



2020 Access to Health Services Report

Certificate of Public Advantage Access Sub-Index Measures for
Ballad Health

Tennessee Department of Health | COPA Report | February 2021



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Access to Health Services Sub-Index

Introduction

According to the Institute of Medicine, access to health care means “the timely use of personal health services to achieve the best health outcomes.”¹ Access to health care services for those residing in Ballad’s Geographic Service Area, or GSA, is the focus of the Access Sub-Index and this COPA Access to Health Services Report.

The region currently served by Ballad is part of the Appalachian Region, including 10 counties in Northeast Tennessee and 11 counties and two independent cities in Southwest Virginia (the GSA). This region has a number of health, economic, and other issues, which when combined present a unique and challenging environment for the improvement of the quality and access of health care in the region. These unique challenges were reaffirmed in a recent report issued by the Appalachian Regional Commission, Robert Wood Johnson Foundation and the Foundation for a Healthy Kentucky (*Health Disparities in Appalachia*), which found that the performance in the Appalachian Region is worse than the performance in the United States as a whole in seven of the ten leading causes of death: heart disease, cancer, chronic obstructive pulmonary disease, injury, stroke, diabetes, and suicide. The region also faces economic challenges, with the Appalachian Region performance in incomes, poverty rates, unemployment rates, and postsecondary education lagging behind the performance at the national level, which is relevant, as the study noted, because socioeconomic and health improvement are often interrelated, if not interdependent. Work force shortages and transportation issues are additional factors that add to the challenges of improving health care access for those residing in the Appalachian Region.

The Tennessee Department of Health believes all Tennesseans should have reasonable access to health services. Access to health care is vital to overall physical, social, and mental health; prevention of disease; detection and treatment of illnesses; quality of life; preventable death and life expectancy. The 2009 National Health Disparities Report states that attaining reasonable access requires:

- Gaining entry into the health care system,
- Getting access to sites of care where patients can receive needed services, and

¹ Institute of Medicine, Committee on Monitoring Access to Personal Health Care Services. *Access to Health Care in America*. Millman M, editor. Washington, DC: National Academies Press; 1993.

- Finding providers with whom patients can develop a relationship based on mutual communication and trust.

Reasonable access should include primary and preventive care, followed closely by emergency care, maternity/prenatal care, mental health care, and care for chronic diseases. Factors that contribute to health care access in a region include: (1) the ratio of population to primary care providers; and (2) the ratio of population to mental health providers², leading to increased number of preventable hospital stays and other adverse outcomes.

Competition and Access

Competition in health care is widely believed to benefit consumers by containing costs, encouraging innovation, and promoting access to high quality care.^{3,4} While Wellmont Health System and Mountain States Health Alliance reasoned in their COPA application that if allowed to merge they would better be able to expand access to health services, many remained concerned that a reduction in competition would lead to a reduction in health care access. The Access Sub-Index was developed to monitor the availability of health care services for residents in the Geographic Service Area (GSA). Maintaining or improving access according to these Sub-Index measures is a component of the annual evaluation and determination of the COPA's ongoing public benefits.

Access Sub-Index Design

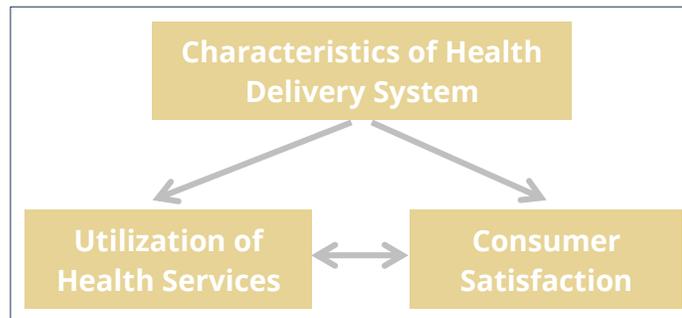
The purpose of the Access Sub-Index is to monitor changes in access to health services in the region by tracking several access-related measures in Ballad Health's GSA. The department's first Access to Health Services Report (found in the Department's COPA Index Reports) set out to establish the baseline values for many Access Sub-Index measures by reporting the most recent verifiable data available in 2018. Several other baseline values were published in the FY20 Ballad Health Annual Report with some reporting timeframes and data still pending approval and verification by TDH. This department report contains updated values on the Access Sub-Index Measures. Annual updates to the data will allow the department to track changes in health care

² Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute, *County Health Rankings 2017: Tennessee; County Health Rankings 2017: Virginia*.

³ Michael Porter and Elizabeth Teisberg, *Redefining competition in Health Care*, Boston: Harvard Business School Press, 2006

⁴ Penelope Dash and David Meredith (Nov, 2010), *When and how provider competition can improve health care delivery* available at: <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/when-and-how-provider-competition-can-improve-health-care-delivery>

access in the region. Annually, a calculation of data on these measures will produce an Access to Care Sub-Index score, which along with a Population Health Sub-Index score and another Benefits Sub-Index score, will produce a Final Score. Each year, the Final Score will be used to evaluate the continuing Public Advantage of the COPA.



The Access Sub-Index measures health care access within three domains:

- Characteristics of Health Delivery System,
- Utilization of Health Services, and
- Consumer Satisfaction.

These domains each address a different question. The Characteristics of Health Delivery System domain seeks to address the question, “Is care available?” Measures for urgent care hours, the distance to urgent care, emergency departments, and hospitals, as well as specialist recruitment and retention are within this domain.

Utilization of Health Services measures aim to answer, “Is the right care being delivered at the right time and in the right place?” Within the utilization of health services domain, six priority areas were identified. Those priority areas are: primary care; appropriate use of care; secondary prevention (screenings); infants and children; mental health and substance abuse; and antidepressant medication management.

The Consumer Satisfaction domain addresses the question, “Are people satisfied with the availability of care?” The measures within this domain require Ballad Health to administer patient satisfaction and access surveys and create and implement plans to address identified deficiencies.

By measuring access in these three ways, we gain a broad understanding of the current level of access gained and future changes in the region's access to care are tracked without stifling innovation.

In total, there are 28 measures that comprise the Access Sub-Index. Pursuant to the Terms of Certification, TDH and Ballad, as appropriate, will provide data for the GSA. Currently, of the 28 Access Sub-Index measures, data on 26 are to be supplied by Ballad in the Ballad Health Annual Report. Data from the two remaining sub-index measures are from Tennessee State databases and will be reported annually in the Department Access to Health Services Report. Data reported in these two reports (along with other sources as deemed appropriate by TDH) will be used to calculate the Access Sub-Index Score. The numerical score generated by the application of this sub-index will be a component of Ballad's Final Score used by TDH to objectively determine whether there is a continuing public advantage.

Access to Health Services Measures will be evaluated for the population specified for each measure. If a population is not specified for an Access to Health Services Measure, the population for that measure is the population in the GSA. For the first year of the ten-year period, Ballad will be required to maintain baseline performance on each measure. In subsequent years, for measures where the target is to improve, the expectation is for improvement over baseline to be achieved and maintained.⁵

Score

The score for the Access Sub-Index will be determined by the percentage of annual targets achieved in a given year.

Each measure has been assigned weighting, ranging from 1.5 percent to 10 percent. The score for the Access Sub-Index is the aggregate of each measure achieved multiplied by its assigned weighting. The targets and weights for each measure are identified in Table 3.

⁵ The Access to Health Services measures and values are identified in Table 1. The data sources are identified in the table shown in Appendix 3.

2020 Access Sub-Index Data Table – for Year 2

TABLE 1

	Measure	GSA Value
CHARACTERISTICS OF HEALTH DELIVERY SYSTEM		
1	Population within 10 miles of an urgent care center (%)	81.9%
2	Population within 10 miles of an urgent care center open nights and weekends (%)	72.1%
3	Population within 10 miles of Urgent Care Facility or Emergency Department (%)	99.7%
4	Population within 15 miles of an Emergency Department (%)	97.3%
5	Population within 15 miles of an acute care hospital (%)	97.3%
6	Pediatric Readiness of Emergency Department	72.6%
7	Appropriate Emergency Department Wait Times (%)	45.7%
8	Specialist Recruitment and Retention	*
UTILIZATION OF HEALTH SERVICES		
Primary Care		
9	Personal Care Provider	80.2%
Appropriate Use of Care		
10	Preventable Hospitalizations – Older Adults (discharges per 1,000 people 65+)	55.9 [†]
11	Preventable Hospitalizations - Adults (discharges per 1,000 people 18+)	20.9 [†]
Secondary Prevention (Screenings)		
12	Screening - Breast Cancer	75.6%
13	Screening - Cervical Cancer	65.3%
14	Screening - Colorectal Cancer	47.3%
15	Screening - Diabetes	72.5%
16	Screening - Hypertension	99.2%
Infant and Children		
17	Asthma Emergency Department Visits Per 10,000 (Age 0-4)	47.3 [†]
18	Asthma Emergency Department Visits Per 10,000 (Age 5-14)	38.1 [†]
19	Prenatal care in the first trimester	75.6%
Mental Health & Substance Abuse		
20	Follow-Up After Hospitalization for Mental Illness (% Within 7 Days Post-Discharge)	30.4% [†]
21	Follow-Up After Hospitalization for Mental Illness (% Within 30 Days Post-Discharge)	47.2% [†]
Antidepressant Medication Management		
22	Effective Acute Phase Treatment (84 days)	80.3% [†]
23	Effective Continuation Phase Treatment (180 days)	67.5% [†]

24	Engagement of AOD (Alcohol or Drug) Treatment	6.1% [†]
25	Rate of SBIRT administration - hospital admissions	0.2%
26	Rate of SBIRT administration - ED visits	5.6%
CONSUMER SATISFACTION		
27	Patient Satisfaction and Access Surveys	100%
28	Patient Satisfaction and Access Survey - Response Report	100%

* = No mutual agreed upon definition by Ballad Health and TDH.

† = Fiscal year data had been provided for these nine measures in the Ballad Health FY20 Annual Report. Data for Calendar Year 2019 were submitted by Ballad Health to TDH on 1/28/2021 upon the state's request and will be used for scoring purposes to maintain consistency.

Appendix 1:

Background

A **Certificate of Public Advantage (COPA)** is the written approval by the Tennessee Department of Health (TDH) that governs a Cooperative Agreement (a merger) among two or more hospitals. A COPA provides state action immunity to the hospitals from state and federal antitrust laws by **replacing competition with state regulation and Active Supervision**. The goal of the COPA process is to protect the interests of the public in the region affected and the State.

TDH has the authority to issue a COPA if applicants pursuing a COPA demonstrate that the **likely benefits** of the proposed Cooperative Agreement **outweigh the likely disadvantages** that would result from the loss of competition. The ability to grant a COPA is authorized by Tennessee's Hospital Cooperation Act of 1993, amended in 2015. Permanent Rules [1200-38-01](#) implement T.C.A. § 68-11-1301 – 68-11-1309.

In 2016 Mountain States Health Alliance and Wellmont Health System filed an application with TDH to form a Cooperative Agreement. Together they had a combined market share of over 75 percent in a geographic service area that spans 10 counties in northeast Tennessee and 11 counties in southwest Virginia (covering a total square mile area equal to the size of New Jersey) and **impacts a population of nearly 960,000 residents** (roughly equivalent to the population of Montana). These two systems had applied to the state to sanction the largest COPA-governed merger in the country to date.

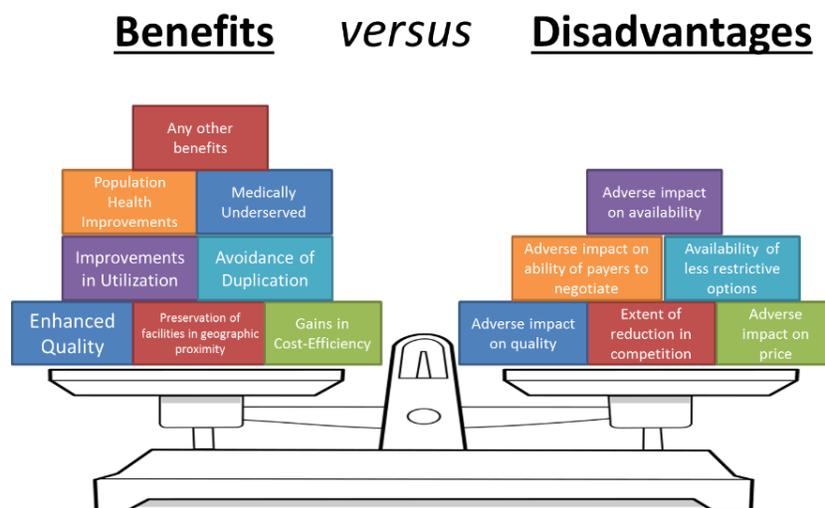
On January 31, 2018, after a lengthy and robust application review process, the Tennessee Department of Health, in coordination with the Tennessee Office of the Attorney General and Reporter, issued a Certificate of Public Advantage to Mountain States Health Alliance and Wellmont Health System, allowing them to merge under the name Ballad Health.

- [Executed Letter of Approval](#)
- [Amended and Restated Terms of Certification, dated July 31, 2019. \(Terms of Certification, dated January 31, 2018\)](#)
- [Certificate of Public Advantage](#)

Appendix 2:

Assessing Ongoing Public Advantage

TDH worked with the applicants and the Attorney General’s Office to create an **index** that will be used to determine if the **disadvantages** caused by a reduction in competition of health care and related services continue to be outweighed by clear and convincing evidence of **benefits** of the Cooperative Agreement.



Sub-Indices

The COPA Index consists of four categories of measures or Sub-Indices that correspond to the potential benefits and disadvantages of the affiliation for which the COPA was issued:

- Population Health Sub-Index – consisting of measures to track improvements in population health;
- Access Sub-Index – consisting of measures to track increased access to health care and prevention services;
- Economic Sub-Index – consisting of measures to verify a minimization of economic disadvantages resulting from a reduction in competition or degree of compliance with the Terms of Certification; and

- Other Sub-Index – consisting of other benefits, such as enhancement of quality of care, patient satisfaction and medical research and education.

Annual Review

Pursuant to the COPA Rules 1200-38-01-.03 and the Terms of Certification, as part of its exercise of active supervision, TDH will annually use an Index to track the demonstration of ongoing public advantage. The annual review will include: 1) the determination of a final score and pass/fail grade, 2) Ballard's degree of compliance with the Terms of Certification, 3) trends of Ballard's performance subsequent to the issue date and 4) other factors relevant to TDH's determination of the likely benefits and disadvantages of the affiliation.

Data reported in the Population Health, Access to Health Services and Other Report(s) as well as Ballard's Annual Report and other sources as deemed appropriate will be used to calculate the Population Health, Access and Other Sub-Index scores.

Appendix 3:

Access Sub-Index Data Source Table

TABLE 2 (Data descriptions and data sources were updated for clarification and consistency, December 2019.)

	Measure	Description	Source ^{††}
1	Population within 10 miles of an urgent care center (%)	Population within 10 miles of any urgent care center; urgent care centers may be owned by the Ballad Health or a competitor and may or may not be located in the geographic service area	Ballad Health analysis of US Census Bureau American Fact Finder; Urgent Care Facility List
2	Population within 10 miles of an urgent care center open nights and weekends (%)	Population within ten (10) miles of any urgent care center open at least three (3) hours after 5pm Monday to Friday and open at least five (5) hours on Saturday and Sunday; urgent care center may be owned by the Ballad Health or a competitor and may or may not be located in the geographic service area	Ballad Health analysis of US Census Bureau American Fact Finder; Urgent Care Facility List
3	Population within 10 miles of an urgent care facility or emergency department (%)	Population within 10 miles of any urgent care center or emergency room; urgent care centers and emergency rooms may be owned by the Ballad Health or a competitor and may or may not be located in the geographic service area	Ballad Health analysis of US Census Bureau American Fact Finder; Emergency Department Facility List
4	Population within 15 miles of an emergency department (%)	Population within 15 miles of any emergency room; emergency rooms may be owned by the Ballad Health or a competitor and may or may not be located in the geographic service area	Ballad Health analysis of US Census Bureau American Fact Finder; Emergency Department Facility List
5	Population within 15 miles of an acute care hospital (%)	Population within 15 miles of any acute care hospital; acute care hospital may be owned by the Ballad Health or a competitor and may or may not be located in the geographic service area	Ballad Health analysis of US Census Bureau American Fact Finder; Acute Care Facility List
6	Pediatric Readiness of Emergency Department	Average score of Ballad Health Emergency Departments on the National Pediatric Readiness Project Survey from the National EMSC Data Analysis Resource Center	Ballad Health analysis of a survey tool created by NEDARC ¹

7	Appropriate Emergency Department Wait Times	Percentage of all Ballad Health hospital emergency department visits in which the wait time to see an emergency department clinician within the recommended timeframe as reported in the National Hospital Ambulatory Care Survey from the CDC National Center for Health Statistics. †††	Ballad Health analysis of National Hospital Ambulatory Care Survey from the CDC National Center for Health Statistics ²
8	Specialist Recruitment and Retention	Percentage of recruitment and retention targets set in the Physician Needs Assessment for specialists and subspecialists to address identified regional shortages	N/A
9	Personal Care Provider	Percentage of adults who reported having one person they think of as a personal doctor or health care provider	Behavioral Risk Factor Surveillance System, 2019 ³
10	Preventable Hospitalizations – Older Adults	Number of discharges for ambulatory care-sensitive conditions per 1,000 Medicare enrollees aged 65 years and older	Ballad Health analysis of Hospital Discharge Data System, Tennessee Hospital Association and Virginia Hospital and Healthcare Association Inpatient Dataset and Medicare Enrollment File, 2019 ³
11	Preventable Hospitalizations – Adults	Number of discharges for ambulatory care-sensitive conditions per 1,000 adults aged 18 years and older	Ballad Health analysis of Hospital Discharge Data System, Tennessee Hospital Association and Virginia Hospital and Healthcare Association Inpatient Dataset and US Census Bureau Fact Finder, 2019 ³
12	Screening – Breast Cancer	Percentage of women Ballad Health Medical Associate patient residents aged 50-74 who reported having a mammogram within the past two years	Ballad Health analysis of Ballad Health Medical Associates data ^{††††, 2}
13	Screening – Cervical Cancer	Percentage of women Ballad Health Medical Associate patient residents aged 21-65 who had a pap test at a Ballad facility or reported having had a pap test in the past three years	Ballad Health analysis of Ballad Health Medical Associates data ^{††††, 2}
14	Screening - Colorectal Cancer	Percentage of adult Ballad Health Medical Associate patient residents who meet U.S. Preventive Services Task Force recommendations for colorectal cancer screening	Ballad Health analysis of Ballad Health Medical Associates data ^{††††, 2}
15	Screening – Diabetes	Percentage of overweight or obese Ballad Health Medical Associate patient residents aged 40-70 who are screened for prediabetes and diabetes.	Ballad Health analysis of Ballad Health Medical Associates data ²
16	Screening – Hypertension	Percentage of Ballad Health Medical Associate patient residents aged 18+ screened for hypertension by Ballad Health.	Ballad Health analysis of Ballad Health Medical Associates data ²

17	Asthma ED Visits – Age 0-4	Number of Asthma Emergency Department Visits Per 10,000 of those aged 0-4	Ballad Health analysis of Hospital Discharge Data System, Tennessee Hospital Association and US Census Bureau Fact Finder, 2019 **, ³
18	Asthma ED Visits – Age 5-14	Asthma Emergency Department Visits Per 10,000 of those aged 5-14	Ballad Health analysis of Hospital Discharge Data System, Tennessee Hospital Association and US Census Bureau Fact Finder, 2019 **, ³
19	Prenatal care in the first trimester	Percentage of live births in which the mother received prenatal care in the first trimester	Birth Statistics, Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics, 2019 ³
20	Follow-Up After Hospitalization for Mental Illness - 7 days	Percentage of adults and children aged 6 years and older who are hospitalized for treatment of selected mental health disorders and had an outpatient visit, and intensive outpatient encounter or a partial hospitalization with a mental health practitioner within seven (7) days post-discharge as reported in the State of Health Care Quality Report from the National Committee for Quality Assurance (NCQA).	Ballad Health analysis of MSSP and Team Member Claims data, 2019 ³
21	Follow-Up After Hospitalization for Mental Illness – 30 days	Percentage of adults and children aged 6 years and older who are hospitalized for treatment of selected mental health disorders and had an outpatient visit, and intensive outpatient encounter or a partial hospitalization with a mental health practitioner within thirty (30) days post-discharge as reported in the State of Health Care Quality Report from the NCQA.	Ballad Health analysis of MSSP and Team Member Claims data, 2019 ³
22	Antidepressant Medication Management – Effective Acute Phase Treatment	Percentage of adults aged 18 years and older with a diagnosis of major depression, who were newly treated with antidepressant medication and remained on an antidepressant medication for at least 84 days (12 weeks) as reported in the State of Health Care Quality Report from the NCQA.	Ballad Health analysis of MSSP and Team Member Claims data, 2019 ³
23	Antidepressant Medication Management – Effective Continuation Phase Treatment	Percentage of adults aged 18 years and older with a diagnosis of major depression, who were newly treated with antidepressant medication and remained on an antidepressant medication for at least 180 days (6 months) as reported in the State of Health Care Quality Report from the NCQA.	Ballad Health analysis of MSSP and Team Member Claims data, 2019 ³

24	Engagement of Alcohol or Drug Treatment	Adolescents and adults who initiated treatment and who had two or more additional services with a diagnosis of alcohol or other drug dependence within 30 days of the initiation visit as reported in the State of Health Care Quality Report from the NCQA.	Ballad Health analysis of Team Member Claims data, 2019 ³
25	SBIRT administration - hospital admissions	Percentage of patients admitted to a Ballad Health hospital who are screened for alcohol and substance abuse, provided a brief intervention, and referred to treatment (SBIRT)	Ballad Health analysis of Ballad Health Social Needs Screening Tool database
26	Rate of SBIRT administration - ED visits	Percentage of patients admitted to a Ballad Health emergency department who are screened for alcohol and substance abuse, provided a brief intervention, and referred to treatment (SBIRT)	Ballad Health analysis of Ballad Health Social Needs Screening Tool database
27	Patient Satisfaction and Access Surveys	Successful completion of patient satisfaction and access surveys, according to Section 4.02(c)(iii)	Ballad Health analysis of Press Ganey Patient Satisfaction Surveys, 2019 ³
28	Patient Satisfaction and Access Survey – Response Report	Report documents a satisfactory plan for the Ballad Health to address deficiencies and opportunities for improvement related to perceived access to care services and documents satisfactory progress towards the plan.	Ballad Health Report, 2019 ³

†† = Data provided by Ballad Health are for the first eight months of Fiscal Year 2020 (July 1, 2019-February 29, 2020) unless otherwise indicated and will be verified by TDH as source data are available to the State. Methodologies for calculating values for each measure are described in Ballad Health’s Access Measure Data Dictionary, which was submitted to TDH 1/11/20201.

††† = The department approved a change from “excessive” emergency department wait times, to “appropriate” emergency department wait times.

†††† = The department approved a data source change for measures related to health screenings (measures 12-14) from the Behavioral Risk Factor Surveillance System (BRFSS) to Ballad Health Medical Associates data.

**= Measures 17 and 18, on Asthma Emergency Department Visits, utilize data from the state discharge databases. Because the Virginia hospital discharge database does not currently provide emergency department discharge activity, only TN GSA patients are included in values reported for these two measures.

1 = Values are based on data from July 1, 2019 through June 30, 2020.

2 = Values are based on data from March 1, 2019 through February 29, 2019.

3 = Values are based on data from January 1, 2019 through December 31, 2019.

Appendix 4:

Access Sub-Index Data Notes

Preventable Hospitalizations:

The Prevention Quality Overall Composite is an aggregate measure of Prevention Quality Indicators (PQIs) described by the Agency for Healthcare Research and Quality (AHRQ). The composite score (rate) is used to identify quality of care for "ambulatory care-sensitive conditions." These are conditions for which early intervention and good outpatient care can potentially prevent complications and severity of disease resulting in hospitalizations. For example, patients with diabetes may be hospitalized for diabetic complications if their conditions are not adequately monitored or if they do not receive the patient education needed for appropriate self-management.

The preventable Hospitalization data in this report are based on AHRQ v2018 definition of Prevention Quality Index - 90. The methodology for calculating this measure is defined in the 2020 Access Measures Data Dictionary developed by Ballad Health. TDH and Ballad Health agreed this measure would exclude those on Medicare who are under 65 years of age.

Behavioral Risk Factor Surveillance System

All estimates are weighted using demographic information from the ten Tennessee counties that comprise the TN Geographic Service Area.

Data Note 1) *All data are subject to limitations as explained in the data source.*

Data Note 2) *Data notes and methodology for the measures where Ballad Health is listed as the data source are detailed in the 2020 Access Measures Data Dictionary developed by Ballad Health.*

Credits

Commissioner Lisa Piercey, MD, MBA, FAAP.

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- Judi Knecht
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