THE FIRST REPORT OF

THE BALLAD MERGER MONITOR

OF THE

SOUTHWEST VIRGINIA HEALTH AUTHORITY

TO

THE BOARD OF DIRECTORS

OF THE

SOUTHWEST VIRGINIA HEALTH AUTHORITY

January 3, 2020

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Contents

I. INTRODUCTION

1.1 Merger Occurred on January 31, 2018 and Is Still Being Implemented

The Virginia Commissioner of Health approved the merger forming Ballad on October 30, 2017, and at approximately the same time by the State of Tennessee. The merger occurred on January 31, 2018. Health care is complex, and it takes time to form a unitary organization out of two large separate organizations with a total of 21 hospital facilities, many more nonhospital sites, approximately 15,000 employees, and more than $2 billion in revenue. For example, Ballad faces a major task in converting to a single computer system, and presently plans to complete that task with a "go live" date of October 1, 2020. As you can see driving around the region, Ballad has not completed changing the signs for all its sites and there are still many sites labeled Wellmont or Mountain States. As of today, there are different charge structures at legacy Wellmont and legacy Mountain States facilities, both in how items are charged and the amounts of those charges, although Ballad does have a plan for going to a unified charge structure. While most policies have been made uniform at all facilities, there are still some policies that are under review. Based on my familiarity with other health care mergers, Ballad is proceeding expeditiously and competently in fashioning a single organization from the two legacy organizations, but that process is not completed.

1.2 Ballad's Annual Report Was Submitted October 28, 2019 and Includes Confidential Information

Ballad has a fiscal year ending June 30. Thus, it has completed two fiscal periods since the merger on January 31, 2018, one short fiscal year of February through June, 2018, and a full fiscal year ending June 30, 2019. Ballad is required to submit an annual report for each fiscal year, and it submitted its annual report for FY 2019 on October 28, 2019. That annual report has two parts, one composed of more than 200 pages of nonconfidential material, and the other containing nearly 400 additional pages of material that Ballad has labeled confidential and protected from disclosure. We have not included in this report information that Ballad has characterized as confidential.

1.3 Other Ballad Reports and Active Monitoring

Ballad furnishes a detailed annual report, much shorter quarterly reports, and monthly quality data. Representatives from both states and this Authority meet monthly with Ballad's management, and also have a monthly conference call with Ballad. Tennessee created the Local Advisory Council to obtain local input, and Ballad participates in public meetings held by the Local Advisory Council. In both regularly scheduled meetings and conference calls, and in less formal telephone and e-mail communication, the state regulators and monitors discuss a wide range of subjects, and the scope of discussion extends beyond the bounds of Ballad's formal commitments. Ballad's management has been forthcoming with information and open in responding to questions.

1.4 Purpose of this Report and Reliability of Ballad Information Presented

This report is intended to summarize both information presented by Ballad and give insight into how well the merger is working in meeting the needs of the residents of southwest Virginia. We have relied on information presented in Ballad's written reports and have also included information garnered from meetings with senior Ballad executives, other members of the regulatory team, and personal observations. The information that Ballad furnishes is examined and tested for accuracy. Much of this testing is done by the Tennessee COPA monitor, who is an extraordinarily well-qualified CPA who worked as the chief financial officer of the University of Virginia for more than 20 years prior to his retirement.

1.5 Compliance Costs, Attempts to Avoid Duplication, and Likely Revision of Each State's Terms and Conditions

By agreement and as a condition of the states approving the merger, Ballad bears the costs of the states' and this Authority's monitoring. Those entire costs are substantial, approximately $2.5 million in FY 2019. This spending is essential, but it is also money that does not go into compensating employees, buying new equipment, or otherwise serving residents of the region. Accordingly, both states and the Authority's Monitor are attempting to minimize the costs of Ballad's compliance by scheduling joint meetings with Ballad and coordinating requests for information. Nevertheless, there are differences between Virginia's and Tennessee's requirements that cause Ballad to do extra work. It is likely that Ballad and the two states will re-examine the applicable requirements in the next year so as to minimize differences between the two states and to resolve ambiguities and uncertainties in the existing documents. In addition, the states are working together on selecting the metrics they will apply in such areas as population management so that Ballad does not have separate targets for each state. Both states' regulators have expressed a strong preference that all appropriate amendments to each state's terms, conditions, and requirements be addressed in a single process, so that the need for future amendments is eliminated or markedly reduced.

1.6 The Authority's Monitor's Job

As stated in the Authority's job description, the job of the Authority's Ballad Merger Monitor is:

> to preserve, protect, and enhance the benefits to the residents of Southwest Virginia of the merger creating the new entity Ballad Health that were promised and anticipated by Authority members voting to recommend approval of that merger.

As the Authority's employee, I solicit your feedback at any time on questions, issues that concern you about Ballad, or about my job performance. I can be reached at dmbarry@verizon.net. Also feel free to make comments to the Authority's counsel, Jeff Mitchell, jeff@mitchell-firm.com.

1.7 Measures of Success

Stepping back from the detail, the ultimate issue is whether the residents in this region are better off with the Ballad merger compared to what would have occurred without the merger. The harms that can be realized by less competition are: reduced access; reduced quality; and higher costs to payors, employers and patients. This report addresses each of these issues and concludes that access has not been adversely affected; quality has overall improved; and costs to payors and patients have been compliant with "Addendum 1" that both states use to bar the abuse of market power. In addition, Ballad is making investments in behavioral health, population health, rural health, and children's health that it would likely have been unable to fund without the savings realized from the merger.

II. ACCESS

2.1 Overall Data for the Region

Included below, *verbatim*, are the metrics on access that Ballad presented in its Annual Report for its Fiscal Year 2019:

	Measure	Source	Baseline	FY19	Source
1	Population within 10 miles of an urgent care center (%)	Ballad Health	80.5%	80.1%2 (slight decline)	Census + Facility Address at Census Block
2	Population within 10 miles of an urgent care center open nights and weekends (%)	Ballad Health	70.3%	70.3% (maintained)	Census + Facility Address at Census Block
3	Population within 10 miles of an urgent care facility or emergency department (%)	Ballad Health	98.9%	98.8% (maintained)	Census + Facility Address at Census Block
4	Population within 15 miles of an emergency department (%)	Ballad Health	97.3%	97.3% (maintained)	Census + Facility Address at Census Block
5	Population within 15 miles of an acute care hospital (%)	Ballad Health	97.3%	97.3% (maintained)	Census + Facility Address at Census Block
6	Pediatric readiness of emergency department	Ballad Health	67%	68.2% (improved)	Survey tool created by NEDARC
7	Appropriate emergency department wait times (%)	Ballad Health	40.7%	42.1% (improved)	NHAMCS, CDC/NCHS

2.2 Lee County

As people in this region are painfully aware, Lee County Hospital in Pennington Gap closed in 2013. Ballad has agreed to reopen that hospital and is making a significant investment of approximately $15 million to do so. Ballad has acquired the physical plant and is busy making

renovations. It opened an urgent care center on the premises in October, 2019, and the volume of patients seen at that site makes it one of Ballad's busiest urgent care centers. Ballad anticipates opening the hospital around October 1, 2020. The timing on opening the facility is dependent not just on renovation (including installation of a new computer and software system), but on processes not controlled solely by Ballad including obtaining "critical access hospital" status, and Medicare provider enrollment and certification (two separate processes). The opening of a hospital in Pennington Gap approximately 7 years after the hospital there closed is very unusual in rural America. Since 2010, 119 rural hospitals have closed nationally. (https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/) The rate of closures of rural hospitals has accelerated with 18 occurring in 2019 alone. Of the 119 closures since 2010, a disproportionate number, 24 or a fifth of the national total, were in this region--Virginia (2, including Lee County), Tennessee (13), Kentucky (4), and North Carolina (7). In contrast, only 2 hospitals have opened in rural locations since 2010.

2.3 Wise County

Wellmont and Mountain States, as then competitors, were barred by antitrust law from conferring prior to their merger on what changes could be made to make service delivery more rational and efficient if their merger were permitted. However, no conferring was needed to realize that the operation of 3 full-service hospitals in Wise County, with a population of approximately 40,000, was not rational, especially with the very low average daily census at each facility. In 2016 in the course of the Authority's review of the merger application, the Authority's consultants made clear that changes in Wise County were very likely. After obtaining approval from Virginia in October of this year, Ballad formally discontinued surgery at Mountain View, moved inpatient and critical care services to Lonesome Pine, and will close the emergency room at Mountain View in January 2020 (and will direct patients to the very close Norton Community Hospital). Ballad has been working with a Visioning Committee composed of Wise County citizens to advise on the additional changes in service delivery in Wise County that make the most sense. Ballad is close to formulating a proposal for reconfigured services at its Wise County facilities, and plans to present that proposal informally to the Virginia Department of Health in the first half of January, 2020. After informal consultation with the Virginia Department of Health, Ballad will subsequently submit a formal application for the necessary approvals. It is our understanding that no services will be eliminated from the County and all three existing facilities will remain in use in some capacity. Indeed, in FY 2019, Ballad treated 700 patients in Wise County who previously would have been transferred out of the County. Many of these were surgical patients, and surgical volume in Wise County in FY 2019 increased 16 percent over the preceding 12 months. In addition, the linear accelerator at Norton Community Hospital will be upgraded during the winter and spring of 2020. (While the linear accelerator is out of service, Ballad will offer transportation or gas cards at its own cost for patients needing to travel to Kingsport for linear accelerator treatment.) It is likely that most employees will still be needed for positions in Wise County and those who may possibly not be needed will be offered the opportunity to work at other Ballad facilities.

2.4 Level I Trauma and NICU Consolidations from Kingsport to Johnson City

There were two Level I Trauma Centers prior to the merger, one at Wellmont's Holston Valley Medical Center and one at Mountain States' Johnson City Medical Center. Having two Level I trauma centers for a service area with a population of roughly one million was not a good use of resources. A measure of need for Level I trauma centers was set forth in a report by the American College of Surgeons as "one level I trauma center per one million population in the service area." (https://www.dshs.texas.gov/emstraumasystems/TX-Special-Report-Final_August-3rd.pdf) at p. 10.[1] Having two Level I trauma centers did not result in simply spending too much but also posed difficulties in maintaining quality. It is well demonstrated in health care that higher volume correlates with higher quality, and *vice versa*. The appropriateness of consolidating the two Level I trauma centers was so apparent that Tennessee (the state with jurisdiction over the hospitals with the trauma centers) approved the consolidation of the trauma centers as part of its COPA approval. In any event, the consolidation has now occurred. Prior to the consolidation proceeding, Ballad managers worked with ambulance service providers in the region to inform them of what services were affected (*e.g.*, major multiple trauma such as may be sustained in a bad automobile crash) and which were not (*e.g.*, heart attack and stroke). To assist emergency room physicians at Holston Valley Medical Center who treat infants suffering from trauma, Ballad has set up a telehealth link with Johnson City Medical Center pediatric trauma specialists. That telehealth link has recently been extended to the emergency room at Bristol Regional Medical Center.

A very similar analysis applies to the consolidation of the neonatal intensive care units (NICUs) to Johnson City where Niswonger Children's Hospital is located on the campus of Johnson City Medical Center. There was insufficient volume to support two NICUs. (More recent data shows a dramatic drop in the number of births in Ballad's service of 9 percent from 2019 to 2020.) The transition to one NICU went smoothly. Best practice is to transfer a mother with a fetus in possible distress to a NICU hospital prior to the baby being born. This has occurred almost all the time since the NICU consolidation and as of mid-November, only two infants had to be transferred from Holston Valley to the NICU in Johnson City.

Regardless of the apparent logic supporting the consolidation of the two trauma centers and NICUs, it is understandable that a segment of the public in the Kingsport area and adjacent Virginia communities resented the removal of two high-level services, trauma and a NICU, to Johnson City. Indeed, as this is written, protesters are still in the city right of way abutting the hospital protesting the Ballad merger and Ballad's actions. In hindsight, it is easy to criticize Ballad's communication about the consolidations; indeed, the Authority's Merger Monitor has discussed communications with Ballad's management. Nevertheless, it is clear to this Merger Monitor that the consolidation of Level I trauma and neonatal intensive care was necessary and appropriate. Whether the consolidation of Level I trauma care should have occurred in Kingsport

[1] This population standard can vary depending on population density and transportation. In this instance, however, the two existing Level I trauma centers were in the same County in Tennessee and well-served by interstate highways.

rather than Johnson City may possibly be fairly debatable—that was an issue solely within the jurisdiction of Tennessee regulators and they approved the consolidations in Johnson City. Studying how both consolidations might have been implemented better is valuable only in informing both Ballad management and state regulators in how to deal with similar issues in the future, although Ballad management has informed the Authority's monitor that no changes of this materiality are on the drawing boards.

2.5 Moving of Infusion Therapy Center to Indian Path Hospital

Ballad closed a freestanding infusion therapy (chemotherapy) center in Kingsport and opened a new "hospital-based" infusion therapy center at Indian Path Community Hospital in Kingsport. Ballad operates a number of infusion centers, all of which have always been hospital-based both under Ballad and the legacy systems. The Kingsport center had previously been hospital-based but because of changes in the legacy Wellmont system, it temporarily became a freestanding site. It remained a freestanding site as changes were put on hold during the process of seeking the Cooperative Agreement and COPA approval.

Federal law requires pharmaceutical manufacturers to offer their best prices to certain governmental and nonprofit hospitals that serve a significant portion of low-income patients. This is known at the "340B" program, and the discounts are referred to as "340B pricing." While these discounts have always been significant, their importance has skyrocketed as the prices of cancer drugs have risen rapidly. Accordingly, 340B discounts are especially important now, but are available only to *hospitals*. By closing a freestanding infusion center in Kingsport and once again making it a hospital-based facility, Ballad realized drug purchasing savings well into seven figures.

From the perspective of physical access, the change had no adverse effect on patients; there was historically and continues presently an infusion therapy center for cancer patients in Kingsport.[2] There is, however, a disadvantage for patients. When outpatient treatment is furnished in a hospital-based setting, many patients have different, and higher, copayments required of them. To avoid any financial harm to patients being treated during the transition, Ballad held those patients harmless. New patients receiving infusion therapy at the hospital-based infusion center will have higher out-of-pocket costs under their insurance plans than they would have had if the prior freestanding infusion therapy center had remained open, although like all Ballad patients, they may be eligible for financial assistance based on Ballad's generous charity care policy. Finally, the charges stated on bills are noticeable higher, although so-called "billed charges" usually have little or no relevance to either the amount paid by a health plan or the patient's out-of-pocket costs. (See discussion of charges in Section IV, below.)

[2] Like most outpatient services in the region, there are also options to obtain infusion therapy at non-Ballad sites in or close to Kingsport.

2.6 Physician and Mid-Level Practitioner Recruitment

Ballad reports that it has recruited or assisted in the recruitment of 150 physicians or "mid-level" practitioners (such as nurse practitioners or physician assistants) to the region, and most of these were recruited in FY 2019. Ballad has four full-time physician recruiters, a substantial budget, and a number of strategies which vary from assisting an existing unrelated physician practice in recruiting new physicians to Ballad itself or employing or contracting directly with recruited physicians. Most recruited physicians are primary care physicians, but among the recruited physicians are an orthopedist and cardiologist in Wise County, and a cardiologist who serves Wythe County.

The Local Advisory Council in Tennessee has raised a concern with the Tennessee COPA monitor that Ballad is not "physician friendly" and its conduct has resulted in physicians leaving the community. The data do not show an alarming number of physicians leaving Ballad hospital medical staffs, but this issue is still being investigated by the Tennessee COPA monitor who is gathering data and intends to interview a sample of physicians who have departed the region. When we have more information, we will furnish a follow-up report to the Authority or its Task Force.

Ballad has completed a physician needs assessment that shows a need for hundreds of additional physicians and mid-level practitioners in the area. It is the judgment of the Authority's Merger Monitor that the generally accepted metrics used by the contractor who prepared that physician needs assessment are out of date and overstate need. Nonetheless, there is little question that more physicians, both primary care physicians and specialists, are needed in the community.

2.7 Nurse Recruitment

There is a national shortage of nurses as well as other health care professionals. The nursing shortage is particularly acute in this region and continues to affect Ballad. For example, one reason some patients remain in emergency room cubicles instead of moving into an inpatient room is because of the shortage of staffed beds (although Ballad's statistics on time from presenting to the emergency room to being moved to an inpatient bed do not depart materially from national medians). Ballad has materially increased nurse compensation, making a system-wide investment of $10 million a year in increased compensation rates for nurses and related occupations.[3] Ballad is taking other steps to improve its ability to attract and retain patient-care

[3] Ballad and its predecessor organizations have been active for years in trying to persuade CMS to change a portion of the Medicare payment formula called the "wage index" which caused Medicare rates to be substantially lower for hospitals in regions such as this which historically had lower labor costs. As the labor market for health care personnel has become increasingly national, the Medicare payment formula made it difficult for hospitals in this region, which had a very low wage index and hence lower Medicare payment rates, to compete with other areas for personnel. Ballad's efforts along with those of similarly situated health systems and hospitals finally bore fruit this year as Medicare implemented a 4-year change to its payment formula to give hospitals with low wage indices some additional funds so that they could pay more competitive compensation. This temporary adjustment to the wage

personnel including having a "career-ladder" for nurses, recruitment incentives (*e.g.*, student loan payments), and even "branding" the Appalachian Highlands (with other area employers) to highlight the attractiveness of the region. While Ballad is taking steps to recruit and retain more nurses, the nursing and allied health shortage will not be alleviated in the short-term and is likely to continue to affect Ballad and its patients for at least the near to mid-term future. One item on the Authority's Merger Monitor's agenda is to research more fully what Ballad is doing to address the problems caused by the nursing shortage.

2.8 Telehealth Services in Schools

Ballad has entered into an agreement with the Lee County Public Schools for the provision of telehealth services to nurses in each school location in Lee County, Virginia beginning in November 2019. We understand that Ballad will offer this service to other counties in the region.

index formula should give Ballad the opportunity to bring its pay up to higher levels which will hopefully be reflected in the Medicare payment formula in the future. There are uncertainties in how this will turn out eventually, but at least in the short to mid-term, the change in the Medicare payment formula is very beneficial to Ballad.

III. QUALITY

3.1 Applicable Quality Standards

At a national level, there has been increasing recognition that harm can and does occur to some hospitalized patients. Last decade, Congress directed CMS to create measures of quality and to change the Medicare payment formula to make a portion of payment dependent on each hospital's quality performance. Medicare separately penalizes hospitals which have more than the average number of readmissions and will not pay a hospital for care required to treat an infection or injury acquired or arising at that hospital.

"Quality" standards may be a misnomer since the quality standards selected by CMS have to do with avoidance of harm. While it may seem self-evident that harm should not occur to a patient in the hospital, that is much easier said than accomplished. The reason CMS selected the quality measures it has is because there is national data showing that there is room for improvement. Indeed, when most hospitals have successfully tackled a problem, CMS "retires" the applicable quality measure. The quality standards that Ballad reports to the two states are standards that CMS had identified, but there are differences in the source of the data and the timeliness. The CMS web site reports quality data as well as hospital ratings on a 5-star scale. Although the measures that Ballad reports to the states are CMS measures of quality, the results differ from what is shown on the CMS web site for two reasons. First, the quality data that Ballad reports is current; thus, the data Ballad reported to the states for FY 2019 was for patients treated in FY 2019. Data reported on the CMS web site for Ballad hospitals goes back as much as 5 years ago and none or virtually none shown there presently are from Ballad's FY 2019. Second, some of the CMS data is from Medicare claims forms, and thus excludes any non-Medicare patients, and also excludes Medicare Advantage patients for whom claims are submitted to nongovernmental health plans. Ballad's reported quality data is for *all* patients. The Tennessee COPA monitor is reviewing Ballad's systems for quality reporting to test their accuracy.

There are other quality reporting systems used, including Leapfrog. Ballad's performance under Leapfrog's standards is not as high as under the standards selected by the States. Part of this is due to Leapfrog data on Ballad, like Medicare's reported data on Ballad, being out-of-date. In any event, Ballad does not furnish data to Leapfrog directly since participation as a system would cost it several hundred thousand dollars annually, and Ballad believes that reporting the data the states have selected gives an accurate picture of how well it is doing. Although Ballad does not endorse all quality rankings, it happily reports:

> Recently, US News reported that all four of Ballad Health's flagship hospitals – Johnson City Medical Center, Holston Valley Medical Center and Bristol Regional Medical Center, in Tennessee; and Johnston Memorial Hospital in Virginia – are among the top-performing hospitals in Tennessee and Virginia in several specialties, with each hospital providing "top performing" services and programs in heart failure and COPD in both states. In each state, less than 30% of all hospitals had any top-performing programs, according to US News. In Tennessee, all three of Ballad Health's flagship hospitals were among the top-

performing hospitals, while in Virginia, Johnston Memorial was among the top performers. (https://www.balladhealth.org/news/reports-annual-results-high-ranking-hospitals-strong-financial)

Norton Community Hospital ranks once again among top 10 percent of inpatient rehab facilities in the nation. (https://www.balladhealth.org/news/norton-top-10-percent-inpatient-rehab) Norton is also recognized as one of the best hospitals in the country for treating patients with black lung disease.

3.2 Ballad Performance on Quality Measures

Measure	Baseline	FY 2018	FY 2019	Performance
Pressure ulcer rate	0.29	1.10	0.53	X
Iatrogenic pneumothorax rate	0.38	0.23	0.33	Ok
In-hospital fall with hip fracture rate	0.10	0.01	0.08	Ok
Perioperative hemorrhage or hematoma rate	4.20	1.76	1.41	Ok
Postoperative physiologic and metabolic derangement rate	1.02	1.06	1.28	X
Perioperative pulmonary embolism or deep vein thrombosis rate	5.35	3.51	3.16	Ok
Postoperative sepsis rate	6.16	3.88	4.03	Ok
Postoperative wound dehiscence rate	2.20	0.99	1.48	Ok
Unrecognized abdominopelvic accidental puncture/laceration rate	0.90	0.98	0.27	Ok
Central line associated blood stream infection	0.774	0.65	0.616	Ok
Catheter associated urinary tract infection[4]	0.613	0.640	0.895	X
Surgical site infection-colon	1.166	1.900	2.285	X
Surgical site infection-hysterectomy	0.996	0.610	0.000	Ok
MRSA[5]	0.040	0.054	0.090	X
CDiff	0.585	0.623	0.352	Ok

On 16 measures shown above, Ballad has improved its performance in FY 2019 over the baseline from the pre-merger period for 11 measures. In 5 categories, Ballad's performance in FY 2019 was not as good as the baseline. More disturbing is that in 8 categories, Ballad's performance in FY 2019 was not as good as FY 2018, although in most of those categories it was still better than the baseline.

[4] This performance was affected by unsterile supplies furnished by a vendor. It is to Ballad's credit that it was able to trace the problem to a tainted product and then eliminate that source of infections.

[5] MRSA is an especially difficult problem in this region because of over-prescribing of antibiotics. Addressing MRSA is an initiative of the Tennessee Hospital Association

Virginia hospital performance on quality measures is generally good with Ballad reporting no instances for Virginia hospitals where they are outside the norm of the national performance on quality metrics. (https://www.balladhealth.org/sites/balladhealth/files/documents/COPA-Public-Reporting-July-FY19.pdf)

3.3 Ballad's Steps to Improve Quality Measure Performance

Ballad's Board has adopted a "no harm" policy. This may seem like a "no-brainer," but it has been generally accepted for years that there are risks to being hospitalized and those risks cannot be reduced to zero. Ballad probably will not reduce risk to zero, but its emphasis on avoiding harm to patients is coming from the top. Every business day, all the senior personnel at each hospital and in the corporate office meet at 9:45 a.m. for a "safety huddle," and any issue that arises as a quality/patient harm problem is reported. Ballad's quality report for the first quarter of FY 2020 generally shows improvement but there are still 4 categories where it does not meet the pre-merger baseline. (Subsequent year reports will differ to some extent from the data shown above since some measures have been retired or combined, and new measures have been added.) An update on quality is a subject of the monthly meetings with the regulators and monitors about every two months—we are watching this very closely. On balance, Ballad is performing satisfactorily, but this is difficult, and it may take some time to see dramatic results from Ballad's focused effort. More information on Ballad's quality data can be found on Ballad's web site, https://www.balladhealth.org/quality-reporting.

3.4 Surveys of Ballad Facilities by CMS, State Agencies, and Accrediting Bodies

The Joint Commission, a private nonprofit accrediting body for hospitals, surveyed Holston Valley Medical Center in 2019 and found no deficiencies. This is to the hospital's credit; it is not unusual for surveys to find some deficiencies and to require a plan of correction. The Commonwealth of Virginia investigated a complaint at Johnston Memorial Hospital and also found no deficiencies.

IV. COST TO PAYORS, EMPLOYERS AND PATIENTS

4.1 Rates Set by Federal and State Governments for Most of Ballad's Patients

The vast majority of Ballad's payor mix is composed of Medicare fee-for-service patients, Medicaid patients, and indigent patients who do not pay at all (and for whom charges are waived under Ballad's charity care policy). For these populations, Ballad does not negotiate and cannot control prices, although the pre-set rates it receives may be affected up or down by factors unilaterally set by the payors including quality scores, readmission rates, overall costs per episode of care, and other factors. The only prices that Ballad negotiates with payors are with private health plans covering nongovernmental patients (about 27% of Ballad's payor mix), Medicare Advantage plans (for whom rates are often based upon a percentage above or below Medicare fee-for-service rates), and to a slight extent, with Tennessee Medicaid managed care plans.

4.2 Limitations on Ballad in Negotiating Price Increases

As part of both states' approval of the merger, Ballad has agreed to limit the prices it negotiates with payors to the annual Medicare rate update plus 0.25 percent for payors who also reward or penalize Ballad based on overall cost of care or other agreed upon measures of value. For fixed rate negotiated arrangements, the price cap is the Medicare rate of increase plus 1.50 percent. These limitations are applied cumulatively so that any "cap" not used in prior years will be added to increases permitted in subsequent years.

In the order approving the merger, Virginia strongly encourages Ballad to increase the number of patients covered by "risk" contracts, *i.e.*, contracts with payors under which Ballad can receive a bonus or suffer penalties depending on how costs for treating those patients differs from expected costs. Indeed, Virginia expects that by January 1, 2021, Ballad "shall" have "at least 30 percent" of its revenue from health insurance contracts (i.e., rates Ballad negotiates) "from risk-based model contracts." Commitment no. 10. Those potential bonuses/penalties are *not* included in the calculation of Ballad's compliance with price caps.

While the general principles applicable to Ballad's pricing are simple, they are contained in an extraordinarily dense document know as Addendum 1. The complexity of Addendum 1 arises from the perceived need to address multiple potential payment models. Whether Addendum 1 meets all possible contingencies remains to be seen. Since compliance with pricing limitations is so important under the Cooperative Agreement and COPA, the parties have agreed that Ballad will submit all contracts to the Tennessee COPA Monitor prior to signing them. The COPA Monitor's approval does not, however, relieve Ballad of annually showing that it has, in fact, met the requirements of Addendum 1. The parties are presently in the process of reviewing possible modifications to Addendum 1. There is no intent to modify its general principles or the caps on price increases. Rather, in trying to apply Addendum 1, the parties have encountered ambiguities, unnecessary verbiage, and other drafting issues. Work to make Addendum 1 more

understandable is underway, and presumably will be reflected in amendments in the next several months.

As a practical matter, the Authority's Merger Monitor believes that in the near term, it is unlikely that health care insurers will agree to price increases that equal the cap on Ballad's pricing. Accordingly, we do not expect the application of the price increase cap to have much, if any, application. (The Merger Monitor does not, however, have any insight or information into the price increases Ballad will attempt to negotiate.)

4.3 Only One New Contract Since Merger

Since the merger occurred on January 31, 2018, Ballad has executed only one contract with a payor. That contract was for a Medicare Advantage product, and was effective July 1, 2019. Ballad agreed to a *reduction* in the rates it charged that payor, in this case a reduced percentage of the Medicare fee for service rates compared the percentage of Medicare rates the payor had previously agreed to pay Ballad.

4.4 Anthem Contract

Anthem[6] is the payor covering most Virginians who have health insurance but are not covered by Medicare or Medicaid. (Anthem may serve as the administrator for employer self-insurance plans as well, and as far as Ballad is concerned, those employer-self-insured patients are Anthem patients.) Anthem had a contract with some legacy Wellmont hospitals (Holston Valley, Bristol, Lonesome Pine and Mountain View) that expired, but both parties have agreed to a month-to-month extension under the rates in the old agreement. Thus, for these 4 hospitals, Ballad has gone without a rate increase when it otherwise would have expected to have negotiated such an increase. Ballad legacy Mountain States' agreement with Anthem will expire in September 2020.

There is ongoing communication between Ballad and Anthem, but to date, Anthem has refused to negotiate a new agreement. For Anthem, the sticking point is that the independent emergency physician group that furnishes physician services at Ballad's legacy Mountain States Virginia hospitals remains "out-of-network" for Anthem. This means that the physician group is not paid directly by Anthem, but instead bills the patient, and the patient is indemnified by Anthem at Anthem's rates for out-of-network physicians. Under Ballad's agreement with the physicians, the physicians do not "balance bill" the patients, meaning that the patients are not suffering financial harm because of the physician's out-of-network status with Anthem.

The emergency physician group has not agreed to a contract with Anthem because it does not want to accept the rates offered by Anthem. Ballad does not control the emergency physician group, does not negotiate payor contracts for it, does not dictate its rates, and receives no portion of the revenue earned by that group. Ballad is not, however, without influence in encouraging the emergency physicians to negotiate. The Merger Monitor has been informed that Anthem's current offer to the physicians is considerably below what other payors[7] pay both to this emergency physician group and what emergency physicians are paid by other health plans at Ballad's Tennessee hospitals. The Merger Monitor has had no communications with Anthem and does not desire or expect to become part of the negotiation either with the emergency physician group or with Ballad.

Typically, impasses between payors and hospitals are resolved, but not always. Thus, it is conceivable that the contract between Ballad and Anthem will lapse. If that occurs, Virginia patients insured by Anthem will be billed directly by Ballad and will have to seek reimbursement from Anthem, which reimbursement may or may not be sufficient to cover Ballad's bill (less any copayments). Even when there is a lapse in a payor contract, the parties almost always reach a resolution. The state regulators and the Authority's merger monitor query Ballad monthly on the status of the relationship with Anthem, and we will keep you informed of developments.

[6] Anthem vigorously opposed the merger forming Ballad, and appeared at the June 18, 2019 FTC session examining COPAs and excoriated Ballad, principally because of the problem with the independent emergency physician group.
[7] We are informed by Ballad that the emergency physician group has contracts with all other significant nongovernmental payors.

4.5 Future Contracts—2020 Will Be a Busy Year

Ballad has many payor contracts expiring over the next year and will be busy negotiating the terms of new agreements. Ballad reports having good relationships with its payors (including Anthem, notwithstanding the current contractual bottleneck).

Ballad has been clear with payors and with regulators that it plans to expand the number of patients for whom it is at risk, meaning that it has the ability to receive bonus payments if it is successful in reducing the payor's expected expenditures for a designated population. Ballad has participated as an "accountable care organization," a Medicare concept, where Ballad is one of the few organizations in the country that has for all years saved money over the targets set by Medicare for the enrolled Medicare population and earned bonus payments. Similarly, Washington County, Tennessee reported to Ballad that the County's costs for health care for its employees declined 10 percent from the prior year because of Ballad's better management of care. Thus, Ballad has a track record at being successful in managing care so as to reduce costs to payors.

Presently, Ballad has a low margin on operations, a little less than 2 percent.[8] While that is an improvement over financial performance compared to the immediate prior years, it is not as good as it needs to be for Ballad to make the investments it should make in future patient care and have a bond rating that will give it ready access to capital at the most favorable rates. Thus, it is commendable that Ballad has a strategy to improve its margin, and its pursuit of so-called "risk contracting" makes sense. As noted above, the Virginia commitments require Ballad to earn "at least 30% of [its] total health insurance contract revenue … from risk-based contracts."

The name of this strategy, *risk* contracting, however, points out that there is, indeed, some risk to pursuing this strategy. There are a number of ways this strategy can backfire: Ballad may fall short in how well it manages care; there may be adverse selection among the enrolled populations; or there could be one or more outliers who skew results badly. Ballad reports that insuring for this risk is so expensive that it is not worthwhile. Ballad is not alone in the strategy of pursuing risk contracting as many other hospitals are making the same bet. In the short to mid-term, it appears to be a sound strategy, but, by definition, is not without risk. One of the reasons that there appears to be a good opportunity here for Ballad is that there have historically been relatively high hospitalization rates in this region, and that historic data is what is used in setting performance targets. Just getting down to national averages will save a lot of money. (This is discussed in more detail in the section below on Ballad's finances.) Finally, whether or not risk contracting is a good strategy for Ballad is almost a moot issue; payors are pushing hard in that direction.

[8] Ballad also has additional nonoperating income from investments of endowment and trust funds. That income includes unrealized gains and losses. While positive for FY 2019, nonoperating income fluctuates significantly from year to year, and can be a material negative amount in market downturns. The industry standard in evaluating financial performance is to focus on operating income.

4.6 Charge Increases Effective January 1, 2020

Hospital charges are nearly irrelevant to payments from governmental payors and the vast majority of nongovernmental health plans. Those payors make payments based on rates, usually determined by the patient's diagnoses and/or procedures performed. Similarly, insured patient's copayment amounts are not ordinarily affected by a hospital's charges. Charges are relevant to payors with contracts to pay a percentage of charges, well under 1 percent of Ballad's business, and to uninsured patients whose payments are not waived because of financial need.

For uninsured patients, without regard to financial need, Ballad agrees to discount its charges, presently by 77 percent at legacy Wellmont hospitals and 85 percent at legacy Mountain States hospitals. Thus, $20,000 of billed charges at a legacy Wellmont hospital would be discounted to $6,600 for an uninsured patient. Then the patient may qualify for a reduction of that net amount in whole or in part based on financial need. If the patient's income is 225 percent or less of the federal poverty level, the patient's entire bill will be written off. Above that level, a sliding scale is applied up to 450 percent of the federal poverty level. This is the most generous uninsured/charity care policy the Authority's Merger Monitor has seen.

Nonetheless, hospital charges still exist, and Ballad plans to update its charges effective January 1, 2020. Legacy Mountain States hospitals have higher charges than legacy Wellmont hospitals. Ballad is moving toward having uniform charges at all its hospitals for the same service. To move in that direction, Ballad is *reducing* charges at its legacy Mountain States hospitals for 2020. Most Virginia hospitals are legacy Mountain States hospitals and overall charges at these hospitals will be reduced. In addition, Ballad is making uniform the uninsured discount for all its hospitals at 85 percent (an increase from 77 percent for legacy Wellmont hospitals). At the same time, Ballad is increasing charges at Wellmont hospitals. The weighted average charge increase *system-wide* will not exceed the percentage limitation in Addendum 1. The Tennessee COPA Monitor has reviewed the charge increase and has concluded that it is compliant with Addendum 1. *There will, however, be some charges at Wellmont hospitals that increase by more than the percentage stated in Addendum 1.* This is because the Addendum 1 charge limitation applies in the aggregate and not to individual charges.

Ballad's charges for an inpatient room will be uniform across all of its hospitals starting January 1, 2020, and will be $1,217 a day. The following table[9] shows Ballad's 2020 inpatient routine room charge compared to other hospitals in the region. Of 23 hospitals (not all of whom are included on the table below), Ballad's 2020 charge is slightly above the mean for the 2019 charges of the other 22 hospitals sampled (not weighted for patient days) of $1,176.

[9] Ballad compiled this data using both hospitals it and the Authority Merger Monitor selected. The data is available since CMS requires all hospitals to post their charge data on their web sites.

Hospital	Room Charge (current for all except Ballad)
Tennova Healthcare Clarksville (highest of the 23 surveyed)	$2,009
Central Carolina	$1,623
Carilion	$1,605
Harris Regional	$1,527
Danville Regional	$1,309
Ballad (eff. 1/1/2020)	*$1,217*
Lewis Gale	$1,091
Saint Francis	$1,008
Chatham, UNC	$915
Mission	$881
Transylvania (lowest of the 23 surveyed)	$557

4.7 Ballad Charges Compared to Charges at Freestanding Sites

Authority members may have received an anonymous e-mail comparing HMG charges with a Ballad hospital's charges for certain imaging services. This e-mail showed substantially higher Ballad charges than HMG charges for the same services. In the view of this Merger Monitor, this comparison was unfair for at least the following reasons:

- As discussed above, hospital charges have little relevance on what payors or patients actually pay;
- Hospitals have to meet regulatory standards under the Joint Commission standards or Medicare conditions of participation that do not apply to nonhospital sites;
- Nonprofit hospitals such as Ballad treat indigent patients and have a charity care policy, while freestanding sites typically limit services to only those who can pay (or have much lower levels of charity care than nonprofit hospitals such as Ballad);
- Hospitals must accept, screen, diagnose, and stabilize all patients presenting for emergency services without regard to the patient's ability to pay;
- Hospitals are open 24 hours a day 7 days a week, and necessarily have higher costs and less efficiency because of the need to maintain services in "off" hours.

In any event, the difference in charges between Ballad hospitals and freestanding sites has nothing to do with the merger creating Ballad. Indeed, as discussed above, hospital charges at legacy Mountain States hospitals are being reduced for 2020.

4.8 Physician Charges Reduced in Mid-Year at Some Sites

There were physicians in community practices and in urgent care centers who were employed by Wellmont and Mountain States. In mid-year, the physician practices from the legacy systems were brought onto the same computer software platform. Part of that conversion necessitated using a uniform physician charge structure. Ballad opted to use the lower charge structure, and hence physician charges at some sites were reduced by as much as 20 percent. Again, this made little difference for many payors because payments are based on rates tied to billing codes, but it did benefit some patients and payors.

4.9 Virginia Charity Care

"Charity care" may seem to be a clear term, but it is defined differently in different contexts. For example, the IRS and Medicare permit hospitals to report shortfalls in payment between Medicaid payments and the costs of treating those patients as charity care. The Virginia commitments require Ballad to "continue to provide charity care at a rate at or above the rate provided by the [legacy systems] 12 months prior to the approval of the cooperative agreement." The Virginia Department of Health is considering what this commitment means including without limitation whether it is applied by hospital, what the word "rate" means, and whether to use a base period of June 30, 2017 rather than the 12-month period ending October 29, 2017, since the order approving the Cooperative Agreement was signed October 30, 2017. Without this information as well as some more detailed information that we have requested from Ballad, it is impossible to verify with certainty whether Ballad has met its charity care commitment as interpreted by the Department of Health.

What we do know is that system-wide, the cost of care furnished to patients who qualified under Ballad's charity care policy in FY 2019 exceeded the cost of charity care furnished by the legacy systems in a base year ending June 30, 2017. This occurred even though the number of hospital admissions declined for all payor categories, including patients qualifying under Ballad's charity care policy.

V. FINANCIAL RESULTS

5.1 System-Wide Results

Ballad has reported the following results for its FY 2019:

- For the year ending June 30, 2019, operating cash flow improved to $228.1 million from $197.6 million in the prior year, a 15.4% improvement.
- Total cash flow (EBITDA) improved to $254.6 million versus $199.6 million in the same 12-month period prior year, a 27.5% increase.
- EBITDA margin improved from 9.9% in the prior 12-month period to 12.5% in the current 12-month period.
- Revenue for the year grew 1.3%, while expenses remained flat, leading to an improvement in the operating margin to 1.7% from 0.5% in the prior year.
- Operating income for the year improved to $36.5 million from $9.9 million in the same period prior year. (https://www.balladhealth.org/news/reports-annual-results-high-ranking-hospitals-strong-financial)

Ballad's net operating income of $36.5 million is a marked improvement over the net operating income for $9.9 million for the prior year. Ballad needs to continue to improve its margin, however, to maintain its access to capital at the most favorable lending rates. In FY 2019, Ballad committed to make capital expenditures of more than $158 million. Ann. Rept. At 14.

Ballad realized large efficiencies as a result of the merger, totaling more than $32 million. Ann. Rept. At 18. These savings came from supply chain standardization; consolidation of space in a number of locales; corporate office staff reduction; etc.

As executives for the legacy systems predicted during the application process, the merged organization faces a huge challenge as well as an opportunity because of the historically high levels of hospitalization in the region. The following table shows hospital inpatient days per thousand population for Ballad (and legacy systems in pre-Ballad years) and national rates.

	2016	2019
Mountain States/Wellmont and then Ballad	124.1	114.6
National	103	100

The dramatic decline in inpatient days at Ballad is mostly a result of reduced admissions, although shorter stays have contributed to that decline. This has caused a huge loss of revenue from what would have been earned with historic levels of inpatient utilization. Moreover, as this chart shows, hospitalization rates in the region remain well above the national average and continued material declines in inpatient revenue can be expected. This is a financial threat to Ballad, but is also an opportunity. To the extent that Ballad can negotiate risk contracts, discussed above, it can receive bonus or incentive payments to reduce costs below historic levels.

The relatively high historical rates of hospitalization in the region give Ballad a good opportunity to achieve savings and to benefit from risk contracts.

5.2 Virginia Hospital Data

Ballad's Virginia hospitals have performed well in the areas of average daily census; observation visits; emergency room visits; outpatient encounters; number of full time employee equivalents (FTEs); and operating net income. Operating net income number is overstated for Virginia's hospitals since corporate depreciation, interest, and amortization costs are recorded at the corporate level and not on each hospital's internally reported results.

VI. PROGRESS ON PLANS TO IMPROVE HEALTH IN THE REGION

6.1 Plans and Measuring Progress

Ballad has submitted plans for: population health; children's health; rural health; and behavioral health; and research/graduate medical education. (The research/graduate medical education plan was not effective for FY 2019 and is not included in the following discussion.) These plans have been approved by both states (except Tennessee has not communicated formal approval of the rural health plan). The plans are the blueprints for spending moneys promised and committed by Ballad as part of the merger application and approval process. The plans contain specific steps with target dates for completion so that progress is measurable. The spending contemplated under these plans is "back-end loaded" since the first steps are planning how most effectively to make investments to advance the plans. In addition, Ballad is attempting to leverage its efforts with other funding such as grants or community resources, although such spending will not be counted toward Ballad's obligations. Spending is measured against a baseline so that only incremental spending above baseline spending is counted as meeting Ballad's commitments. The plans will be serially reviewed and revised after 3 years.

6.2 Rural Health

Ballad's rural health plan relies heavily on telehealth services. This is consistent with national trends and is a logical way to extend services to less populated and more remote regions. There are two obstacles: the lack of availability of broadband in some areas; and outmoded payment policies for telehealth services. Broadband access in rural areas is a national problem and Ballad cannot reasonably be expected to solve that problem. However, some progress is being made with the availability of federal grants, other state and local government help, and private sector activity. For example, fiber has been extended to Grayson County. Reimbursement policies are also being liberalized, and Virginia presently is considering and formulating policies to foster the growth of telehealth services.

Ballad is also focusing on recruiting primary care physicians and mid-level practitioners for rural locations. Ballad has recruited over 150 practitioners to the region, and has plans to recruit 120 more in its FY 2020. Recruitment to this region generally, and for rural areas specifically, is difficult.

6.3 Behavioral Health

Behavioral health is one of the most underserved needs across the nation. The reason is very simple—the behaviors that are most problematic cause individuals to lose their jobs or to be unemployable so that they are uninsured. While nonprofit providers such as Ballad have moral and, to some extent, legal obligations to furnish care to uninsured patients, providers also have a need to make enough net income to survive. Thus behavioral needs are among the greatest unmet needs. Those needs are especially acute in this region because it has been

ravaged by opioid addiction. A single statistic brings this home—30 percent of the babies born in Wise County are born addicted.

Ballad is starting to address these needs. First, it has created a behavioral health division. It is opening a residential facility in Greenville, Tennessee for pregnant women who have substance abuse problems so that they can stay off drugs and protect their babies. Ballad is also moving toward increasing the availability of medically assisted treatment for opioid addiction. While it is controversial in some circles to treat opioid addiction with other opioid drugs (which do not create a "high" but which do satisfy the physical craving for the drug), medically assisted treatment has been shown to be more effective than other treatments. This service is heavily regulated by the federal government and there are other practical problems in providing it. Ballad has also started in Virginia a medical fellowship in addiction medicine which should add to the number of physicians in the region who are experienced in treating addicted patients. Expanding the availability of mental health evaluation services and outpatient treatment is also underway.

6.4 Children's Health Plan

With the benefit of hindsight, Ballad's children's health plan was too aggressive. The plan called for the recruitment of approximately 10 pediatric specialists, which are already in short supply nationally. While Ballad has made some progress in recruiting pediatric specialists, it acknowledges that its recruitment goals were unrealistic. In addition, there has been a recent marked downturn in the population of children in the region with a nearly 10 percent decline in births and children. Therefore, rather than proceed with what is now viewed by its own executives as an unrealistic plan, Ballad has informed us that it will develop a revised children's health plan. In the Merger Monitor's view, the error here was in creating an unrealistic plan in the first instance. Whether realistic or not when the plan was initially drafted, the sudden drop in the population of children compounds the problem of an insufficient number of patients to support the specialty services originally hoped for. In the judgment of this Merger Monitor, pulling back from the goals in that original plan and moving toward shared services or in other directions will be better for the region. Ballad has committed to produce a revised children's health plan in the spring of 2020. This means, however, that super specialist needs will have to be met by providers outside of the region such as Vanderbilt.

6.5 Population Health

Ballad's plan for population health focuses on children, and to focus on children it aims to support strong, healthy families. This means that Ballad is trying to improve prenatal health, have children grow up in homes with parents who are not addicted, have healthy environments where there is, for example, no smoking, have adequate exercise and avoid childhood obesity, have adequate nutrition, and can learn in school (attaining a third-grade reading level is a key predictor of health status). These are very aggressive goals, but also very worthy goals. The executives involved in this plan demonstrate a passion for making a difference that is energizing to witness. Ballad cannot, however, come close to achieving these goals by itself, and it

recognizes that. Ballad has organized well over 200 organizations in the community to work together in a focused and organized manner to achieve these goals. By its very nature, a project of this type will take years to show benefits, but if realized, the benefits should prove to have the greatest return on investment of all the plans Ballad has.

Other measures are sometimes viewed as "population health," such as adequate screening, adult immunizations, proper treatment of chronic diseases such as diabetes, etc. Ballad does not include these items in its population health plan, but they are a focus for the organization. Often, there are targets in health plan contracts where additional payments are made for assuring that covered patients have screening tests and are immunized. In addition, a key to reducing inpatient hospitalizations is successful monitoring and treatment of patients with chronic conditions so as to avoid crisis hospitalizations. That is encouraged by Ballad's risk contracting models where cost savings are rewarded. But it is not all just about financial incentives. For uninsured patients in the region, Ballad will issue a card that functions as a health insurance card at Ballad facilities. For these patients, Ballad is contracting for managed care oversight to assure that there are appropriate immunizations, screening, and treatment of chronic conditions.

6.6 Spending to Implement the Plans in FY 2019

Part of each plan includes a spending target for each year covered by the plan. At present, the Tennessee COPA Monitor is examining Ballad's reported spending for each plan and has not yet presented any conclusions. In any event, Ballad made material expenditures to implement each of the plans discussed above. For the most part, Ballad has met the objectives it had set forth for itself in its plans for FY 2019, and to the extent that it has not done so, there are good explanations (and some goals not met by the hoped-for date have been met in the first quarter of FY 2020).

6.7 Future Activities of the Authority's Task Force

The Task Force may find it useful to devote a meeting to each of the plans discussed above and to have Ballad present what is in the plan and the progress toward implementation.