



# 2019 Other (Quality) Report

Certificate of Public Advantage Other (Quality) Sub-Index  
Measures for Ballad Health

Tennessee Department of Health | COPA Report | February 2020



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# The Ballad Health Certificate of Public Advantage (COPA)

## ***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.

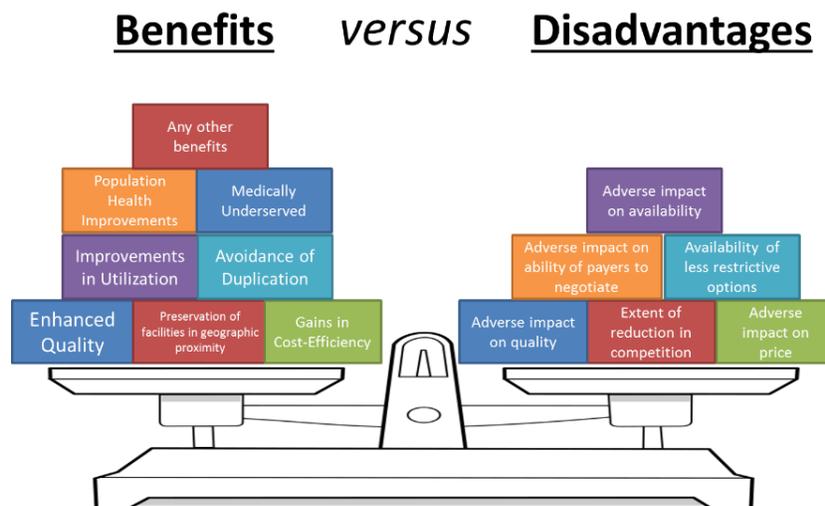
In 2016 Mountain States Health Alliance and Wellmont Health System filed an application with TDH to form a Cooperative Agreement. Together they had a combined market share of over 75 percent in a geographic service area that spans ten counties in northeast Tennessee and 11 counties in southwest Virginia (covering a total square mile area equal to the size of New Jersey) and **impacting 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](#)

## ***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.

# Other (Quality) Sub-Index

## **Introduction**

The Other Sub-Index is comprised of measures to evaluate the quality of hospital and hospital-related care provided to residents at three levels: throughout Ballad Health's entire system, throughout Ballad Health's TN Geographic Service Area, and at the individual facility level.

The Institute of Medicine has defined the quality of health care as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'.<sup>1</sup>

Hospital quality is important for:

- Individual and population health: Measuring and monitoring hospital quality is essential to improving health outcomes and service delivery<sup>2</sup>
- Business: Positive feedback from consumers leads to the goodwill of service providers in the market, which indirectly expands their business<sup>3</sup>
- Cost-effectiveness: Poor quality of care, measured by medical errors in the hospital setting, account for approximately 17 Billion dollars each year<sup>4</sup>

## **Population Health**

While managed care organizations support the principle that community health improvement is beneficial for society, hospital systems are often stymied from this endeavor by the need to focus on reducing patient costs. This issue is further perpetuated by a lack of business incentive to address population health needs within the hospital system. Measurements of hospital quality are being used to align efforts and resources between managed care and public health to enhance the impact on population health outcomes. For example, the US Medicare system

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<sup>1</sup> Institute of Medicine. Medicare: a strategy for quality assurance. 1. Washington, DC: National Academy Press; 1990.

<sup>2</sup> Lieberthal RD, Comer DM. What are the characteristics that explain hospital quality? A longitudinal prdit approach. *Risk Manag Insur Rev.* 2013;17(1):17-35.

<sup>3</sup> Gupta KS, Rokade V. Importance of quality in health care sector: A review. *J Health Manag.* 2016;18(1):84-94.

<sup>4</sup> Van Den Bos J, Rustagi K, Gray T, Malford M, Ziemkiewicz E, Shreve J. The \$17.1 billion problem: the annual cost of measurable medical errors. *Health Aff.* 2011; 30(4):596-603.

has value-based programs in which health care providers are rewarded incentive payments for the quality of care they provide to Medicare beneficiaries.<sup>5</sup> These incentives are in place to motivate hospitals to improve their quality and attract patients. The financial health of the organization is thus dependent on delivering high quality care and improving population health.

### **Competition promotes quality**

Competition in health care markets benefits consumers because it helps contain costs, improve quality, and encourage innovation.<sup>6</sup> In recent years, health care markets have been subject to reforms introducing competition among health care providers. In addition to regulations promoting competition, there are regulations to protect competition. The Federal Trade Commission's job as a law enforcer is to stop health care markets from engaging in anticompetitive conduct that harms consumers.<sup>7</sup> Measuring hospital quality is important to determine if the disadvantages caused by a reduction in competition continue to be outweighed by the benefits of the Cooperative Agreement.

While competition is a strong driver for quality improvement, it is not the only driver. Internal goals for increasing population health and cost-effectiveness are strong motivating forces too. Hospitals can hold themselves accountable for achieving these goals through routine/systematic measuring and monitoring of quality performance measures.

### **Other (Quality) Sub-Index Design**

The purpose of the Other (Quality) Sub-Index is to evaluate the quality of hospital and hospital-related care provided to patients. While this first Other (Quality) report establishes the baseline values for the Sub-Index measures by reporting data available in 2018, subsequent annual reports will contain updated values to track on-going changes in healthcare quality at Ballad Health facilities. Annually, a calculation of these measures will produce an Other (Quality) Sub-Index score, which along with a Population Health Sub-Index score, and an Access to Health Services 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.

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<sup>5</sup> Centers for Medicare & Medicaid Services. What are the value-based programs? <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs.html>. Accessed May 8, 2018.

<sup>6</sup>Brekke KR, Cellini R, Siciliani L, Straume OR. Competition and quality in health care markets: A differential-game approach. *J Health Econ.* 2010; 29(4):508-523.

<sup>7</sup> Federal Trade Commission. Health Care Competition. <https://www.ftc.gov/news-events/media-resources/mergers-competition/health-care-competition>. Accessed May 8, 2018.

The Other (Quality) measures include quality and consumer satisfaction around the following domains:

- Performance of Key Health System Divisions,
- Payer Performance,
- Employer Performance, and
- Scale, Spread, and Sustainability.

Two sets of Quality Measures are included in the Other (Quality) Sub-Index. They are Target Quality Measures and Quality Monitoring Measures.

Target Quality Measures are those for which Ballad should show improvement in quality outcomes. For the first year of the Affiliation, Ballad Health will be required to maintain performance on the Target Quality Measures. For each subsequent year, Ballad Health will be required to improve performance on Target Quality Measures. Achievement of Target Quality Measures account for 25 percent of the Other Sub-Index score.

The Quality Monitoring Measures provide a broad overview of system quality. The goal of these measures is to continually monitor Ballad's performance of with regard to quality. For hospital quality performance, Quality Monitoring Measures will include CMS Hospital Compare measures. Hospital Compare measures that are identified as Target Quality Measures and measures of payment and value of care will be excluded from Quality Monitoring Measures. Ballad will be evaluated on Quality Monitoring Measures for each applicable Ballad Health Entity. Achievement of Quality Monitoring Measures account for 75 percent of the Other (Quality) Sub-Index score.

## 2109 Other (Quality) Sub-Index Data Table – for Year 1

Year 1 data for the Other (Quality) Sub-Index at the system and state level are below and were first published in the 2019 Ballard Health Annual Report. The link to that report is here: <https://www.tn.gov/content/dam/tn/health/documents/copa/FY19-Annual-Report.pdf>

TABLE 1

	Ballad Health	TN Ballard Health
<b>Quality Target Measures</b>	<b>2019</b>	<b>2019</b>
PSI 3 Pressure Ulcer Rate	0.53	0.60
PSI 6 Iatrogenic Pneumothorax Rate	0.13	0.11
PSI 7 Central Venous Catheter-Related Blood Stream Infection Rate	0.05	0.04
PSI 8 In Hospital Fall with Hip Fracture Rate	0.08	0.04
PSI 9 Perioperative Hemorrhage or Hematoma Rate	1.41	1.56
PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis	1.28	1.27
PSI 11 Postoperative Respiratory Failure Rate	7.56	8.00
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	3.16	3.15
PSI 13 Postoperative Sepsis Rate	4.03	4.11
PSI 14 Postoperative Wound Dehiscence Rate	1.48	1.70
PSI 15 Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate	0.27	0.32
CLABSI	0.616	0.664
CAUTI	0.895	0.940
SSI COLON Surgical Site Infection	2.285	2.703
SSI HYST Surgical Site Infection	0.000	0.000
MRSA	0.090	0.097
CDIFF	0.352	0.373

TABLE 2

	Ballad Health	TN Ballard Health
<b>Quality Monitoring Measures</b>		
<b>GENERAL/STRUCTURAL MEASURES</b>	<b>2019</b>	<b>2019</b>
ACS REGISTRY - Retired	Yes	Yes
SMPART GENSURG General Surgery Registry - Retired	Yes	Yes
SMPART NURSE Nursing Care Registry - Retired	Yes	Yes
SMSSCHECK Safe Surgery Checklist	Yes	Yes
OP12 HIT Ability electronically receive lab results	Yes	Yes
OP17 Tracking Clinical Results Between Visits	Yes	Yes
OP25 Outpatient Safe Surgery Checklist	Yes	Yes

	Ballad Health	TN Ballad Health
<b>SURVEY OF PATIENT'S EXPERIENCE</b>	2019	2019
<b>Patients who reported their nurses communicated well</b>		
Always	79.2%	78.2%
Usually	14.7%	16.5%
Sometimes or Never	6.1%	5.3%
<b>Patients who reported their doctors communicated well</b>		
Always	79.7%	74.0%
Usually	14.0%	15.3%
Sometimes or Never	6.3%	5.7%
<b>Patients who reported that they received help as soon as they wanted</b>		
Always	64.6%	64.4%
Usually	24.4%	25.2%
Sometimes or Never	11.1%	10.4%
<b>Patients who reported their pain was well controlled (measure suspended)</b>		
Always	--	--
Usually	--	--
Sometimes or Never	--	--
<b>Patients who reported that staff explained about medicines before giving it to them</b>		
Always	62.5%	61.1%
Usually	16.4%	17.7%
Sometimes or Never	21.1%	21.1%
<b>Patients who reported they were given information about what to do during their recovery at home</b>		
Yes	87.0%	86.3%
No	13.0%	13.7%
<b>Patients understood their care when they left the hospital</b>		
Strongly Agree	47.2%	48.9%
Agree	43.1%	44.9%
Disagree or Strongly Disagree	5.4%	5.4%
<b>Patients who reported their room and bathroom were clean</b>		
Always	70.1%	72.1%
Usually	18.0%	17.8%
Sometimes or Never	11.9%	10.2%
<b>Patients who reported that the area around their room was quiet at night</b>		
Always	61.4%	58.4%
Usually	28.1%	31.3%
Sometimes or Never	10.6%	10.3%
<b>Patients ratings from 0 (lowest) to 10 (highest)</b>		
6 or lower	10.6%	9.6%
7 or 8	21.1%	22.8%
9 or 10	68.3%	67.7%
<b>Patients who reported they would recommend the hospital</b>		
Definitely recommend	68.3%	67.7%
Probably recommend	24.7%	26.2%
Definitely not or Probably not recommend	4.1%	6.1%

	<b>Ballad Health</b>	<b>TN Ballad Health</b>
<b>TIMELY &amp; EFFECTIVE CARE</b>		
<b>Cataract Surgery Outcome %</b>	<b>2019</b>	<b>2019</b>
OP31 Cataracts Improvement - voluntary reporting	--	--
<b>Colonoscopy Followup %</b>		
OP29 Avg Risk Polyp Surveillance	81.6%	89.6%
OP30 High risk Polyp Surveillance	84.0%	82.9%
<b>Heart Attack</b>		
OP3b Median Time to Transfer AMI --- RETIRED	--	--
OP5 Median Time to ECG AMI and Chest Pain RETIRED	--	--
OP2 Fibrinolytic Therapy 30 minutes -too few cases to report	--	--
OP4 Aspirin at Arrival AMI Chest Pain -- RETIRED	--	--
<b>Stroke Care %</b>		
STK4 Thrombolytic Therapy --RETIRED	91.2%	91.2%
<b>Emergency Department Throughput</b>		
EDV Emergency Department Volume	--	--
Median Time from ED Arrival to Transport for Admitted Patients (ED1)	229.80	223.50
ED2b ED Decision to Transport	84.80	76.00
Median Time from ED Arrival to Departure for Outpatients (18b)	123.00	133.50
OP20 Door to Diagnostic Evaluation RETIRED	--	--
OP21 Time to pain medication for long bone fractures RETIRED	--	--
OP22 Left without being seen	0.9%	1.2%
OP23 Head CT stroke patients	76.8%	79.5%
<b>Preventive Care %</b>		
IMM2 Immunization for Influenza	96.5%	95.7%
IMM3OP27 FACADHPCT HCW Influenza Vaccination	99.5%	100.0%
<b>Blood Clot Prevention / Treatment</b>		
VTE5 Warfarin Therapy at Discharge - voluntary reporting	--	--
VTE6 HAC VTE	0.01	0.01
<b>Pregnancy And Delivery Care %</b>		
PC01 Elective Delivery	0.02	0.01
<b>COMPLICATIONS</b>		
<b>Surgical Complications Rate</b>		
Hip and Knee Complications	0.023	0.027
PSI4SURG COMP Death rate among surgical patients with serious treatable complications	149.69	152.12
PSI90 Complications / patient safety for selected indicators	0.91	0.93

	<b>Ballad Health</b>	<b>TN Ballad Health</b>
<b>READMISSIONS 30 DAYS RATE%</b>	<b>2019</b>	<b>2019</b>
READM30 AMI Acute myocardial infarction (AMI) 30day readmission rate	12.0%	11.8%
READM30 CABG Coronary artery bypass graft (CABG) surgery 30day readmission rate	8.9%	8.9%
READM30 COPD Chronic obstructive pulmonary disease 30day readmission rate	17.8%	17.6%
READM30 HIPKNEE 30day readmission rate following elective THA / TKA	3.5%	2.7%
READM30 HOSPWIDE 30day hospitalwide allcause unplanned readmission	11.0%	12.2%
READM30 STK Stroke 30day readmission rate	10.0%	10.3%
READM30HF Heart Failure 30Day readmissions rate	19.9%	16.4%
READM30PN Pneumonia 30day readmission rate	14.3%	14.3%
<b>MORTALITY 30 DAYS DEATH RATE %</b>		
MORT30 CABG Coronary artery bypass graft surgery 30day mortality rate	1.8%	1.8%
MORT30 COPD 30day mortality rate COPD patients	2.3%	2.4%
MORT30AMI Acute myocardial infarction (AMI) 30day mortality rate	3.9%	3.9%
MORT30HF Heart failure 30day mortality rate	3.5%	3.7%
MORT30PN Pneumonia 30day mortality rate	4.4%	4.5%
MORT30STK Stroke 30day mortality rate	5.4%	5.7%
<b>USE OF MEDICAL IMAGING OUTPATIENT</b>		
OP8 MRI Lumbar Spine for Low Back Pain - Annual	0.38	0.37
OP9 Mammography Followup Rates - Annual	0.07	0.08
OP10 Abdomen CT Use of Contrast Material - Annual	0.07	0.08
OP11 Thorax CT Use of Contrast Material - Annual	0.01	0.01
OP13 Outpatients who got cardiac imaging stress tests before lowrisk outpatient surgery - Annual	0.04	0.04
OP14 Outpatients with brain CT scans who got a sinus CT scan at the same time - Annual	0.01	0.01

(Baseline data can be accessed here: <https://www.tn.gov/content/dam/tn/health/documents/copa/COPA-Sub-Index-Baseline-Reports-2019.11.30.pdf>)

Year 1 data for the Other (Quality) Sub-Index by TN facility are in Table 2 below. (Baseline data can be accessed here: <https://www.tn.gov/content/dam/tn/health/documents/copa/COPA-Sub-Index-Baseline-Reports-2019.11.30.pdf>)

TABLE 3

	Johnson City Medical Center	Bristol Regional Medical Center	Holston Valley Medical Center	Franklin Woods Community Hospital	Hancock County Hospital	Hawkins County Memorial Hospital	Indian Path Community Hospital	Sycamore Shoals Hospital	Johnson County Community Hospital	Unicoi County Hospital	Greeneville Community Hospital
<b>Quality Target Measures</b>	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
PSI 3 Pressure Ulcer Rate	0.18	0.59	1.65	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00
PSI 6 Iatrogenic Pneumothorax Rate	0.13	0.07	0.06	0.27	0.00	0.00	0.31	0.00	0.00	0.00	0.00
PSI 7 Central Venous Catheter-Related Blood Stream Infection Rate	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PSI 8 In Hospital Fall with Hip Fracture Rate	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PSI 9 Perioperative Hemorrhage or Hematoma Rate	0.93	2.42	1.67	2.80	--	0.00	0.00	0.00	--	--	3.53
PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis	1.97	2.10	0.62	0.00	--	0.00	0.00	0.00	--	--	0.00
PSI 11 Postoperative Respiratory Failure Rate	6.35	11.18	9.16	5.08	--	0.00	0.00	0.00	--	--	8.62
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	3.46	3.44	2.42	5.25	--	0.00	3.94	0.00	--	--	6.71
PSI 13 Postoperative Sepsis Rate	2.43	3.94	4.83	7.54	--	0.00	5.46	4.72	--	--	8.77
PSI 14 Postoperative Wound Dehiscence Rate	1.74	3.26	2.01	0.00	--	0.00	0.00	0.00	--	--	0.00
PSI 15 Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate	0.00	1.27	0.00	0.00	--	0.00	0.00	0.00	--	--	0.00
CLABSI	1.215	0.383	0.379	0.000	--	0.000	0.000	0.000	--	0.000	1.862
CAUTI	2.519	1.165	0.304	0.000	--	0.000	0.935	0.000	--	0.000	0.000
SSI COLON Surgical Site Infection	5.645	0.000	5.236	2.381	--	0.000	1.667	3.448	--	--	0.000
SSI HYST Surgical Site Infection	0.000	0.000	0.000	0.000	--	--	0.000	0.000	--	--	0.000
MRSA	0.124	0.092	0.105	0.041	--	0.000	0.000	0.070	--	0.000	0.114
CDIFF	0.308	0.309	0.487	0.317	--	0.514	0.763	0.350	--	0.000	0.242
<b>Quality Target Measures</b>											
<b>GENERAL/STRUCTURAL MEASURES</b>	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
ACS REGISTRY - Retired	Yes	Yes	Yes	Yes	No	No	Yes	Yes	--	No	No
SMPART GENSURG General Surgery Registry - Retired	Yes	Yes	Yes	Yes	No	No	Yes	Yes	--	No	No
SMPART NURSE Nursing Care Registry - Retired	Yes	Yes	Yes	Yes	No	No	Yes	Yes	--	No	No
SMSSCHECK Safe Surgery Checklist	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	--	Yes	Yes
OP12 HIT Ability electronically receive lab results	Yes	Yes	Yes	Yes	--	No	Yes	Yes	--	Yes	Yes
OP17 Tracking Clinical Results Between Visits	Yes	Yes	Yes	Yes	--	Yes	Yes	Yes	--	Yes	Yes
OP25 Outpatient Safe Surgery Checklist	Yes	Yes	Yes	Yes	--	Yes	Yes	Yes	Yes	Yes	Yes

	Johnson City Medical Center	Bristol Regional Medical Center	Holston Valley Medical Center	Franklin Woods Community Hospital	Hancock County Hospital	Hawkins County Memorial Hospital	Indian Path Community Hospital	Sycamore Shoals Hospital	Johnson County Community Hospital	Unicoi County Hospital	Greenville Community Hospital
<b><i>SURVEY OF PATIENT'S EXPERIENCE</i></b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>
<b>Patients who reported their nurses communicated well</b>											
Always	75.3%	81.6%	79.4%	81.2%	92.6%	84.4%	79.7%	82.4%	100.0%	81.7%	74.4%
Usually	18.4%	11.5%	13.0%	14.6%	4.6%	9.1%	15.2%	13.9%	0.0%	13.4%	17.6%
Sometimes or Never	6.3%	7.0%	7.5%	4.2%	2.8%	6.5%	5.1%	3.7%	0.0%	5.0%	8.0%
<b>Patients who reported their doctors communicated well</b>											
Always	75.0%	81.1%	80.0%	82.9%	88.0%	82.0%	81.5%	82.9%	60.0%	83.1%	78.5%
Usually	17.6%	11.8%	12.7%	13.0%	8.3%	11.6%	13.7%	11.6%	20.0%	11.9%	14.0%
Sometimes or Never	7.4%	7.1%	7.3%	4.1%	3.7%	6.4%	4.9%	5.4%	20.0%	5.0%	7.6%
<b>Patients who reported that they received help as soon as they wanted</b>											
Always	61.9%	65.5%	62.6%	66.1%	90.5%	74.8%	60.2%	73.0%	100.0%	75.9%	64.0%
Usually	27.1%	22.5%	24.1%	24.0%	7.1%	18.5%	30.2%	21.3%	0.0%	18.1%	23.7%
Sometimes or Never	11.0%	12.0%	13.3%	9.9%	2.4%	6.6%	9.6%	5.7%	0.0%	6.0%	12.3%
<b>Patients who reported their pain was well controlled (measure suspended)</b>											
Always	--	--	--	--	--	--	--	--	--	--	--
Usually	--	--	--	--	--	--	--	--	--	--	--
Sometimes or Never	--	--	--	--	--	--	--	--	--	--	--
<b>Patients who reported that staff explained about medicines before giving it to them</b>											
Always	58.2%	65.7%	62.9%	67.1%	75.0%	70.2%	64.3%	66.0%	100.0%	52.7%	60.9%
Usually	17.9%	13.5%	15.0%	17.2%	15.0%	9.6%	15.9%	16.7%	0.0%	21.8%	17.1%
Sometimes or Never	24.0%	20.8%	22.1%	15.6%	10.0%	20.2%	19.9%	17.2%	0.0%	25.5%	21.9%
<b>Patients who reported they were given information about what to do during their recovery at home</b>											
Yes	85.9%	88.5%	87.7%	88.1%	92.9%	86.3%	88.1%	84.3%	80.0%	82.2%	85.1%
No	14.1%	11.5%	12.3%	11.9%	7.1%	13.7%	11.9%	15.7%	20.0%	17.8%	14.9%
<b>Patients understood their care when they left the hospital</b>											
Strongly Agree	45.0%	49.4%	47.6%	55.1%	47.5%	45.6%	48.2%	44.4%	46.7%	50.8%	41.3%
Agree	44.2%	41.7%	43.2%	37.0%	45.5%	43.5%	42.0%	44.9%	46.7%	39.2%	45.4%
Disagree or Strongly Disagree	7.4%	4.2%	4.4%	4.2%	0.0%	4.3%	5.3%	5.8%	0.0%	6.9%	6.7%

	Johnson City Medical Center	Bristol Regional Medical Center	Holston Valley Medical Center	Franklin Woods Community Hospital	Hancock County Hospital	Hawkins County Memorial Hospital	Indian Path Community Hospital	Sycamore Shoals Hospital	Johnson County Community Hospital	Unicoi County Hospital	Greenville Community Hospital
<b>Patients who reported their room and bathroom were clean</b>	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
Always	63.4%	68.1%	63.9%	77.8%	86.1%	78.0%	81.2%	81.1%	80.0%	82.8%	64.3%
Usually	21.5%	18.5%	19.3%	15.6%	2.8%	16.9%	13.3%	13.2%	20.0%	13.8%	20.3%
Sometimes or Never	15.0%	13.4%	16.8%	6.7%	11.1%	5.1%	5.5%	5.7%	0.0%	3.4%	15.4%
<b>Patients who reported that the area around their room was quiet at night</b>											
Always	48.4%	66.9%	62.9%	70.4%	82.9%	75.0%	61.3%	66.2%	60.0%	72.1%	57.5%
Usually	35.7%	22.9%	24.9%	25.6%	14.3%	16.7%	30.6%	27.1%	40.0%	20.9%	30.5%
Sometimes or Never	15.9%	10.2%	12.2%	4.0%	2.9%	8.3%	8.1%	6.8%	0.0%	7.0%	12.0%
<b>Patients ratings from 0 (lowest) to 10 (highest)</b>											
6 or lower	14.5%	9.8%	9.7%	6.6%	2.8%	5.2%	7.7%	6.8%	20.0%	6.8%	15.5%
7 or 8	23.5%	21.3%	22.8%	16.4%	11.1%	25.0%	24.5%	15.6%	0.0%	8.0%	22.1%
9 or 10	61.9%	68.9%	67.5%	77.0%	86.1%	69.8%	67.8%	77.6%	80.0%	85.2%	62.4%
<b>Patients who reported they would recommend the hospital</b>											
Definitely recommend	60.0%	71.6%	71.5%	80.5%	82.9%	69.3%	73.4%	72.4%	80.0%	78.4%	56.9%
Probably recommend	30.8%	22.1%	22.0%	15.3%	17.1%	26.3%	20.6%	22.1%	0.0%	17.0%	31.7%
Definitely not or Probably not recommend	4.8%	3.6%	3.8%	3.0%	0.0%	3.5%	3.9%	2.7%	20.0%	3.4%	6.3%
	Johnson City Medical Center	Bristol Regional Medical Center	Holston Valley Medical Center	Franklin Woods Community Hospital	Hancock County Hospital	Hawkins County Memorial Hospital	Indian Path Community Hospital	Sycamore Shoals Hospital	Johnson County Community Hospital	Unicoi County Hospital	Greenville Community Hospital
<b>TIMELY &amp; EFFECTIVE CARE</b>											
<b>Cataract Surgery Outcome %</b>											
OP31 Cataracts Improvement - voluntary reporting	--	--	--	--	--	--	--	--	--	--	--
<b>Colonoscopy Followup %</b>											
OP29 Avg Risk Polyp Surveillance	100.0%	55.0%	75.0%	75.0%	--	100.0%	100.0%	100.0%	--	--	90.3%
OP30 High risk Polyp Surveillance	81.5%	48.3%	97.4%	87.1%	--	92.7%	83.3%	78.4%	--	--	85.4%
<b>Heart Attack</b>											
OP3b Median Time to Transfer AMI --- RETIRED	--	--	--	--	--	--	--	--	--	--	--
OP5 Median Time to ECG AMI and Chest Pain RETIRED	--	--	--	--	--	--	--	--	--	--	--
OP2 Fibrinolytic Therapy 30 minutes -too few cases to report	--	--	--	--	--	--	--	--	--	--	--
OP4 Aspirin at Arrival AMI Chest Pain -- RETIRED	--	--	--	--	--	--	--	--	--	--	--

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<b>Stroke Care %</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>
STK4 Thrombolytic Therapy --RETIRED	75.0%	100.0%	100.0%	--	--	--	--	--	--	--	--
<b>Emergency Department Throughput</b>											
EDV Emergency Department Volume	40.00	30.00	40.00	20.00	20.00	10.00	20.00	20.00	10.00	10.00	20.00
Median Time from ED Arrival to Transport for Admitted Patients (ED1)	<b>285.50</b>	<b>293.50</b>	<b>445.50</b>	<b>259.80</b>	--	<b>232.50</b>	<b>203.50</b>	<b>207.30</b>	<b>143.00</b>	<b>209.50</b>	<b>256.80</b>
ED2b ED Decision to Transport	<b>108.00</b>	<b>116.00</b>	<b>225.00</b>	<b>79.00</b>	<b>56.00</b>	<b>64.50</b>	<b>58.50</b>	<b>70.00</b>	<b>51.00</b>	<b>53.50</b>	<b>84.00</b>
Median Time from ED Arrival to Departure for Outpatients (18b)	<b>174.30</b>	<b>157.50</b>	<b>177.50</b>	<b>153.00</b>	<b>117.50</b>	<b>86.50</b>	<b>124.50</b>	<b>119.00</b>	<b>81.00</b>	<b>133.80</b>	<b>130.20</b>
OP20 Door to Diagnostic Evaluation RETIRED	--	--	--	--	--	--	--	--	--	--	--
OP21 Time to pain medication for long bone fractures RETIRED	--	--	--	--	--	--	--	--	--	--	--
OP22 Left without being seen	<b>1.1%</b>	<b>1.5%</b>	<b>2.1%</b>	<b>0.8%</b>	<b>0.6%</b>	<b>0.4%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.8%</b>
OP23 Head CT stroke patients	<b>75.0%</b>	<b>100.0%</b>	<b>75.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>75.0%</b>	<b>83.3%</b>	--	<b>0.0%</b>	<b>66.7%</b>
<b>Preventive Care %</b>											
IMM2 Immunization for Influenza	<b>97.6%</b>	<b>98.4%</b>	<b>96.3%</b>	<b>100.0%</b>	--	<b>100.0%</b>	<b>100.0%</b>	<b>99.5%</b>	<b>50.0%</b>	<b>44.0%</b>	<b>83.6%</b>
IMM3OP27 FACADHPCT HCW Influenza Vaccination	--	<b>100.0%</b>	--	--	--	--	--	--	--	--	--
<b>Blood Clot Prevention / Treatment</b>											
VTE5 Warfarin Therapy at Discharge - voluntary reporting	--	--	--	--	--	--	--	--	--	--	--
VTE6 HAC VTE	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.14</b>
<b>Pregnancy And Delivery Care %</b>											
PC01 Elective Delivery	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	--	--	<b>0.06</b>	--	--	--	<b>0.00</b>
<b>COMPLICATIONS</b>											
<b>Surgical Complications Rate</b>											
Hip and Knee Complications	<b>0.018</b>	--	--	--	--	--	<b>0.106</b>	<b>0.047</b>	--	--	--
PSI4SURG COMP Death rate among surgical patients with serious treatable complications	<b>182.19</b>	<b>143.79</b>	<b>151.96</b>	<b>78.95</b>	--	--	<b>28.57</b>	<b>125.00</b>	--	--	--
PSI90 Complications / patient safety for selected indicators	<b>0.67</b>	<b>0.86</b>	<b>0.82</b>	<b>0.89</b>	<b>1.00</b>	<b>0.95</b>	<b>0.85</b>	<b>0.87</b>	<b>1.00</b>	--	<b>1.06</b>

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<b>READMISSIONS 30 DAYS RATE%</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>
READM30 AMI Acute myocardial infarction (AMI) 30day readmission rate	10.9%	10.8%	10.2%	33.3%	--	0.0%	6.9%	23.1%	--	0.0%	10.0%
READM30 CABG Coronary artery bypass graft (CABG) surgery 30day readmission rate	11.3%	11.0%	6.0%	--	--	--	--	--	--	--	--
READM30 COPD Chronic obstructive pulmonary disease 30day readmission rate	13.9%	20.3%	20.4%	8.5%	11.1%	8.2%	8.9%	16.5%	0.0%	10.6%	17.0%
READM30 HIPKNEE 30day readmission rate following elective THA / TKA	2.9%	4.2%	1.7%	--	--	--	5.9%	2.9%	--	--	0.0%
READM30 HOSPWIDE 30day hospitalwide allcause unplanned readmission	11.1%	12.4%	10.8%	5.8%	9.4%	8.3%	7.8%	11.2%	0.0%	7.9%	10.8%
READM30 STK Stroke 30day readmission rate	9.3%	8.6%	10.5%	0.0%	--	0.0%	4.5%	4.0%	--	0.0%	20.0%
READM30HF Heart Failure 30Day readmissions rate	21.3%	22.8%	18.6%	17.4%	14.3%	7.7%	16.7%	22.9%	--	13.6%	8.3%
READM30PN Pneumonia 30day readmission rate	15.3%	16.2%	15.2%	7.7%	5.9%	10.4%	12.1%	9.5%	0.0%	--	11.3%
<b>MORTALITY 30 DAYS DEATH RATE %</b>											
MORT30 CABG Coronary artery bypass graft surgery 30day mortality rate	3.0%	0.5%	2.5%	--	--	--	--	--	--	--	--
MORT30 COPD 30day mortality rate COPD patients	3.3%	1.8%	3.1%	1.0%	0.0%	2.0%	4.8%	1.4%	0.0%	--	0.0%
MORT30AMI Acute myocardial infarction (AMI) 30day mortality rate	5.2%	3.5%	4.7%	0.0%	--	25.0%	6.5%	13.3%	--	--	0.0%
MORT30HF Heart failure 30day mortality rate	4.8%	3.8%	3.9%	0.0%	0.0%	0.0%	4.8%	1.8%	--	--	3.7%
MORT30PN Pneumonia 30day mortality rate	7.1%	4.0%	5.3%	2.9%	5.6%	1.7%	3.8%	4.4%	0.0%	--	2.9%
MORT30STK Stroke 30day mortality rate	11.6%	2.5%	3.2%	0.0%	--	0.0%	0.0%	3.8%	--	--	0.0%
<b>USE OF MEDICAL IMAGING OUTPATIENT</b>											
OP8 MRI Lumbar Spine for Low Back Pain - Annual	0.35	0.36	0.41	--	--	--	--	--	--	--	--
OP9 Mammography Followup Rates - Annual	0.05	0.10	0.04	--	--	0.04	0.06	0.08	0.08	0.08	0.08
OP10 Abdomen CT Use of Contrast Material - Annual	0.08	0.06	0.11	0.16	0.06	0.06	0.07	0.08	0.10	0.12	0.08
OP11 Thorax CT Use of Contrast Material - Annual	0.00	0.01	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00
OP13 Outpatients who got cardiac imaging stress tests before lowrisk outpatient surgery - Annual	0.03	0.06	0.04	0.07	--	--	0.05	--	--	--	--
OP14 Outpatients with brain CT scans who got a sinus CT scan at the same time - Annual	0.02	0.01	0.01	--	--	0.00	0.00	--	--	0.00	--

# Other (Quality) Appendix:

## ***Other (Quality) Sub-Index Data Notes***

The COPA Quality **Target** Measures are comprised of the following Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures:

- 11 Agency for Healthcare Research and Quality (AHRQ) Quality Indicators
  - These 11 measures make up the Patient Safety and Adverse Events Composite, also known as PSI 90, as updated 8-31-16, and referred to as v6.0, and were the most updated and modified version of the Patient Safety Indicators for Selected Indicators Quality Indicator Composite as of the drafting of the [Terms of Certification](#).
  - The AHRQ's PSI 90 Fact Sheet can be accessed here: [https://www.qualityindicators.ahrq.gov/News/PSI90\\_Factsheet\\_FAQ.pdf](https://www.qualityindicators.ahrq.gov/News/PSI90_Factsheet_FAQ.pdf)
- Five Hospital Acquired Condition measures were originally part of the COPA's Quality Target Measures list. These five measures, along with the CMS PSI 90 measures referenced above, comprise the measures in the Centers for Medicare and Medicaid Services Hospital-Acquired Conditions Reduction Program.
  - One of the measures, Surgical Site Infections (SSI) has subsequently been split into two measures for the Other (Quality) Sub-Index Table 1 and 2: Colon Surgical Site Infection and Hysterectomy Surgical Site Infection.
  - An overview from QualityNet of the Hospital Acquired Condition (HAC) Reduction Program can be accessed here: <https://www.qualitynet.org/inpatient/hac>

The COPA Quality **Monitoring** Measures consist of measures reported on Hospital Compare. Hospital Compare measures were selected by CMS Hospital Quality Initiative as they related to hospital performance and quality of care.

- These 83 measures fall under several performance categories: general/structural, patient experience, timely & effective care, complications, readmission, mortality, and efficient use of medical imaging.
- Hospitals may not be able to report data on all measures, due to the number and types of patients they treat.
- More information on Hospital Compare measures can be accessed here: <https://www.medicare.gov/hospitalcompare/Data/Measure-groups.html#>

## ***Other (Quality) Sub-Index Score calculation***

<b><u>Commitment/Outcome</u></b>	<b><u>Percentage Weight</u></b>
Target Quality Measures Achieved	25
Quality Monitoring Measures Achieved	75
<b>Total</b>	<b><u>100</u></b>

### ***Final score calculation:***

1. Determine score (pass or fail) for Economic Sub-Index.
2. If applicable, determine impact of a failing score on the Economic Sub-Index on continuing public advantage.
3. If the result of Item 2 indicates a possible continuing public advantage, then determine from the results of the Annual Review the numerical score ranging from 0 to 100 for each Sub-Index (excluding the Economic Sub-Index).
4. Multiply the applicable score for each Sub-Index by its assigned weighting:

<b><u>Sub-Index</u></b>	<b><u>Percentage Weight</u></b>
Population Health	50%
Access to Care	30%
Other	<u>20%</u>
<b>Total</b>	<b><u>100%</u></b>

5. Add results of Item 4 for Final Score.
6. Application of Final Score to Public Advantage:

<b><u>Final Score</u></b>	<b><u>Public Advantage Clear and Convincing?</u></b>
(≥ 85)	Yes
(60-<85)	Unclear. All facts and circumstances to be considered in determination of continuing public advantage. May constitute noncompliance and/or result in proposal by the department of a COPA modification.
(< 60)	No. COPA revoked absent compelling circumstances, including without limitation additional COPA modifications proposed by the department.

## ***Credits***

**Commissioner Lisa Piercey, MD, MBA, FAAP.**

### **TDH Division of Health Planning**

- Jeff Ockerman
- Judi Knecht
- Elizabeth Jones

### **Arundel Metrics**

- Tom Eckstein
- Sarah Milder
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### **TDH Office of Population Health Surveillance**

- Shalini Parekh
- Lindsey Hall
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- Fred Croom
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### **TDH Office of Informatics and Analytics**

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- Ben Tyndall
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### **Tennessee Department of Education**

- Mark Bloodworth
- Lori Paisley
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### **TDH Division of Family Health and Wellness**

- Joana Rosales

### **TDH Office of Primary Prevention**

- John Vick

### **TDH Office of Communication & Media Relations**

- Shelley Walker