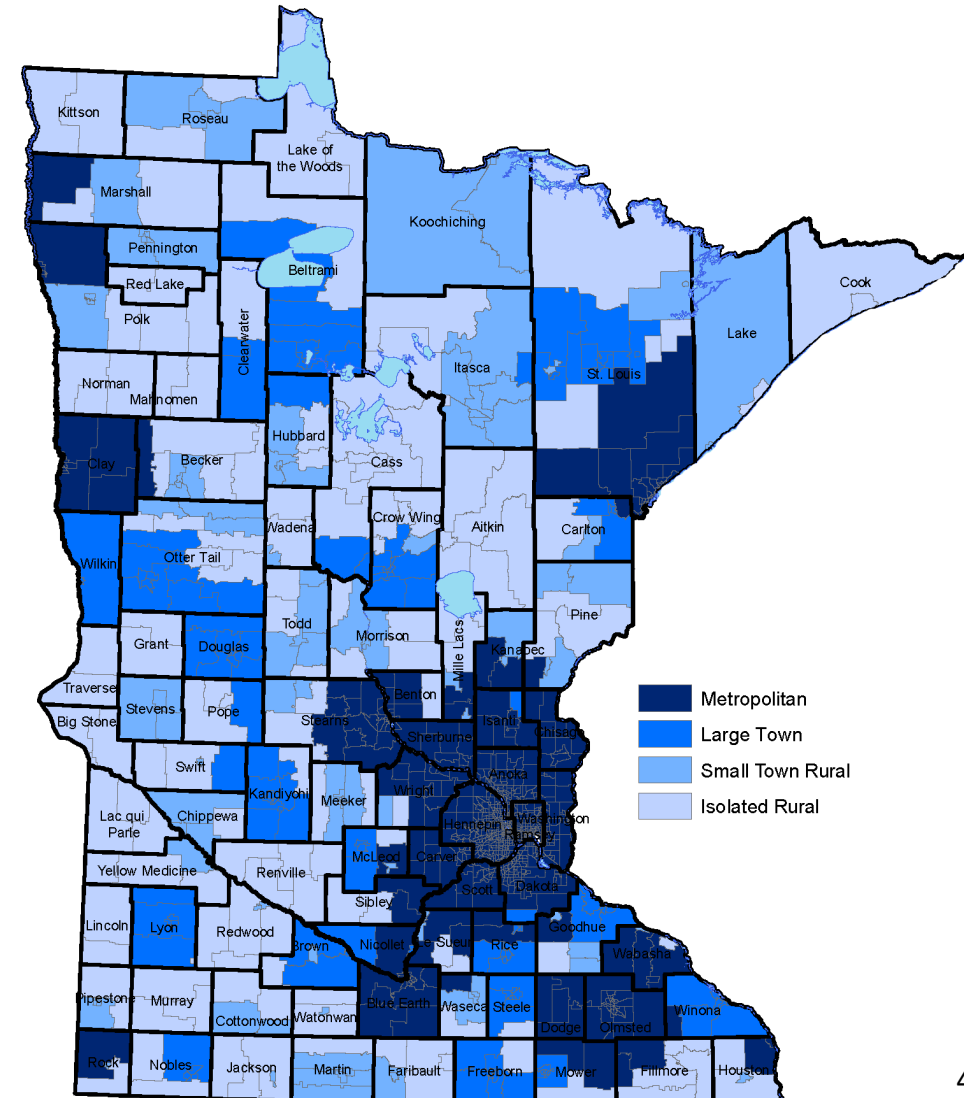
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# Technical notes

- A summary of all data sources and notes are available here: <https://www.health.state.mn.us/facilities/ruralhealth/docs/summaries/ruralhealthcbdata2021.pdf>
- There are a number of ways to report on rurality and geography. This chartbook uses the following constructs (defined in subsequent slides). The use of a particular construct is informed by the availability of the data.
  - Rural-Urban Commuting Area codes (RUCA codes)
    - Based on zip code, census tract, or county, as noted in each slide
  - State Community Health Services Advisory Committee (SCHSAC) regions
- When possible, the most up-to-date data are used. Therefore, the data year(s) presented may vary across the chart book.
- To access this chart book in an alternate format, a summary of the charts, graphs and maps is available here: <https://www.health.state.mn.us/facilities/ruralhealth/docs/summaries/ruralhealthcbdata2021.html>.
- Direct links are listed on each slide.
- We also define Minnesotan's based on the Social Vulnerability Index (SVI) quartile their zip code is in. Communities with a high SVI (SVI quartile 1) generally have higher rates of poverty, crowded housing, racial/ethnic minorities, and lack of access to transportation when compared to communities with a low index. The SVI was created by the Centers for Disease Control and Prevention (CDC).

# Defining rural: Rural-Urban Commuting Area (RUCA) Codes

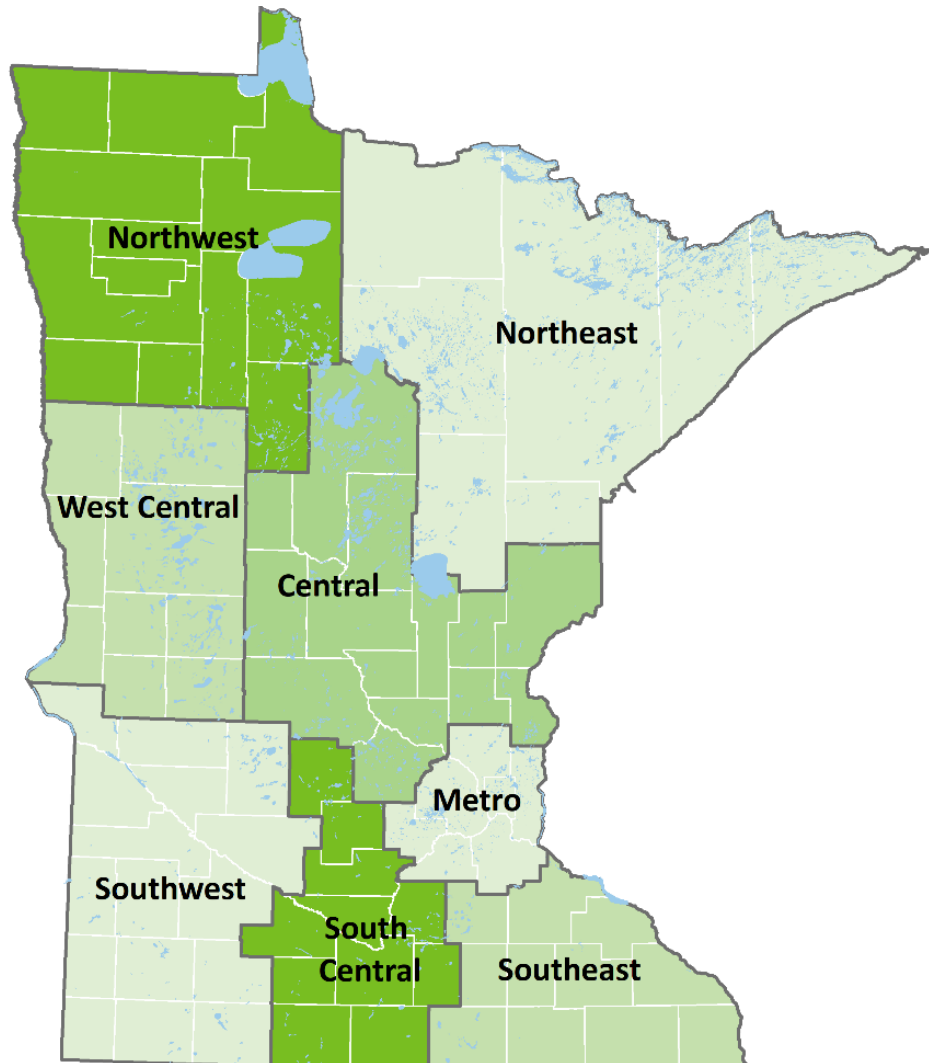
- Rural-Urban Commuting Areas are one of many ways to measure rurality.
- RUCAs take into account population density, urbanization and daily commuting patterns to identify urban and rural regions of the state.
- Current definitions are based on 2010 census data. More areas of the state became urban between the 2000 and 2010 census.
- For slides with two categories, unless otherwise noted:
  - urban = metropolitan
  - rural = large town + small town rural + isolated rural
- RUCA codes are based on zip code unless otherwise noted each slide.



Source: MDH. RUCAs were developed by the U.S. Department of Agriculture, Economic Research Service, and the University of Washington's WWAMI Rural Health Research Center. This map is based on census tract.

[Summary of Slide](#)

# Defining rural: Regions



## State Community Health Service Advisory Committee (SCHSAC) Regions

- 8 regions based on groups of counties.
- Focused on developing, maintaining and financing community health services.

# State of Rural Minnesota

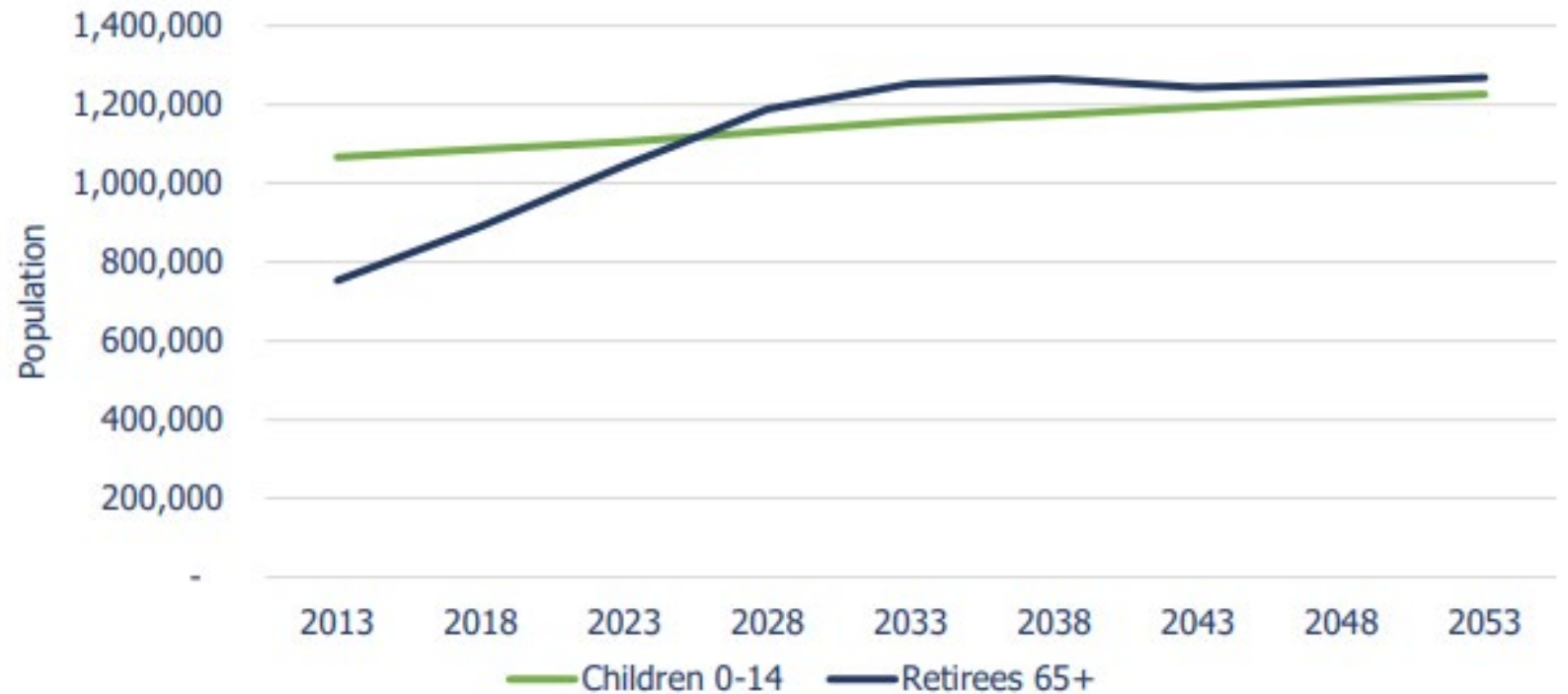
What are the demographic characteristics of rural Minnesota?

# Key points – Minnesota rural demographics

- Minnesota is projected to gain nearly 900,000 residents between 2018 and 2053.
  - The seven-county metro region is projected to gain about 924,000 residents, while Greater Minnesota will shrink by approximately 27,000 residents during this time.
  - Top 5 counties with the largest decline in population by 2053 will be Saint Louis (-28,238), Winona (-8,960), McLeod (-8,425), Freeborn (-7,078), and Martin (-6,541).
- Minnesota's oldest residents, aged 85 and above, are expected to more than double in the next 35 years—from the current 120,000 to over 270,000.
- Population growth in the state will be driven by communities of color.

# The population of Minnesota is aging

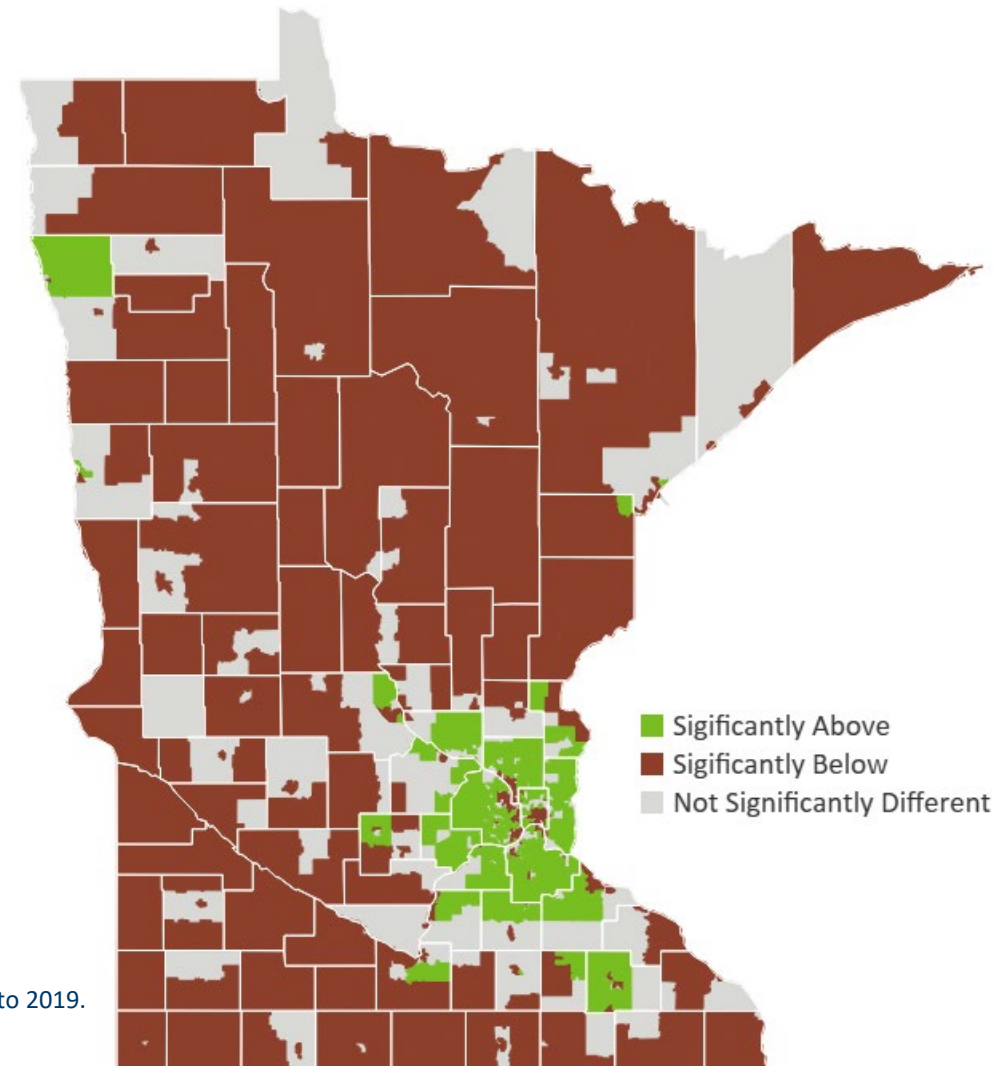
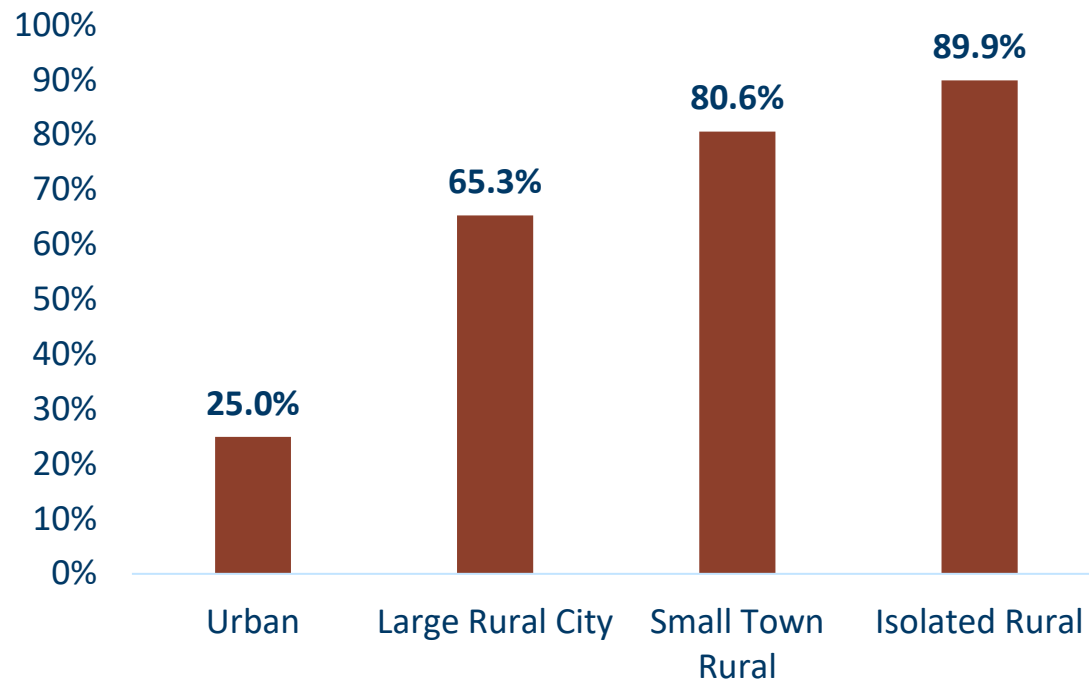
- Within the next decade, the total number of older adults (65+) is anticipated to outnumber children in Minnesota age 0 to 14.
- In 2033, 32% of rural Minnesota counties are projected to be 65 years of age or older vs. 19% for urban counties.





# People living in rural Minnesota are more likely to have household incomes below the statewide median income

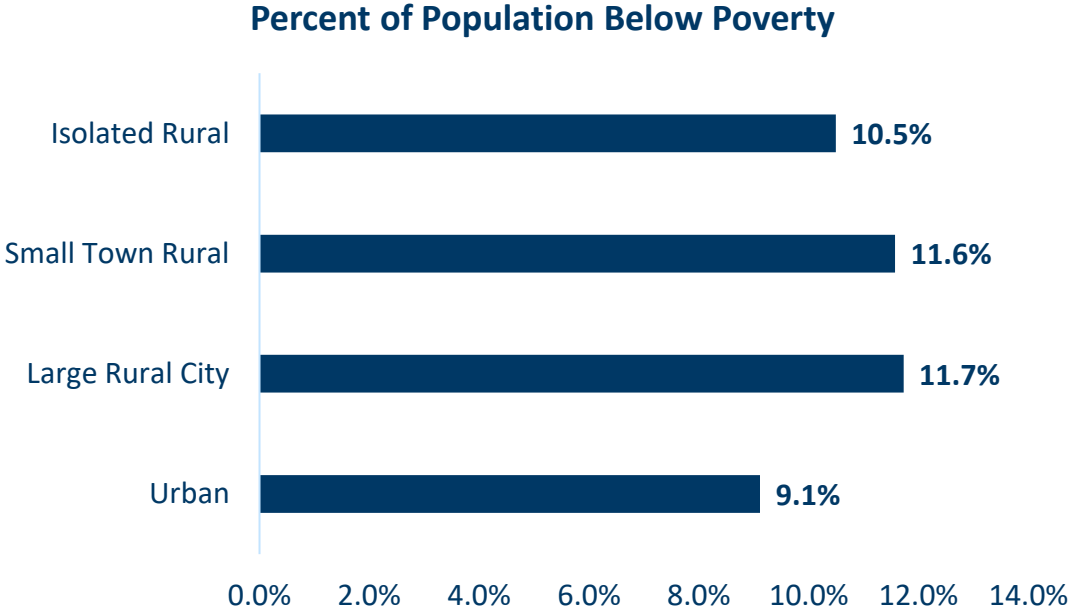
More than three out of four of people living in rural areas have household incomes below the statewide median income



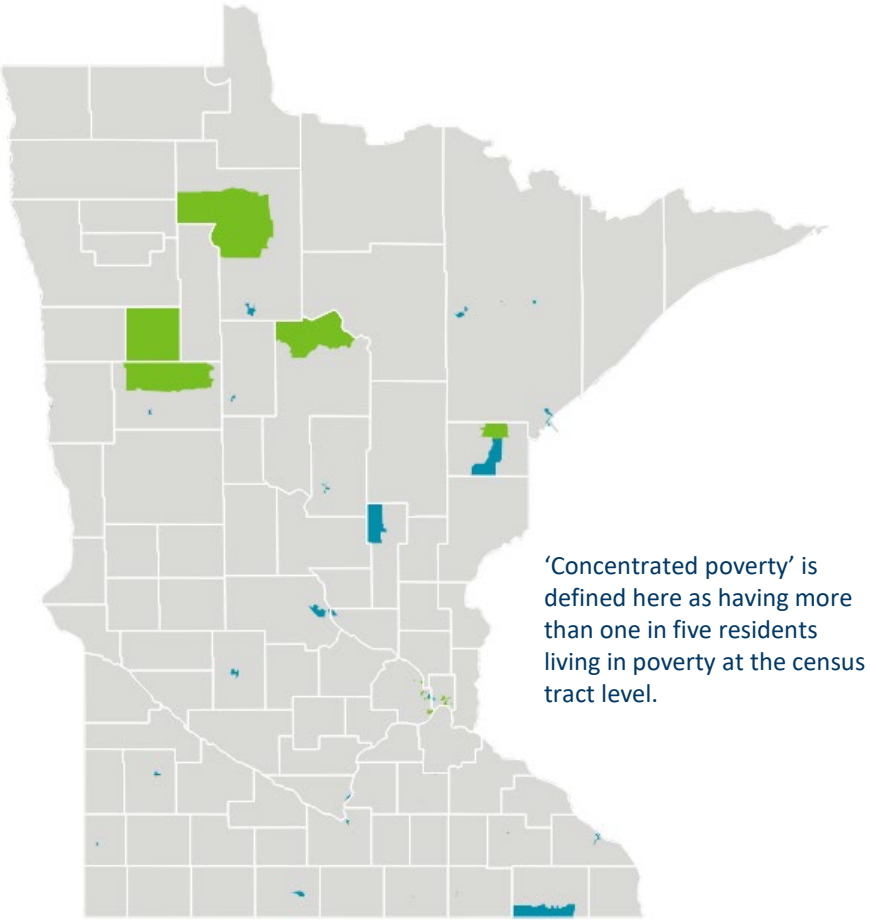
Source: MDH/Health Economics Program analysis of the American Community Survey Five-Year Estimate 2015 to 2019.  
RUCA based on census tract  
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# Areas of concentrated poverty occur in both rural and urban areas of the state

There are an estimated 122,000 people living in concentrated poverty areas in rural Minnesota.



Note: The percentages are not statistically different by geographic category.  
Source: MDH/Health Economics Program analysis of the American Community Survey Five-Year Estimate 2015 to 2019. RUCA based on census tract  
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- Majority White, Non-Hispanic Concentrated Poverty Areas
- Majority Non-White or Hispanic Concentrated Poverty Areas
- Non-Concentrated Poverty Areas

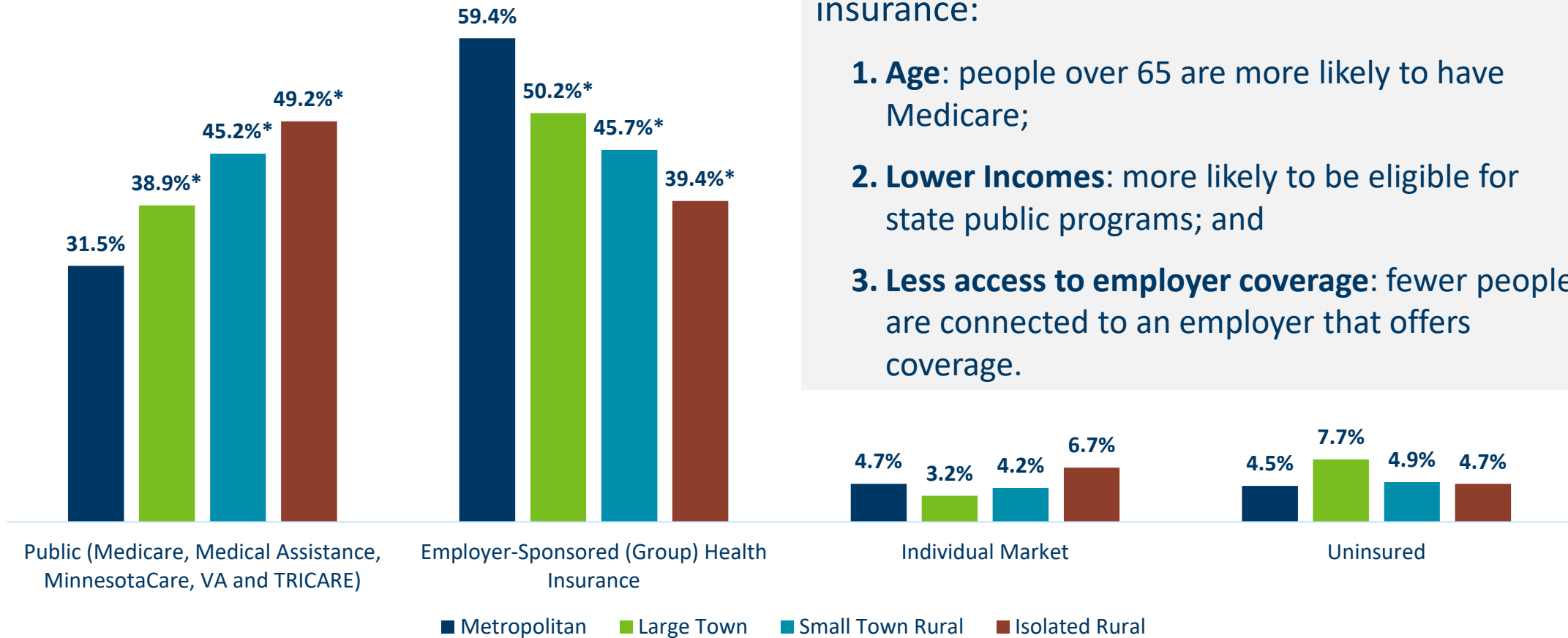
# Structure of Rural Health System: An Overview

How do people in rural areas access health care? Where are health care facilities in the state?

# Key points – Access to health care

- Rural residents are more likely to get health care through public sources, such as Medicare, Medicaid and MinnesotaCare.
- While health care facilities are distributed throughout the state, they are more spread out in rural areas.

# Rural Minnesotans are more likely to have public health insurance coverage, such as Medicare, Medicaid or MinnesotaCare



Reasons for higher rates of public health insurance:

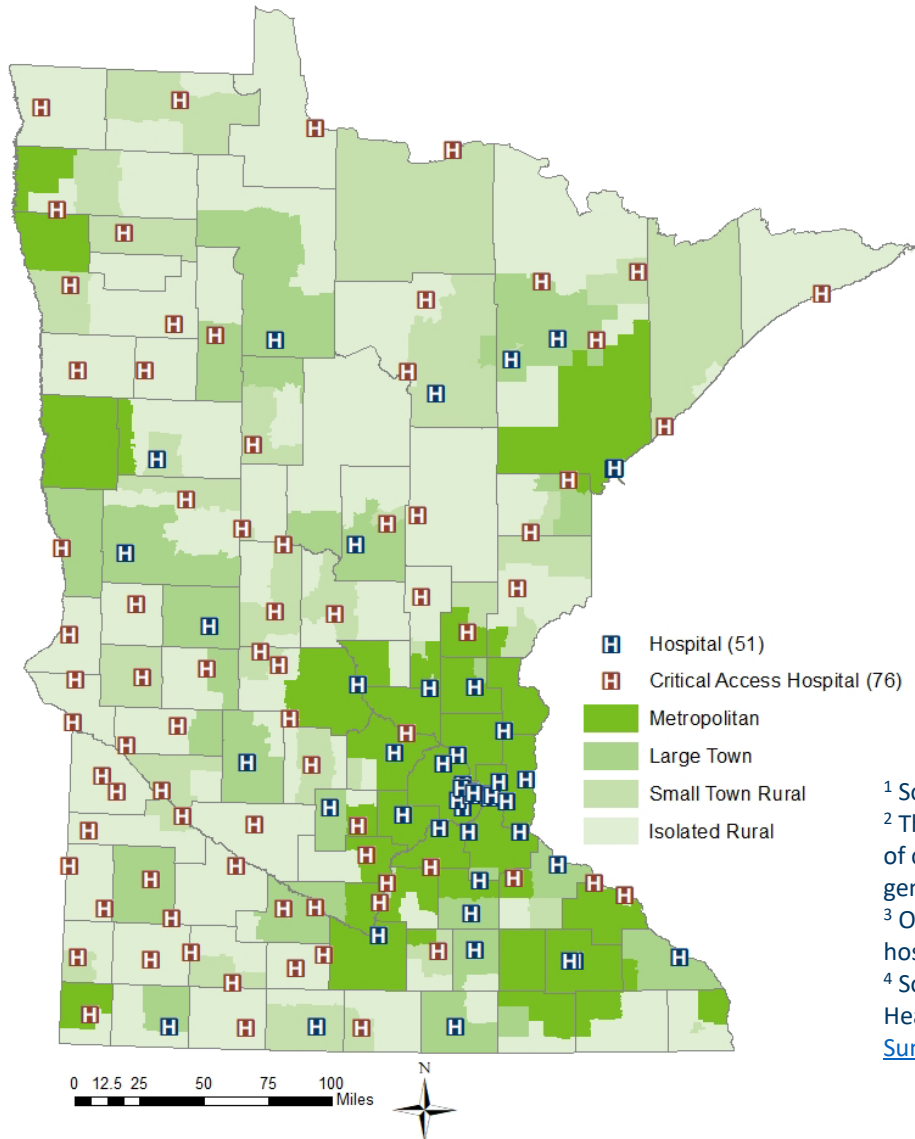
- 1. Age:** people over 65 are more likely to have Medicare;
- 2. Lower Incomes:** more likely to be eligible for state public programs; and
- 3. Less access to employer coverage:** fewer people are connected to an employer that offers coverage.

Source: Minnesota Health Access Survey, 2019; Geographies based on RUCA zip-code approximations.

\*Indicates significant difference from Metropolitan at the 95% level.

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# Hospital and nursing home services are available throughout the state



- Of the 127 community hospitals in Minnesota, 76 are designated Critical Access Hospitals.<sup>1,2</sup>
- In total, 90 hospitals are located in rural areas.<sup>1</sup>
- Around one-third of all hospital outpatient clinics in the state, 149 of 471 total clinics, are in rural areas.<sup>1,3</sup>
- All but one county, Red Lake, has at least one nursing home as of 2020.<sup>4</sup>

<sup>1</sup> Source: MDH Health Economics Program analysis of 2020 hospital annual reports, October 2021.

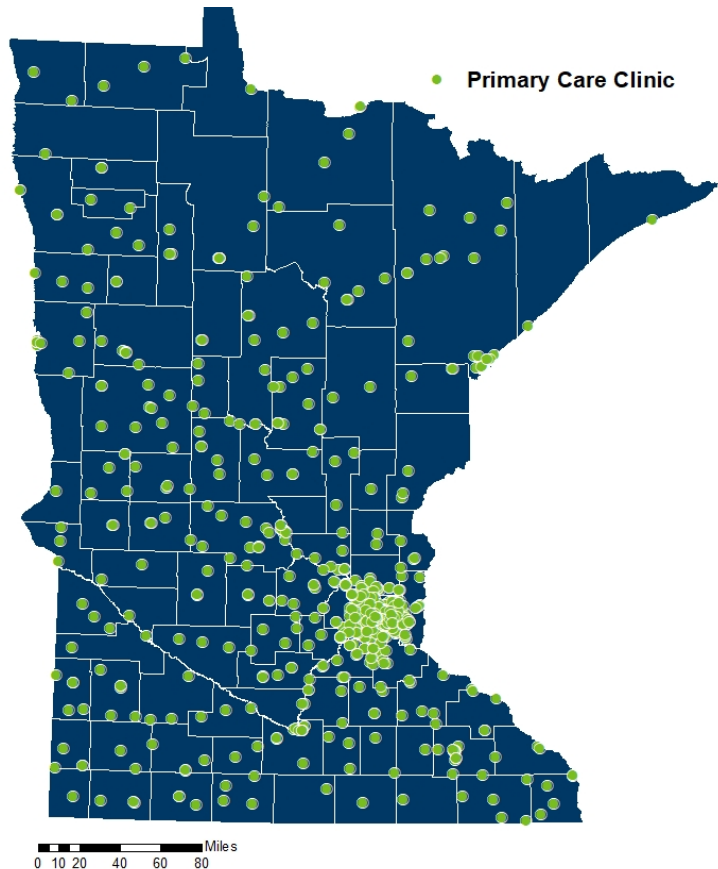
<sup>2</sup> There are 77 Critical Access Hospitals in Minnesota; however, one is an Indian Health Services Hospital. This is not included in the count of community hospitals, which are limited to non-federal short-term general and other special hospitals, and are accessible by the general public. <https://www.health.state.mn.us/facilities/ruralhealth/flex/mnhospitals.html>

<sup>3</sup> Outpatient clinics are designated by the hospital and may not be co-located with the hospital, but are billed to Medicare under the hospital's provider identification number. Since 2018, half of closed outpatient clinics were connected to hospitals in rural areas.

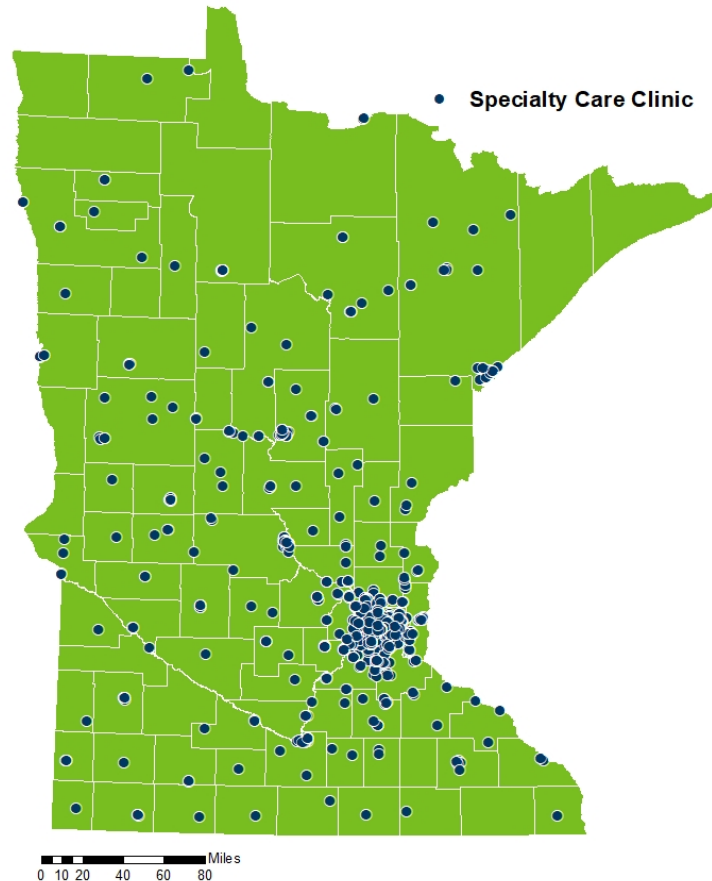
<sup>4</sup> Source: Minnesota Department of Health, Health Economics Program analysis of 2020 Directory of Registered, Licensed and/or Certified Health Care Facilities and Service, Table 11. <https://www.health.state.mn.us/facilities/regulation/directory/docs/2020mdhdirectory.pdf>. [Summary of Slide](#)

# Primary and specialist clinics are available throughout Minnesota

## Primary Care Clinics, 2020



## Specialty Care Clinics, 2020



- 37% (242) of all primary care clinics (661) are located in rural areas.<sup>1</sup>
- 19% (208) of all specialty care clinics (1,070) are located in rural areas.<sup>1</sup>
- Minnesota Community Health Centers had 720,846 medical, dental and mental health visits in 2020.<sup>2</sup>

Map Notes: Dots represent the number of clinics, and do not account for patient population or number of practicing physicians. Primary Care includes general family medicine, general internal medicine, and general pediatrics; Specialty Care includes one or more non-primary care specialty. 74.3% of the population lives in urban areas, and 25.7% of the population lives in rural areas based on 2019 5-year population estimates and census tract RUCA codes.

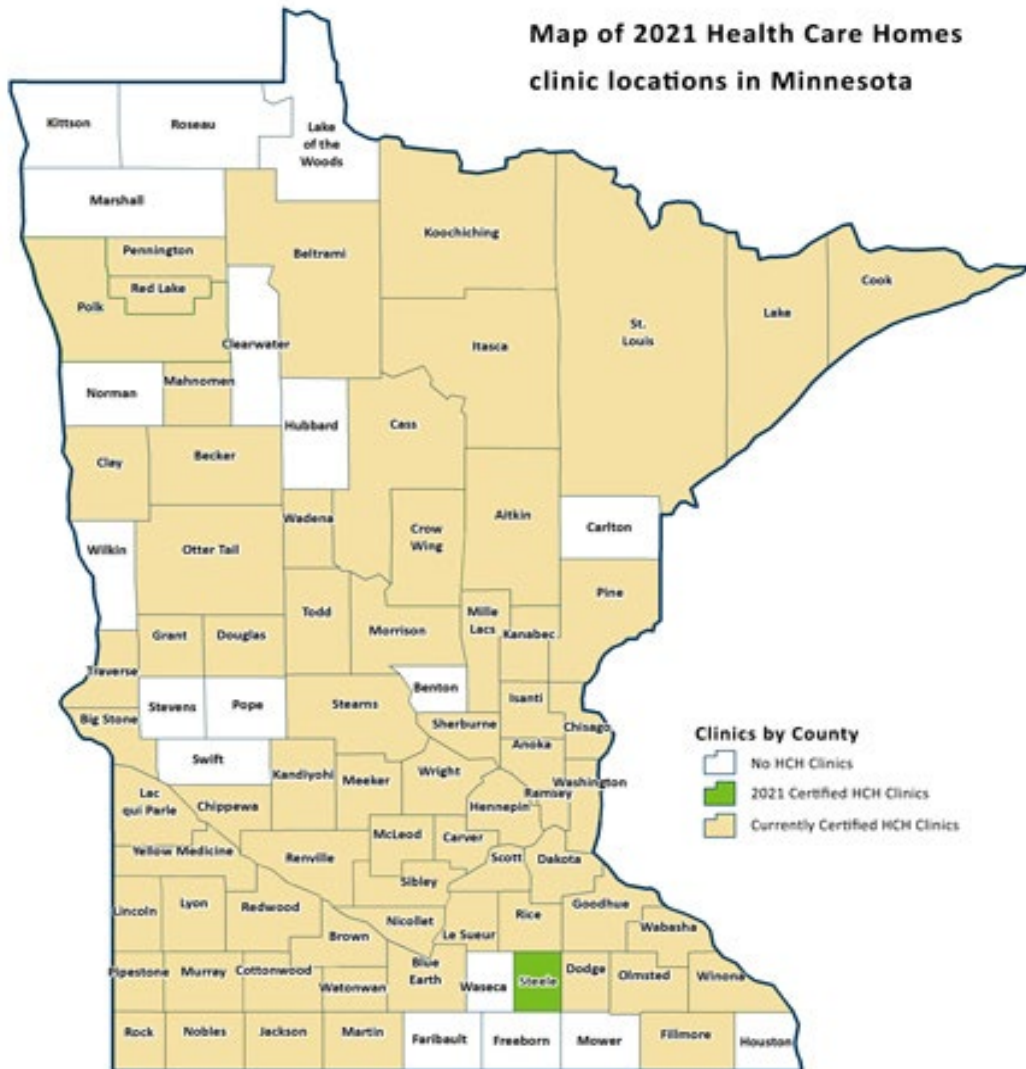
<sup>1</sup> Source: MDH Health Economics Program analysis of the Minnesota Statewide Quality Reporting and Measurement System 2020 Physician Clinic Registry; also source for maps.

<sup>2</sup> Source: [https://issuu.com/mnachc/docs/mnachc\\_2020\\_annual\\_report](https://issuu.com/mnachc/docs/mnachc_2020_annual_report).

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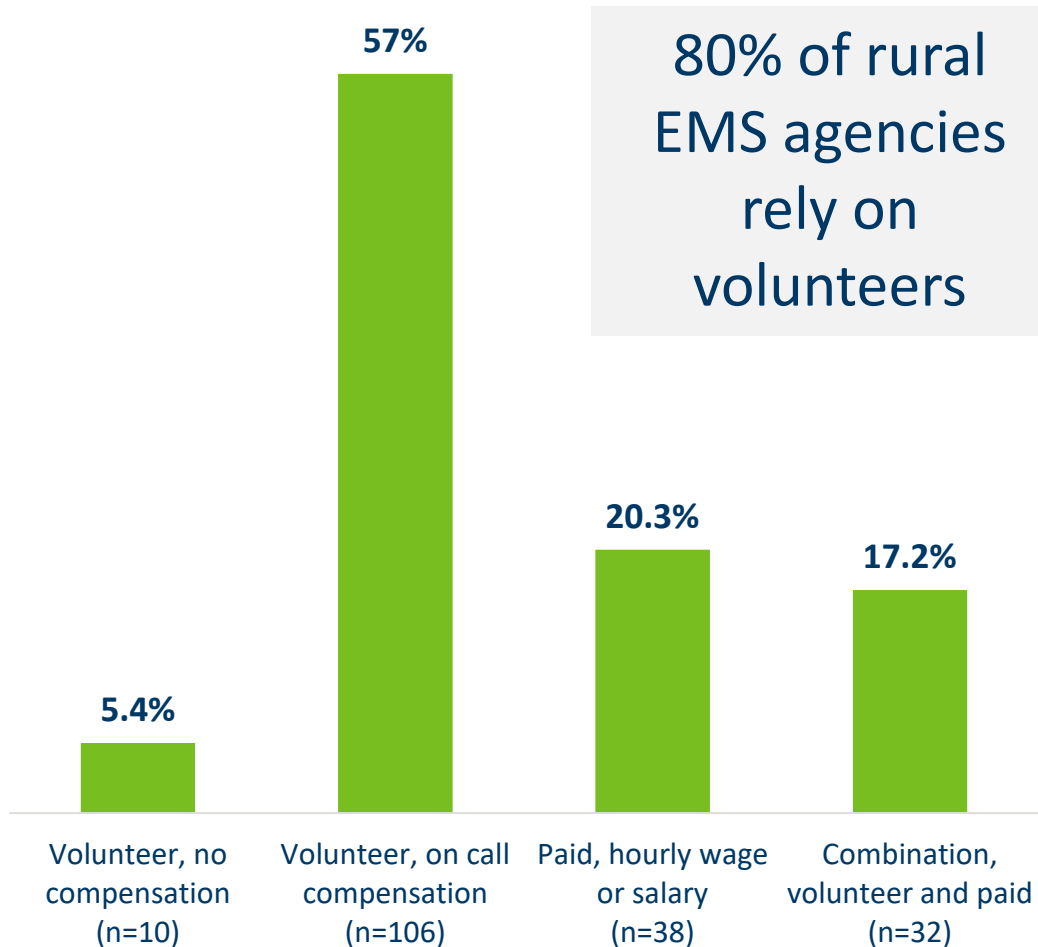
# Person-centered, coordinated primary care available to most Minnesotans



- MDH certifies primary care clinics and clinicians as health care homes, known nationally as a patient centered medical home.
- The health care home clinic team coordinates care with the patient and their family to ensure whole person care and improve health and well-being.
- 79% of MN counties have at least one health care home clinic.
- 207, or about one half, of the 409 certified health care home clinics are in rural areas (SCHSAC regions).



# Rural Emergency Medical Services (EMS) reliance on volunteerism is unsustainable



- Rural EMS agencies rely on volunteers, but face decreasing volunteer roster sizes, and many shifts (weekdays, weekends, holidays) are difficult to fill.
- About 60% of agencies have inadequate staff to cover their call schedule without undue burden.
- 59% of agencies do not have all of their shifts covered at least 24 hours in advance.
- 88% of agencies provide Basic Life Support (not paramedic level services) to their communities.

# Access to critical trauma care is available throughout the state

- Minnesota has 126 designated trauma hospitals across four adult and two pediatric designation levels.
- 99% of Minnesotans live within 60 minutes of a trauma hospital.
- 76% of Minnesotans live within 60 minutes of a Level 1 or 2 trauma hospital.
- 72% of Minnesota children live within 60 minutes of a pediatric trauma hospital.

# Rural Health Care Workforce

What is the composition, demographics and geographic distribution of the state's licensed health care workforce?

# Key points – Health care workforce

- Nurses make up the largest share of the state's licensed providers and are the foundation of the health care system.
- There is a maldistribution of providers in the state—the majority work in the urban areas. Consequently, the rural parts of the state face a severe shortage of all provider types, especially in primary care and mental health.
- 80% of Minnesota counties qualify as mental health professional shortage areas.
- Rural providers are older and closer to retirement.

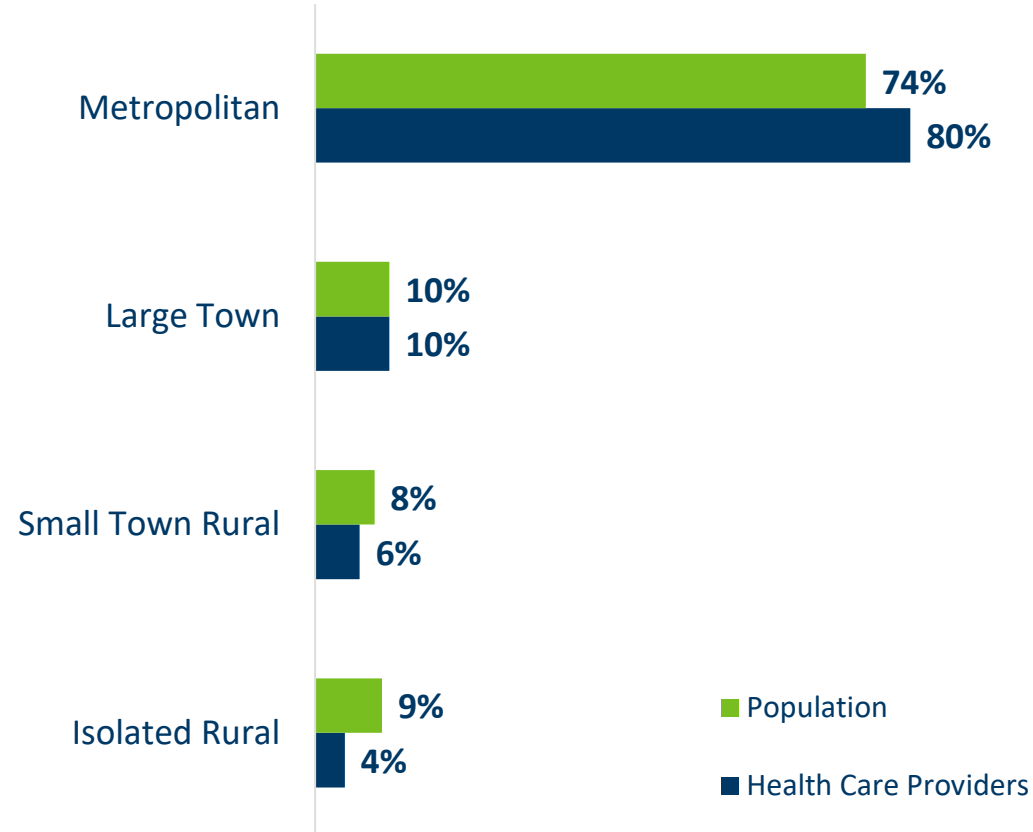
# Registered nurses and licensed practical nurses make up the majority of the health care workforce in Minnesota

License Type	Number of Providers in Minnesota in 2021
Registered Nurses and Licensed Practical Nurses	138,777
Pharmacists	9,621
Physicians	26,344
Mental Health Providers	25,142
Advance Practice Registered Nurses	10,677
Physical Therapy Professionals	8,171
Dentists	4,066
Alcohol and Drug Counselors	3,828
Physician Assistants	3,819

Source: MDH Office of Rural Health and Primary Care analysis. Data provided by Health Licensing Boards, November 2021. This table **excludes** Respiratory Therapist, Pharmacy Technicians and some other smaller licensed occupations, including: Chiropractic, Sports Medicine, and Occupational Therapy. Mental health providers include marriage and family therapists, social workers, psychologists, counselors, etc.

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# The majority of licensed health care providers work in metropolitan areas



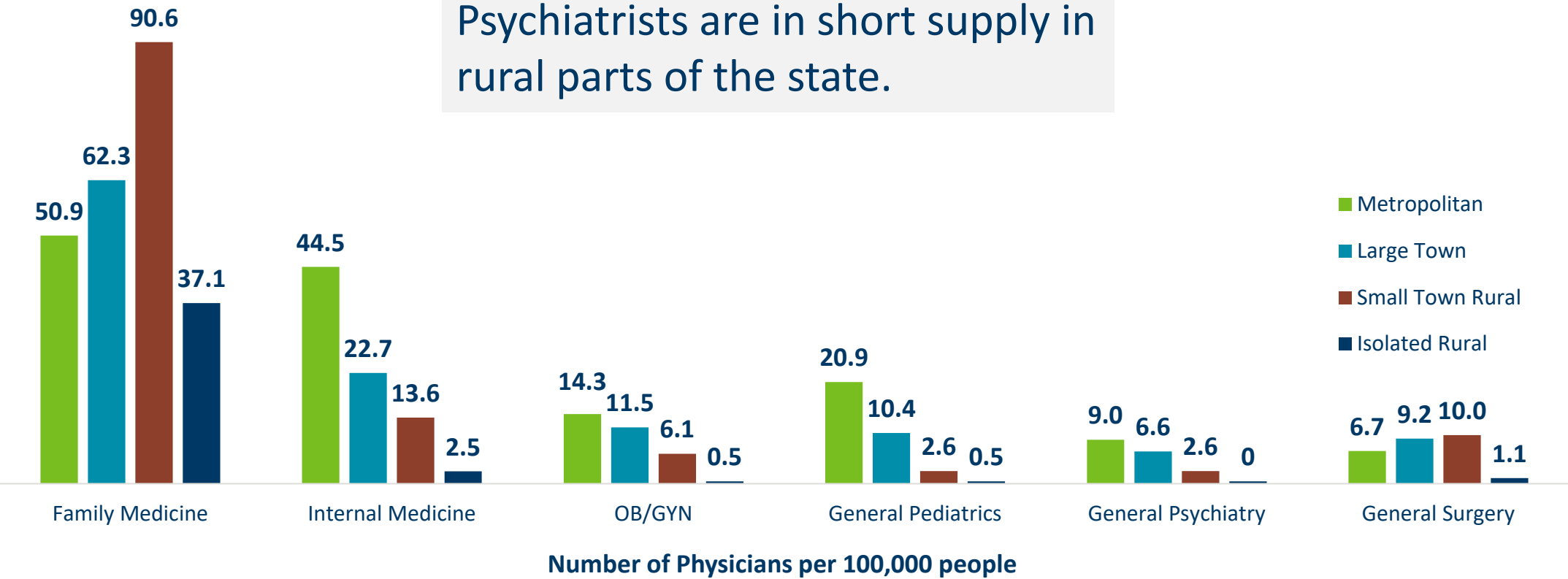
Very few licensed health care providers work in rural areas.

Source: MDH Office of Rural Health and Primary Care analysis. Data provided by Health Licensing Boards, August 2021. Data includes: physicians, physician assistants, respiratory therapists, oral health professions, pharmacy professions, physical therapy professions, and mental health professions.

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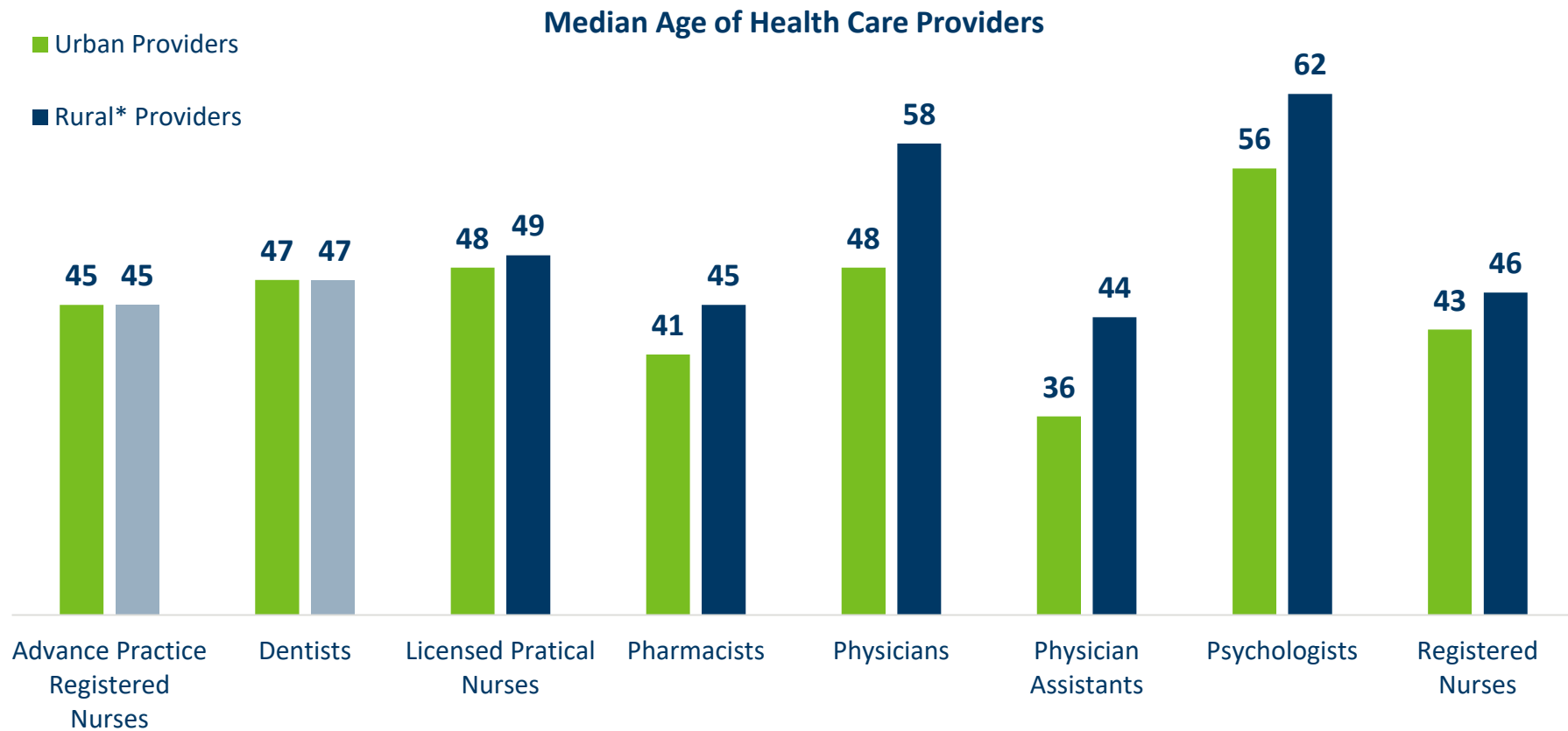
# Rural areas face severe shortages of primary care physicians

OB/GYNs, Pediatricians, and Psychiatrists are in short supply in rural parts of the state.



Source: MDH Office of Rural Health and Primary Care analysis. Data provided by Board of Medical Practice, August 2021. Counts by region are based on primary practice address that physicians report to the Board.  
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# Rural providers are older than their urban counterparts



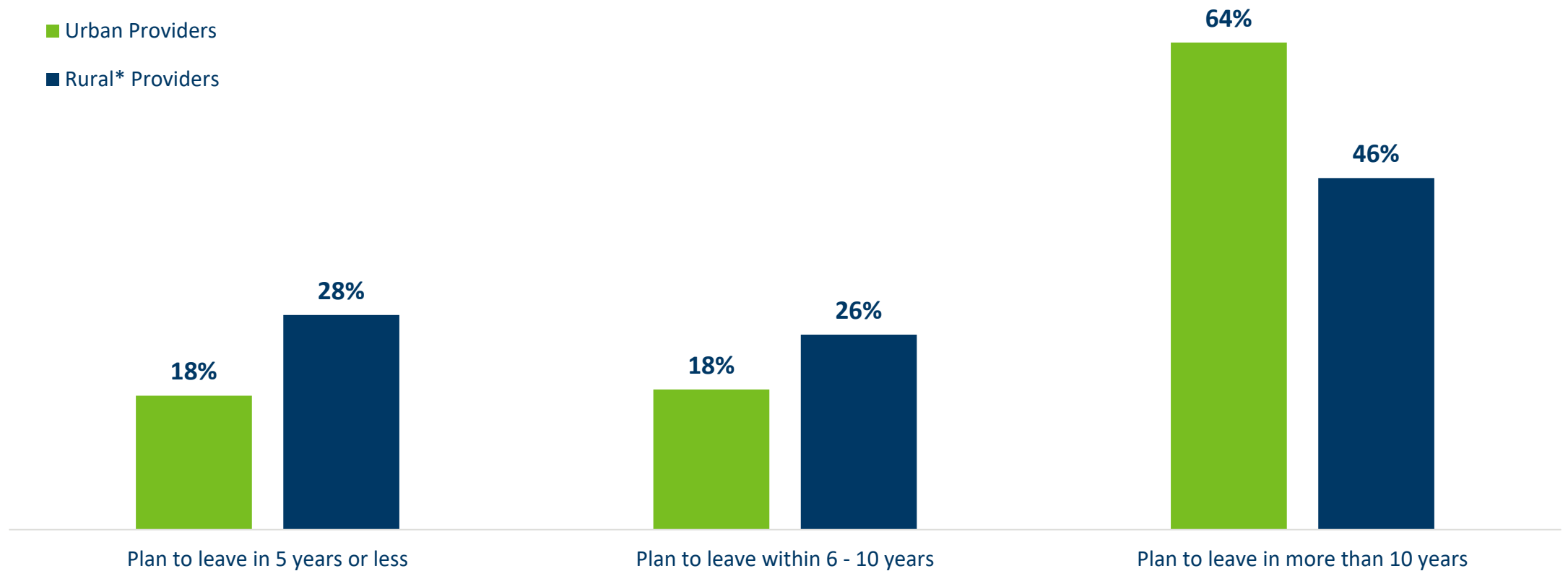
Source: MDH Office of Rural Health and Primary Care analysis. Data provided by Health Licensing Boards, August, 2021.

\*Rural = isolated rural from Rural-Urban Commuting Area codes.

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# More than a quarter of rural physicians plan to leave the workforce within the next five years



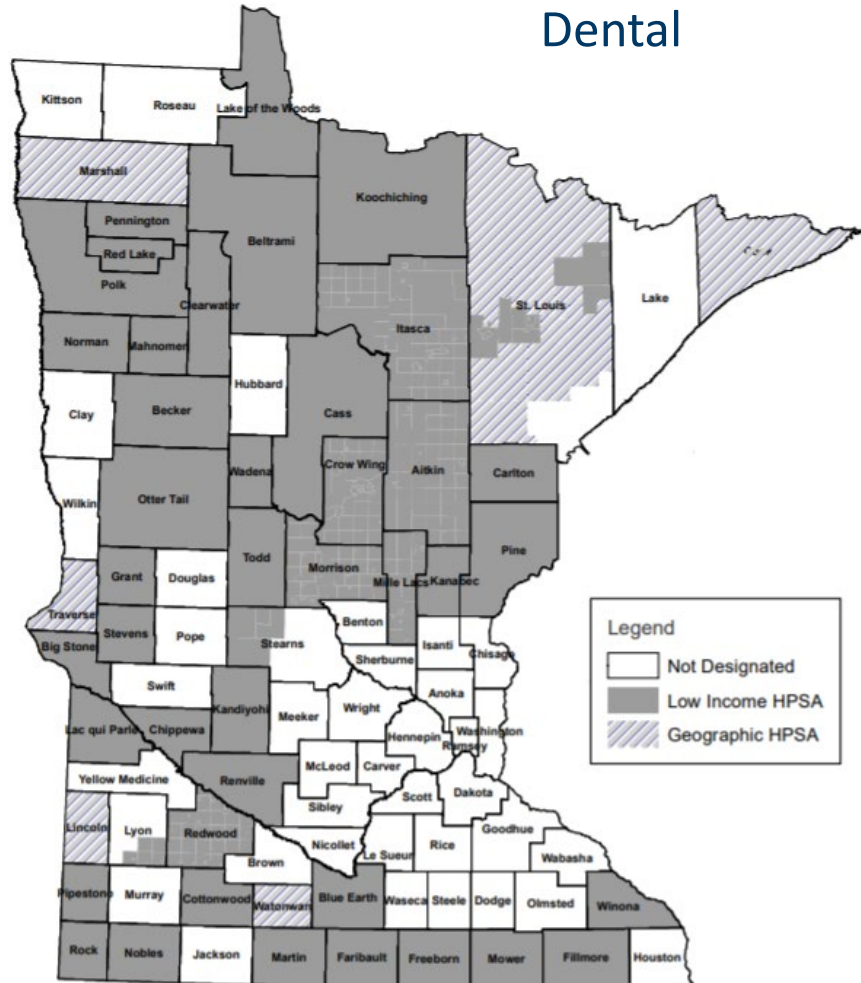
Source: MDH Office of Rural Health and Primary Care, Physician Workforce Survey, 2021.

\*Rural = isolated rural from Rural-Urban Commuting Area codes.

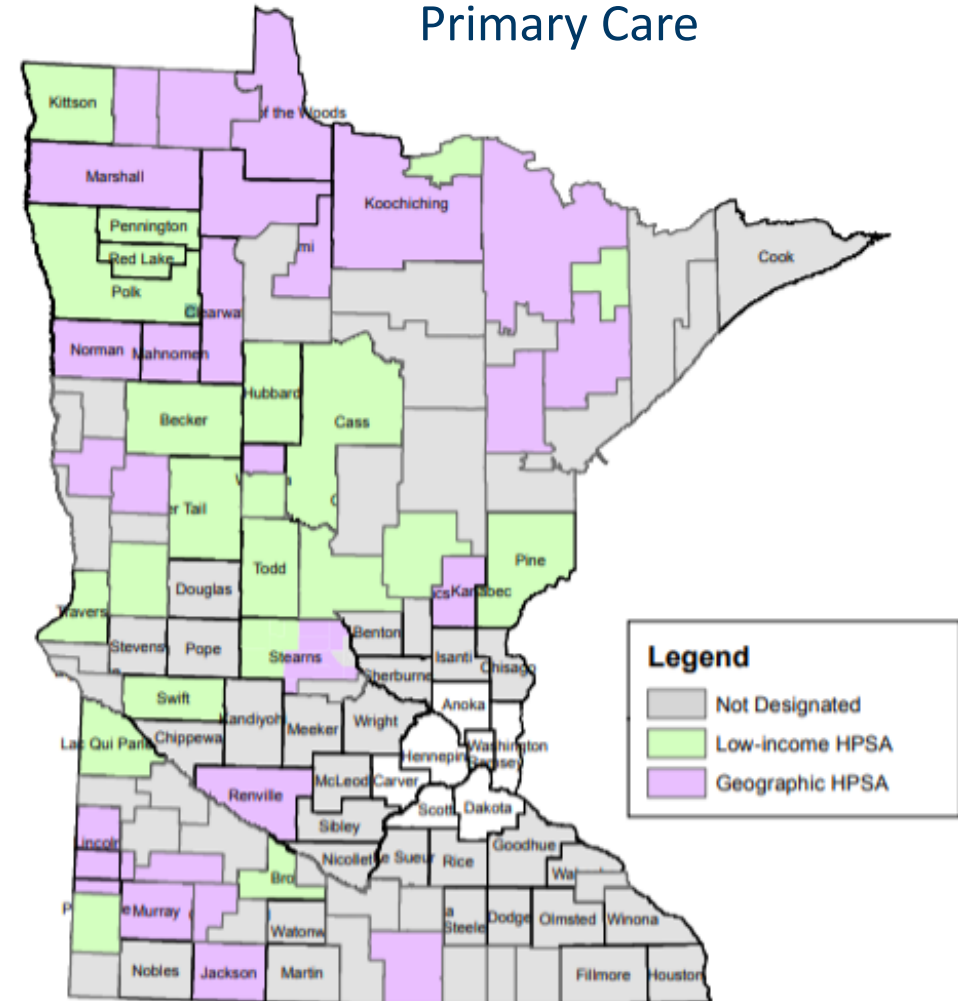
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# Minnesota has 94 designated Health Professional Shortage Areas across 53 counties in dental and primary care

## Health Professional Shortage Areas Dental



## Health Professional Shortage Areas Primary Care



# Availability of Health Care Services in Rural Minnesota

What health care services are available to people living in rural Minnesota, and has it changed over time?

# Key points – Health care availability

- The availability of services, especially in hospitals, has been changing over the past 10 years:
  - Fewer services are available at rural hospitals, or the hospitals have closed.
  - Non-metro counties have seen declines in obstetrics services and increases in outpatient psychiatric services.
  - More than half of the nursing home closures between 2011 and 2020 were in rural counties.

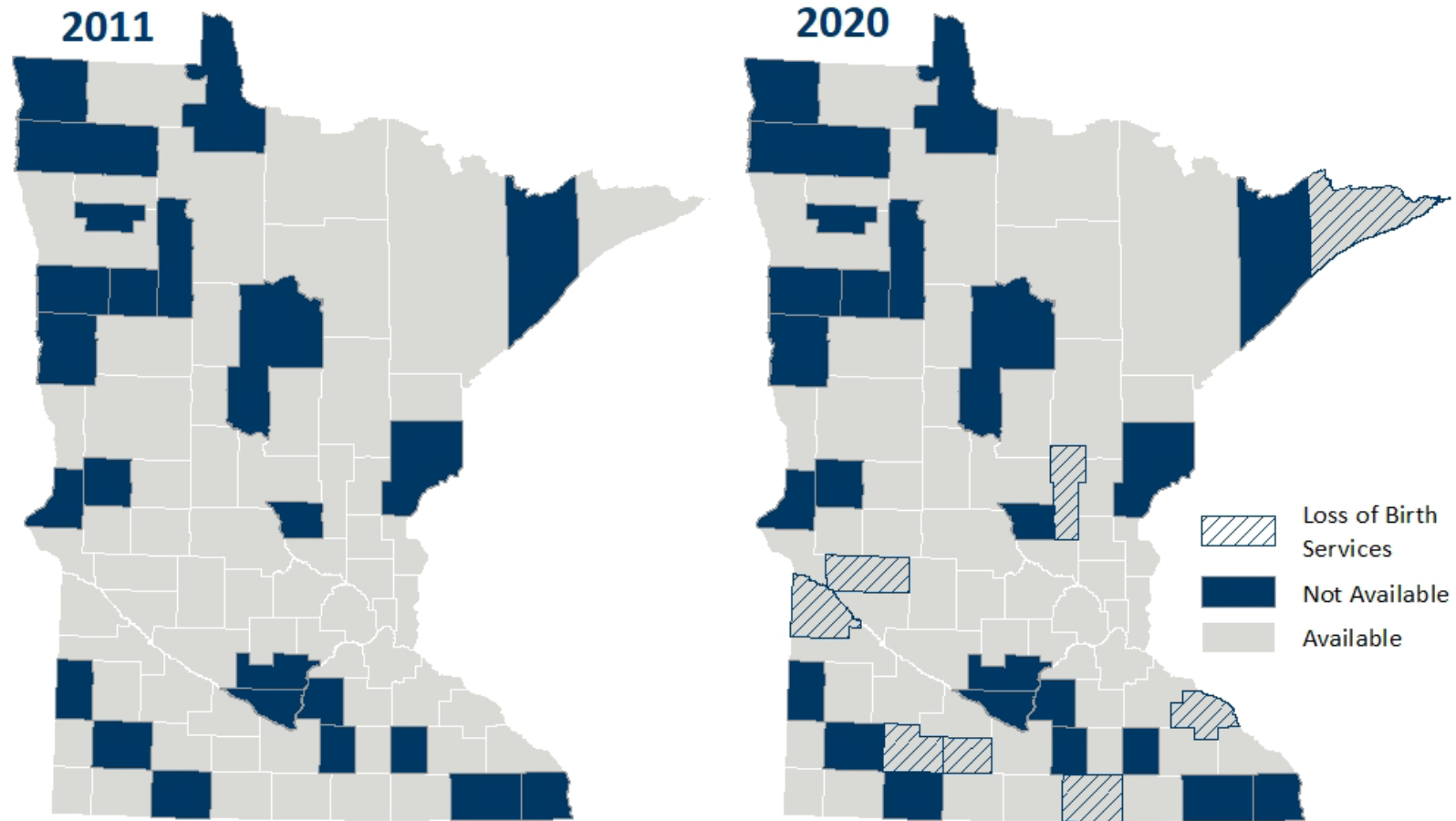
# Rural hospitals saw service declines due to hospital closures, consolidation, or service loss over the past decade

	Hospitals with service available in 2011	Change in Service due to:			Hospitals with service available in 2020	Percent Change 2011 to 2020
		Closure or Consolidation	Lost Service	Added Service		
<b>Surgery</b>						
Inpatient Surgery	87	2	6	1	80	-8.0%
Outpatient Surgery	91	2	2	0	87	-4.4%
<b>Mental Health/Chemical Dependency Services</b>						
Outpatient Psychiatric	37	2	4	15	46	24.3%
Detoxification Services	9	1	4	4	8	-11.1%
<b>Diagnostic Radiology Services</b>						
Computer Tomography (CT) Scanning	92	2	0	0	90	-2.2%
Magnetic Resonance Imaging (MRI)	90	2	0	0	88	-2.2%
Positron Emission Tomography (PET)	2	0	1	3	4	100.0%
Single Photon Emission Computerized Tomography (SPECT)	16	0	1	14	29	81.3%
<b>Other Services</b>						
Renal Dialysis Services	14	0	2	2	14	0.0%
Cardiac Catheterization Services	2	0	0	1	3	50.0%

Over the same time period, rural hospitals added outpatient psychiatric services and advanced diagnostic imaging services.

Source: MDH Health Economics Program analysis of hospital annual reports, September 2021; 2020 data is considered preliminary. Services are considered “available” when they are provided on site by hospital staff, on site through contracted services, or off site through shared services agreement. No rural hospitals had open heart surgery or organ transplant services available in 2011 or 2020.

# Eight Minnesota counties lost hospital birth services between 2011 and 2020



Increases in pre-term births have been associated with the loss of hospital birth services in rural areas.

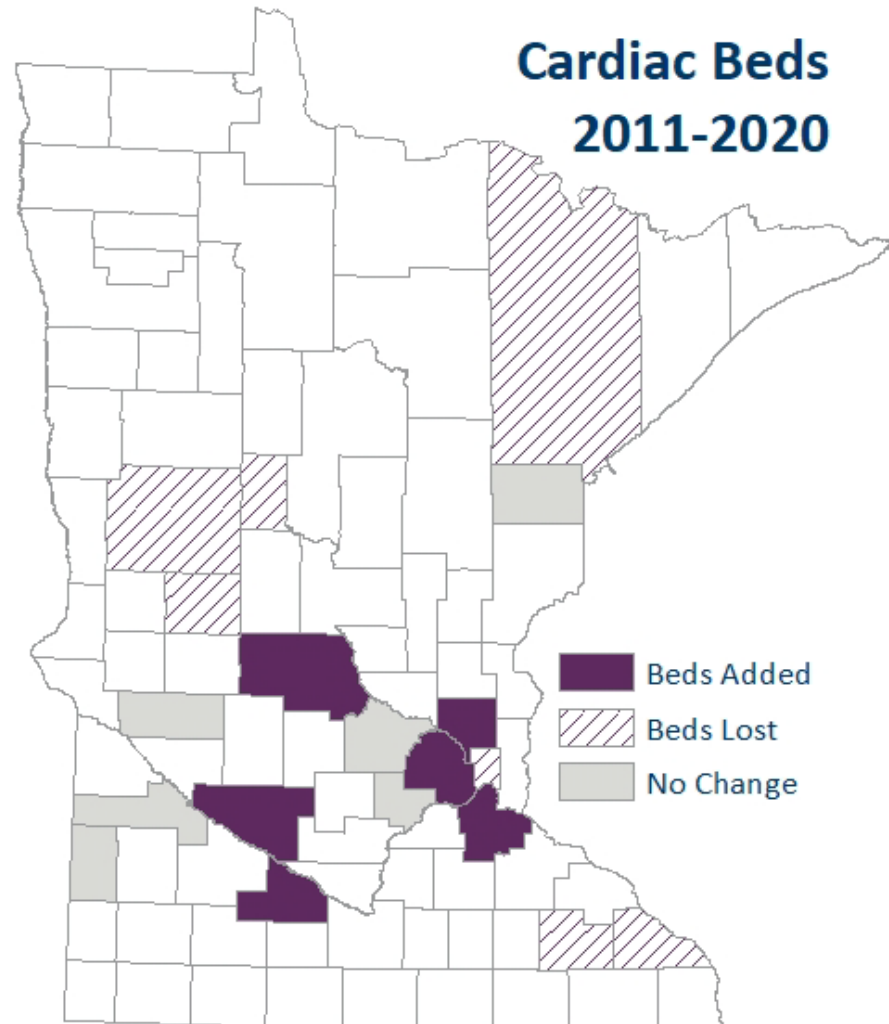
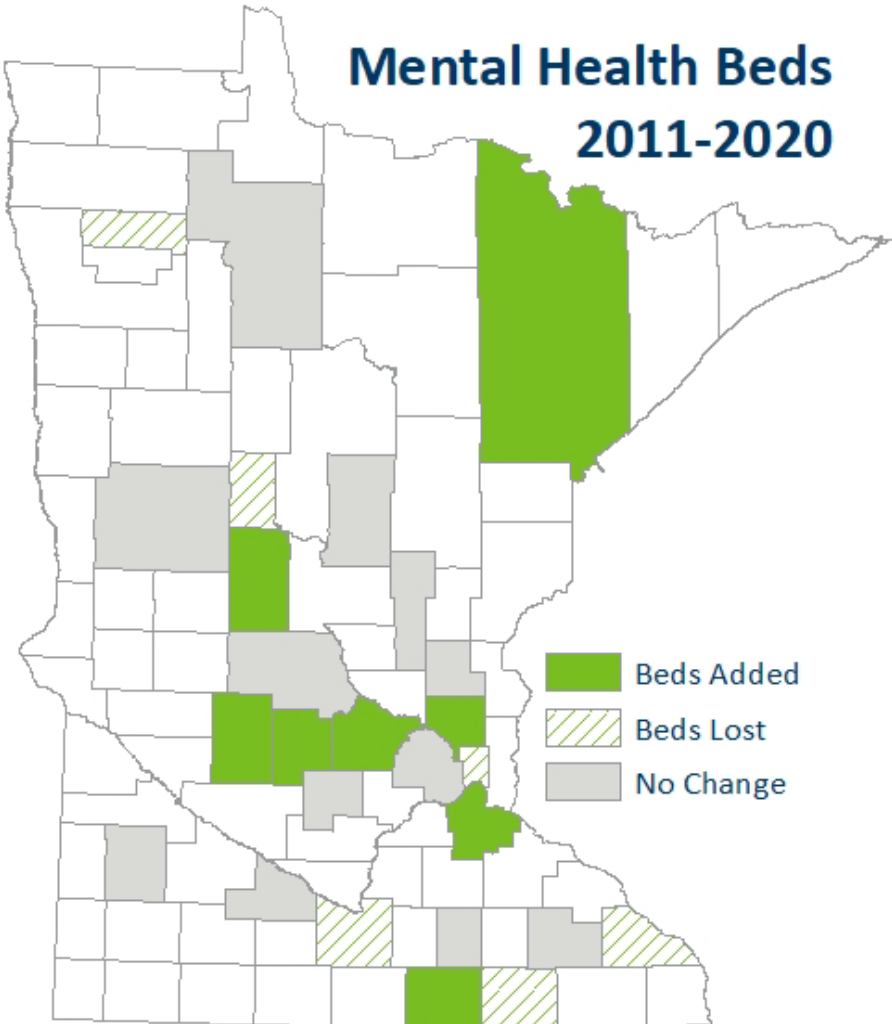
Note: Due to a merger, the hospital in Mower County was no longer an independent licensed entity as of the end of 2014; however, birth services were offered at that site under the license of the remaining corporate entity. The other hospital of the merger, in Freeborn County, no longer has birth services.

Source: Minnesota Department of Health, Health Economics Program Analysis of hospital annual reports, September 2021; 2020 data is considered preliminary; U.S. Census Bureau (County Designations)

Definition: Community hospitals were categorized as not offering birth services if they did not have at least one routine birth and had no licensed bassinets or stated that services were not available.

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# Other counties had changes in cardiac and mental health beds over the past decade



Statewide,  
between 2011 and  
2020:

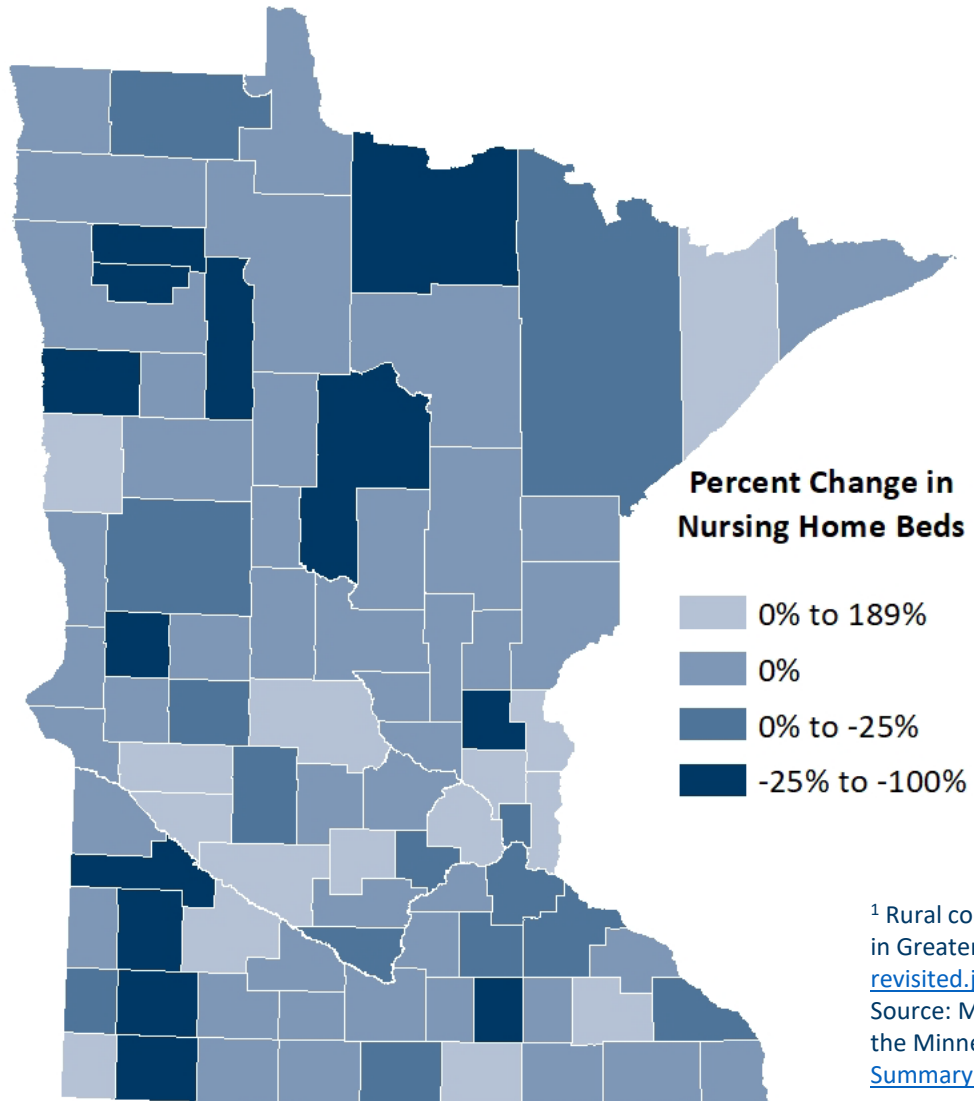
- 6 mental health beds were *added*.
- 7 cardiac beds were *lost*.

Note: Counties in white do not have dedicated beds in that category.

Source: MDH Health Economics Program analysis of hospital annual reports, October 2021; 2020 data is considered preliminary.

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# The relative decline in nursing homes and nursing home beds was greater in rural Minnesota between 2011 and 2020



- Rural counties<sup>1</sup> have about 1/3 of all nursing homes but accounted for the majority of closed nursing homes in the state between 2011 and 2020.
- In total, rural counties<sup>1</sup> lost 16 nursing homes, and had a 6% decline in nursing home beds.
- The nursing home population has been declining since 1995, with alternative options for long-term care, including home care and assisted living becoming more common.

<sup>1</sup> Rural counties are those that are either entirely rural, or a rural/town mix (49 counties), as defined by the Minnesota Population Center in Greater Minnesota: Refined and Revisited (<https://mn.gov/admin/demography/reports-resources/greater-mn-refined-and-revisited.jsp>), page 33.

Source: Minnesota Department of Health, Health Economics Program analysis of 2011 and 2020 nursing facility counts and capacity from the Minnesota Department of Health, Health Regulation Division.

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# Health Care Use in Rural Minnesota

What is the health status of people in rural Minnesota?  
What are the barriers they face to receiving health services, and what are their health outcomes?

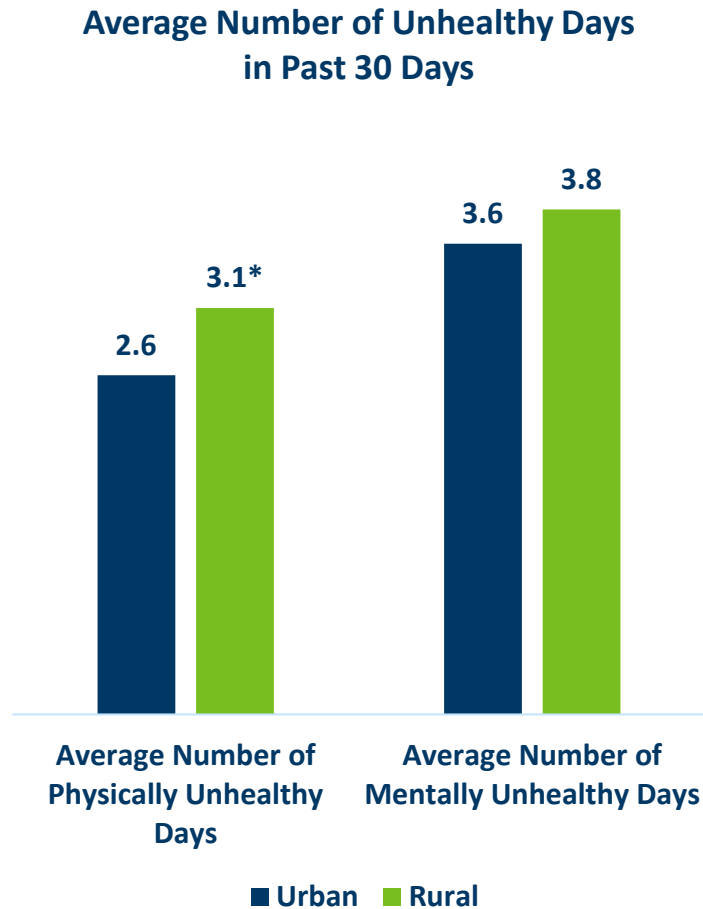
# Key points – Health care access and use

- Rural Minnesotans report poorer physical health status, and experience higher rates of suicide.
- They also have to travel farther to receive inpatient health care services – especially mental health and obstetrics services.
- Rural Minnesotans are more likely to have problems getting appointments with primary care providers when needed and having specialists accept insurance coverage.
- Primary care providers work to fill “gaps” in care, especially in mental health, obstetrics, and pediatric care.
- Rates of adolescent mental health screening are lower in rural areas, and there are higher rates of opioid prescribing.

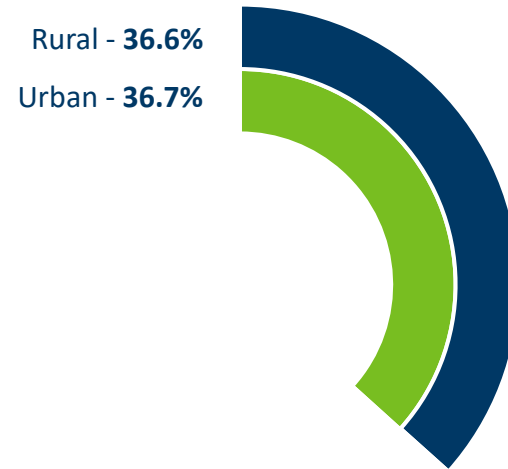
# How Minnesotans access health care services

- In aggregate, Minnesota spent \$56.6 billion on health care in 2019, 1/3 of the spending – \$18.8 billion – was at hospitals.
- Most Minnesotans – 95.3% – use health insurance to help pay for health care services.
- Even with health insurance to help cover costs, many Minnesotans still face substantial health care costs – 19.4% of Minnesotans struggle with medical bills, and 23.9% forgo needed health care due to cost.

# Rural residents report more unhealthy days



**Percent of Minnesotans with a Chronic Condition**



- Minnesotans living in rural areas reported frequent mental distress at about the same rate (12.4%) as those living in urban areas (10.4%).<sup>1</sup>
- Age-adjusted suicide rate in greater Minnesota (17.3) was higher than the 7-county metro area (12.2) for 2015-19.<sup>2</sup>

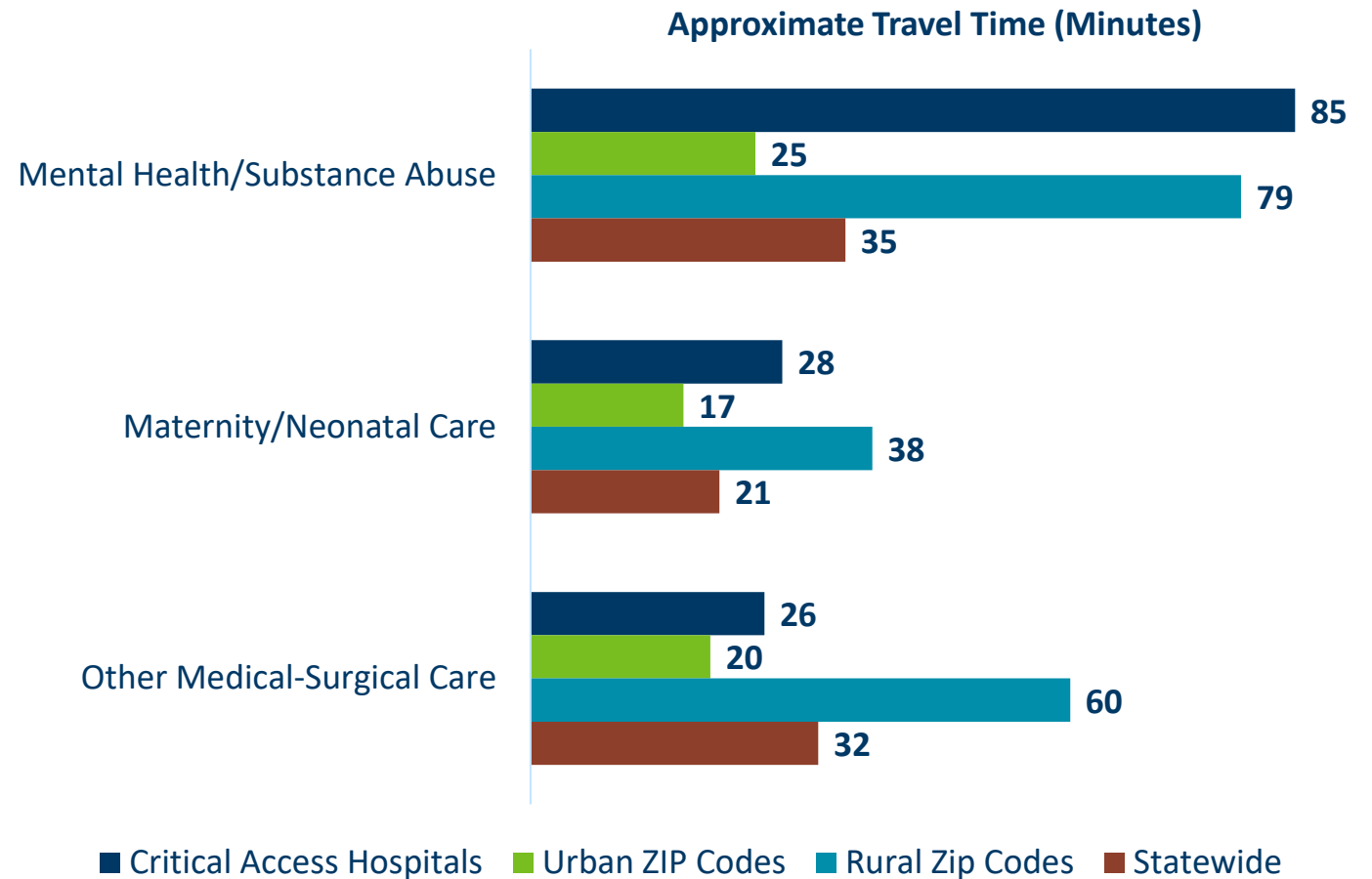
<sup>1</sup> Source: Minnesota Health Access Survey, 2019. Urban and Rural defined based on RUCA zip-code approximations. Difference was not statistically significant.

\* Indicates significant difference from Urban at the 95% level.

<sup>2</sup> Source: 1999-2019: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death on CDC WONDER Online Database, released 2020.

# Minnesotans in Rural Areas have to travel longer to get inpatient services – especially mental health services

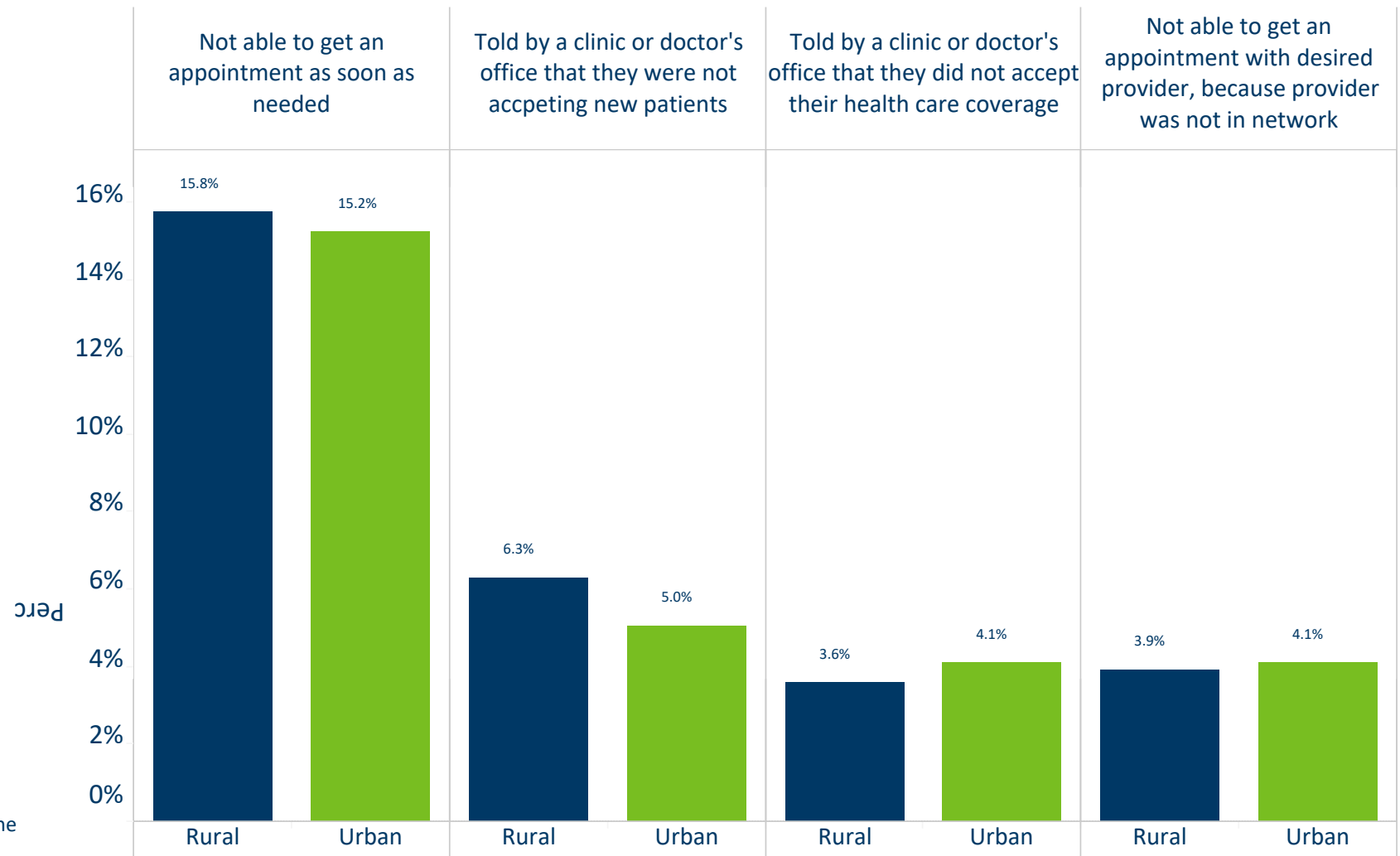
- Rural patients seeking inpatient mental health and chemical dependency treatment travel more than three times longer than urban patients.
- Patients receiving medical/surgical care at Critical Access Hospitals experience shorter travel times than those traveling to other types of hospitals.



Source: MDH analysis of Minnesota hospital administrative (discharge) inpatient records for medical-surgical care, obstetrics care, and mental health or chemical dependency care for 2016 to 2019. The analysis calculated the distance between the geographic centroid of each ZIP code to respective hospitals and excluded hospital stays that were transferred to another hospital to avoid duplication. Patients with planned services, such as surgeries, may intentionally travel longer distances. Non-metropolitan ZIP codes are classified as 'rural' using RUCA.

# Rural and urban Minnesotans have similar problems accessing providers

- Over 15% of Minnesotans could not see a provider as soon as needed.
- Minnesotans also had issues with providers not accepting new patients.

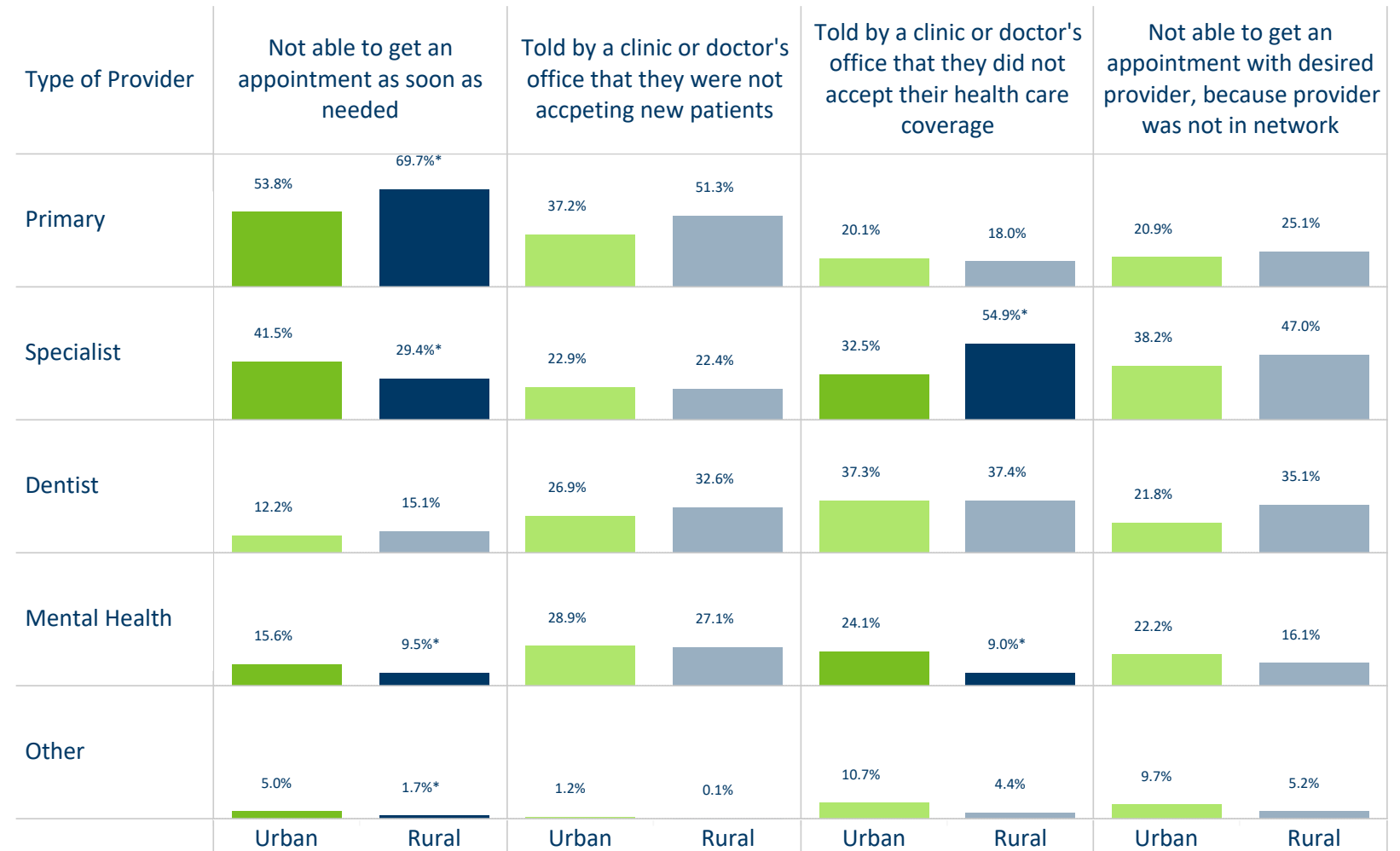


Source: Minnesota Health Access Survey, 2019.  
No Rural category had significant differences from Urban at the 95% level.  
Urban and Rural defined based on RUCA zip-code approximations.  
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# People in rural Minnesota had the most trouble getting primary care appointments as soon as they were needed

Among those who weren't able to get an appointment as soon as needed: Rural Minnesotans were more likely to say they couldn't get an appointment with a primary care provider.

Rural Minnesotans also had more problems finding specialist care that accepted their insurance coverage.



Source: Minnesota Health Access Survey, 2019.

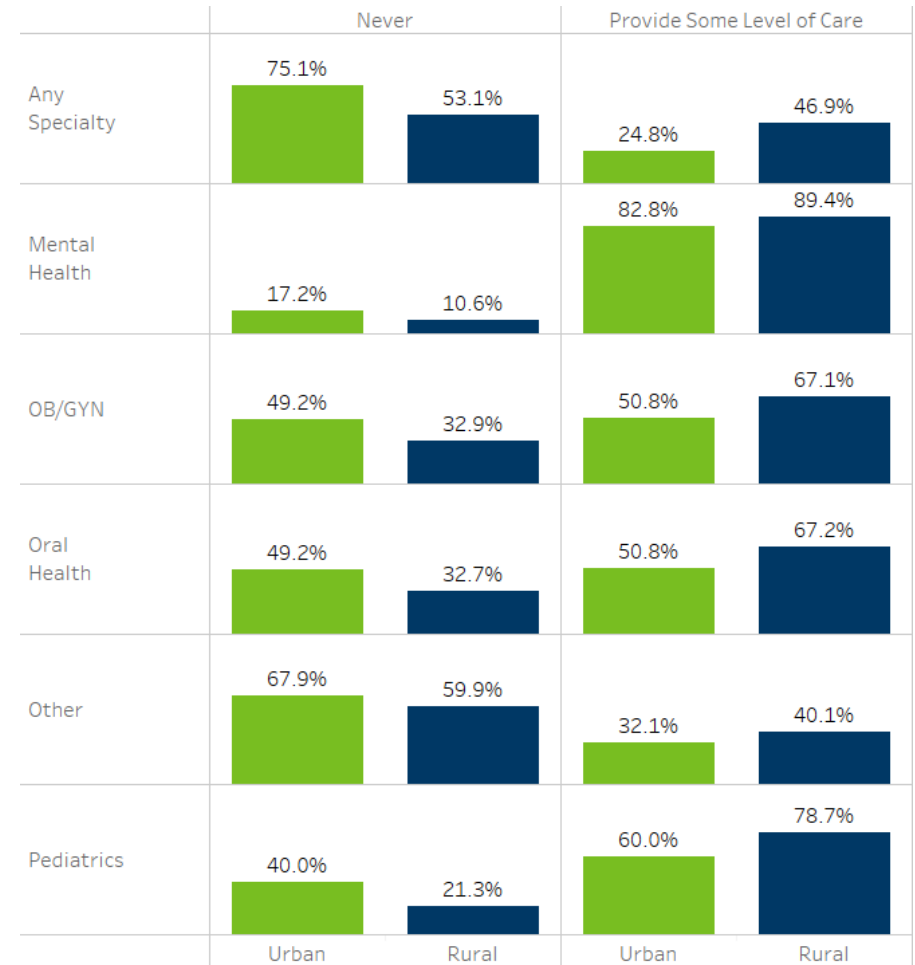
\*Indicates significant difference from Urban at the 95% level.

Percentages for Type of Provider do not sum to 100 because respondents were able to select more than one type of provider. Urban and Rural defined based on RUCA zip-code approximations.

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# Rural primary care physicians are more likely to fill gaps in care than their urban counterparts

- Rural physicians often fill gaps in care when there is a lack or absence in specialty providers to serve rural populations.
- In areas of Obstetrics/Gynecology, Oral Health, and Pediatrics, rural primary care physicians are 15% more likely to provide some level of care than urban primary care physicians.



Source: MDH-ORHPC Physician Workforce Survey, 2018.

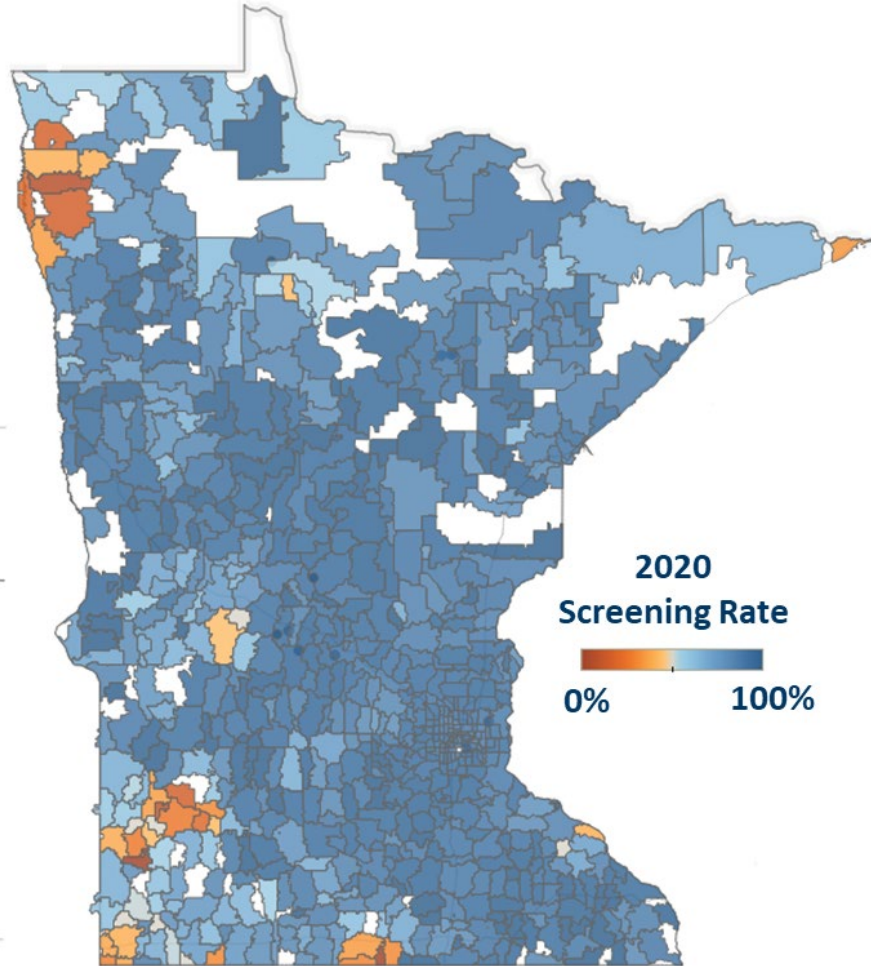
\* Rural = isolated rural from Rural-Urban Commuting Area codes.

\*\* The most common “other” specialties listed include dermatology; emergency medicine; and orthopedics.

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# Fewer adolescent patients in rural areas are screened for mental health or depression problems, though rates are improving

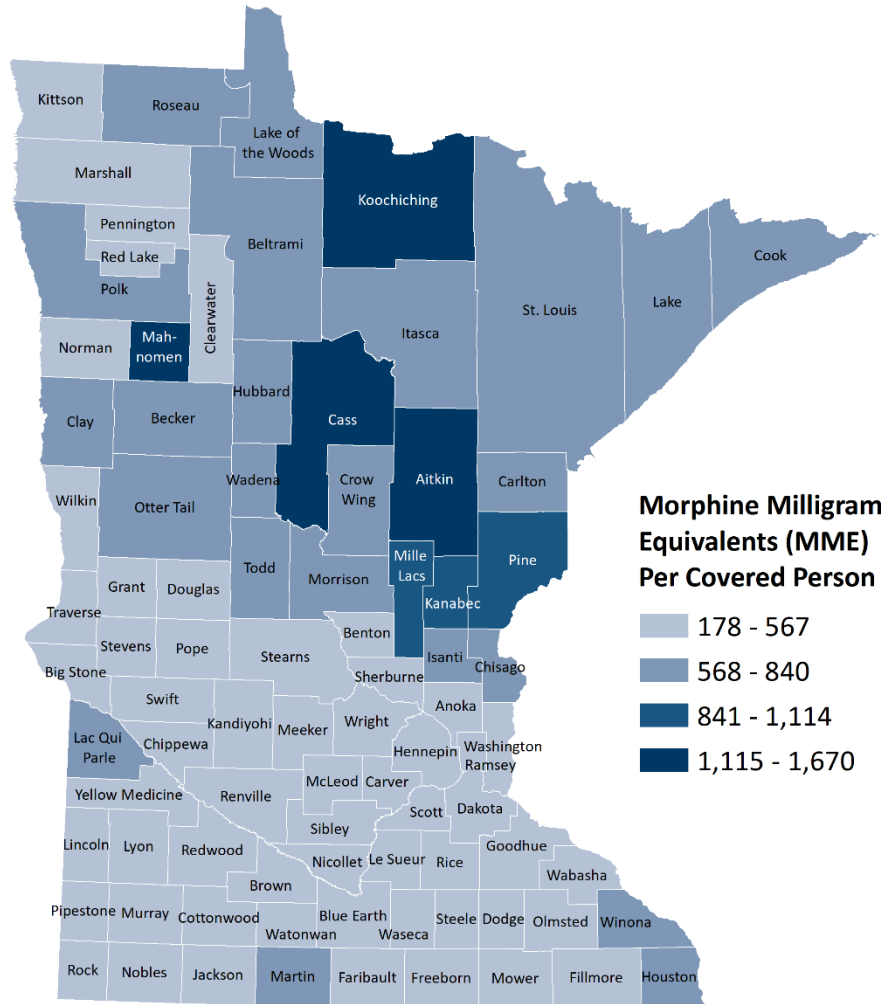


Geography	2017 Screening Rate	2020 Screening Rate
Metropolitan	86%	92%
Small Rural Town	66%	86%
Isolated Rural	70%	85%
<b>Statewide</b>	<b>83%</b>	<b>91%</b>

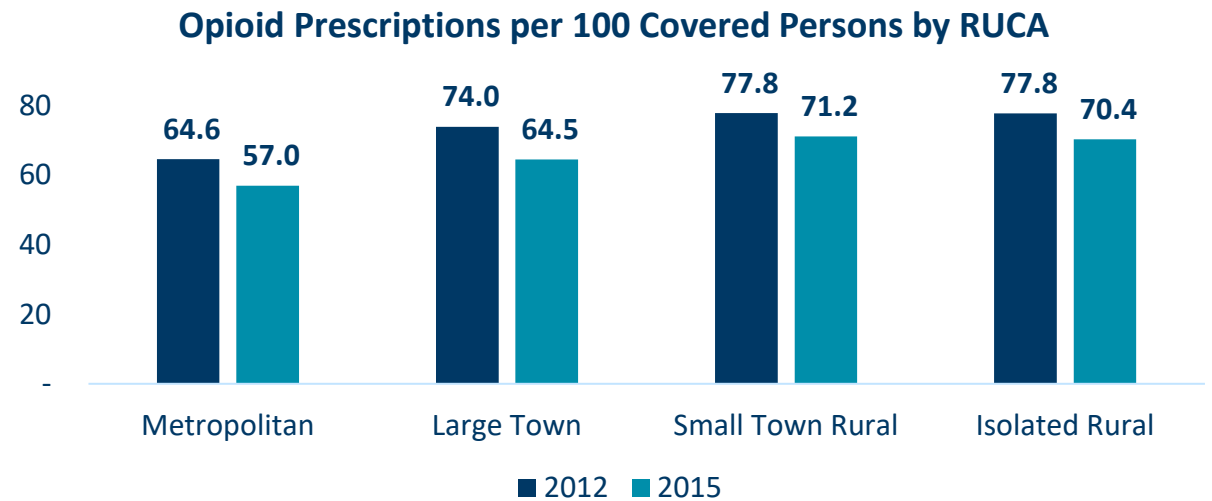
- Screening has *increased* over time in both urban and rural areas
- Rural adolescents are still less likely to be screened
- Half of all mental health conditions begin by age 14.<sup>1</sup>
- Early treatment may lead to better outcomes in the long term.

<sup>1</sup> Kessler, et al. "Lifetime Prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication." Arch Gen Psychiatry, 2005 Jun; 62(6): 593-602.  
 Source: MDH Health Economics Program analysis of Adolescent Mental Health and/or Depression Screening data from the Minnesota Statewide Quality Reporting and Measurement System. Based on adolescent patients aged 12-17 who had at least one telehealth or face-to-face well-child visit in a Minnesota clinic. White areas on the map had fewer than five patients for this measure.  
 US Preventive Services Task Force recommends mental health screening for all adolescents (see: [Final Recommendation Statement: Depression in Children and Adolescents: Screening](#) (2016), U.S. Preventive Services Task Force.  
[Summary of Slide](#)

# Prescription opioid use is higher in rural areas



- Prescription opioid use has declined over time – but is still higher in rural areas.
- Some counties in Northern Minnesota have especially high rates of prescriptions.



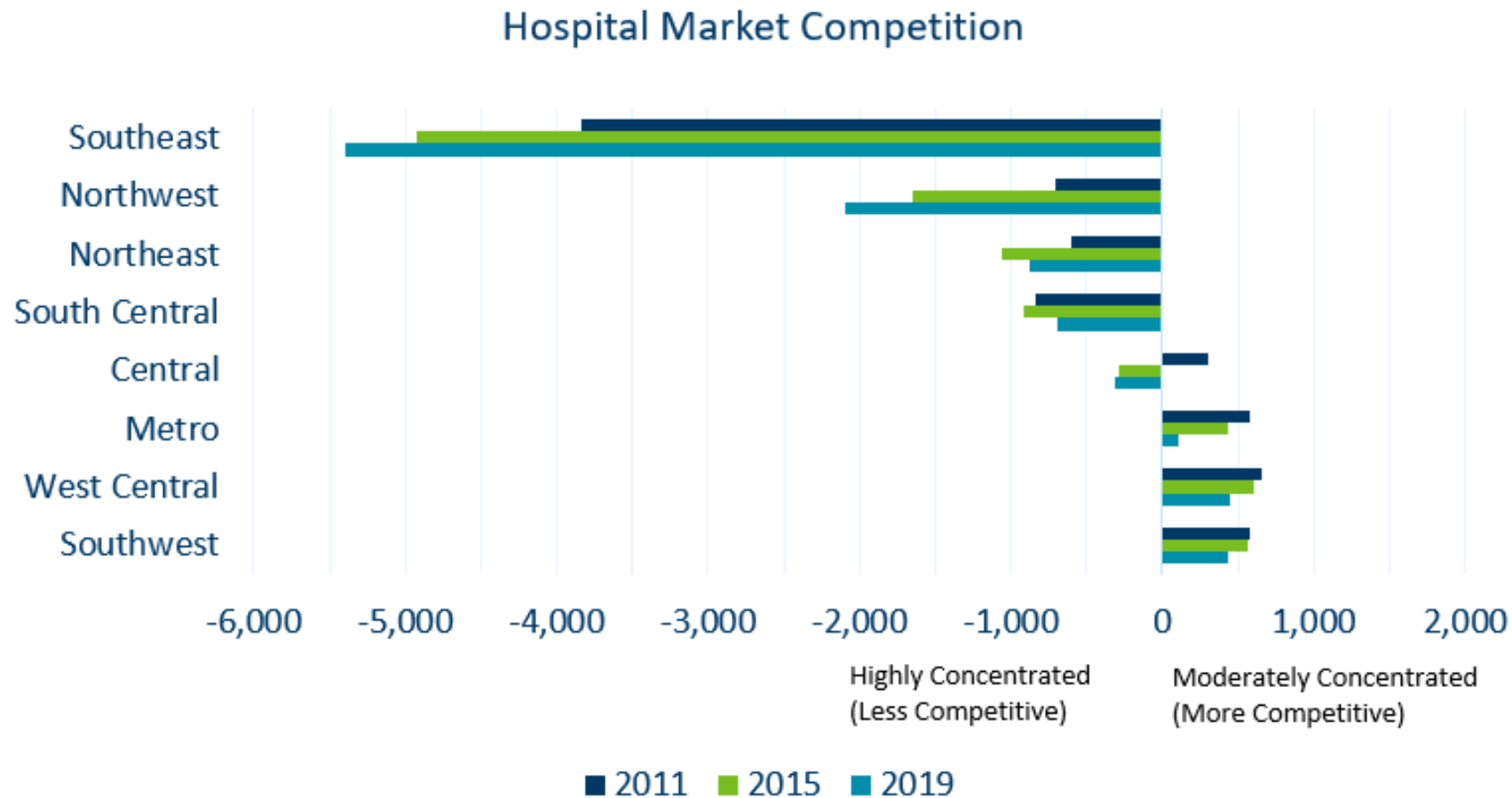
# Financing

What level of competition do we see among rural health care providers?  
Do we pay more for health care different in rural areas? How are providers doing financially?

# Key points – Health care financing

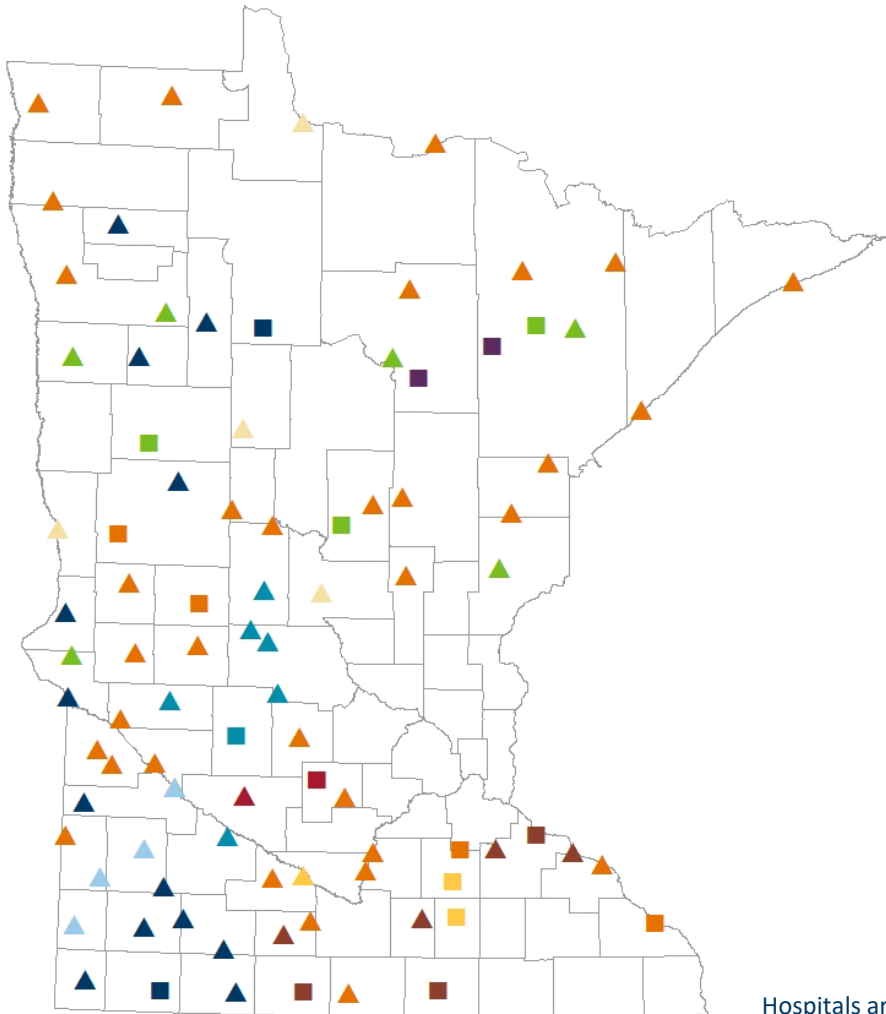
- More and more rural hospitals are affiliated with larger hospital and provider systems.
- CAH status is associated with higher net incomes for hospitals.
- Rural residents experience higher monthly cost sharing as compared to their urban counterparts.
- Isolated rural hospitals provide higher levels of community benefit relative to operating expenses.
- Community benefit in rural hospitals is more focused on keeping services available than providing charity care.

# Many hospital markets in Minnesota are not competitive



- Market concentration can lead to higher prices.
- Three out of eight regions had moderately concentrated markets in 2019.

# Over half of Minnesota's rural hospitals were affiliated with a larger provider group in 2020



	Total	Available Beds
Sanford Health	15	413
Essentia Health	9	322
Mayo Clinic	7	244
CentraCare Health System	7	200
Avera Health	4	105
Catholic Health Initiatives	4	90
Allina Health System	3	108
M Health Fairview	2	133
HealthPartners, Inc.	2	52
Unaffiliated or Single Rural Hospital in Hospital System	37	942
<b>Total</b>	<b>90</b>	<b>2,609</b>

▲ Critical Access Hospital      ■ Non-Critical Access Hospital

Hospitals that are part of larger systems:

- May offer increased access to specialty services only available in urban areas;
- May increase financial viability; and
- Lead to consolidation of services to fewer hospitals, meaning some services may be less available in rural areas.

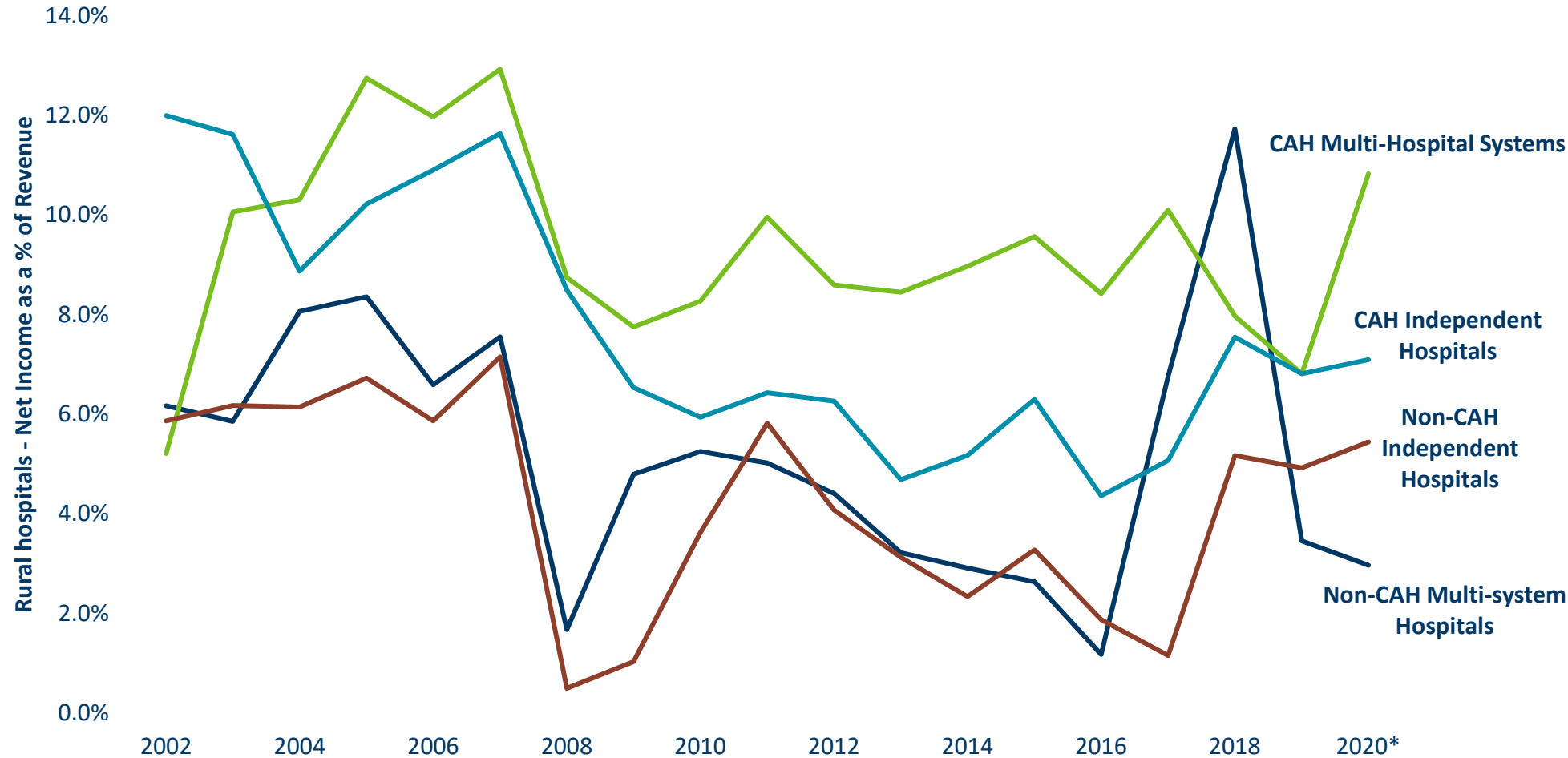
Hospitals are classified based on RUCA zip code. Health care systems are ordered by total number of hospitals in descending order. Data does not include urban hospitals.

Source: MDH Health Economics Program analysis of hospital annual reports, October 2021.

[Summary of Slide](#)

# Of rural hospitals, Critical Access Hospitals that are part of larger systems have higher net income

- Critical Access Hospitals (CAHs) that are part of multi-hospital systems have higher net incomes.
- Hospitals that are not Critical Access Hospitals (CAHs) have the lowest net incomes.



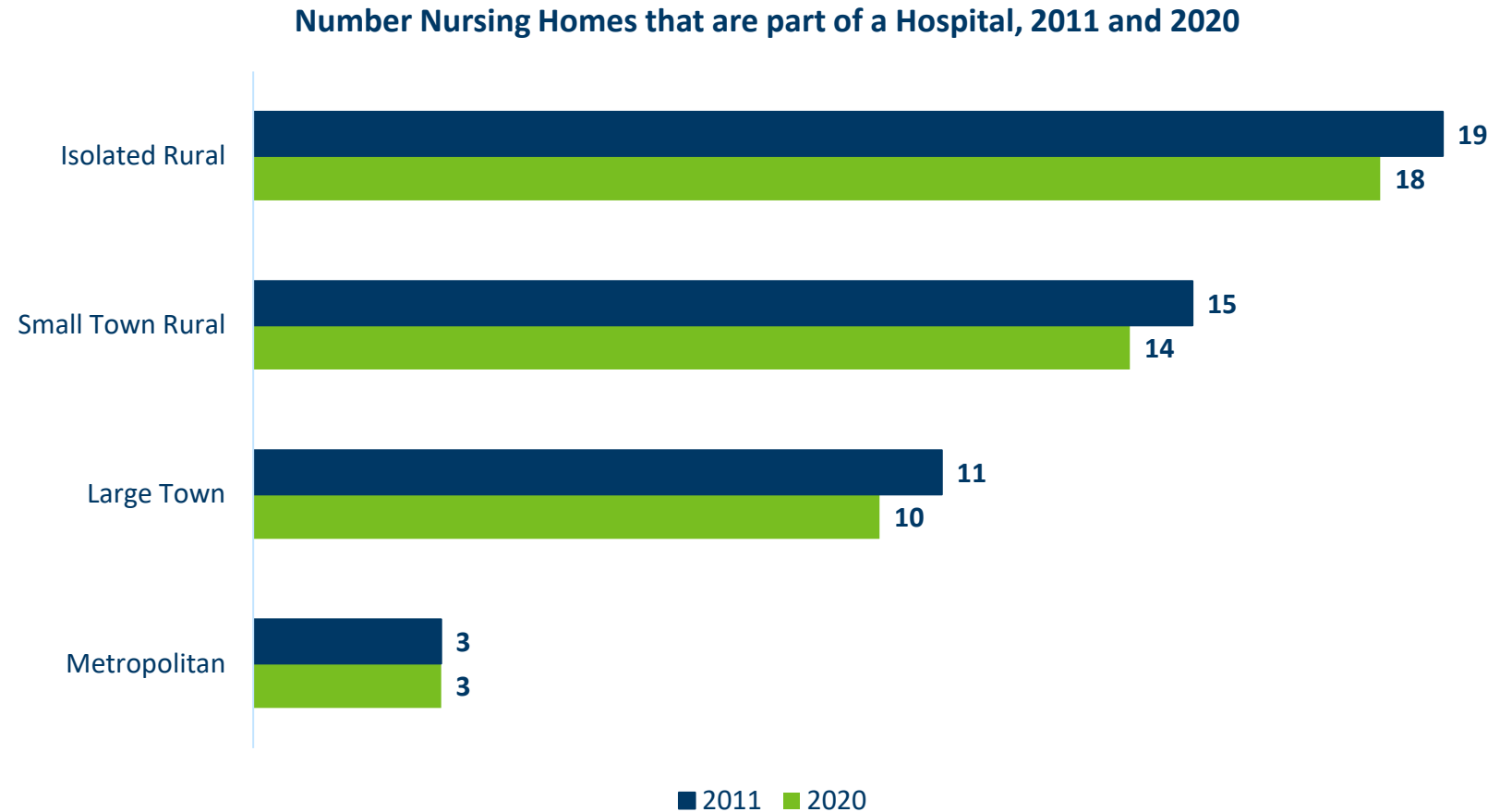
\*Preliminary data. Does not include urban hospitals.

Source: MDH Health Economics Program analysis of hospital annual reports, October 2021.

[Summary of Slide](#)

# Rural areas have seen most of the decline in nursing homes attached to hospitals in the past 10 years

- Two of the closed nursing homes were associated with Critical Access Hospitals.
- Having nursing home services attached to hospitals may lead to more days at home for patients.
- However, it may cause financial strain for hospitals if nursing homes are operating at low capacity.



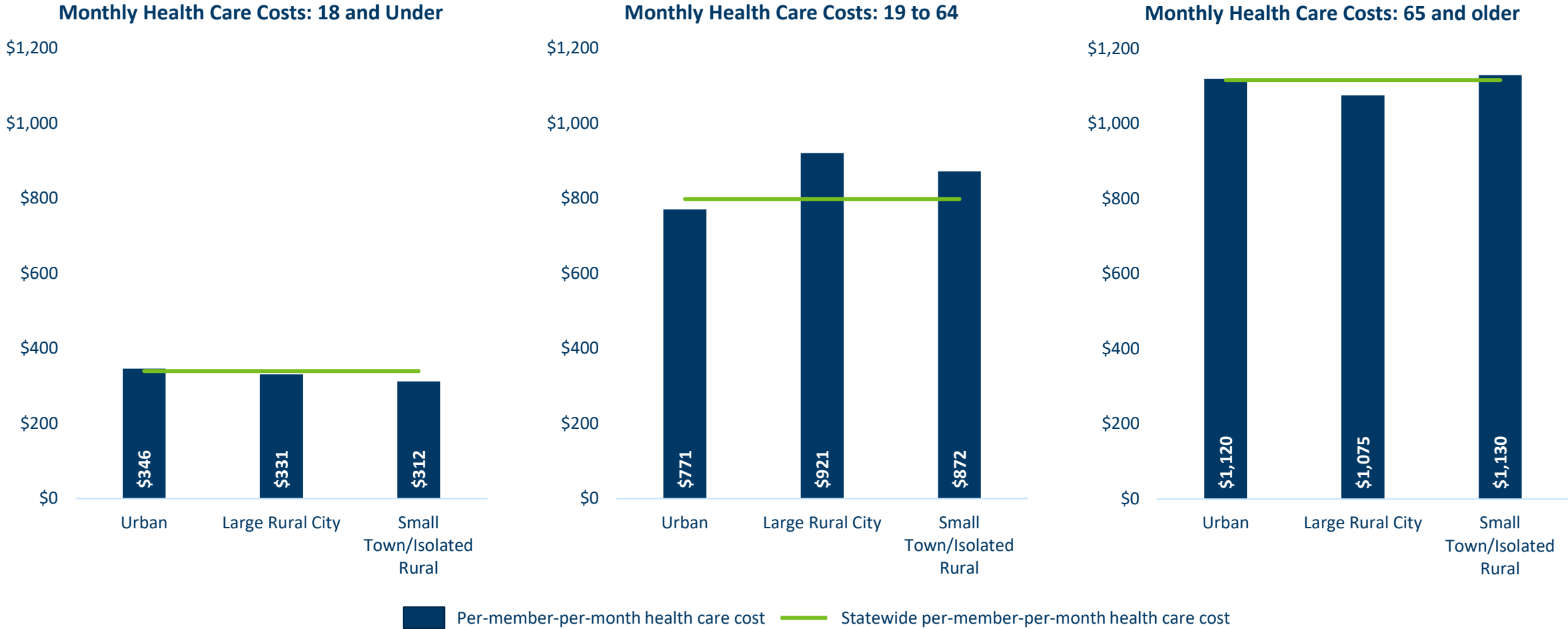
Note: 2020 data is preliminary, numbers are based on charges for nursing homes reported by hospitals. Urban and Rural defined based on RUCA zip code designation.

Source: MDH Health Economics Program analysis of hospital annual reports, October 2021.

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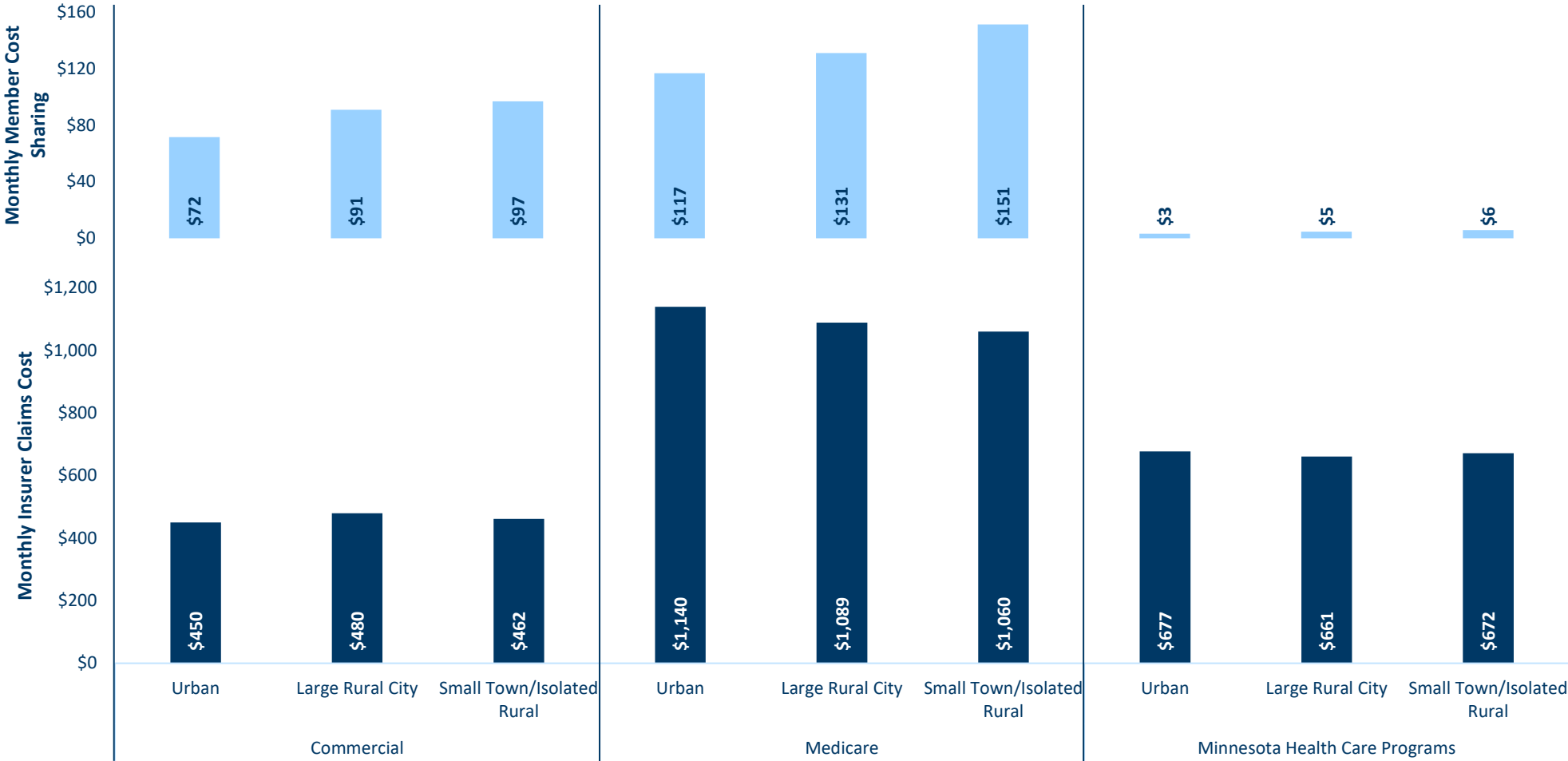


# Monthly health care costs are higher in rural areas for adults, lower for children



Source: MDH Health Economics Program analysis of All Payer Claims Database Public Use Files - Member (2018). Small town rural and isolated rural are combined. Monthly health care costs are based on total dollars spent divided by number of months with enrollment across all types of coverage. For more information on the MNAPCD, or to get data: <https://www.health.state.mn.us/data/apcd>.

# Minnesotans in rural areas experience higher monthly cost sharing regardless of health insurance coverage type



Higher cost sharing in rural areas could be related to:

- Provider network differences.
- Health status differences.
- Different health plan options available.

Source: MDH Health Economics Program analysis of All Payer Claims Database Public Use Files - Member (2018). Small town rural and isolated rural are combined. Monthly claims costs are based on payments made by insurers for health care services received by members divided by number of months with enrollment in that type of coverage; monthly member cost sharing is based on cost sharing (deductible, copayment or coinsurance) that was expected to be paid by member for health care services received divided by number of months with enrollment. For more information on the MNAPCD, or to get data:

<https://www.health.state.mn.us/data/apcd>.

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# Rural hospitals rely more on Medicare revenue than their urban counterparts

	Critical Access Hospitals		Rural, Non Critical Access Hospitals		Statewide Community Hospitals	
	2011	2020 <sup>1</sup>	2011	2020 <sup>1</sup>	2011	2020 <sup>1</sup>
<b>Medicare</b>	41.4%	46.6%	35.0%	35.5%	30.6%	33.4%
<b>State Public Programs<sup>2</sup></b>	10.0%	11.1%	11.8%	11.9%	12.4%	13.3%
<b>Private Insurance</b>	41.4%	37.5%	47.6%	47.0%	51.5%	48.9%
<b>Self-Pay</b>	4.3%	3.1%	4.3%	4.0%	3.6%	2.9%
<b>Other Payers</b>	2.9%	1.7%	1.3%	1.6%	1.8%	1.6%
<b>Hospital Patient Revenue, All Payers</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>1</sup>2020 data is preliminary.

<sup>2</sup>Includes Medical Assistance and MinnesotaCare.

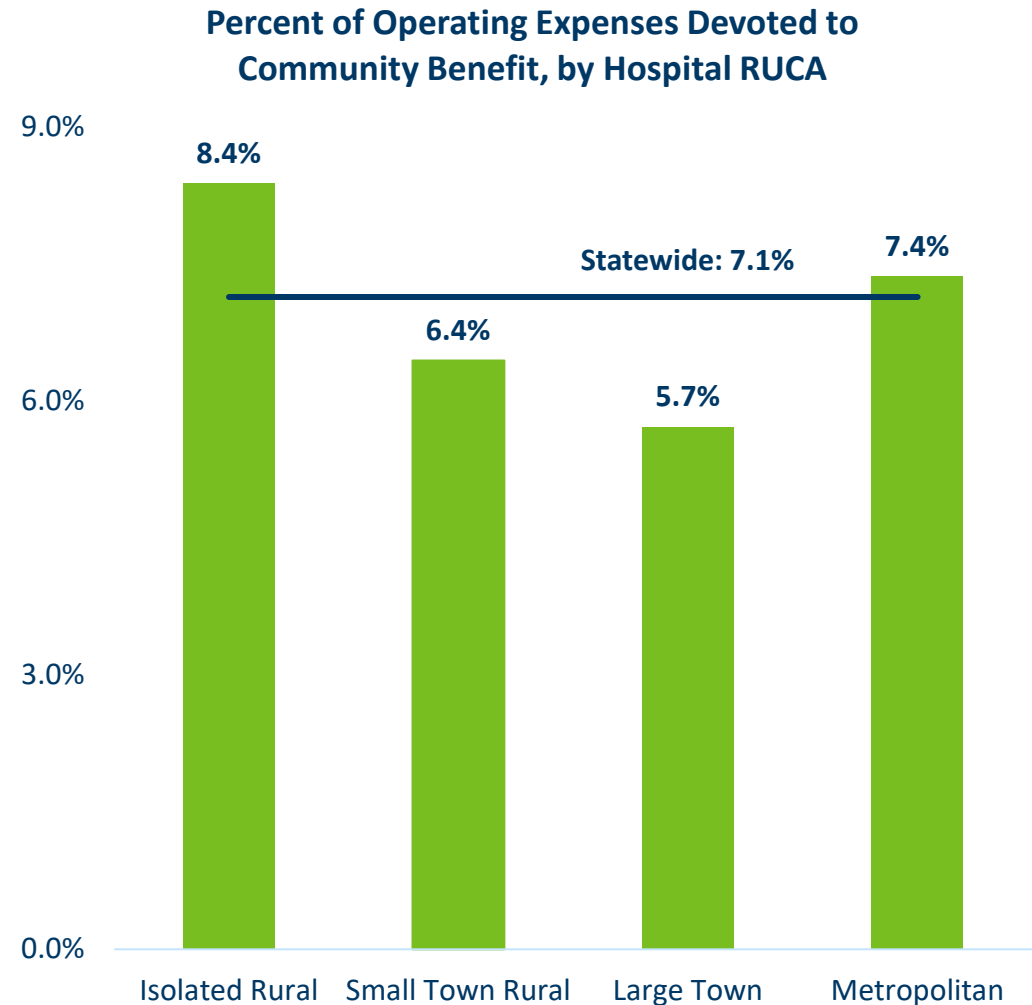
Percent shown is a percent of Hospital Patient revenue.

Source: MDH Health Economics Program analysis of hospital annual reports, October 2021.

[Summary of Slide](#)

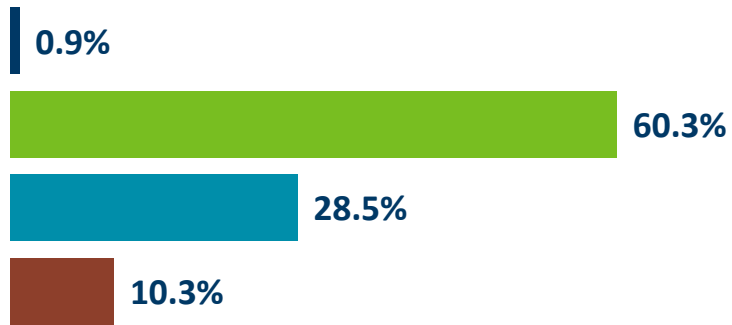
# Isolated rural hospitals devote a larger percent of operating expenses to community benefit

- Non-profit hospitals provide community benefit as part of their tax-exempt status.
- Community benefit spending can be categorized into four broad categories:
  - Direct patient care or unreimbursed services
  - Research and education
  - Financial and in-kind contributions
  - Community activities
- Most community benefit is in the “direct patient care” category.

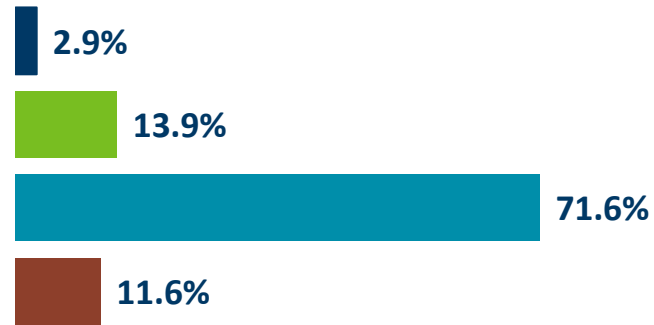


# Community benefit for direct patient care is different across the state

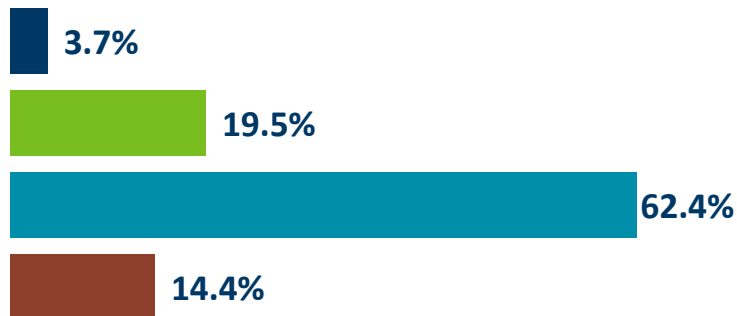
Isolated Rural



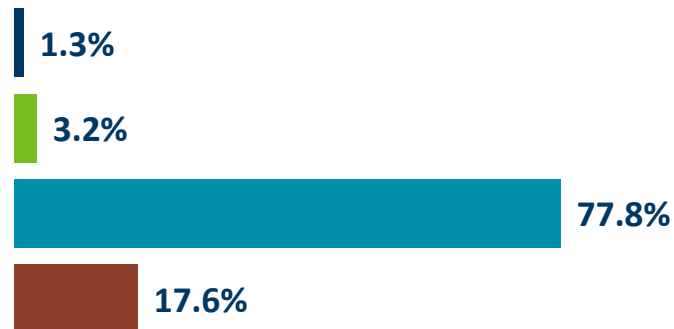
Metropolitan



Small Town Rural



Large Town



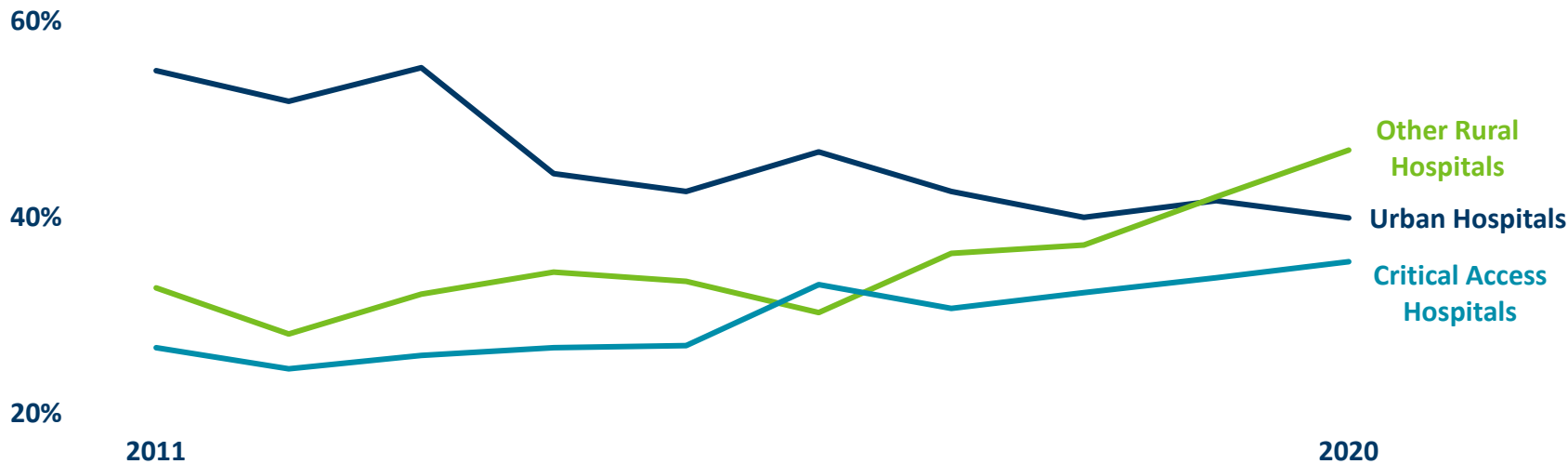
■ Community Health Services    
 ■ Operating Subsidized Services    
 ■ State Health Care Programs Underpayment    
 ■ Charity Care

- Isolated rural areas focus on operating subsidized services – such as keeping emergency rooms open and staffed.
- State health care programs underpayments – the difference between the cost of care provided to state program patients and the actual payment received – are greater in hospitals located in metropolitan areas, large towns, and small rural towns.

# Most uncompensated care in rural hospitals is bad debt



Percent of Uncompensated Care that is Charity Care, 2011 to 2020<sup>1</sup>



- The divide between rural and urban hospitals has been decreasing in the past 5 years, due to decreasing charity care at urban hospitals.
- Charity care is lower at CAHs than other rural hospitals and increasing slower.
- Bad debt is not considered community benefit.

<sup>1</sup>2020 data is preliminary.

Source: MDH, Health Economics Program analysis of Hospital Annual Reports, October 2021.

[Summary of Slide](#)

# COVID-19 Supplement (2021)

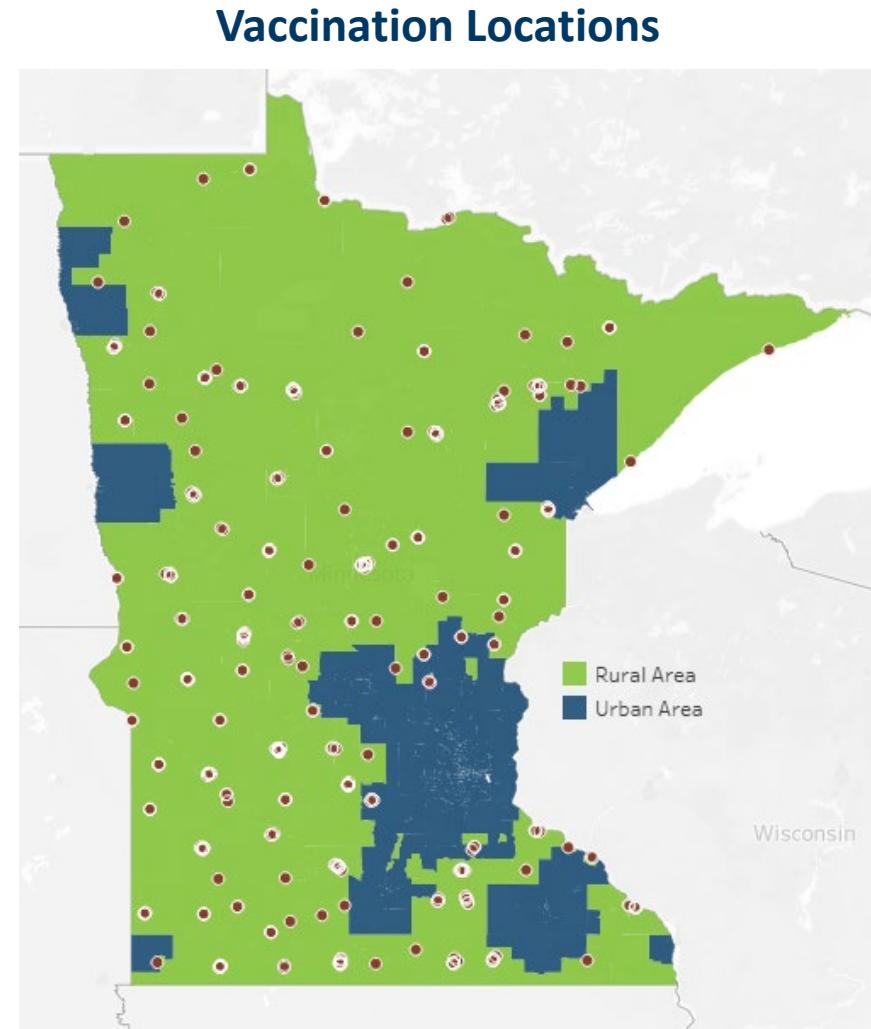
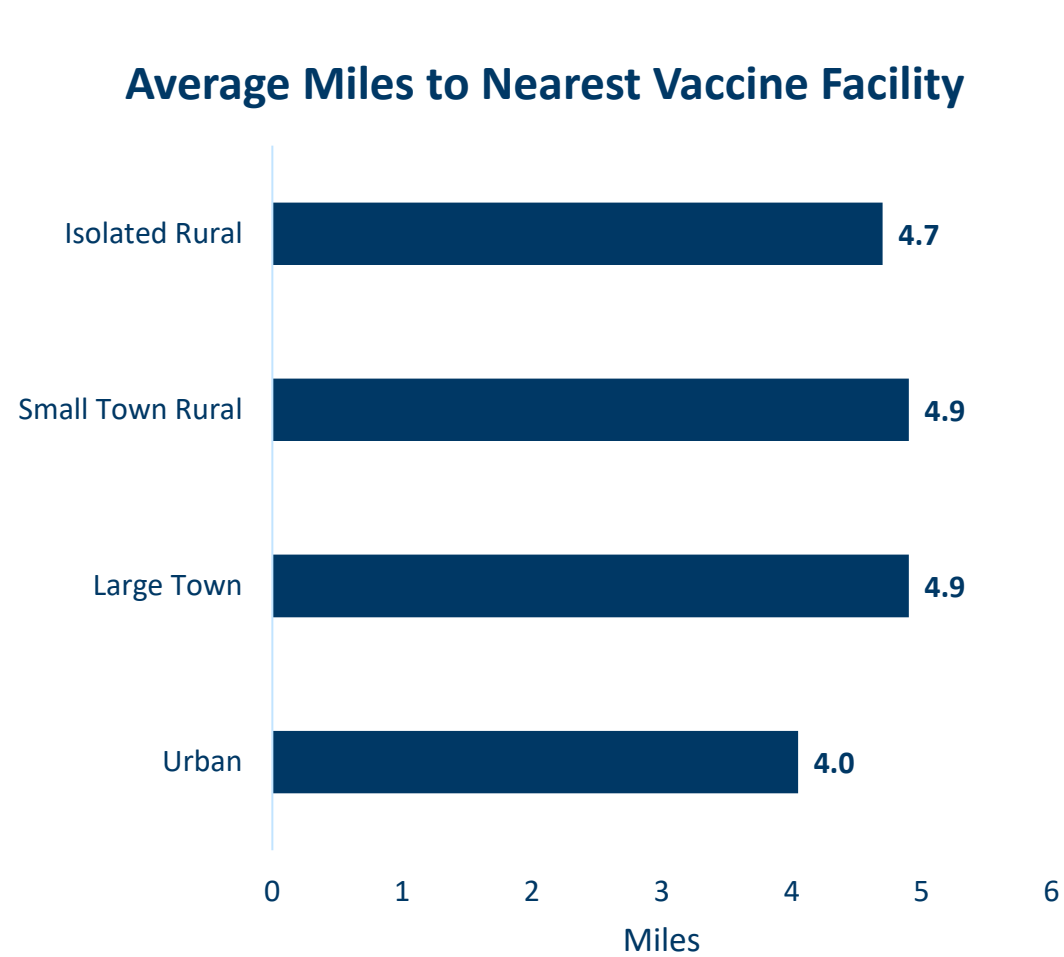
What was the impact of COVID-19 on the state? How did rural Minnesota experience the COVID-19 pandemic?  
How did the state respond to the pandemic?

# COVID-19 Data in Minnesota

- The COVID-19 pandemic is not static; therefore, data on specific case and hospitalization are not included in this supplement. For up-to-date information, please see:
  - Cases and testing: <https://www.health.state.mn.us/diseases/coronavirus/situation.html>
  - Hospital Capacity: <https://mn.gov/covid19/data/response-prep/response-capacity.jsp>
  - Vaccination Effort: <https://mn.gov/covid19/vaccine/data/index.jsp>



# The distance to COVID-19 vaccination facility locations in rural areas is very similar to urban areas of Minnesota



# Nearly \$200 million in state grants were awarded to health organizations to assist with COVID-19 expenses

Grant Type	Number of Applications	Number Awarded (Final Dispersed)*	Total Grant Funds (Dispersed)
Short Term Emergency Funding	1,325	344	\$50,000,000
Health Care Response Grants	1,107	956	\$149,264,491
<b>TOTAL</b>	<b>2,432</b>	<b>1,300</b>	<b>\$199,264,491</b>

- Nearly \$200 million in COVID-19 grants were allotted to health systems, facilities and providers to support costs related to planning, preparing and responding to the COVID–19 pandemic.
- \$50 million were granted in short-term emergency funding to provide cash flow relief to health care organizations to cover their highest priority needs, and \$150 million were disbursed to assist with COVID-19 costs.

Source: MDH Office of Rural Health and Primary Care 2021.

\*Some grantees were awarded funding, but either turned the award down or had the offer rescinded for administrative reasons.

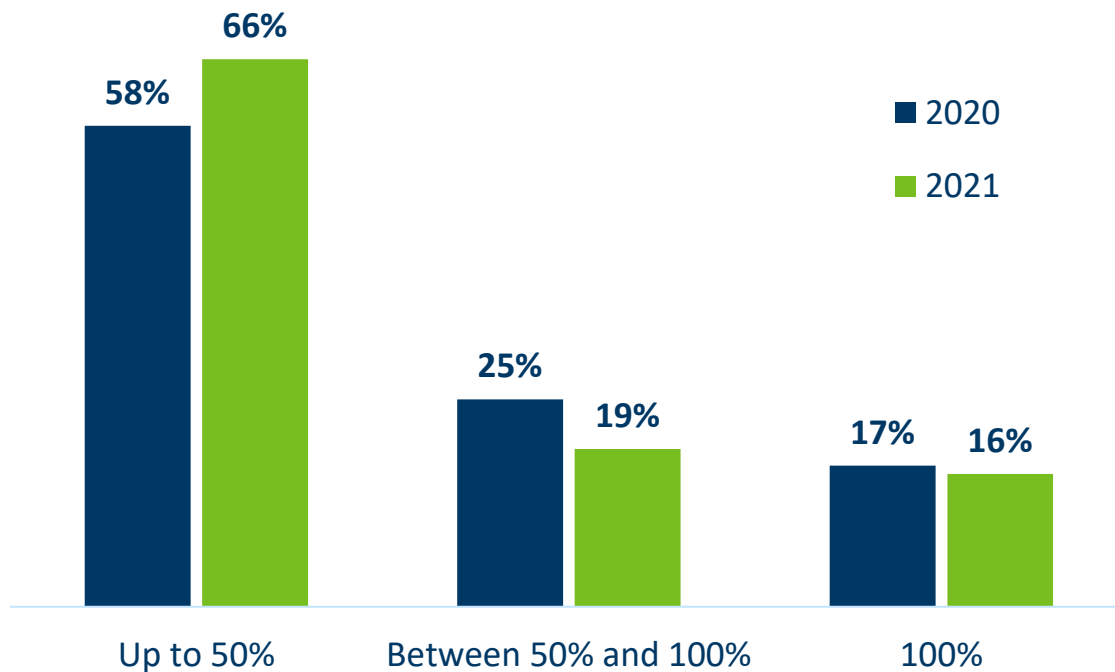
# Assisted living/Nursing facilities were awarded the most number of COVID grants; Hospitals were awarded the biggest share of the grants

Provider Type	# of Grants	Salaries	Supplies	Equipment	Construction	Other	Total Paid
Assisted Living/Nursing Facilities	533	\$17,224,470	\$9,240,452	\$704,301	\$824,777	\$785,968	\$28,779,965
Clinic	76	\$3,117,281	\$1,678,883	\$171,873	\$158,991	\$898,141	\$6,025,168
FQHC	14	\$1,197,480	\$283,509	\$32,196	\$41,500	\$231,306	\$1,785,991
Hospital/System	163	\$72,208,472	\$40,794,667	\$17,878,827	\$3,363,937	\$6,665,581	<b>\$140,911,482</b>
Pharmacy	21	\$601,058	\$194,403	\$0	\$41,422	\$80,297	\$917,180
Transport	132	\$2,350,090	\$1,852,301	\$579,731	\$13,455	\$52,722	\$4,848,299
Tribal Health	18	\$2,141,858	\$890,389	\$140,986	\$132,298	\$416,518	\$3,722,050
Other	344	\$6,673,436	\$4,329,643	\$111,825	\$302,630	\$857,272	\$12,274,806
<b>TOTAL</b>	<b>1,301</b>	<b>\$105,514,145</b>	<b>\$59,264,247</b>	<b>\$19,619,739</b>	<b>\$4,879,009</b>	<b>\$9,987,804</b>	<b>\$199,264,941</b>

- Assisted living/Nursing facilities were awarded 41% of all grants, representing 14.4% of all paid awards. In comparison Hospitals/Systems were awarded 12.5% of grants, representing 70.7% of all paid awards.

# Telehealth is here to stay

Amount of care provided using a dedicated telemedicine platform - 2020, 2021



- In 2020, 58% of providers used telehealth for up to half of all care provided.
- In 2021, 8% more providers reported using telehealth (66%). Despite availability in-person care options, 16% continue to provide *all* care via telehealth.
- Urban providers (33%) more likely to use telehealth vs rural providers (25%).

Source: MDH Office of Rural Health and Primary Care, Workforce Survey analysis, 2020, 2021.  
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## Appendix of Data Sources Available Here:

[www.health.state.mn.us/facilities/ruralhealth/docs/ruralhealthcbdata2021.pdf](http://www.health.state.mn.us/facilities/ruralhealth/docs/ruralhealthcbdata2021.pdf)

### Health Economics Program

[www.health.mn.state.us/healthconomics](http://www.health.mn.state.us/healthconomics)

E-mail: [health.hep@state.mn.us](mailto:health.hep@state.mn.us)

Phone: 651-201-4520

Publications: [heppublications.web.health.state.mn.us/](http://heppublications.web.health.state.mn.us/)

Health Care Markets Chartbook:

[www.health.state.mn.us/data/economics/chartbook/](http://www.health.state.mn.us/data/economics/chartbook/)

### Office of Rural Health and Primary Care

[www.health.state.mn.us/facilities/ruralhealth/](http://www.health.state.mn.us/facilities/ruralhealth/)

E-mail: [health.orhpc@state.mn.us](mailto:health.orhpc@state.mn.us)

Phone: 651-201-3838

Publications:

[www.health.state.mn.us/data/workforce/reports.html](http://www.health.state.mn.us/data/workforce/reports.html)

A summary of the charts and graphs contained within is provided at

<https://www.health.state.mn.us/facilities/ruralhealth/docs/summaries/ruralhealthcbdata2021.html>

Direct links are listed on each page. If you need the information in a different format, please use the contact links above.