Certificate of Public Advantage

Department Annual Report

Covering Fiscal Year 2020: July 1, 2019-June 30, 2020

Tennessee Department of Health| April 23, 2021

COPA: Department Annual Report on FY20

Executive Summary

In 2018 the two largest health systems in Northeast Tennessee, Wellmont Health System and Mountain States Health Alliance, were issued a Certificate of Public Advantage (COPA) and allowed to merge under the name, Ballad Health. The Tennessee Department of Health (TDH) required the new health system to reinvest expected savings from the merger in ways that would substantially benefit residents living in the system's geographic service area.

The State required the formerly competing systems to agree to a number of terms and conditions that were set out in the Terms of Certification (TOC), a document governing the COPA. Importantly, the TOC stated that the system would be Actively Supervised by the State and subject to an annual review.

This Department Annual Report is on TDH's Annual Review of the Ballad Health COPA and includes determinations of compliance, the Sub-Index Scores, the Final Score, the Pass/Fail Grade, and other elements relevant to the Active Supervision of the COPA.

This Annual Report covers Fiscal Year (FY) 2020 (July 1, 2019 – June 30, 2020). However, due to the COVID-19 pandemic, many of Ballad's obligations under the (TOC) were temporarily suspended by the State, including data collection and reporting. For that reason, the Ballad Health Annual Report for FY20 only includes data and information through February 29, 2020.

Ballad's handling of the pandemic and the fact that all of Ballad Health's 21 hospitals, including its many vulnerable rural hospitals, remained open through the year were identified by TDH as two of the system's greatest successes for FY20.

TDH noted that data issues related to the annual evaluation of the COPA, the COPA Index Score, and alignment of measures with TDH's counterparts at the Virginia Department of Health remained unresolved, largely due to the pandemic.

The Ballad Health periodic reports due prior to the period of public emergency were submitted in compliance with the TOC. Additionally, Ballad Health submitted its Fiscal Year 2020 Annual Report to TDH timely despite the requirement having been temporarily suspended.

Highlights from the Ballad Health Fiscal Year 2020 Annual Report, include:

- Ballad Health improved access to healthcare by opening a new Ballad Health Urgent Care Center in Lee County, Virginia. Ballad also continued to make investments and progress toward opening a critical access hospital in the same County. The three Access Patient Satisfaction Survey scores administered in Fiscal Year 2020 were all above 79, and relatively unchanged from last year.

- Ballad Health continued its community health work advancing the Striving Toward Resilience and Opportunity for the Next Generation (STRONG) Children and Families model to fund, develop, and evaluate programs that create more safe, stable, and nurturing environments for children and that support families in the region.
- Ballad Health's quality performance, by comparing the raw numbers from Ballad's Fiscal Year 2020 against their established baselines, improved for 13 of the 17 measures. Ballad's Clinical Council remained active, developing and implementing strategies to improve care through multiple subcommittees.

The State's Active Supervision structure includes the critical investigative work of the COPA Monitor. Findings from the COPA Monitor related to Fiscal Year 2020 are shared in the COPA Monitor Annual Report.

As part of its Active Supervision work, TDH published three Sub-Index reports with recent data on population health measures, access to health services measures, and other (quality) measures related to improvement and performance expectations for the health system, for patients, and for residents in the region. In accordance with the procedures and requirements of the TOC, data in the three Sub-Index reports and the Ballad Heath Annual Report are part of the Department's annual evaluation and determination of ongoing Public Advantage. The data were assigned weights and calculated into Sub-Index Scores for Fiscal Year 2020.

TDH's calculation of the Sub-Index and Final Score agree with the score recommendations in the COPA Monitor's Annual Report. They are:

Economic Sub-Index: **Pass**

FINAL SCORE: **92**

Pursuant to the Terms of Certification, with a Passing score in the Economic Sub-Index, and a Final Score of 92, TDH determined that the Ballad Health COPA continues to demonstrate a Public Advantage.

Note: This report covers the time period from July 1, 2019 to June 30, 2020 though data and information submitted by Ballad Health were only required from July 1,2019 through February 29, 2020, which is the period prior to Governor Bill Lee's order declaring a State of Emergency to facilitate the treatment and containment of the COVID-19 pandemic. Consequently, TDH's evaluation of the impact of the COPA largely excludes data on activities and outcomes from the period during the coronavirus pandemic.

Introduction and Background

The COPA

A Certificate of Public Advantage (COPA) is the written approval by the Tennessee Department of Health (TDH) that governs a Cooperative Agreement (including 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.

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 February of 2016, the two largest health systems in Northeast Tennessee, Wellmont Health System and Mountain States Health Alliance, submitted an application for a COPA. The applicants' justification for the merger was realized savings by reducing duplication and improving efficiencies. These savings would then be reinvested in ways that would substantially benefit those residing in their Geographic Service Area (GSA).

The combined GSA of the two systems consists of 10 counties in Northeast Tennessee and 11 counties and two independent cities in Southwest Virginia[1]. This part of the Appalachian Region is largely rural and has a number of health, economic, and other challenging factors that, when combined, present a unique and difficult environment for improving the quality of and access to health care and for improving health outcomes.

On January 31, 2018, in coordination with the Tennessee Attorney General's Office (AG's Office), TDH issued a COPA to Mountain States Health Alliance and Wellmont Health System, allowing them to merge under the name Ballad Health. TDH and the AG's Office developed the Terms of Certification (TOC) to govern the COPA. The TOC lays out Ballad's obligations and responsibilities

[1] Carter, Cocke, Green, Hamblen, Hancock, Hawkins, Johnson, Sullivan, Unicoi, and Washington Counties in Tennessee; Buchanan, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe Counties in Virginia; and the independent cities of Bristol City and Norton City in Virginia.

and the regulatory role of the State. This document details the conditions required by the State for Ballad to demonstrate ongoing public advantage.

Within the TOC is a description of the Index and scoring system that is used to track and evaluate the demonstration of ongoing public advantage in four categories (sub-indices):

- Access to Health Services
- Population Health Improvement
- Economics
- Other (primarily quality of care)

Via the COPA Index, TDH will track the system's progress under the Cooperative Agreement and annually determine if a public advantage is maintained for the residents of the GSA.

To fulfill regulatory functions specific to the COPA and the TOC, an active supervision structure was established. The active supervision roles and functions, as outlined in the TOC, include:

- A COPA Compliance Office – Seeks to resolve compliance issues; reviews, logs, and investigates complaints; recommends corrective action; and prepares an Annual Report.
- A Local Advisory Council – Processes public feedback and comments; hosts an annual public hearing; prepares an Annual Report on public comments; and makes recommendations to TDH on how the Public Health Initiative Fund should be spent.
- A COPA Monitor - Reviews COPA Compliance Office complaints; conducts audits; reviews reports from the Compliance Office, LAC, and Ballad; and makes recommendations to the Commissioner of Health and TDH.

The Department Annual Report

Pursuant to the TOC, TDH is required to prepare an "Annual Report that incorporates findings from (i) Ballad Health's Periodic Reports, (ii) the COPA Compliance Office Annual Report, (iii) the Local Advisory Council Annual Report, (iv) the COPA Monitor Annual Report, (v) the Healthcare Access Report, and (vi) the Population Health Report." The Department's Annual Review must also "include determinations of compliance, the Index Scores, the Final Score, the Pass/Fail Grade, and trends relevant to the Active Supervision of the COPA and continued Public Advantage" for each Fiscal Year that such information is available.

The Department Annual Report on FY20 is the last in a series of Annual Reports required by the TOC this Fiscal Year. The Fiscal Year 2020 Ballad Health Annual Report and COPA Compliance Office Annual Report were submitted within a few months of the end of Ballad's Fiscal year. The Local Advisory Council (LAC) held a Public Hearing on January 25, 2021 to allow residents to respond to the Ballad Health Annual Report and subsequently drafted and published the Local Advisory Council Annual Report on public feedback. The LAC's report was published on February 24, 2021. The COPA Monitor Annual Report was provided to TDH on March 24, 2021, in which the COPA Monitor reported on Ballad's performance against the Index and provided recommendations to TDH and Ballad Health.

COVID-19

In March of 2020 the Tennessee Department of Health suspended certain provisions of the TOC to better allow Ballad Health to respond to the public health and health care emergency caused by the COVID-19 pandemic. The temporary suspension began March 1, 2020 and remains in effect as of the publication of this report. Because this temporary suspension included many reporting requirements, the Ballad Health FY20 Annual Report only included information on eight months of the fiscal year—from July 1, 2019 through February 29, 2020. Additionally, Ballad's score to determine ongoing public advantage for FY20 is based on its performance from July 1, 2019 through March 1, 2020.

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Annual Review

Section 7.02 of the TOC reads:

> Pursuant to Tenn. Code Ann. §68-11-1303(g), the Department shall review, on at least an annual basis, the COPA to determine Public Advantage (the "Annual Review"). The Department shall review whether Public Advantage is demonstrated or not for each Fiscal Year during the COPA Term, in accordance with the procedures and requirements of the COPA Act and (the TOC). This Annual Review shall include, without limitation, the following: (i) the determination of the Final Score and Pass/Fail Grade, … (ii) the COPA Parties' degree of compliance with the Terms and Conditions, … and any and all COPA Modifications and Corrective Actions occurring prior to such review, and (iii) trends of (Ballad Health's) performance hereunder since the Issue Date and other factors (which may or may be reflected in the Index) relevant to the Department's determination of the likely benefits and disadvantages of the Affiliation which, as of the time of such determination, can reasonably be expected if the Affiliation is continued.

As in previous Department Annual Reports, this Report includes, as a part of its review, comments on things that are working well, and opportunities and concerns regarding non-compliance that either surfaced or persisted in the past year.

Things that are working well.

TDH has identified the following COPA-related successes of the past year (FY20):

- Hospitals that were under threat of closure remained open.
- Ballad Health, as a single system with 21 hospitals, redeployed staff, beds, and personal protective equipment to ensure resources were efficiently utilized across the region during the COVID-19 pandemic in ways that would not have been possible as two separate competing systems. Ballad secured necessary supplies, swiftly responded to the various challenges presented by the pandemic and served as a trusted voice in the region for COVID-19 information.
- According to the Ballad Health Annual Report, Ballad achieved $27.997M in efficiencies in FY20 that appear to be a result of the merger, which exceeded Ballad's FY20 monetary commitment of $18M. (Ballad Health reported achieving $32.376M in efficiencies in FY19, which exceeded its FY19 monetary commitment of $4M.)

- Ballad successfully converted its legacy Mountain States Health Alliance practices to the Epic electronic health record.
- Prior to the suspension of reporting requirements, Ballad Health submitted each of the required quarterly reports to the Department in compliance with the TOC. Ballad Health also submitted its FY20 Annual Report despite the reporting requirement having been suspended.
- The COPA Compliance Office responded quickly and thoroughly to inquiries from TDH.
- Ballad Health's executive staff met with the COPA Monitor nearly every month of the Fiscal Year and provided information upon request.
- Ballad Health's executive staff provided updates on its activities to TDH staff on monthly calls and met with TDH staff every quarter, either in person or virtually[2], to discuss progress made in implementing the system's three-year plans: Population Health Plan, Children's Health Plan, Behavioral Health Plan, Rural Health Plan, Health Information Exchange Plan, and the Health Research and Graduate Medical Education Plan.
- Ballad Health executives engaged with TDH and VDH staff to revise the list of required contents for the Ballad Health Annual Report. This effort resulted in a FY20 Ballad Health Annual Report that was found to be both more concise and filled with more meaningful information than prior years' reports.
- TDH remains impressed by the size and range of stakeholders participating in the Accountable Care Community (ACC), which Ballad Health played a lead role in establishing in the region. TDH remains optimistic about the ACC's new Striving Toward Resilience and Opportunity for the Next Generation (STRONG) Children and Families model for change and interested in discussing how to support Ballad's alignment with the ACC's STRONG approach.
- Ballad Health's quality performance, by comparing the raw numbers from Ballad's Fiscal Year 2019 against the system's established baselines, improved for 13 of the 17 Target Quality Measures.

[2] Quarterly meetings were held virtually during part of FY20 in response to the COVID-19 pandemic.

Resolved instances of potential non-compliance

The COPA Monitor has addressed potential COPA and TOC violations in his COPA Monitor Annual Report. TDH is not aware of any additional potential or confirmed non-compliance events under the TOC.

Findings from Reports related to Ballad Health's Fiscal Year 2020

The COPA Compliance Office Annual Report

The COPA Compliance Office Annual Report is available here.

Findings:

- The COPA Compliance Office (CCO) Annual Report was filed in compliance with the Terms of Certification and included required information.
- Details of the two complaints received by the CCO that were not previously reported to TDH in a quarterly report were provided. (Details of COPA complaints received by the CCO throughout the year are typically provided in the COPA Compliance Office Quarterly Reports, however, with the COVID-19 induced temporary suspension of certain reporting requirements, only two of the four quarterly reports were required for FY20.) Both complaints appear to have been investigated and addressed satisfactorily.
- The CCO's Report on Potential Violations of the TOC was complete for Fiscal Year 2020. All issues have been resolved except for the following:
    - Spending commitments made by Ballad Health for Fiscal Year 2020 are under review by the COPA Monitor for their compliance with the TOC.
    - While Ballad's charity policy is more favorable to residents than its legacy systems' policies, the amount of Charity Care provided by Ballad Health in FY20 was lower than the pre-merger baseline. (The COPA Monitor identified several external factors that accounted for the FY20 Charity Care shortfall and provided a waiver for this TOC requirement. The waiver letter for FY20 is available here.
- Ballad Health's actual spend for Fiscal Year 2019 was not compliant with the spending commitments set forth in the TOC for one of the monetary commitment categories. (TDH and Ballad have subsequently agreed on a cure for the noncompliance. Ballad agreed to place $239,000 of their FY19 spending shortfall in a Board-designated fund to be spent on new and incremental capital expenditures and operating expenses pursuant to a revised Children's Health Plan that is approved by TDH. The October 14, 2020 letter from Ballad, agreeing to the proposed cure is available here.
- The COPA Compliance Office projected COPA Expenses for Ballad Health of nearly $2.19 million in Fiscal Year 2021. Such amount includes the projected Tennessee COPA Fees,

projected Virginia Cooperative Agreement Fees, CCO Operating Expenses, and Ballad's COPA-related legal fees.

Ballad's Periodic Reports

Ballad Health Quarterly Reports are available at the following links:

- The Ballad Health Fiscal Year 2020 Q1 Report (reporting period: July 1, 2019-September 30, 2019) can be read here.
- The Ballad Health Fiscal Year 2020 Q2 Report (reporting period: October 1, 2019-December 31, 2019) can be read here. (Ballad Health submitted amended language for Item G of their FY20 2nd Quarter Quarterly Report by email on February 28, 2020 and by formal letter on March 1, 2021, which can be read here.)
- The Ballad Health Fiscal Year 2020 Q3 Report (reporting period: January 2019-March 2020) would normally have been due to the Department on May 15, 2020, however this reporting requirement was temporarily suspended during the COVID-19 period of public emergency.
- The Ballad Health Fiscal Year 2020 Q4 Report (reporting period: April 2020-June 2020) would normally have been due to the Department on May 15, 2020, however this reporting requirement was temporarily suspended during the COVID-19 period of public emergency.

Findings:

- Ballad Health's pre-COVID-19 quarterly reports were submitted in compliance with the Terms of Certification and included all required information.

The Ballad Health Annual Report is available here.

Findings:

- Ballad Health submitted its FY20 Annual Report to TDH November 25, 2020, despite the requirement to do so having been temporarily suspended due to the Force Majeure caused by the pandemic.

- Because many of the reporting requirements were temporarily suspended, Ballad's FY20 Annual Report only covers 8 months of the fiscal year (July 1, 2019-Feb 28, 2020). Due to a lengthy and comprehensive process that staff from TDH, VDH, and Ballad Health engaged in, the list of required contents for the Ballad Health Annual Report was refined resulting in a FY20 Annual Report that was shorter than last year, yet filled with more meaningful information. Qualitative data often included comparisons to peer groups or national averages or prior system values. The narratives and summaries provided by Ballad in the report often included important qualitative details that explained the landscape, Ballad's work over the past year, and lessons learned. The effort invested in revising the contents list was successful in producing a high-quality work product for the public and for the States as Active Supervisors.

- <u>Related to Access:</u>

    - Baseline and Year 2 Access to Health Services Sub-Index data were reported in this Fiscal Year 2020 Ballad Health Annual Report for 25 of the 28 measures. Ballad provided separately an updated Access Data Dictionary that detailed the methodology and definitions on each measure for which the system provided data. Timeframes were adjusted to exclude data on performance during the months affected by the pandemic. TDH appreciates the updates on Ballad's implementation of its Behavioral Health, Children's Health, and Rural Health plans.

    - TDH is pleased that Ballad Health opened a new Ballad Health Urgent Care Center in Lee County, Virginia, while making investments and progress toward opening a critical access hospital there.*

    - TDH is also pleased that 1) the first residents of a Ballad Health dental residency program began treating patients in the region in Fiscal Year 2020; 2) Ballad had success expanding telehealth; 3) Ballad continued to invest in the addiction medicine program at East Tennessee State University.

    - Two of the three Access Patient Satisfaction Surveys administered in Fiscal Year 2020 resulted in lower scores than the baseline year. The percentage of patients who reported being satisfied with access to care in owned medical practices was above the baseline for the second year in a row, at nearly 90, while outpatient and emergency department access scores remained fairly stable, at 79 and 89, respectively.

*The new Lee County hospital is scheduled to open in the summer of 2021.

- Related to Population Health:

    - Ballad Health provided information on each of the two components of the Year 2 Population Health Sub-Index scoring.

        1. Regarding investment in Population Health: Ballad exceeded its Year 2 spending commitment of $2,000,000.

    - Regarding the Achievement of Process Measures identified in the system's Population Health Plan: Ballad achieved 42 of the 46 Process Measures (listed as Metrics in Ballad's Population Health Implementation Roadmap). Progress has been made on Ballad's Striving Toward Resilience and Opportunity for the Next Generation (STRONG) Children and Families model.

        - In its FY20 Annual Report, Ballad Health provided a detailed update of the STRONG Children & Families vision, essential program elements, and a description of the criteria used to select and fund programs and interventions. Ballad's ambitious STRONG vision includes supporting educational, economic, and health success across the lifespan of individuals in the Appalachian Highlands Region. The essential program elements include organizing and aligning community improvement efforts through a collective impact approach, developing a community based referral platform to coordinate the navigation of residents with health related social needs to appropriate services; investing in regional programs that are essential to parenting success, meet social needs, and improve child development outcomes; and funding the creation of a longitudinal database for research on the long-term impacts of the STRONG interventions.

        - As noted in last year's Department Annual Report, TDH is interested in supporting Ballad Health as it seeks to align its population health improvement work with the STRONG Accountable Care Community (ACC). TDH and Ballad began discussing how to best measure the long-term outcomes and impacts of this innovative population health improvement approach as well as how to appropriately account for Ballad's specific role in the ACC's efforts in order to evaluate population health improvement and determine if it is attributable to the COPA. These discussions have been temporarily paused while Ballad focuses on more urgent work associated with the pandemic.

- TDH is pleased with the following accomplishments that were reported:
    - The establishment of a relationship between Ballad Health with the East Tennessee State University (ETSU) Center for Rural Health Research for program evaluation and intervention design support.
    - The development of a partnership with the State of Franklin Health Associates to prepare for the launch of a Hospital Quality and Efficiency Program.
    - The expansion of Ballad's Medicare Shared Savings Program (AnewCare) to include legacy Wellmont Medical Associate providers.
    - The development of the Appalachian Highlands Care Network, a program designed to increase healthcare access for low-income uninsured people.

- Related to Economic factors:
    - Ballad Health achieved nearly $28M in savings in FY20 due to cost-efficiency steps taken that likely would not have been possible without the COPA (Ballad's monetary commitment under the COPA in FY20 was $18M).
    - Facility maintenance and capital expenditure figures were provided for the first eight months of FY20 and for all of FY19. Ballad Health invested $121.1 million in FY20 as of February 29, 2020, and $141.6million in capital improvements in FY19. An increase in spend for IT as well as for facilities and construction was seen in FY19, despite the reduced time period.
    - Full-time Equivalents (FTEs) per adjusted occupied bed for five of the six hospitals the state requested data on remained stable between FY19 and FY20. Indian Path Community Hospital was the only hospital to see the rate decrease, which may be due to service mix changes.
    - Ballad Health reported spending $8.8 million on market adjustment in FY20, positively impacting 40% of its workforce.
    - A link to Ballad's chargemasters was provided in the report and Ballad referenced the COPA Monitor's November 21, 2019 report which concluded that FY19 changes to patient-related prices charged were consistent with Addendum One of the TOC. (The COPA Monitor's March 24, 2021 report confirms Ballad Health's compliance with Addendum 1 in FY20.)

- Related to Quality:

    - In its annual report, Ballad Health provides data on its system-wide quality performance alongside two types of comparison data. In Attachment 2, Ballad Health's Fiscal Year 2020 performance on multiple quality indicators are compared to its performance during the prior fiscal year and baselines. In Attachment 4, the data are compared to similarly sized systems.

    - In FY20, the Clinical Council developed by Ballad Health, consisted of 18 Ballad employed and 14 independent physicians. During the year, the Council implemented strategies to improve supply chain formularies and to promptly review process issues and reward good catches at each facility. It also recommended how telehealth services can support care during the pandemic and developed the FY21 system priorities.

    - The Department is pleased with the Clinical Council's focus areas as evidenced by its active subcommittees: Strategic Planning and Care Transformation Subcommittee; the High-Value Care Evidence-Based Medicine Subcommittee; Pharmacy and Therapeutics Subcommittee; Patient, Family and Provider Experience Subcommittee; Opioid Task Force Subcommittee; Health Informatics Subcommittee; Medical Staff Services Subcommittee; and Surgical Services/Perioperative Subcommittee.

    - Ballad and TDH are in the process of establishing baselines that include all patient data to update the quality data provided in Attachment 2 on quality indicators. That information will be used for future comparisons.

    - By strictly comparing the raw numbers, TDH observed that 13 of the 17 measures, or 76% were improved. Analysis to determine statistically significant or meaningful change has not yet been conducted.

- Related to Health Research and Graduate Medical Education:

    - In the Schedule of Residency Programs, it would be helpful if information on "hired in the region" or "hired at Ballad" was Included. As improving access to health services is one of the primary goals of the COPA, Ballad should continue to collect data that would indicate the retention rate of residents in Ballad's GSA. Such information is necessary to understand the degree to which health

care access needs in the region are being met or can be met through training and retention.

- TDH is pleased that Ballad increased the number of residents supported at East Tennessee State University (ETSU) and that the majority of Ballad Health Sponsored Residency Programs listed in its report, including pediatrics, were in primary care.
- The information provided on Studies, Research Goals and Projects, Grant Spending, and Grant Money Brought In was succinct and easy to digest. The data and narrative provided were useful and well organized.

The Local Advisory Council Annual Report

The Local Advisory Council 2021 Annual Report is available here.

Findings:

The Local Advisory Council 2021 Annual Report was published February 24, 2021. It did not include any recommendations to TDH.

The COPA Monitor Annual Report

The COPA Monitor Annual Report is available here.

Findings:

The COPA Monitor Annual Report included recommendations to TDH. These recommendations and the Department's responses are on page 30.

Regarding Findings noted in the following three Sub-Index Reports:

This Department 2020 Annual Report compares baseline or prior year data to most current data. The Department will continue to work with Ballad Health to refine and improve the data collection and analysis by adding and removing data being collected, refining, and tightening definitions and refining and codifying methods to improve comparability, including adding confidence intervals where possible.

All reports are available at https://www.tn.gov/content/dam/tn/health/documents/copa/Ballad-Healths-FY20-Amended-Annual-Report-2021-05-19.pdf.

The Department Population Health Report

Reference - The Department's **2019** Population Health Report can be found here.
Current Year - The Department's **2020** Population Health Report can be found here.

- Despite previous discussions on metrics, there remained 9 population health measures for which data were not available for inclusion in the Department's 2020 Population Health Report. They include:
    - Three measures for which Ballad Health is responsible for data collection (Physician Office Visits that include counseling or education related to weight and physical activity, Infants Breastfed at 6 months, and Diabetes Adverse Events) and
    - Six measures from the Behavioral Risk Factor Surveillance System (BRFSS) for which survey response levels did not meet the minimum that was required for reporting (Those measures relate to smoking and obesity for high- and low-population density counties and among those with high school or more education..

Findings:

Because of the brief time period that the COPA has been in effect, the following comments on population health data and early trends may be largely observations of the landscape that Ballad is operating within and not yet considered attributable to Ballad Health or the COPA.

- The COPA region has a higher infant mortality rate (8.4 deaths per 1,000 live births) than the peer counties (5.5 deaths), the state (7.0 deaths), and the U.S. (5.7 deaths). The infant mortality rate was 8.3 deaths per 1,000 live births in the 2019 report.
    - The region faces additional challenges as shown by other outcome measures:
        - Frequent mental distress (20.4% of adults) and frequent physical distress (22.1% of adults) are higher than peer counties, the State, and the US.
            - Since the 2019 report, frequent mental distress increased from 17.8% of adults and frequent physical distress increased from 18.2% of adults.

        - Low birthweight (8.9% of live births) is higher than peer counties and the US, but lower than the State, it was 8.4% in the 2019 report.
        - Cardiovascular deaths (340.1 deaths per 100,000 population), cancer deaths (278.4 deaths per 100,000 population) and suicide (25.0 deaths per 100,000 population) are higher than peer counties, the State, and the US. These three death rates are also higher in the 2020 report than in the 2019.
        - Diabetes deaths (36.2 deaths per 100,000 population) are lower in the COPA region than in peer counties, but higher than the State and the US. Diabetes deaths increased by over 25% since the 2019 report (28.2 deaths per 100,000 population).

- While smoking prevalence (23.5% of adults) and smoking among those with a high school education or more are lower than peer counties, smoking during pregnancy, youth smoking, and use of electronic vapor products are higher than in peer counties.
    - Smoking during pregnancy in the COPA region is over triple the US rate.
    - Youth tobacco use in the COPA region is almost double the US rate.
    - Overall smoking prevalence in the COPA region declined from the 2019 report (The smoking prevalence in 2019 was reported as 26.7% of adults).
- The prevalence of obesity in the COPA region, in general, is about par with peer counties and the State. It is higher than the US rate.
    - Obesity among those with a high school education or more is less than peer counties.
    - Overweight and obesity among public high school students is slightly greater than the State and about equal to peer counties.
    - Obesity has increased from 33.9% of adults in the 2019 report to 37.1% of adults.
- Breastfeeding initiation in the COPA region is on par with peer counties, however, it is 6 and 10 percentage points lower than the State and the US rates, respectively.
    - The current rate in the COPA region is 74.6% of live births, up slightly from 73.4% in the 2019 report.

- Soda consumption in the COPA region has dropped from 78.2% of students who drink soda to 74.9% of students. It is lower than in peer counties and the State, however, it still remains higher than the US rate.
- Neonatal abstinence syndrome (NAS) at 34.3 cases per 1,000 live births in the COPA region remains higher than peer counties and is over three times higher than the State rate. It has decreased from 41.3 cases per 1,000 live births in the 2019 report.
- Drug overdoses in the COPA region (320.4 cases per 100,000 population) are now less than the State rate (348.1). The rate has decreased from 377.4 cases per 100,000 population in the 2019 report.
- The reported number of HPV and Tdap vaccinations in the COPA region have increased year over year.
- The rate of adult flu vaccinations increased from 28.1% of adults in 2019 to 46.0% in 2020 and is higher than in peer counties, the State and the US.
- Third-grade reading levels remain higher than peer counties again this year.

Year 2 Population Health Sub-Index scoring:

- According to the Terms of Certification, "data reported in the Department Population Health Reports and Ballad Health Annual Reports and other sources as deemed appropriate by the Department will be used to calculate the Sub-Index Score, Index Score … and trends that will be" a part of TDH's Annual Review and determination of continuing Public Advantage. However, trends take multiple years to establish and trend lines for persistent population health challenges may take many years to improve.
- The Population Health Sub-Index scoring schedule, as laid out in the TOC, allows a few years for those post-merger trends to be established. For the first three years, the Population Health Sub-Index score is based on investments, development and implementation of plans, and infrastructure building.

The following table (Table 1) shows the Year 2 calculation for the Population Health Sub-Index Score for the Ballad Health COPA:

Population Health Sub-Index Data Table – for Year 2

TABLE 1

Year 2 Requirement	Year 2 Goal	Status	Percentage weight

Investment in Population Health (incremental spending commitment)	$2,000,000 Commitment	Ballad exceeded the $2,000,000 incremental spending commitment for Year 2	25 (out of 25)
Achievement of Process Measures Identified in the Population Health Plan	Achieve 46 of the Process Measures identified in the Fiscal Year 2020 Implementation Roadmap	42 of the 46 process measures were achieved	68.5 (out of 75)
Year 2 Population Health Sub-Index score			**93.5** (out of 100)

The Department Access to Health Services Report

Reference – The Department's **2019** Access to Health Services Report can be found here.
Current Year – The Department's **2020** Access to Health Services Report can be found here.

- The 28 Access Sub-Index measures include those related to geographic proximity, emergency department response, personnel requirements and recruitment, and behavioral care access. Data sources include health system records, BRFSS, and Tennessee Hospital Discharge Data System. Success is indicated by maintaining and/or improving the values, depending upon the measure.
- Ballad Health calculated the values on 25 of the 28 Access Sub-Index measures. Each of those 25 measures have a defined source, timeframe, and methodology that are detailed in an Access Measures Data Dictionary created by Ballad Health.
- The values for two of the Access Sub-Index measures, Personal Care Provider and Prenatal Care in the First Trimester, were calculated by TDH staff from State data.
- Discussion is still underway about how to best measure Specialist Recruitment and Retention while acknowledging the importance of both in-person and tele-presence availability. Baseline and Year 2 values for all remaining defined measures are presented in Table 2 below.

Findings:

- Both pediatric readiness of emergency departments and appropriate emergency department wait times have improved slightly in the last year.
- Both Appropriate Use of Care measures have improved in the last year.

    - Preventable hospitalizations among older adults have declined from 63.8 discharges per 1,000 people 65+ to 55.9 discharges.
    - Preventable hospitalizations among all adults have declined from 22.9 discharges per 1,000 people to 20.9 discharges.

- Secondary prevention screenings remain comparable to 2019.
- Asthma emergency department visits are roughly on par with last year. Prenatal care in the first trimester increased slightly from 70.5% to 75.6% of births.
- Seven-day follow-up after hospitalization for mental illness increased from 24.1% in 2019 to 30.4% in 2020. Thirty-day follow-up did not change.
- Antidepressant medication management improved slightly as effective acute phase treatment improved from 76.8% to 80.3% of patients and effective continuation phase treatment improved from 62.1% to 67.5% of patients.
- Engagement of alcohol or drug treatment and SBIRT administration upon admission or ED visit remain very low and are essentially unchanged.
- Consumer satisfaction surveys and reports are 100% in compliance.

<u>Year 2 Access Sub-Index scoring:</u>

- As no analyses on statistically significant or meaningful differences were conducted, the Year 2 scoring is based on the differences in raw baseline values compared to the raw Fiscal Year 2020 values.
- According to the TOC, "data reported in the Department Access to Health Services Report and the New Health System Annual Report and other sources as deemed appropriate by the Department will be used to calculate the Sub-Index Score … and trends that will be reported in the Department Annual Report."
- For the second year of the 10 Year Period, the New Health System is required to maintain (or improve upon) baseline performance on the Access Measures

The following table (Table 2) shows the year 2 calculation of the Access Sub-Index for the Ballad Health COPA:

Access Sub-Index Data Table – for Year 2

TABLE 2

	Measure	Baseline GSA Value	Year 2 GSA Value	Achieved (Weight)
CHARACTERISTICS OF HEALTH DELIVERY SYSTEM				
1	Population within 10 miles of an urgent care center	80.5%	81.9%	**Y** (4.0%)
2	Population within 10 miles of an urgent care center open nights & weekends	70.3%	72.1%	**Y** (4.0%)
3	Population within 10 miles of Urgent Care Facility or Emergency Department	98.9%	99.7%	**Y** (4.0%)
4	Population within 15 miles of an Emergency Department	97.3%	97.3%	**Y** (4.0%)
5	Population within 15 miles of an acute care hospital	97.3%	97.3%	**Y** (4.0%)
6	Pediatric Readiness of Emergency Department	66.6%	72.6%	**Y** (4.0%)
7	Appropriate Emergency Department Wait Times	40.7%	45.7%	**Y** (3.0%)
8	Specialist Recruitment and Retention †	n/a	n/a	n/a
UTILIZATION OF HEALTH SERVICES				
	Primary Care			
9	Personal Care Provider	80.5%	80.2%	**N** (3.5%)
	Appropriate Use of Care			
10	Preventable Hospitalizations– Older Adults (discharges per 1,000 people 65+)	72.2	55.9	**Y** (2.5%)
11	Preventable Hospitalizations-Adults (discharges per 1,000 people 18+)	25.6	20.9	**Y** (3.5%)
	Secondary Prevention (Screenings)			
12	Screening - Breast Cancer	74.1%	75.6%	**Y** (2.0%)
13	Screening - Cervical Cancer	63.8%	65.3%	**Y** (2.0%)
14	Screening - Colorectal Cancer	46.4%	47.3%	**Y** (2.0%)
15	Screening – Diabetes	71.2%	*72.5%*	**Y** (3.0%)
16	Screening – Hypertension	97.6%	99.2%	**Y** (4.0%)
	Infant and Children			
17	Asthma Emergency Department Visits Per 10,000 (Age 0-4) *	60.4	47.3	**Y** (2.5%)
18	Asthma Emergency Department Visits Per 10,000 (Age 5-14) *	41.5	38.1	**Y** (2.5%)
19	Prenatal care in the first trimester	66.8	75.6%	**Y** (2.0%)
	Mental Health & Substance Abuse			
20	Follow-Up After Hospitalization for Mental Illness (% Within 7 Days Post-Discharge)	33.3%	*30.4%*	**N** (3.5%)
21	Follow-Up After Hospitalization for Mental Illness (% Within 30 Days Post-Discharge)	58.6%	*47.2%*	**N** (3.5%)
	Antidepressant Medication Management			
22	Effective Acute Phase Treatment (84 days)	75.5%	80.3%	**Y** (1.5%)
23	Effective Continuation Phase Treatment (180 days)	65.3%	67.5%	**Y** (1.5%)
24	Engagement of AOD (Alcohol or Drug) Treatment	1.9%	6.1%	**Y** (3.5%)
25	Rate of SBIRT administration - hospital admissions	0.0%	0.20%	**Y** (3.5%)

26	Rate of SBIRT administration - ED visits	0.0%	5.60%	**Y** (3.5%)
CONSUMER SATISFACTION				
27	Patient Satisfaction and Access Surveys	n/a	100%	**Y** (10.0%)
28	Patient Satisfaction and Access Survey - Response Report	n/a	100%	**Y** (10.0%)
	The raw sum of achieved weights before adjusting for the removal of measure #8:			86.5%
	Adjusted Year 2 Access Sub-Index Score *(86.5 ÷ 97 = 89.2%)*			**89.2%**

† = There was no agreed upon definition by Ballad Health and TDH for Access measure 8, Specialist Recruitment and Retention. Therefore, this measure will not be included in the Year 2 Access Sub-Index Score calculation. The 3.0% weight originally assigned to this measure is being removed from both the numerator and denominator to proportionately distribute the missing 3.0% across the remaining measures.

* = 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.

The Department Other (Quality) Report.

Reference - The Department's **2019** Other (Quality) Report is available here.

Current Year - The Department's **2020** Other (Quality) Report can be found here.

- The Other Sub-Index is undergoing significant changes to improve the usability and consistency of the reported data. By shifting data flows from being dependent upon the Centers for Medicare and Medicaid Services (CMS) data and methodologies to a flow that incorporates a private data aggregator using widely-accepted, stable and consistent methodologies and definitions, the Department will be able to better compare measures over time and across systems.

- Quality data for Fiscal Years 2018 and 2019 were submitted using the new aggregated data flow (using Ballad Health's quality data vendors, Premier, Inc. and Press Ganey for risk-adjusting and aggregating Ballad's quality data). Original baselines (on Fiscal Year 2017) used only Medicare patient data. The process of establishing and switching to improved baselines paused in FY20 due to the higher priority work demands related to COVID-19.

- While the data flow has changed significantly, the original 16 Target Quality Measures (measures that focus on items that can cause harm, such as hospital infection and adverse event rates) and the 83 Quality Monitoring Measures (which focus on processes, communications, and other quality-related operational methods) have undergone only minor changes:

- Central Venous Catheter-Related Blood Stream Infection Rate, formerly Target Quality Measure #3, was removed, due to CMS having retired the measure. Its replacement measure, Sepsis Management Bundle, was approved by TDH in 2019.
- The original Surgical Site Infection (SSI) measure combined the rates for both Colon and Hysterectomy SSIs. In 2019 TDH agreed to separate these measures raising the number of Target Quality Measures from 16 to 17.

Findings:

Note: all comparisons are to the baseline measurements presented in the 2020 Other (Quality) Report, which can be accessed here.

- Of the 17 quality target measures
  - 13 of the measures improved.
  - Four measures declined.
- Of the quality target measures that improved, occurrences of the following measures declined by 50% or more:
  - PSI 6 Iatrogenic Pneumothorax Rate
  - PSI 8 In-Hospital Fall with Hip Fracture Rate
  - PSI 9 Perioperative Hemorrhage or Hematoma Rate, and
  - PSI 11 Postoperative Respiratory Failure Rate
- Quality target measures that worsened as a result of increasing are:
  - PSI 3 Pressure Ulcer Rate (from 0.29 to 0.31 per 1,000 discharges),
  - SSI Colon Surgical Site Infection rate (from 1.166 to 2.496 per 100 patients),
  - SSI HYST Surgical Site Infection rate (from 1.000 to 1.026 per 100 patients), and
  - MRSA (from 0.040 to 0.057 infections per 1,000 discharges).
- Surveys of the patient's experience yielded similar results from baseline with no measure changing by more than 0.1 which corresponds to 10%.
  - Patients reporting their room and bathroom were always clean increased by 0.1 (10%).

- Three measures related to sharing information with the patient all declined. Information sharing measures include:
    - HCOMP5A P: Patients who reported that staff "always" explained about medicines before giving it to them.
    - HCOMP6Y P: Patients who reported YES, they were given information about what to do during their recovery at home, and
    - HCOMP7SA: Patients who "strongly agree" they understood their care when they left the hospital

- Across the system and within Tennessee, the death rate among surgical patients with serious treatable complications (PSI4SURG COMP for full definition of measure) rose. In Tennessee, it increased 31% from 135.7 at baseline to 177.8 deaths per 1,000 elective surgical procedures in this report.

Year 2 Other (Quality) Sub-Index scoring:

- For Year 2 scoring, the current baseline data on CMS patients who are not enrolled in Medicare Advantage will be compared to the Fiscal Year 2020 data on all-patients. While the populations are different, both data sets have been risk-adjusted using the same CMS protocols. (All-patient data for Fiscal Year 2017 has been requested and TDH plans to use such data for the baselines for Year 3 and subsequent scoring.)

- There are two components of the Other Sub-Index Score:

    1. Data on **Target Quality Measures** at the system level, state level, and facility level were provided in the Fiscal Year 2020 Ballad Health Annual Report and in the Department's 2020 Other (Quality) Report. For scoring purposes Ballad Health was required to improve performance on the Target Quality Measures or otherwise maintain performance on the Target Quality Measures such that the New Health System's performance remains above either (i) the performance of the New Health System during the baseline year or (ii) the then-current national and/or state estimates of Target Quality Measures, whichever is associated with better quality outcomes, at the system level, beginning in Year 2. Table 3 below shows the Year 2 determination of achievement for each Target Quality Measure.

    2. Data on **Quality Monitoring Measures** at the system level, state level, and facility level were provided in the resubmitted Fiscal Year 2020 Ballad Health Annual Report

and in the Department's 2020 Other (Quality) Report. For scoring purposes, Ballad Health was only required to timely submit data on the Quality Monitoring Measures.

Target Quality Measures Table – for Year 2

TABLE 3

	Ballad Health	Ballad Health	
Target Quality Measures	**Baseline[1]** (CMS patients)	**2020[2]** (All patients)	
PSI 3 Pressure Ulcer Rate	0.29	0.31	Not achieved
PSI 6 Iatrogenic Pneumothorax Rate	0.38	0.13	Achieved
PSI 8 In Hospital Fall with Hip Fracture Rate	0.10	0.05	Achieved
PSI 9 Perioperative Hemorrhage or Hematoma Rate	4.20	1.40	Achieved
PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis	1.02	0.51	Achieved
PSI 11 Postoperative Respiratory Failure Rate	14.40	5.83	Achieved
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	5.35	3.71	Achieved
PSI 13 Postoperative Sepsis Rate	6.16	4.66	Achieved
PSI 14 Postoperative Wound Dehiscence Rate	2.20	1.59	Achieved
PSI 15 Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate	0.90	0.67	Achieved
CLABSI	0.774	0.680	Achieved
CAUTI	0.613	0.589	Achieved
SSI COLON Surgical Site Infection	1.166	2.496	Not achieved
SSI HYST Surgical Site Infection	0.996	1.026	Not achieved
MRSA	0.040	0.057	Not achieved
CDIFF	0.585	0.331	Achieved
Sepsis Management Bundle	56.6%	64.4%	Achieved

[1]Baseline data for the Target Quality Measures at the system were first published in the Department's Updated Other (Quality) Report, updated November 2019.

[2]Year 2 data for the Other (Quality) Sub-Index at the system were first published in the 2020 Ballad Health Annual Report.

The following table (Table 4) shows the Year 2 calculation of the Other Sub-Index for the Ballad Health COPA:

Other Sub-Index Score Table – for Year 2

TABLE 4

	Determination	**Status**	**Maximum possible Percentage weight**	**Year 1 Percentage weight** (calculation)
Target Quality Measures Achieved	13 out of 17 likely improved	76.5% achieved	25	**19.1** (76.5 x .25)
Quality Monitoring Measures Achieved	Data submitted timely	100% achieved	75	**75** (100 x .75)
Year 2 Other Sub-Index score				**94.1** (19.1+75)

Response to the COPA Monitor recommendations

TDH appreciates the excellent work of the COPA Monitor in auditing, investigating, and reporting on his findings regularly to TDH. TDH is in receipt of the COPA Monitor Annual Report for year ending June 30, 2020, which includes two recommendations to the Department. Below are TDH's responses:

COPA Monitor Recommendations to TDH:

- … **leadership from both states (should) work with Ballad Health leadership to modify the regulatory agreements to reduce differences in the regulations between each state. The objective of this recommendation is not to eliminate or minimize any regulation, but rather to make existing regulations more consistent between the two states.**

  TDH agrees with the COPA Monitor's assessment that differences between Tennessee's Terms of Certification and Virginia's Order create extra work and expense. Specific examples include differences between charity expenditure guidelines and the manner by which each state determines whether there is a continuation of Public Advantage. TDH is currently in discussions with Virginia on this issue.

- **(That there be) a revision to the TOC requiring the TDH to perform the duties set forth for the Local Advisory Council (LAC). Furthermore (and that) … the TOC require the formation of a LAC on an ad hoc basis for advice on the investment of the Population Health Initiatives Fund if money is available in the Fund.**

  TDH agrees that there is a need to achieve greater efficiencies regarding the duties and responsibilities of the LAC.

  The LAC was created early in the COPA process to support TDH in collecting and providing feedback from the community and to make decisions related to the investment of the Population Health Initiatives Fund.

  Holding an annual public hearing and providing a report on public input are duties TDH is able to perform independently. TDH has served as the LAC's staff since the body was created in preparing meeting agendas and materials, keeping meeting minutes, posting

public notice of meetings, etc. over the years as well as significant interaction and engagement with the Northeast Tennessee community throughout the COPA process.

Therefore, going forward, the Department will hold the annual public hearing in the region to collect feedback from the community and will include those comments in its Annual Report. TDH will call on former LAC members to provide input on the Population Health Initiatives Fund at the time funding is available. The TOC will be revised accordingly.

Dr. Piercey and the Department are very grateful for the time and contributions of each LAC member who has served.

Department's Recommendations to the COPA Monitor

- **TDH requests that the COPA Monitor assess the ongoing impact of COVID-19 on the system's quality of care and finances and provide a report to the Department on any material findings.**

Department's Recommendations to Ballad

- **Provide annual updates on the percentage of residents in Ballad-Supported Residency Programs who are hired in the region.** As improved access to health services in the GSA is one of the primary goals of the COPA, and Ballad continues to see a provider shortage in the GSA, TDH encourages Ballad to collect data related to recruitment and retention. Specifically, TDH would like updates on the percentage of Ballad supported residents who are hired in the region to help identify opportunities and understand challenges associated with training and retaining physicians in the region.
- **Prepare for the eventual lifting of the State of Emergency.** Ballad has already resumed many activities that were allowed to be suspended for as long as Tennessee remains in a State of Emergency, which is commendable. It would be beneficial to regularly analyze which activities are no longer being impacted by the system's COVID-19 response in order to make the transition out of suspension as seamless as possible.

Conclusion

Current (Year 2) Findings

TDH calculations of the Sub-Index and Final Score agree with the COPA Monitor's recommendations. TDH's calculations for the Index score for Fiscal Year 2020, which align with the recommendations set forth in the COPA Monitor Annual Report, are as follows:

Economic Sub-Index: **Pass**

Sub-Index	Sub-Index Score	Percentage Weight For each Sub-Index	Weighted scores
Population Health	93.5	50%	46.8
Access to Care	89.2	30%	26.8
Other	94.1	20%	18.8
TOTAL			**92.4**

Therefore, pursuant to the Terms of Certification, with a Passing score in the Economic Sub-Index and a Final Score of 92:

> **It is the Tennessee Department of Health's determination that the Ballad Health COPA continues to provide a Public Advantage.**