

Minnesota's 2019 State of Health Care Quality

Stratis Health Brief

Minnesota has frequently ranked among the top performing states for many health outcome and quality process measures, since such measures first became widely available nearly 20 years ago. Are we still among the best in terms of quality and safety? Does being best mean Minnesotans are universally and consistently receiving the best quality care and maintaining good health?

Stratis Health scanned quality measures available for national comparison, identifying measures relevant across multiple health issues and health care settings to see how Minnesota continues to fare in health care quality and outcomes. Our analytic staff examined national-level data, layering in Minnesota-produced data when available. This brief calls out six select cross-cutting areas of health and care that show where Minnesota stands today and signal where work is needed.

The Big Picture: How Minnesota Fares on Quality

Minnesota's top performance is evidenced by several organizations which nationally rank and evaluate states in overall health and health care quality. Minnesota is:

- Rated “Strong” (very strong is best) and is among the top 10 states for overall health care quality measure performance, in the annual Agency for Healthcare Research and Quality (AHRQ) [State Snapshots](#) that assign performance levels relative to state benchmarks on a large number of health care quality measures.ⁱ
- Ranked #3 overall (#1 is best) for indicators of access, quality, outcomes, and disparities, in The Commonwealth Fund's 2018 [Scorecard](#).ⁱⁱ
- Ranked #7 [overall](#) and #4 for [seniors](#) (#1 is best) in health benchmarks and ratings across health, environmental, and socioeconomic indicators, in the United Health Foundation's 2018 [America's Health Rankings](#).ⁱⁱⁱ

While the Minnesota health care community can be proud of these continued achievements, the data point to the work Minnesota has yet to do, especially in health equity. Having always been among top performers and always above average, Minnesota is starting to lose ground in our rate and direction of improvement for certain care settings and topics. Other states are improving faster or have better performance in several areas.

Minnesota is starting to lose ground in our rate and direction of improvement for certain care settings and topics.

Specifically, Minnesota's “Strong” AHRQ rating is just above the cutoff from “Average”, and has remained stagnant in this position for several years.

America's Health Rankings show Minnesota steadily slipping as a high performer. The state fell from #6 overall in 2017 (and #4 before that) and #1 for seniors. When this data are examined for disparities, we rank lower relative to our overall performance in many areas. The Commonwealth Fund ranks Minnesota #7 for Disparities and #9 for Access and Affordability, while the state has dropped in rank for both categories.



Six Select Cross-cutting Health Outcome and Quality Measures



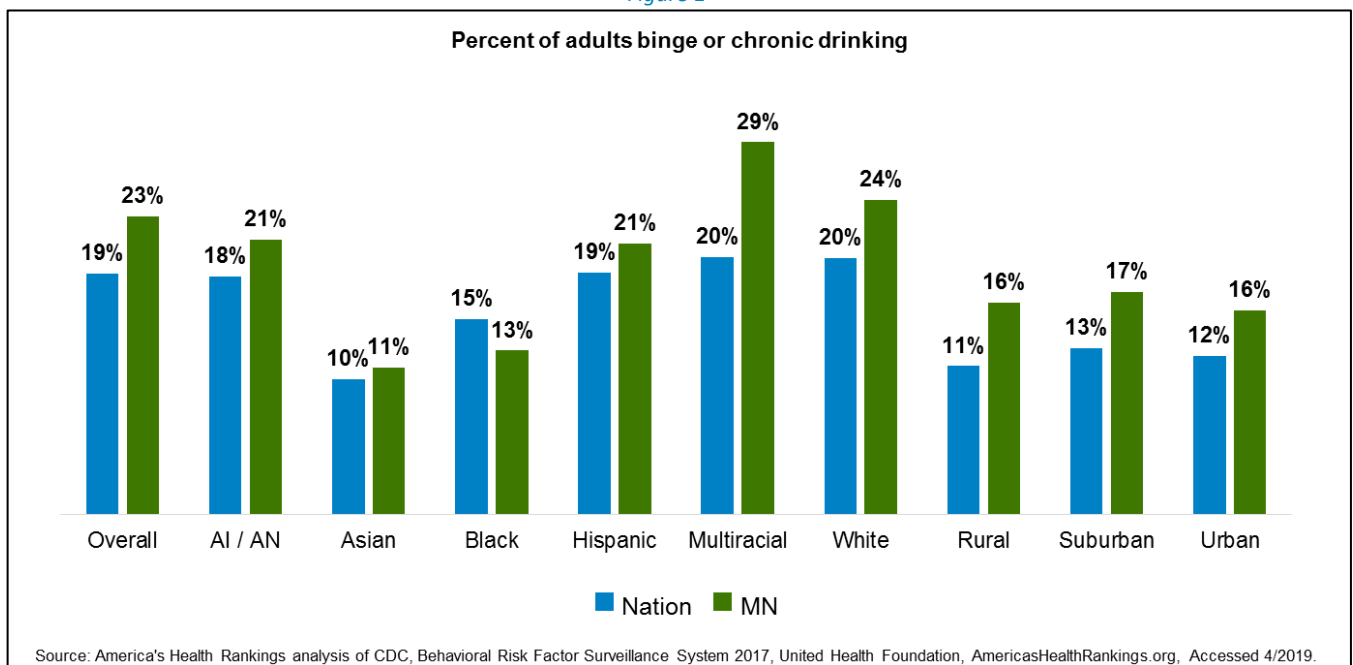
Healthy behaviors and prevention: Positive overall, disparities throughout, and alcohol is a problem

Minnesota has much to be proud of in our healthy behaviors and use of preventive care. The state is in the top quartile of performance on many prevention measures. According to nationally-available data sources, 71% of adults receive age- and/or gender- appropriate cancer screenings and vaccines.^{iv} Despite our relatively strong screening rates, more recent Minnesota-specific data shows that disparities abound. For example, only 53% of American Indian/Alaska Native Minnesotans receive screening for colorectal cancer compared to 72% of white Minnesotans.^v

Relative to other states, Minnesota ranks among the best with lower obesity rates, lower smoking rates, and high physical activity rates.^{vi} That said, obesity rates in Minnesota are getting worse. When these three healthy behaviors measures are examined by age, income, education, or race/ethnicity, Minnesota has some notable disparities.

Minnesota is ranked #16 in America’s Health Rankings “Behaviors” category. This performance ranking is largely pulled down by excessive drinking (Figure 1). Over time, Minnesota has consistently been among the worst states—currently ranked #46, with 21.7% of our adult population reporting either binge or chronic drinking. The state is worse than the nation in excessive drinking when examined by a number of different subpopulations.^{vii} Additionally, Minnesotans are behind in recommended childhood (19 to 35 months) immunizations relative to other states. The state ranks #48 for childhood immunizations and #29 for adolescent immunizations, and is rated as “Average” for most measures of childhood and adolescent immunizations by AHRQ.^{viii}

Figure 1



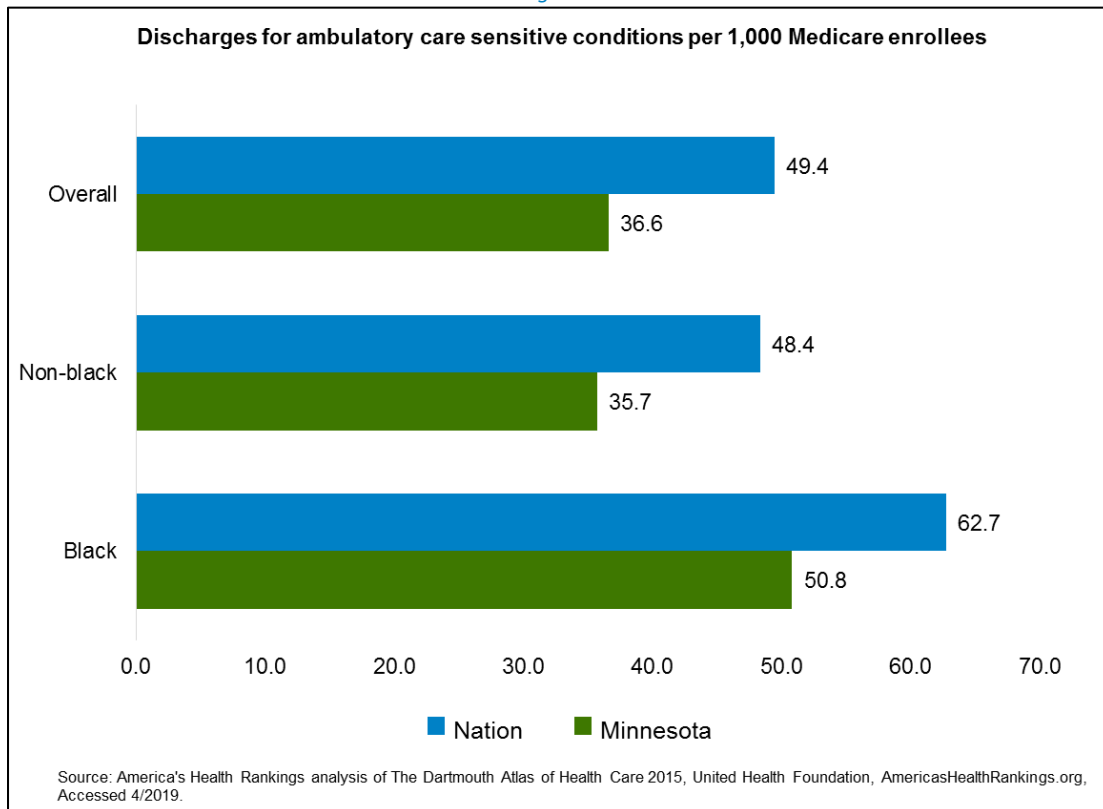
2

Care coordination and cross settings: Hospitalization rates are not improving as they once were

For years, Minnesota health care organizations and others have worked hard to improve readmission rates and reduce avoidable hospitalizations. Despite this work and attention, and steady improvement leading up to 2014, hospital readmission rates and potentially avoidable hospital use in Minnesota have either bottomed out or worsened in the past five years. We continue to perform better than the nation, but other states are catching up. Based on 2015 data, Minnesota remains in the first (best) quartile for avoidable emergency department visits for adults, and for preventable hospitalizations for adults (ranked #10).^{ix} The state is in the third quartile for 30-day readmissions for adults.^x More recent data available through the Medicare Quality Innovation Network - Quality Improvement (QIN-QIO) program suggests that readmission and admission rates are not improving for Minnesota's Medicare fee-for-service (FFS) population, while the rest of the nation is gradually catching up.

Looking at disparities data, Figure 2 illustrates Dartmouth Atlas 2015 ambulatory care sensitive condition hospital discharge data (used in both America's Health Rankings and the Commonwealth Fund's Scorecard). Ambulatory care sensitive conditions, such as congestive heart failure or diabetes, are those that could be managed in outpatient or primary care settings rather than in the hospital. Hospitalizations for ambulatory care sensitive conditions are often viewed as potentially preventable. Minnesota outperforms the nation in each group in Figure 2, but non-black Minnesotans have much lower rates of ambulatory care sensitive discharges than black Minnesotans.

Figure 2

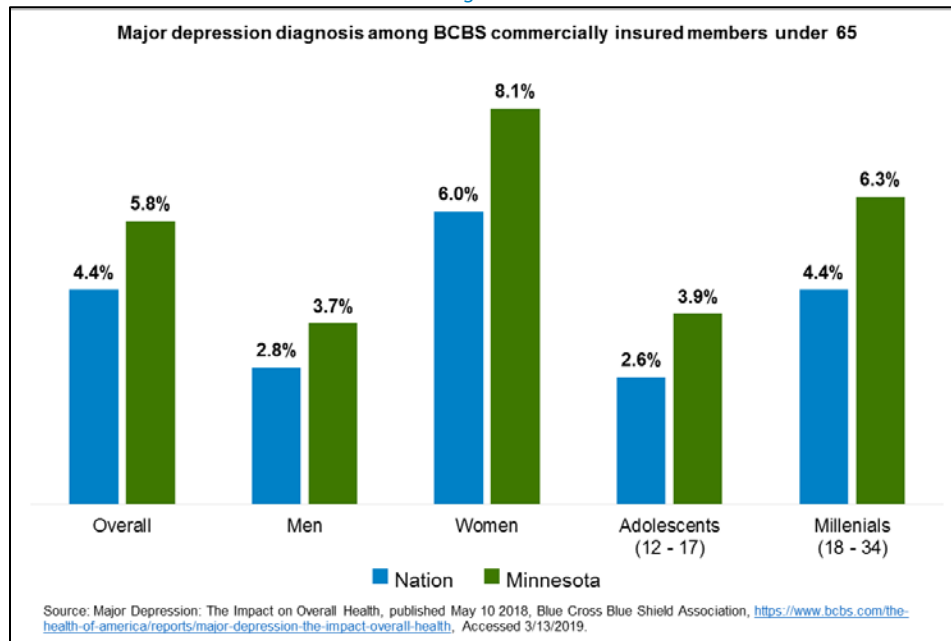


3

Mental and behavioral health: Services and health status vary

Using data available from Medicare QIN-QIO work, we know that depression screening rates are relatively high in Minnesota compared to other states. Reported rates of major depression among those under 65 are higher in Minnesota than other places overall (this may be confounded by high depression screening rates). Figure 3 illustrates that certain groups in Minnesota show even higher diagnosis rates than the nation. Women are diagnosed more than men, and millennials more than adolescents.^{xi} Minnesotans older than 65 self-report that they are diagnosed with a depressive disorder, at lower rates than nationally, at 12.3%.

Figure 3



Minnesota outperforms the nations for people having the fewest number of days of poor mental health, except for Minnesotans of color and those with less education or lower income, who fare worst of all. Rural Minnesotans report that they fare best in mental health; and younger Minnesotans (age 18-44) have worse mental health than older Minnesotans.^{xii} The state should be concerned about increasing suicide rates for Minnesotans under 65 (Minnesota is ranked #15). Among Asians, Hispanics, and people 15 to 44 years old in Minnesota, suicide rates are worse than the national rates for those populations.^{xiii}

Access to mental health services in Minnesota varies. Minnesota is in the worst quartile of states for adults with mental illness who report an unmet need—24% of Minnesotans with mental illness reported unmet need, compared to 20% nationally. However, Minnesota has among the lowest rates of adults with mental illness not receiving treatment, and the state has improved significantly over time in this area.^{xiv}

As a whole, Minnesota is among the best in the nation (in top quartile of states) for low rates of antipsychotic use in nursing homes^{xv}, with 13% of Minnesota nursing home residents receiving antipsychotic medications in quarter three of 2018 compared to 14.6% nationally.^{xvi} Medicare is pushing to reduce use of antipsychotics which, for example, have been used inappropriately in dementia treatment plans.

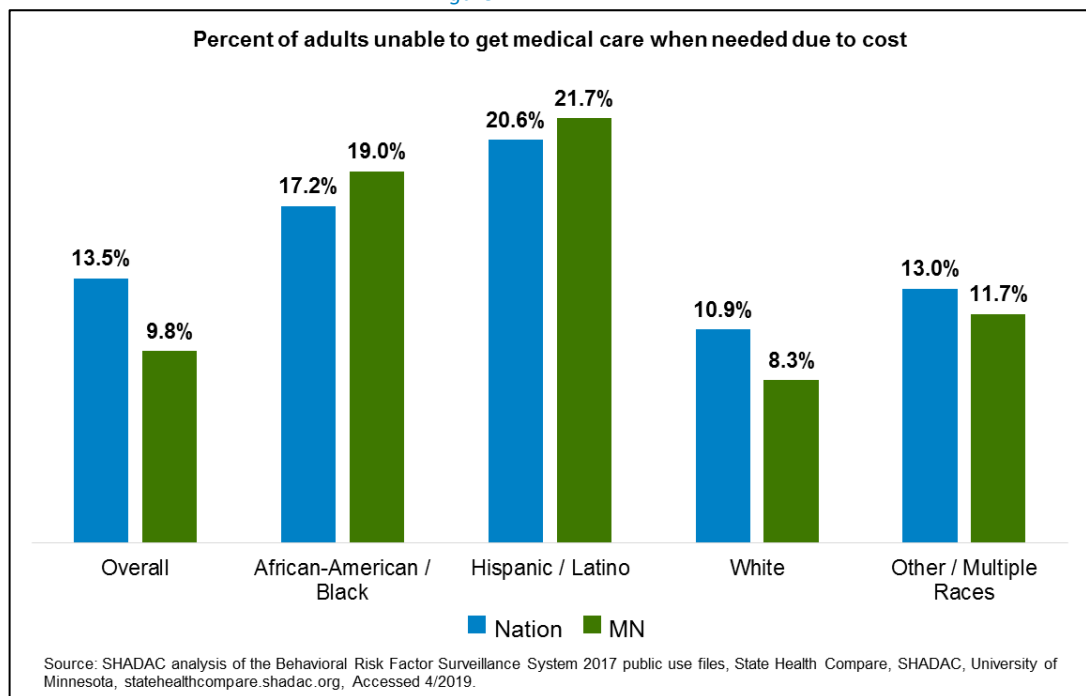
4

Ability to access care and affordability: Comparatively strong performance, but not for all Minnesotans

While Minnesota has low uninsurance rates based on nationally available data (approximately 4.5% in 2017)^{xviii} and is ranked #4 in the country for the lowest uninsured rates, state-specific data suggests that the rate of uninsurance is higher than this at 6.3% and is worsening.^{xviii} Groups that are most vulnerable are seeing the biggest increases in uninsurance rates. Uninsurance rates are worst for people of color, and Hispanics have especially high uninsurance rates). Uninsurance rates for those Minnesotans with less than a high school education have seen a large spike as well, from 12.1% in 2015 to 20.5% in 2017.^{xix}

As shown in Figure 4, about 10% of adults in Minnesota go without care because of its cost, compared to over 13% nationally.^{xx} In latest available rankings, Minnesota is among the top quartile of states with the fewest adults foregoing care due to cost.^{xxi} Looking closer, disparities are uncovered with nearly 22% of Hispanic/Latino Minnesotans and 19% of African-American/Black Minnesotans who said they couldn't get medical care when needed due to the cost.

Figure 4



5

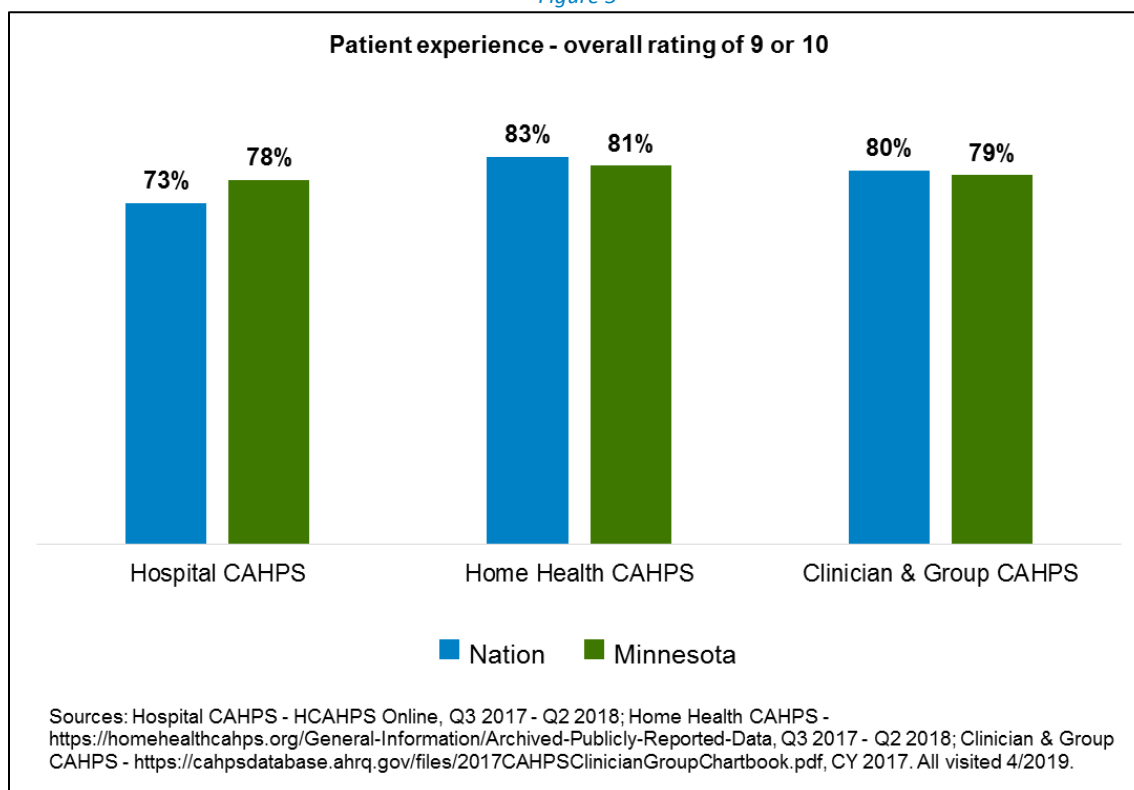
Experience of care: Adequate overall, comparable to the nation, and challenging to measure

Patient experience is frequently measured via Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys. Administration of patient experience surveys is incentivized for payment by CMS for many health care settings, such as hospitals, home health agencies, and hospice agencies. Although questions are not identical across settings, most ask for the patient to provide an overall rating and their willingness to recommend the facility or provider to others. As Figure 5 illustrates, Minnesota generally performs at or close to the national average in these “overall

rating” and “willingness to recommend” categories. Overall, Minnesota facilities and providers have good performance in most CAHPS-type measures, and this is consistent over time. The one stark exception is Minnesota’s performance on skilled home health care CAHPS-type measures, which is consistently lower than the nation.

National attention is also focused on provider experience and provider burnout. Although a standard way to measure these is not widely available, recent research suggests that burnout and stress among Minnesota health professionals is comparable to the nation.^{xxii}

Figure 5



6

Life and death: Happiest, healthiest, and longest-lived among states – for many Minnesotans

Life expectancy and healthy life expectancy at birth have increased overall in the United States over the past 16 years. Minnesota is ranked #4 for longest life expectancy (currently at 80.8 years, compared to 78.9 nationally), and is ranked #1 for healthy life expectancy (70.3 years, compared to 67.7 nationally).^{xxiii} For Medicare FFS beneficiaries near the end of life, Minnesota’s use of hospice has increased over time, and is now on par with the nation.^{xxiv} Across all states, Minnesota performs best in measures of disability and premature mortality. The state has the lowest age-standardized rates of years of life lived with disability and years of life lost due to premature mortality.^{xxv}

Deaths due to drug injury are increasing in Minnesota and nationwide, although Minnesota is ranked #6 nationally for having lower drug deaths per 100,000 overall. However, drug deaths among American Indians and Alaska Natives in Minnesota are more than 4 times higher for the overall

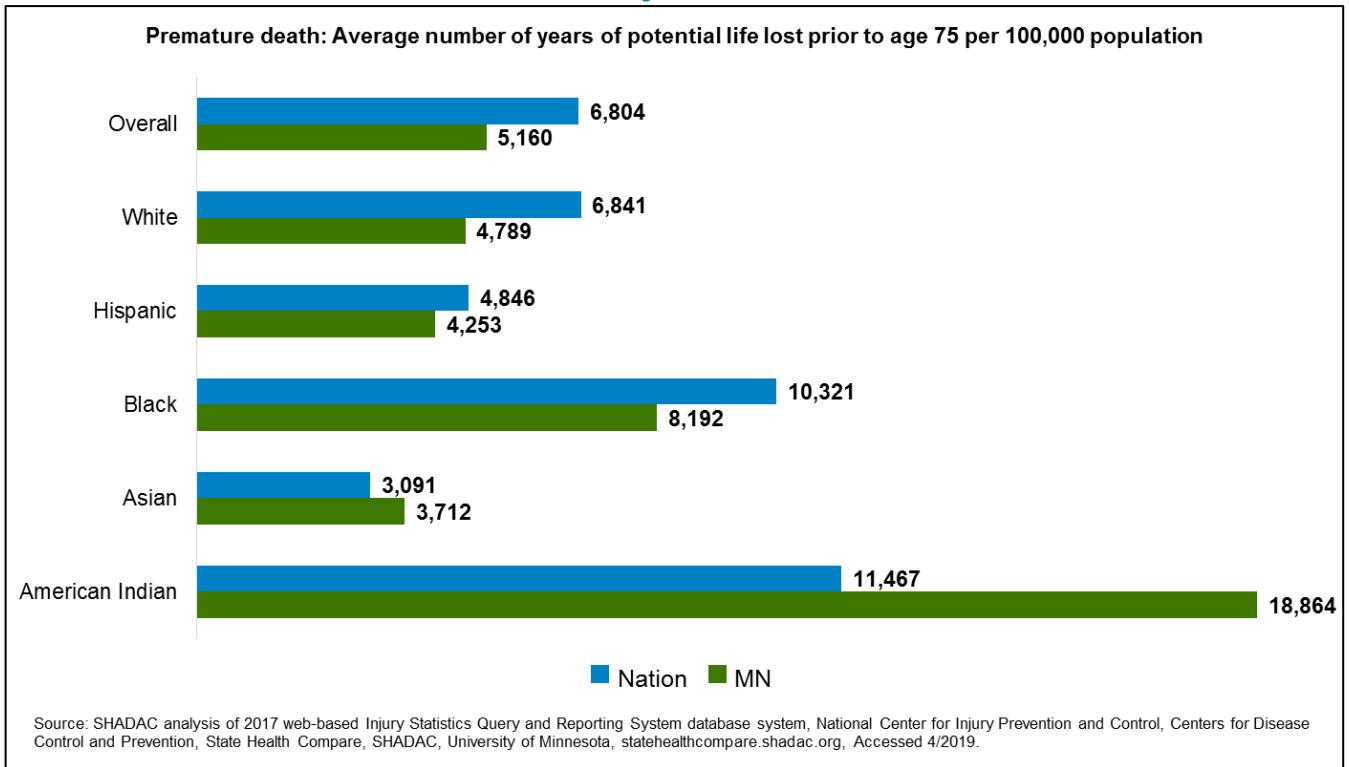
population in Minnesota, and almost 3 times higher for the overall population nationally.^{xxvi} These deaths are often associated with opioid use; in 2017, 422 of 733 drug overdose deaths were opioid-involved.^{xxvii} Some of Minnesota's weakest measures overall as defined by AHRQ include emergency department and hospital inpatient stays that involve opioid-related diagnoses.^{xxviii}

As illustrated in Figure 5, Minnesota's overall low rate of premature death hides disparities. When defined as life lost prior to age 75, persons of color in Minnesota carry much of this burden. In particular, American Indians in Minnesota have an average number of years of potential life lost that is alarmingly higher than any other group in Minnesota and the nation. Nearly four times as many years of life are lost for American Indians (18,864 years per 100,000) compared to whites (4,789 years per 100,000) in Minnesota.^{xxix}

In aggregate, infant mortality in Minnesota is low relative to other states, although in recent years for some Minnesota populations it has worsened slightly.^{xxx} Infant mortality rates in Minnesota vary widely by race/ethnicity and maternal age. In 2014-2015, infants born to mothers who are black had a mortality rate more than twice that of infants born to mothers who are white.^{xxxi}

Quality of life and well-being are incredibly important, but the health sector lacks discrete, widely-used, agreed-upon measures or data points to determine performance. Many measures of health combined can help piece together parts of this puzzle. Less statistically robust measures of quality of life, but not necessarily less meaningful, can be found outside of the health care sector. Among other top rankings, Minnesota ranked #2 and #3 state in quality of life (U.S. News & World Report 2018, Forbes 2018, CNBC 2018). It has been named the best state for women and the least stressed state in the nation (WalletHub 2019). And, it ranked #4 in overall child well-being (2018 Kids Count Databook) and earned the title of happiest state in the U.S. (MagnifyMoney, 2018).^{xxxii}

Figure 6



Making Sense of the State of Health Care Quality

The data in this report say a good deal about health and the state of quality in Minnesota. The state is a good place to live and is healthy for many residents. Yet, Minnesota's communities of color do not experience these same high levels of health and wellbeing. The disparities described in this report reflect inequality of opportunity. We increasingly understand that good health and the ability to access health care are tightly linked to having education, economic opportunity, and basic necessities met, such as housing and food security. This shines a light on how we need to work in a more community-oriented way to drive change.

Minnesota has been a leader in overall health care quality for decades, though data show this position is diminishing. For many quality measures, other states are improving at a faster rate and raising national performance averages—more people are receiving recommended care and achieving better health. As a top performer, moving measures becomes more difficult when only the more-challenging issues are left to tackle. Continuous quality improvement, too, requires us to work in a more collective way to drive change.

Minnesota shows promising signs that we have the drive to make the changes needed to approach health in a more community-oriented way. Examples abound. The Silos to Circles initiative underway aims to transform cross-sector collaboration and explore how communities and systems can better foster the health and well-being of Minnesotans. Across Minnesota, 405 organizations in 10 Coordination of Care Communities, facilitated by Stratis Health, worked together on new solutions to reduce avoidable hospital admissions and readmissions. And, our health systems have been experimenting with efforts to address social determinants in partnership with the patients they serve.

Closing Minnesota's gaps in health and care quality will not be accomplished by a series of projects or by organizations on their own. We need collective efforts to change behaviors at the individual level; raise the bar in education, housing, and jobs at the community level; and set priorities and devote needed resources as the state level. From our interactions with partners across that state, Stratis Health is confident that organizations and individuals across Minnesota share a commitment to make that state the best place to live for everyone to be healthy.

References

- ⁱ AHRQ National Healthcare Quality and Disparities Reports – State Snapshots, Agency for Healthcare Research and Quality, https://nhqrnet.ahrq.gov/inhqrdr/Minnesota/snapshot/summary/All_Measures/All_Topics, Accessed March 2019.
- ⁱⁱ David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance, (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ⁱⁱⁱ America’s Health Rankings – 2018 Annual Report, 2018 Senior Report, United Health Foundation, <https://www.americashealthrankings.org/explore/annual/state/MN>, Accessed March 2019.
- ^{iv} David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ^v 2018 Preventive Health Measures, MN Community Measurement, January 2019, <https://mncm.org/wp-content/uploads/2019/01/mncm-preventive-health-screening-report-2018.pdf>, Accessed March 2019.
- ^{vi} America’s Health Rankings 2018 Annual Report (Minnesota), 2018 Senior Report (Minnesota), United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed March 2019.
- ^{vii} America’s Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed April 2019.
- ^{viii} Minnesota State Snapshot for Prevention, Agency for Healthcare Research and Quality, https://nhqrnet.ahrq.gov/inhqrdr/Minnesota/snapshot/table/Type_of_Care/Prevention, Accessed 4/5/2019.
- ^{ix} America’s Health Rankings analysis of The Dartmouth Atlas of Health Care, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed March 2019.
- ^x David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ^{xi} Major Depression: The Impact on Overall Health, published May 10 2018, Blue Cross Blue Shield Association, <https://www.bcbs.com/the-health-of-america/reports/major-depression-the-impact-overall-health>, Accessed March 2019.
- ^{xii} America’s Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed 2019.
- ^{xiii} America’s Health Rankings analysis of CDC WONDER Online Database, Underlying Cause of Death, Multiple Cause of Death files, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed March 2019.
- ^{xiv} David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ^{xv} David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ^{xvi} CMS National Partnership to Improve Dementia Care, Antipsychotic Medication Use Report updated 3/1/2019, https://www.nhqualitycampaign.org/files/Antipsychotic_Medication_Use_Report.pdf, Accessed May 2019.
- ^{xvii} SHADAC analysis of the American Community Survey (ACS) Public Use Microdata Sample (PUMS) files, State Health Compare, SHADAC, University of Minnesota, <http://statehealthcompare.shadac.org/>, Accessed March 14, 2019
- ^{xviii} Minnesota’s Uninsured in 2017: Rates and Characteristics – Appendix, Minnesota Health Access Survey 2017, <https://www.health.state.mn.us/data/economics/docs/mnha2017appendix.pdf>, Accessed March 2019.
- ^{xix} Minnesota’s Uninsured in 2017: Rates and Characteristics – Appendix, Minnesota Health Access Survey 2017, <https://www.health.state.mn.us/data/economics/docs/mnha2017appendix.pdf>, Accessed March 2019.
- ^{xx} SHADAC analysis of the Behavioral Risk Factor Surveillance System (BRFSS) public use files, 2017, State Health Compare, SHADAC, University of Minnesota, <http://statehealthcompare.shadac.org/>, Accessed March 15, 2019.
- ^{xxi} David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (Commonwealth Fund, May 2018), https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf, Accessed March 2019.
- ^{xxii} H. Britt, R. Koranne, T. Rockwood. Statewide improvement approach to clinician burnout: Findings from the baseline year. *Burnout Research*, 7 (2017), 29-35.
- ^{xxiii} The US Burden of Disease Collaborators. The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018;319(14):1444–1472. doi:10.1001/jama.2018.0158
- ^{xxiv} Market Saturation and Utilization: Hospice – Percentage of Users out of FFS Beneficiaries, 2017-04-01 to 2018-03-31. <https://data.cms.gov/market-saturation>, Accessed April 2019.
- ^{xxv} The US Burden of Disease Collaborators. The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018;319(14):1444–1472. doi:10.1001/jama.2018.0158
- ^{xxvi} America’s Health Rankings analysis of CDC WONDER Online Database, Underlying Cause of Death, Multiple Cause of Death files, United Health Foundation, <https://www.americashealthrankings.org/>, Accessed March 2019.
- ^{xxvii} <https://www.americashealthrankings.org/explore/annual/measure/Drugdeaths/state/MN>
- ^{xxviii} Drug Overdose Deaths Among Minnesota Residents, Minnesota Department of Health, <https://www.health.state.mn.us/communities/opioids/documents/2017opioiddeathreport.pdf>, Accessed May 2019.
- ^{xxix} AHRQ National Healthcare Quality and Disparities Reports – State Snapshots. https://nhqrnet.ahrq.gov/inhqrdr/Minnesota/snapshot/summary/All_Measures/All_Topics, Accessed March 2019.
- ^{xxx} SHADAC analysis of Web-based Injury Statistics Query and Reporting System (WISQARS) database system, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (CDC), State Health Compare, SHADAC, University of Minnesota, <http://statehealthcompare.shadac.org/>, Accessed March 2019.
- ^{xxxi} America’s Health Rankings analysis of CDC WONDER Online Database, Underlying Cause of Death, Multiple Cause of Death files; Natality public-use data, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed March 2019.
- ^{xxxii} America’s Health Rankings analysis of CDC WONDER Online Database, Linked Birth/Infant Death files, United Health Foundation, [AmericasHealthRankings.org](https://www.americashealthrankings.org), Accessed March 2019.
- ^{xxxiii} How Minnesota Ranks: Quality of Life. Minnesota Department of Employment and Economic Development, <https://mn.gov/deed/ed/how-we-rank/>, Accessed April 2019.