Independent Assessment of Ballad Health’s Likelihood of Successfully Navigating the Narrow Corridor in a Merged Integrated Delivery System

Prepared for Mountain States Health Alliance and Wellmont Health System

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Independent Assessment of Ballad Health’s Likelihood of Successfully Navigating the Narrow Corridor in a Merged Integrated Delivery System

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Introduction

Purpose and Qualifications for Assessment

Purpose of the Report

In April 2015, two independent health systems – Mountain States Health Alliance and Wellmont Health System – announced their intent to create a new, integrated delivery system serving the communities of northeast Tennessee and southwest Virginia. The combined system’s stated goal is to generate savings through operational efficiencies and then reinvest those savings in efforts to enhance and benefit the region, including through a focus on improving the overall health of the population.¹

I was asked to lead a team of consultants to independently evaluate and report upon the likelihood that the merged integrated delivery system, known as Ballad Health, will be able to achieve its stated goals related to navigating the “narrow corridor” of successfully transitioning toward population health management and risk-based contracting.² Specifically, my team and I conducted an independent assessment of the merged entity’s ability to make the transition from today’s mostly fee-for-service world toward a fee-for-value reimbursement system and to be operationally successful in a future accountable payment environment (requiring successful population health management, significant coordination of care, efficient, effective operational delivery, and optimal performance in risk-based contracting).

To that end, this report addresses the current and stated plans for future capabilities of both systems, critical success factors during the transition, and the likelihood for future operational success in achieving population health management and optimal risk-based performance as a merged integrated delivery system.

Qualifications for Offering an Opinion

I am an Executive Vice President, the Chief Medical Officer and a National Partner at the Advisory Board, a best practice research, technology and consulting firm focused on the health care and education industries. Our firm has relationships with more than 4,000 health care organizations around the world and over 90% of the hospitals in the U.S. Our consulting teams have delivered engagements in all 50 states with clients as diverse as state governments, health insurance companies, large multi-state health systems and stand-alone medical groups. While our work takes us all over the country, my team is based in Nashville, Tennessee.

I am a Certified Physician Executive, Diplomat of the American Board of Medical Management, Diplomat of the American Board of Obstetrics and Gynecology, a Member of the American College of Physician Executives, and a Fellow of the American College of Obstetricians and Gynecologists. I have been honored to receive numerous awards and honors for my work in clinical medicine, medical management and technology integration.

I received my Doctor of Medicine from the University of Iowa College of Medicine and completed my residency in obstetrics and gynecology at Wilford Hall Medical Center in San Antonio. I earned my Master of Business Administration from the Olin School of Business at Washington University in St. Louis, and I am a Distinguished Graduate of the U.S. Air Force Academy. I also trained in Flight Surgery at the Air Force School of Aerospace Medicine.

My work has ranged from one of the country’s largest implementations of advanced primary care models in a successful effort to stabilize access to care in post-Katrina New Orleans (for which the community received the NCQA National Quality award) to my recent selection to help the New York State Department of Health facilitate the development of risk-based contracting models in New York City between employers, health plans, health systems and primary care providers. Over the next few months, I will publicly facilitate the strategy, design and implementation plan for advancing primary care, population health management and the transition to risk-based contracting. Another project germane to the regional challenges that have

2) Aim high. (2012). Journal of Healthcare Contracting. (“As an organization moves along the corridor, falling off either way can hurt the organization... Unfortunately, in a fee-for-service world, if you’re effective at reducing utilization, you can hurt yourself. On the other hand, if you assume risk but you’re unable to coordinate care, financially, you can find yourself in a very difficult position.”)
precipitated this merger (poor health, low income levels, a stagnant and aging population, and the ongoing effects of economic decline) is a Multi-Payer Advanced Primary Care Practice Demonstration in New York’s rural and mountainous Adirondack region, where I’ve spent the last eight years providing strategic leadership. This demonstration was initiated as a result of a primary care crisis in which the region lost almost 20% of the region’s total supply of primary care physicians in a less than two-year period.\(^3\) The demonstration has brought together five hospital systems, 33 primary care practices, and nine commercial and government payers (including Medicare and Medicaid) to agree on a funding model to support the transition to greater value-based payment and downside risk. During my involvement, I’ve watched a number of the participating health systems be acquired by the University of Vermont Health Network as a result of deteriorating finances and the challenges of limited scale in the pursuit of population health management.

I lead a value-based health care consulting team composed of dedicated, high-performance group of professionals with deep backgrounds and experience building strategic relationships between health systems and physicians. This team is exclusively focused on helping health care organizations navigate the transition toward greater value-based payments, whether that is through the formation of Clinically Integrated Networks, the development of Accountable Care Organizations or by pursuing Patient-Centered Medical Home initiatives. Our work has even included assisting state governments in the development of State Innovation Models that will transform care delivery and payment across entire states.

Having led narrow corridor strategy initiatives in hundreds of organizations across the country, my team and I are well equipped with the necessary experience to evaluate health system preparedness for population health management and risk-based contracting. In fact, the team I lead was recently recognized by two independent research firms as a market-leader in value-based care consulting services, as detailed below.

**KLAS report recognizes Advisory Board’s impact**

KLAS, an independent health research firm, conducted thousands of provider interviews to rate consulting firms and vendors in its report, *Value-Based Care. Making the Shift: Who Can Help?* Advisory Board received top ratings in two critical capabilities for population health management:

- 100% of Advisory Board clients said the firm had a high impact on enabling them to enter future risk-bearing agreements.
- 100% of client organizations reported that Advisory Board had a high impact for delivering on the triple aim, including patient access and satisfaction, clinical care and outcomes, and reducing costs.

“The team we worked with at Advisory Board knew more about population health than anybody else. They have deep expertise in looking at organizations and assessing capabilities for moving toward value.” —client organization interviewed by KLAS

KLAS also cited Advisory Board for top performance in promoting physician leadership to create Clinically Integrated Networks that better position providers for managing population health. In particular, the report notes that providers “are pleased with Advisory Board’s process-oriented, template-driven approach and proven track record with the Federal Trade Commission.” This reference to our track record with the Federal Trade Commission (FTC) is based on our historic ability to design Clinically Integrated Networks that are well-aligned with FTC and Department of Justice guidance and designed in a way that is likely to improve the quality, outcome and efficiency of patient care.

**Advisory Board recognized as a Kennedy Vanguard™ leader**

Our consulting team also received the highest ranking in terms of depth of consulting capabilities in a Kennedy Vanguard report. In the report, it was noted that our team received praise for our approach to alternative care model adoption and that our team was “the sought-after leader in ACM transition.”

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Executive Summary

Key Takeaways and Our Approach

Key Takeaways

The two organizations have complementary skill sets that give us confidence the merged entity will be successful in its stated aim of pursuing population health management and achieving optimal risk-based contracting performance.

Throughout the detailed independent assessment that follows, a recurring theme is the complementarity between Mountain States and Wellmont. The combined systems will be able to leverage each other’s strengths and apply them at scale across the system for the betterment of the population. For example, Mountain States brings significant experience in value-based payments and care management, while Wellmont brings a deep background in clinical standardization as well as EMR utilization and rapid implementation. Both organizations have also pursued complementary physician engagement initiatives: For example, Mountain States’ Physician Leadership Academy could readily be rolled out to include Wellmont providers, and Wellmont’s medical informatics committee could quickly involve Mountain States’ providers.

Given the unique market in which Mountain States and Wellmont operate, the merged entity’s scale is critical to pursue population health management in a financially sustainable manner.

Mountain States and Wellmont face the challenge of using limited financial resources to serve a population with particularly challenging characteristics. Achieving a minimum viable scale, in terms of the number of lives under value-based contracts, is essential to successfully navigating the narrow corridor in three related ways:

1. **Significant Fixed Costs**: Pursuit of population health management and risk-based contracting requires significant fixed cost investments that need to be spread across a large population, where reductions in cost are shared between the payer and the organization investing in infrastructure. Each system lacks sufficient scale on its own to support infrastructure over the long term. As a case in point, Wellmont participated in the Medicare Shared Savings Program (MSSP) for only one year because the system concluded that it lacked sufficient volume of attributed lives to cover extensive fixed infrastructure costs. A survey of MSSP Accountable Care Organizations (ACOs) found that average ACO operating costs are in excess of $1.6 million a year — a number which does not take into account “demand destruction” as population health management efforts result in fewer hospital admissions and other services. As organizations take on more downside risk, reinsurance requirements and costs increase, further elevating the magnitude of fixed costs. Having a large population over which to spread fixed costs is particularly important for the communities of northeast Tennessee and southwest Virginia, where patients have disproportionately poor health outcomes across a number of health measures (needing higher levels of investment to impact change). Additionally, a significant portion of the population is uninsured and therefore unable to be covered by a value-based contract. This reality heightens the need for a shared population health management approach across the region.

2. **Actuarial Significance**: There is a minimum number of lives needed to make a value-based contract actuarially sound to the point where outlier cases will not undermine otherwise successful performance at reducing cost and improving quality for a contracted population. Medicare’s value-based contracts require an organization to have a minimum of 5,000 lives

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in the case of the Medicare Shared Savings Program (MSSP), where most participants have pursued upside shared savings only, and 10,000 lives in the Next Generation ACO program that mandates downside risk. For reference, in 2014 (the only year available for comparability), Wellmont had 11,130 attributed Medicare FFS lives and Mountain States’ ACO had 20,190 attributed lives. While each organization has the minimum number of lives to take on downside risk with Medicare, separately, Wellmont and Mountain States would struggle to have a minimum of 5,000 to 10,000 attributed lives needed to realistically take on downside risk with most commercial payers.

3. **Proportionality**: Related to the two points above regarding significant fixed costs and the need for scale in order to pursue value-based contracts, proportionality of lives at risk necessitates scale in order to pursue population health management goals. To justify a complete redesign of the way it delivers care, a significant portion of a provider’s business needs to be covered by value-based contracts. As an example, CMS felt that 50% or more of a practice’s revenue should be covered by value-based contracts in order to effectively implement the value-based service model of the Comprehensive Primary Care Plus program. A higher proportion of lives at risk involving multiple payer contracts helps smooth out individual years of poor performance and maintain long-term financial sustainability. Additionally, as an organization develops population health management capabilities, it can expect to see a “spillover” effect as non-covered lives receive the benefits of the system’s efforts, which represents utilization reductions without the ability to share in savings. Thus, the sooner a system grows its lives at risk, the faster it minimizes the effects of spillover.

### The proposed merger is the only way to fund necessary investments and ensure collective buy-in to the population health management and risk-based contracting strategy.

Success in population health management demands extensive investments in clinical redesign and transformation as well as sophisticated health IT and analytics capabilities. Mountain States and Wellmont fund competing investments that do not support long-term financial sustainability given the region’s circumstances. For example, the region is projected to have a stagnant population, and the systems’ population health management efforts will contribute to significantly decreased hospital utilization in the future (with hospital utilization being the primary source of revenue for both systems).

Continuing to operate as rival organizations precludes the systems from being able to pursue a population health management strategy that best serves the region. As separate systems, there is no collaborative management relationship, single point of accountability or financial alignment that would allow the type of collective investment or operational efficiencies needed to pursue the merged integrated delivery system’s goals – specifically, to reinvest up to $450 million to improve population health, expand access to health care services, implement a common IT platform, enhance professional training and make other strategic investments to address the region’s most pressing health problems. A critical component of achieving these goals is a greater understanding of underlying costs and how to move patients to the highest quality and lowest cost setting of care. Absent a merger, it would be difficult and unlikely for competing systems to share cost data that is critical to understanding how to take overall costs out of the health care delivery system in the region.

Working together with a joint commitment to population health management and risk-based contracting is the only financially viable solution that can positively impact population health across the region.

In summary, I conclude that a merger between Mountain States and Wellmont to create Ballad Health would bring together complementary strengths and provide the scale necessary for long-term sustainability in

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8) Practices that have approximately 50% or more of their current revenue generated from these payers and Medicare will be better positioned to implement the service delivery model and meet the practice requirements. Medicare alone cannot provide the adequate supports that practices need to make significant changes in the way they deliver care, as primary care practices serve patients whose health care is paid for many different insurers. Centers for Medicare and Medicaid Services. (2016). CPC+ frequently asked questions. https://innovation.cms.gov/Files/x/cpcplus-practiceapplicationfaq.pdf

population health management and optimal risk-based contracting performance. I believe that the establishment of an integrated delivery system is the model most likely to achieve the desired population health goals for the region.

**Methodology**

The methodology for our assessment followed a two-part approach consisting of data review and extensive in-person stakeholder interviews in order to gain a deep understanding of each organization’s culture, staff capabilities, operations and plans for the merged integrated delivery system. In-person interviews were a critical component of our process and enabled my team and me to understand and appreciate each organization’s experience with population health management and their plans for optimal risk-based contracting performance, as well as the unique context for this merger.

First, our team conducted a document review that included Mountain States and Wellmont's Application for a Certificate of Public Advantage in Tennessee, responses to questions by the Tennessee Department of Health, and Plan of Separation. Additionally, the team reviewed public comments related to the merger from a number of parties, including the FTC staff, America’s Health Insurance Plans, Holston Medical Group, local Chambers of Commerce, and various professors and economists.

Secondly, our team interviewed more than 80 key stakeholders representing Mountain States, Wellmont, community providers and community leaders. The purpose of these interviews was to assess existing population health management capabilities that could serve as “building blocks” for future success. These interviews represented a significant commitment of human capital in the process to ensure a detailed evaluation of the organizations’ current state across the following areas:

- Care Management and Care Coordination
- Employed and Community Physicians
- Governance
- Health Information Exchange / Electronic Medical Record Integration
- IT, Clinical and Financial Analytics
- Managed Care Contracting and Payer Environment
- Physician Enterprise and Partnerships
- Population Health Programs
- Quality Infrastructure and Initiatives

A full list of individuals who were interviewed can be found in the Appendix of this report.
Framework for Population Health Assessment

Our team conducted a gap analysis following a core methodology focused on the six areas we believe are necessary to be successful at population health management, as illustrated below. The Advisory Board’s “Pillars Approach” (supported by a foundational focus on Organization and Governance) describes the essential competencies for organizations to pursue population health management, and our analysis and findings mirror this structure.

### Pillars of Successful Population Health Management

#### Organization & Governance
Structuring the organization for success in a multi-payer, value-based care environment

<table>
<thead>
<tr>
<th>Pillars of Successful Population Health Management</th>
<th>Care Delivery &amp; Management</th>
<th>Strategic Operations</th>
<th>Payment Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Care Delivery &amp; Management</strong></td>
<td>Enabling proactive, coordinated patient care across the care continuum</td>
<td>Developing a centralized infrastructure with local governance to support operations and integrating data for reporting</td>
<td>Navigating narrow corridor of transitioning from fee-for-service to value-based contracts</td>
</tr>
<tr>
<td><strong>Segmentation &amp; Provider Network</strong></td>
<td>Building and developing an aligned, high-value provider network driven to improve outcomes and efficiencies</td>
<td>Health IT &amp; Analytics</td>
<td>Enabling IT resources to support delivery system redesign, provider accountability, value-based quality monitoring and patient engagement</td>
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Summary of Findings

Focus Area: Findings & Building Blocks for Success

Organization and Governance

1. The proposed Ballad Health board is structured appropriately to represent key stakeholders and ensure oversight and accountability.
2. Significant experience with physician involvement in leadership at Mountain States and Wellmont lays the foundation for physician-led governance within the combined system.
3. Both organizations have experience in value-based arrangements and will bring relevant leadership and resources to support Ballad Health’s pursuit of population health management and optimal risk-based contracting performance.

Care Delivery and Management

1. A strong commitment from both organizations to reduce system-wide care variation will accelerate high-quality, consistent care delivery across Ballad Health.
2. Care management teams at Mountain States and Wellmont offer complementary skill sets that, when brought together, will provide comprehensive care across the continuum.
3. Ballad Health plans to invest in IT tools that support care management resources to enable more effective risk stratification and delivery of care.

Segmentation and Provider Network

1. The combined entity will have a critical mass of employed primary care providers to continue the transition to value-based care and also will present an even greater opportunity for engagement with independent providers.
2. Combined, both systems will have a complement of assets and network relationships that will allow Ballad Health to span the full care continuum necessary for successful population health management and risk-based contracting.
3. The combined entity will be even better positioned to address the needs of the geographic service area and make continued investments in order to address gaps in access to care.

Strategic Operations

1. Ballad Health has established a clear strategic vision with significant input from community stakeholders and a focus on community health.
2. As a single health system, Mountain States and Wellmont will have the opportunity to unite their complementary strengths.
3. Significant analytics infrastructure and staffing at each organization will be able to be merged and consolidated, resulting in economies of scale under the combined entity.

Health IT and Analytics

1. A Common Clinical IT Platform across both organizations will facilitate true interoperability and robust exchange of health information versus limited data-sharing.
2. Both systems utilize IT tools to understand and analyze data across the care continuum.
3. Mountain States and Wellmont bring extensive expertise in different, complementary areas related to health IT.

Payment Transformation

1. Experience and proven success under value-based contracts will be leveraged by the combined entity.
2. A detailed understanding of costs will be critical to navigating the narrow corridor from fee-for-service to value-based contracts, and only a combined entity will be able to standardize and address unwarranted variation in underlying costs across facilities.
3. Both systems engage with physicians through data transparency and aligned incentives.
Organization and Governance

Structuring the organization for success in a multi-payer, value-based care environment

Organization and Governance is the underpinning for the other pillars of population health management and risk-based contracting. It defines the structure an organization must have in place to enable success in a value-based care and accountable payment environment.

Ideally, this structure is rooted in robust board involvement, comprehensive stakeholder representation, physician leadership and well-defined mechanisms to support value-based strategies. Specifically, best practices for Organization and Governance (which were evidenced during our interviews with Mountain States and Wellmont) include:

- Strong board involvement to support vision with appropriate mechanisms for oversight
- Strong representation of cross-continuum stakeholders, including system administration, physician leadership (hospital-based and ambulatory), and community provider groups
- Physician-led governance in place to monitor and manage network and clinical initiatives
- Established committees with ownership over population health management initiatives, including quality, contracting/finance, care standardization/ transformation, physician remediation and community health

Findings and Building Blocks for Success

My team and I identified three key building blocks for success across both systems that will position the combined entity for success from an Organization and Governance perspective:

1. The proposed Ballad Health board is structured appropriately to represent key stakeholders and ensure oversight and accountability. The health systems have defined a structure for the merged entity board with equal representation from both systems, strong leadership and exceptional community involvement. Specifically, the new board will include appointees from both Mountain States and Wellmont, the chief executives from each system, joint appointees, and ex officio representation from East Tennessee State University (ETSU) – an important community stakeholder in the region for its role in developing the pipeline of future health care workers and resources for medical research and education. Leaders from both organizations have committed to the inclusion of independent and employed clinicians on the board, which has been linked to higher quality of care in hospitals. This well-defined structure will enable the board to support the vision for the merger and ensure diverse voices are heard from internal and external stakeholders. In addition to this inclusive board structure, Wellmont and Mountain States have involved key community stakeholders (Dr. Brian Noland, the President of ETSU; David Golden, the Senior Vice President, Chief Legal and Sustainability Officer of Eastman Chemical Company; and Scott Niswonger, the Chairman and Principal of Landair Transport, Inc.) on the Joint Board Task Force to ensure diverse perspectives, particularly local employer perspectives, are included as the Task Force makes plans for integrating the two organizations.

A key critical success factor is that the board will have mechanisms for continued oversight of the merger to ensure accountability toward the stated goals. A standing committee, the Committee on Population Health and Social Responsibility, will be charged with overseeing Ballad Health’s fulfillment of its

commitments as outlined in the COPA and ensuring compliance with reporting requirements. The Committee will also interface with the internal Department of Population Health Improvement, a new health system department dedicated to Ballad Health’s community health improvement efforts.

Finally, a common pitfall for hospital mergers is a lack of board involvement and buy-in, which was not at all evidenced in our interviews that included eight members of Mountain States’ board and seven members of Wellmont’s board. In our interviews, both sets of board members could clearly articulate why they felt the merger was absolutely necessary to improve the population health of the region. Both boards also strongly believed that the only viable alternative to this merger was their system selling to a health system outside the region. The board members from Wellmont were acutely aware of the likely impact from this scenario (loss of local control, jobs and investment) as they recently evaluated proposals from all of the most likely buyers during the Wellmont Strategic Options process. The board members of both systems repeatedly echoed their belief that a single integrated health system was the best outcome for their region. This board-level buy-in to the vision will provide an additional layer of oversight that holds the new system accountable to the pre-merger vision, anticipated synergies and community benefit. Strong advocacy at the board level will also play a critical role in influencing the new organization’s culture and in establishing a unified mindset to create a culture of “systemness.”

Without this strong commitment from each organization’s board, the merger would be far less likely to live up to its expected benefits.

2. **Significant experience with physician involvement in leadership at Mountain States and Wellmont lays the foundation for physician-led governance within the combined system.** During stakeholder interviews conducted by our team, physicians at both organizations were active, engaged participants and demonstrated a willingness to collaborate with their colleagues. The significant degree of community and employed physician involvement in interviews was substantially different from most of our client engagements and a positive sign toward the merged entity’s likelihood for future success. (Over 31 physicians participated in our interviews, representing each employed medical group, independent practices and community organizations.)

To enable physician-led governance, Mountain States has actively created multiple venues for physicians to be involved in governance, including a physician leadership academy – from which 100 physicians have already graduated – dedicated to training future physician leaders. During interviews, Mountain States leadership expressed its desire to build on existing platforms to enhance physician leadership across the combined system post-merger. At least four separate Mountain States physician-led governance entities were identified during interviews that will be leveraged in the combined entity:

- AnewCare Collaborative – physician-led governing body that steers the Accountable Care Organization (ACO) in providing high-quality, patient-centered care;
- Physician Council for Clinical Excellence – unites physicians from each facility to address issues with clinical variation across the system;
- Quality Council of Mountain States Medical Group – reviews care standards and initiatives to strengthen physician culture and leadership; and
- Primary Care Advisory Council – reviews clinical processes and helps foster engagement with the PCP population, upon which population health management success relies.

Wellmont also has strong provider involvement at all levels of governance that can be leveraged in the combined system. For example, a group of physicians dedicated to clinical informatics meets weekly to review and approve new clinical standards to improve the quality and efficiency of care. The group engages physician stakeholders with broad specialty representation, involves IT staff to support clinical standardization changes and relies on a sub-committee that reviews evidence-based literature to validate any changes to order sets. Wellmont’s experience with clinical informatics reveals strong capabilities in clinical standardization, efficient use of a common Electronic Medical Record (EMR) to support care transformation and meaningful physician participation in strategic decision-making. This group’s work could be readily scaled to support the new entity’s clinical standardization efforts.

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Both organizations will be able to build on their foundation of physician leadership and find ways for strong physician leadership to permeate the new organization's culture. A critical forum for physician leadership will be the Ballad Health Physician Clinical Council. The role of this group will be to guide the combined system's efforts to achieve the Triple Aim and to help develop a shared culture of quality improvement and population health management across the organization. Structurally, the Council will be overseen by the Quality Committee of the board and administratively supported by the Chief Medical Officer of the system; members will be appointed jointly by the system board and the medical staffs of the various hospitals. This structure will create ties between the Council and the medical staff and community physicians so that best practices are broadly disseminated and incorporated into practice patterns across the integrated delivery system, which will be an important vehicle for physician engagement and quality improvement.14

3. Both organizations have experience in value-based arrangements and will bring relevant leadership and resources to support Ballad Health’s pursuit of population health management and optimal risk-based contracting performance.

The systems’ experience with value-based care delivery and payment reform will be extremely useful to the merged entity. Mountain States has had early successes with value-based payments through upside and downside risk contracts and exceptional performance in the MSSP ACO program. While these early successes are promising, Mountain States' scale is limited, and the "upside" will diminish over time. The merger will allow Ballad Health to improve on the critical mass of lives necessary to take on full risk and manage the size of the population to be financially viable for the long term. Wellmont, too, brings experience with value-based reimbursement through its Pay-for-Performance and bundled payment arrangements. As it relates to Organization and Governance, the systems' experiences will provide existing resources, structures and leadership expertise to Ballad Health as it moves forward to take on more risk. Additional detail will be discussed under the Payment Transformation pillar.

Additionally, a particular strength of the combined entity will be the diversity and scope of experience across each organization’s leadership teams. As an example, leaders at Mountain States have professional experience with health policy and state government. Alan Levine, President and CEO of Mountain States, served as Secretary of Louisiana’s Department of Health and Hospitals and Senior Health Policy Advisor to the governor of Louisiana, as well as Deputy Chief of Staff and Senior Health Policy Advisor to the governor of Florida and Secretary of Florida’s Agency for Health Care Administration. In each role, Levine led major successful state efforts to transform the health delivery and payment systems of the states, an effort requiring support and buy-in from a variety of health care interests and the support and oversight of legislative and administrative public bodies. Senior Vice President and Chief Development Officer Tony Keck was Director of Health and Human Services for South Carolina, where he led successful state efforts to align the payment system with intended public health outcomes. These experiences make them well-positioned to understand the multitude of state and private sector infrastructure interactions that must occur for such a transition to be successful. The COPA commitments include many health improvement strategies that go beyond traditional health care services (e.g., childhood literacy), and state health policy experience will help the system thrive in the intersection of traditional health care delivery and social determinants of health. Similarly, Levine and Bart Hove, CEO of Wellmont, have a combined more than 50 years of hospital operations experience, and they are supported by operations and financial leadership which have decades of experience in operations of complex health systems. The management teams have the right blend of experience to optimize the likelihood of success of this complex transition.

Care Delivery and Management

*Enabling proactive, coordinated patient care across the care continuum*

Care Delivery and Management is the pillar that involves constructing the care model to deliver value. It includes the frontline, patient-centered strategies by which successful organizations

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achieve and maintain population health management and optimal risk-based contracting performance.

For successful Care Delivery and Management, organizations rely on a robust clinical program, cross-continuum engaged providers, and supporting tools and analytics. Best practices (which were evidenced during our interviews with Mountain States and Wellmont) include:

- High-quality, standardized care pathways and an operational infrastructure to support cost and quality monitoring across an episode of care
- Comprehensive understanding of quality metrics and goals for clinical program development
- Ability to risk stratify populations, perform targeted interventions for high- and rising-risk patients, and track real-time patient utilization
- Established care management processes that work seamlessly together, supported by analytics, workflow management, communications and reporting
- Multidisciplinary teams working together to maintain unified care plan across patient needs
- Comprehensive wraparound services and aligned, high-performing post-acute providers
- Existence of cross-continuum quality program to which all physicians are held accountable

Findings and Building Blocks for Success

The two systems have Care Delivery and Management capabilities that will complement and strengthen each other in a combined system.

1. **A strong commitment from both organizations to reduce system-wide care variation will accelerate high-quality, consistent care delivery across Ballad Health.** A resounding and consistent theme from stakeholder interviews at both systems was the desire to minimize variation in care and, where possible, standardize care delivery to ensure that patients receive the same high standard of care regardless of their access point to the integrated delivery system.

The health systems have begun independent efforts to reduce unwarranted clinical variation, which is linked with higher costs, inferior outcomes and disparities in care. Wellmont is investing significant effort in reducing care variation and has experience with standardizing clinical workflows and order sets to provide consistent, reliable and evidence-based medicine. Specifically, Wellmont leverages a group of physicians dedicated to clinical informatics to review and approve clinical standards and to work with IT staff to support clinical standardization efforts. These efforts to address clinical variation can be tapped into and scaled for significant impact across the combined entity.

As an additional example, AnewCare Collaborative, Mountain States’ ACO, uses an executive dashboard for cost, utilization and quality data; this dashboard is reviewed at the Quality Committee of the ACO board, which then determines initiatives to address gaps and set quality improvement initiatives. This work can be scaled across the combined entity to promote standardization of clinical practice patterns in the ambulatory space. In the inpatient setting, Mountain States has established a Physician Council for Clinical Excellence, a group of physicians from each facility that identifies and addresses system-wide clinical variation issues (as discussed under the Organization and Governance pillar).

Importantly, both systems have tied quality measure performance to provider compensation – a key mechanism for sustaining care standardization over time. In fact, physicians have been shown to be the main influence that drives quality improvement, impacting nearly half of key performance indicators on their own and another 43% in partnership with the hospital. At Mountain States, primary care physicians have compensation tied to a number of key quality measures that are also present in the system’s risk contracts, creating continuity between physician incentives and system goals. This

continuity demonstrates an understanding of the system’s quality goals and the need to align provider compensation with clinical program development.

2. **Care management teams at Mountain States and Wellmont offer complementary skill sets that, when brought together, will provide comprehensive care across the continuum.** Mountain States has focused its strategy on providing ambulatory care management, with resources being shared between the ACO and medical group. The ACO care management team works collaboratively with Mountain States Medical Group on clinical workflows and quality initiatives and provides care management to the medical group’s Medicare Shared Savings Program population (lives covered by the ACO). Additionally, the ACO has provided assistance to community providers in areas such as data reporting and EMR optimization to facilitate improved care management processes.

Mountain States also has begun to address social determinants of health via behavioral health navigators. ("Navigators" are members of a care management team who guide patients through the health care system, often by coordinating visits, providing education and medication reminders, and supporting adherence to care plans.) By going into the patient’s home, navigators often uncover and address behavioral factors impacting the patient’s health. The use of navigators is an important strategy for holistic care delivery, as research confirms that a broad range of social, economic and environmental factors determine one’s ability to participate in healthy behaviors.\(^\text{17}\) Navigators are a particularly effective resource to engage with an underserved population because they can help address cultural assumptions such as distrust in providers and skepticism regarding the general health care system.\(^\text{18}\) During interviews, the care management team members demonstrated a strong understanding of the need for a behavioral health strategy that accounts for social determinants of health, a positive indicator for population health management success as these individuals will carry forward that understanding into the new system.

Multiple Mountain States practice sites have been selected for CMS’ Comprehensive Primary Care Plus (CPC+) initiative. Looking ahead, the infusion of CPC+ dollars will be used to expand staffing at Mountain States (as well as within independent practices that were also awardees) to support increased investment in care management. It should be noted that selection to participate in CPC+ is an external validation of existing capabilities and the future commitment of Mountain States to be successful in advancing primary care, population health management and optimal risk-based contracting performance. Mountain States has also invested in a post-acute transition model for post-acute patient placement that encourages post-acute facilities to reduce length of stay, hospital readmissions and overall cost of care.

Similarly, Wellmont has redesigned its inpatient case management function to focus on post-acute transitions, emergency department (ED) utilization, readmissions and addressing social determinants of health. Wellmont’s case managers work toward improving care transitions as patients transition out of the inpatient setting into the post-acute environment and eventually back to their homes. This work in coordinating transitions is currently hindered by a lack of visibility into a patient’s movement across systems. For example, an acute discharge from a Wellmont facility that readmits to a Mountain States facility will not receive as seamless a care experience as if the readmission was at the same health system, resulting in less coordinated delivery of care and duplicative resource consumption. The Mountain States post-acute network does not include the upstream transition work being done by the Wellmont case managers, thus limiting the effectiveness of each system’s individual efforts. Combining these efforts can more effectively improve acute utilization metrics and create more visibility and communication across the system.

3. **Ballad Health plans to invest in IT tools that support care management resources to enable more effective risk stratification and delivery of care.** Currently, AnewCare Collaborative care managers have extensive experience identifying care management opportunities through reports from Truven Health Analytics and Health Endeavors, which uses a care management algorithm based on risk stratification to focus on high-risk patients. On the medical group side, Mountain States Medical Group uses a care management dashboard that sits on top of its EMR to identify gaps in care and prepare clinical teams to address those gaps during a patient’s visit. While the care management tool is enabled

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for all patients, care managers tend to focus on populations for which the system has risk-based payer arrangements. Beyond a continued focus on addressing gaps in care and enhancing risk stratification capabilities, Mountain States’ future goals are to leverage more robust care management tools to include real-time utilization notifications, advanced analytics and prospective modeling.

At both systems, stakeholders are committed to developing more sophisticated population health management capabilities, yet current resource limitations make these goals unfeasible. As a combined organization, the parties have committed to investing in fully integrated population health management tools as part of the Common Clinical IT Platform. ¹⁹ Using these tools to focus efforts on the highest-risk patients will be an important strategy for building a best practice care management approach. ²⁰ Having robust population health management support and using a single set of tools across the system will promote uniformity of care and consistent population health management capabilities.


Segmentation and Provider Network

Building and developing an aligned, high-value provider network driven to improve outcomes and efficiencies

Proper Segmentation and an integrated Provider Network guides organizations to develop a high-functioning integrated care model, an essential component of any population health management and risk-based contracting strategy. Without an aligned provider network, health systems are severely limited in their capacity to manage populations at scale. Since the majority of Primary Care Physicians in the market are independent, this type of alignment strategy will benefit the region, as it provides a proper vehicle for minimizing care variation and aligning the interest of independent groups with Ballad Health.

Effective Segmentation and an integrated Provider Network should include appropriate coverage of providers (clinically and geographically), a critical mass of covered patient lives, and standardized communication and engagement with providers. Detailed best practices (which were evidenced during our interviews with Mountain States and Wellmont) include:

- High-functioning primary care network with sufficient coverage of lives
- A commitment to develop a clinically integrated network, which leads to comprehensive provider alignment covering an appropriate clinical and geographic reach
- Provider education about, and engagement in, population health management initiatives
- Standardized communication channels to support the network and streamlined communication between physicians, inpatient facilities and post-acute care providers

Findings and Building Blocks for Success

My team and I assessed the network capabilities of both systems in terms of the number of providers, geographic reach and coverage across the continuum of care.

1. The combined entity will have a critical mass of employed primary care providers to continue the transition to value-based care and also will present an even greater opportunity for engagement with independent providers. When Mountain States and Wellmont combine their employed medical groups, the merged system will have more than 90 primary care physicians. This number represents a sufficient primary care group to begin engaging in even more value-based contracts. Financial sustainability within risk-based contracting relies on a provider group’s ability to manage the care of a meaningful number of attributed patients. The combined entity would have sufficient attribution to establish an actuarially sound risk pool with most payers, whereas each individual system may not have sufficient lives to engage in large downside risk arrangements. Additionally, the combined system’s primary care network could and should be supplemented by a significant and growing number of financially aligned specialty providers.

The region in which the two systems operate has a significant concentration of independent providers (roughly 70%), and both systems can leverage their experience engaging with providers to pursue value-based contracts: Mountain States through its ACO (AnewCare Collaborative) and Wellmont through its Physician Hospital Organization (Highlands Wellmont Health Network). Through these physician alignment vehicles, both organizations have experience working with payers to find contracts that are beneficial to both the health system and their independent physician partners. Greater alignment with independent providers will result in greater coordination for patients, increased attribution and more meaningful improvements in care throughout the region. To be successful in population health management, changes in practice patterns are essential, and community physicians will need to be involved in the process if changes are to be sustained in the long term.

23) Primary care physician numbers provided by systems: 54 at Mountain States, excluding urgent care and hospitalists; 36 at Wellmont (estimate does not include Takoma Regional Hospital).
It is important to note that while Ballad Health will have sufficient attribution to establish actuarially sound risk models, the overwhelming majority of primary care physicians (necessary for attribution) will remain independent. Thus, the alignment strategy of developing a clinically integrated network is a wise commitment for Ballad Health to make, and is important for achieving the broadest reach necessary to achieve the objectives of improved population health.

Finally, a key component of physician engagement under population health management is the need for standardized communication channels with providers. The Organization and Governance section of this report details a number of existing physician leadership structures at both systems, as well as the planned future Physician Clinical Council for Ballad Health. As discussed in that section, the parties have designed the Physician Clinical Council structure with the aim of inclusiveness. By appointing members of both hospital medical staffs to the Council, the system will be able to ensure more streamlined communication back to the respective medical staffs, leading to enhanced engagement and adoption of best practices. The Physician Clinical Council was constructed to ensure balance between critical stakeholders: between Wellmont and Mountain States, between employed and independent physicians, between primary care and specialists, and between board/management input and input from the independently elected medical staffs of the hospitals.

2. Combined, both systems will have a complement of assets and network relationships that will allow Ballad Health to span the full care continuum necessary for successful population health management and risk-based contracting. Both organizations have a broad range of assets across the care continuum, including skilled nursing facilities (SNFs), home health providers and hospice services, and they have focused on building collaborative arrangements with other community stakeholders. For example, both systems have built high-functioning and selective post-acute networks based on collaborative relationships focused on improving patient care. High-functioning post-acute networks try to guide patients toward SNFs and other post-acute providers with higher quality and lower cost outcomes (lower readmission rates). For example, Wellmont’s post-acute network requires SNFs to have a CMS Star rating of 5 (the highest-awarded Star rating achieved by only 24% of organizations in the country).

Managing the total cost of care for patients relies heavily on care provided outside the four walls of the hospital, and having a selective network of post-acute partners has been a proven technique for reducing post-acute costs in bundled payment and total cost of care contracts. Ballad Health can leverage these high-functioning post-acute networks as bundled payment programs continue to develop and the combined system manages an even greater proportion of total cost of care risk. In addition to building post-acute networks, both systems have put in place resources that communicate with patients and providers at SNFs to help improve patient care, ease transitions of care and prevent avoidable readmissions to the hospital.

3. The combined entity will be even better positioned to address the needs of the geographic service area and make continued investments in order to address gaps in access to care. While Mountain States and Wellmont have competed for years to create often redundant access points throughout their service area, Ballad Health will be able to more effectively assess the population’s geographic needs and adapt accordingly (such as by developing a broader variety of access points and recruiting providers to fill service gaps). Under the current state, some services have excess and redundant capacity, while others (like behavioral health) have very limited or no excess capacity. The merged entity will be in a much better position to match supply with demand and expand access to health care services.

Ballad Health has committed to investing $140 million to expand services and pursue a more efficient allocation of clinical services across the region. By filling gaps and redistributing clinical resources as needed, the combined system will be able to more effectively reach the population with the right care in the right location – a key component of successful population health management and risk-based contracting performance. While it is my understanding as a non-attorney that antitrust laws prevent the two organizations from agreeing to specific business plans prior to approval of their Application, they have committed to pediatric specialty centers and emergency rooms in Bristol and Kingsport, recruitment

24) CMS Nursing Home Compare website as of 2/1/2017.
of pediatric specialists, creating new capacity for residential addiction treatment and expanding mental health access in partnership with local resources. Community-based mental health services may include mobile health crisis management teams and outpatient treatment and addiction services.26
Strategic Operations

Developing a centralized infrastructure with local governance to support operations and integrating data for reporting

The Strategic Operations pillar is the engine that moves an organization’s population health management initiatives forward. It involves creating a clear vision for population health management and aligning the infrastructure to support operationalizing this vision.

Strategic Operations must include a compelling vision and value proposition, well-organized resources and tools, and use of analytics support. Specifically, best practices for Strategic Operations (which were evidenced during our interviews with Mountain States and Wellmont) include:

- Aligned, well-defined strategic vision across all stakeholders
- Structured population health management value proposition and communications strategy for both internal and external stakeholders
- Optimally allocated resources and services into centralized, regionalized and point-of-service categories
- Broad-reaching stakeholder involvement with established community partnerships to support the organization’s strategic vision

Findings and Building Blocks for Success

My team and I identified significant resources that will enable Ballad Health to achieve success in population health management and risk-based contracting performance from a Strategic Operations perspective.

1. Ballad Health has established a clear strategic vision with significant input from community stakeholders and a focus on community health. Since announcing their intent to merge in the spring of 2015, Mountain States and Wellmont have diligently sought to provide education to internal and external stakeholders regarding the merger and to facilitate dialogue through formal feedback mechanisms. These mechanisms include a dedicated website, newsletter and FAQ forum, as well as many public events with participants from the community and local media. Following the public events, the merger received the endorsement of all three cities’ chambers of commerce (Bristol, Johnson City and Kingsport) with confidence that the merger was in the best interest of the community’s needs. Resounding support also comes from other local leaders and employers, including the Washington County Mayor, Eastman Chemical, the Bank of Tennessee and other community organizations. These endorsements by significant employers herald a successful merger as their financial interests align with the merger’s goals. Many of these employers are self-insured with a financial interest in care integration models that are evidence-based, reduce duplication and shift risk toward the combined provider system.

Both systems engaged community stakeholders early in the merger process in order to develop a strategic plan that met the needs of the community. Through a series of round table meetings coordinated by ETSU’s College of Public Health, Mountain States and Wellmont engaged with residents of the region to solicit input on the most pressing health concerns in the community. Additionally, the systems formed an Integration Council with executive representation from both systems that has met regularly to develop plans for operational and cultural integration. These thorough engagement and planning efforts over the past two years are a positive indicator of future success; in fact, involving key stakeholders throughout the merger planning process and relying on them for feedback is a recognized best practice for merger success. The planning process has been thorough in both its scope and the level of transparency that has been provided to the community.

The systems have consistently articulated a clear vision for what the merger will allow them to jointly achieve: By leveraging economies of scale that result from combining operations, Ballad will reinvest resources in improving community health in northeast Tennessee and southwest Virginia. The reinvestment of resources will enable the combined system to bolster and grow its population health management resources and capabilities, which will in turn be used to succeed in future risk-based contracting. During our interviews, it was clear that this vision resonates strongly with leadership and board members at both systems. This alignment around vision with internal and external stakeholders is important because it is another key factor in the ultimate success of any merger.32

It will be important for Ballad to continue to reinforce its strategic vision across stakeholder groups – especially clinicians – during and after the integration process, so they remain aligned and help drive the vision forward to fruition.

2. As a single health system, Mountain States and Wellmont will have the opportunity to unite their complementary strengths. The current competitive environment between Mountain States and Wellmont is a barrier to gaining economies of scale for services that could be shared. Through financial integration as a result of the merger, Mountain States and Wellmont will have the opportunity to unite their complementary capabilities, leverage each system’s strengths and strategically plan as a unified system to meet the needs of the region in a manner difficult to achieve without financial and operational integration.

The combined entity will bring together valuable, complementary resources supporting both employed and independent providers – for example, credentialing through Wellmont’s Physician Hospital Organization, ambulatory care managers through AnewCare Collaborative and case management through Integrated Solutions Health Network. Additionally, the systems have strengths in different areas that can be tapped into and scaled across the system: Mountain States has significant experience with value-based contracting, while Wellmont has experience with medical informatics that will be invaluable in supporting Ballad Health’s clinical standardization efforts. Additionally, Wellmont has strong EMR capabilities that can be leveraged across the combined system.

Integrated Solutions Health Network (ISHN) – a Mountain States entity that includes the AnewCare Collaborative ACO – houses a number of population health management resources, such as case management and analytics, that can be scaled to support the new entity. Mountain States has already expressed a vision for integrating ISHN’s capabilities throughout the Mountain States system, and this work should be expanded post-merger to support population health management by Ballad Health. In support of ISHN’s care management resources, Ballad Health’s Physician Clinical Council is charged with developing the uniform guidelines, protocols and outcome measures that will be implemented across the system.33 These centralized capabilities and resources will support Ballad Health’s goal of growing its primary-care led strategies like patient-centered medical homes (PCMH). PCMH status is achieved by demonstrating competency and capabilities in five functions and attributes: comprehensive care that includes behavioral health services, patient-centered care, coordinated care aligned with community services, accessible care at the patient’s convenience, and high quality and safety.

Importantly, duplication is not a wise use of limited resources. Instead, the sharing of resources across the entire spectrum of services deployed by Mountain States and Wellmont would be a sensible optimization of investments and would leave more resources available for services and the front-line care necessary to accomplish the objectives of the merger.

3. Significant analytics infrastructure and staffing at each organization will be able to be merged and consolidated, resulting in economies of scale under the combined entity. In addition to ensuring its provider network meets the region’s needs, Ballad Health can reorganize its operations (centrally, regionally and at the point of service) more effectively than is possible today given the parties’ need to compete as separate entities. Ballad Health planning teams have discussed ways in which they will be able to integrate leadership and centralize certain analytic and IT resources. As an example, non-traditional members of the primary care team (social workers, diabetes educators, nutritionists and

pharmacists) are critical to success in population health management and often work with multiple primary care locations. Post-merger, these team members will be able to work with former Wellmont and Mountain States practices in more concentrated geographic areas and therefore spend more of their time on patient care.

Population health management and optimal risk-based contracting performance demand investment in infrastructure, specifically in care management, health IT and analytics capabilities. It cannot be overstated that the economies of scale and efficiencies generated through the merger will help fund these investments at a volume that would not be feasible for either system under its current operations.
Health IT and Analytics

*Enabling IT resources to support delivery system redesign, provider accountability, value-based quality monitoring and patient engagement*

Health IT and Analytics involves the supportive technology that is essential to advance population health management and risk-based contracting strategies.

Strong Health IT and Analytics should include ease of information flow throughout the system, transparency with providers, supporting business intelligence tools and reporting capabilities. More detailed best practices (which were evidenced during our interviews with Mountain States and Wellmont) include:

- Common clinical information technology roadmap that spans the enterprise
- Technology that monitors and supports provider performance, accountability and data transparency
- Aligned providers and associated patient data connected through HIE/data warehouse
- Informational continuity and interoperability across settings to enable seamless, scalable care management activities across delivery network
- Business intelligence tools that support population health management activities, including risk stratification, claims analysis, referral management, quality reporting and care manager support portals
- Robust clinical and financial reporting on discrete populations
- Value-based revenue/contracting/actuarial reporting and cost management tools to support analytics

**Findings and Building Blocks for Success**

Mountain States and Wellmont have a number of Health IT and Analytics capabilities in place that will position them for success post-merger.

1. **A Common Clinical IT Platform across both organizations will facilitate true interoperability and robust exchange of health information versus limited data-sharing.** Currently, Wellmont has migrated to a single EMR system, but Mountain States utilizes a host of different IT systems independently knitted together. This structure creates barriers to data exchange and a sub-optimal impact on internal operations. By contrast, in the combined system there will be a Common Clinical IT Platform, which will enable interoperability across the system and real-time health information exchange.

Today, Mountain States and Wellmont both participate in a Health Information Exchange that has limited information exchange functionality. Both systems contribute data to the HIE, which only covers 20 data points and requires a fee to view data. Ballad Health’s expanded use of a Common Clinical IT Platform for the entire system and community will allow for informational exchange across all EMR data points with no additional fees required. Both organizations have significant experience with health information exchange (e.g., Wellmont has exchanged patients records with more than 800 hospitals, 1,200 emergency departments and 21,000 clinics for over 200,000 patients), but still feel that a Common Clinical IT Platform is absolutely essential in order to turn “Health Information Exchange” between the systems from a noun into a verb. Throughout multiple stakeholder interviews, IT leaders at both organizations expressed the need for continued investment in these areas to ensure that Ballad Health is prepared for future risk arrangements and becomes a leader in the use of clinical IT systems.

The Common Clinical IT Platform will allow for Ballad Health to share its EMR platform with community providers at a significantly lower cost than an independent practice could afford on its own, resulting in cost savings outside the combined system’s achieved synergies and improved data flow between community physicians and the hospital. Additional benefits of moving to a single IT platform include improved satisfaction from providers, as the platform enhances their communication channels with each other.  

34) Stakeholder interviews.
35) Stakeholder interviews.
other, and from patients, as they benefit from a single access point to their health information across the system (instead of logging into separate patient portals). A unified patient portal will also allow the combined system to more effectively build telehealth capabilities with direct patient messaging. Additionally, the system’s migration to a Common Clinical IT Platform will enhance multidisciplinary communication, which can magnify the value of a single point of contact through integration of the EMR and the patient portal.

Successful integration to a single IT platform will lead to integration of two mandatory data sets for optimal results – clinical data and financial data. In a way no community-based exchange can provide, an integrated IT platform will enable the system to standardize clinical data while also benefiting from clarity in the contributing cost variables. This is absolutely essential for any system that expects to enter into full risk arrangements, as lack of clarity or continued variation in this data can lead to failure in risk-based models.

A Common Clinical IT Platform will also be necessary to achieve the new system’s goal of improved clinical standardization through the deployment of best practices. Mitigation of variation requires the use of standardized order sets and commonality of data definitions – making a common governance structure essential. A community-based HIE can help achieve sharing of limited data, but will fall short of providing the integration in order entry, drug utilization, patient flow and data consumption necessary for optimally effective population health management.

A major factor for successful population health management is the establishment of an infrastructure that allows for transparency of data and access to information at the point of care. Ballad Health’s commitment to a Common Clinical IT Platform will satisfy those needs and become the foundation on which a successful population health management program can be built.

2. Both systems utilize IT tools to understand and analyze data across the care continuum. As discussed under the Care Delivery and Management pillar, business intelligence tools are in place in both systems and would be enhanced through the increased resources generated by the merger. Both systems utilize risk stratification tools and will continue their evolution in this capability with the inclusion of elements such as social need screenings, health risk identification and immunization delivery.

Wellmont utilizes many business intelligence capabilities from its Epic EMR and has established multiple layers of robust analytic solutions atop its enterprise data warehouse. Core capabilities include predictive modeling, risk scoring, compliance and safety monitoring, clinical quality reporting for over a dozen different programs, disease registries, quality benchmarking and analytics, cost accounting data, and self-service analytics with an accessible data mart of measures. Wellmont has established a centralized IT and analytics department that manages quality reporting and supports all clinical standardization efforts within the system. These activities will be scalable across the new system and arm Ballad Health with the experience necessary to undergo new areas of population health management and analytics.

Both organizations have invested in Crimson Continuum of Care (CCC), a multifaceted quality and performance improvement tool that allows physicians, administrators and performance improvement teams to analyze severity-adjusted quality and cost data. CCC allows Mountain States and Wellmont to compare their performance by physician group to cohorts of other hospitals and historical performance at their own hospitals. As a combined system with shared access to CCC, Ballad Health will be able to use cohort and system-wide comparisons on quality and cost to identify areas with the greatest opportunities for clinical standardization and cost savings.

As discussed under the Care Delivery and Management pillar, Ballad Health has committed to investing in fully integrated population health management tools as part of the Common Clinical IT Platform. Having a common set of business intelligence tools will facilitate consistency and continuity in care

management across the system and will enable the organization to focus its staff outreach to high- and rising-risk patients and engage low-risk patients through a common patient portal and virtual access points.  

3. **Mountain States and Wellmont bring extensive expertise in different, complementary areas related to health IT.** A common theme throughout this assessment is the merging of complementary strengths held by Mountain States and Wellmont. The meshing of skillsets and assets is particularly strong in areas related to Health IT and Analytics.

Wellmont has demonstrated exceptional use of its EMR with strong data governance, clinical workflow optimization, and integration with ambulatory and community providers. Wellmont is one of the country’s most advanced users of Epic’s EMR and has demonstrated particular expertise in the rapid implementation of EMR instances for its own hospitals. In fact, Wellmont was one of only eight Epic users in the world to achieve Epic’s level 8 out of 10 for its success in implementing the EMR’s functionality.  

Wellmont uses its EMR to ensure clinical standardization across the system and has a well-defined process for identifying, building and implementing new clinical pathways. During interviews with Wellmont stakeholders, it was clear that the organization felt great pride for its historical EMR accomplishments and an overwhelming enthusiasm for the possibilities of EMR integration across the merged system.

For Mountain States, AnewCare Collaborative brings experience with claims analysis, risk stratification and contracting analytics that can be leveraged across the new entity. Success under value-based contracts relies on access to timely, reliable and actionable data for the appropriate stakeholders. AnewCare has experience in population health management analytics and has a proven approach for how those analytics can be integrated into a caregiver’s practice to help achieve total cost of care savings. Using claims data, AnewCare Collaborative has visibility into the entire care continuum, which is crucial in understanding a population’s health care pain points and where quality improvement and cost reduction strategies can best intervene. Additionally, AnewCare Collaborative has experience working with multiple EMRs at independent practices to collect and report on quality data for value-based contracts. AnewCare Collaborative established a strong audit process for reporting early in its inception and was able to report on 100% of measures with all practices in the first year – a feat not often achieved by new ACOs. These reporting processes and standards will be valuable for the combined entity.


42) Stakeholder interviews.
Payment Transformation

Navigating narrow corridor of transitioning from fee-for-service to value-based contracts

Payment Transformation is the pillar that ensures financial viability for organizations as they embark on the journey toward value-based care. With a foot in both worlds, health systems must manage a delicate transition between fee-for-service and fee-for-value.

To do so, organizations should have data-driven financial insights, aligned provider incentives, and dynamic reporting capabilities. Best practices (which were evidenced during our interviews with Mountain States and Wellmont) include:

- Compelling value proposition for payers
- Understanding of impact of "demand destruction" to hospital contribution margin, inclusive of DRG-specific direct costs through cost accounting
- Billing, cost and claims data integrated to portray comprehensive dynamics and financial net impact of value-based care strategy
- Providers' incentives and compensation are tied to improved cost and quality
- Board-driven measurement system to monitor and evaluate population health management and risk-based contracting performance success
- Consistent, reliable and actionable reporting is tailored to stakeholder-specific needs: executive, operational and clinical
- Payer contract analytics and negotiations expertise under bundled payments, P4P or capitation

Findings and Building Blocks for Success

Together, Mountain States and Wellmont have core capabilities in place for Payment Transformation.

1. **Experience and proven success under value-based contracts will be leveraged by the combined entity.** Mountain States, in particular, has significant experience in pursuing value-based contracts with varying levels of risk. For example, Mountain States is a national leader in Medicare’s upside-only Shared Savings Program where it has achieved total shared savings of $17.5 million, the 16th-highest amount of savings in the country (out of 392 ACOs operating as of 2015). Mountain States has performed well in value-based arrangements with two Medicare Advantage Plans. Mountain States' employed primary care group is evaluated on screening activities and documentation improvement and has received incentive payments for positive performance. Additionally, Mountain States is taking on downside risk with one non-government payer and is on track to have downside risk with another non-government payer as well as Medicare FFS in 2019 (collectively representing a significant portion of its business). Finally, while this venture was ultimately shut down due to losses, Mountain States gained valuable experience while operating its own insurance company, CrestPoint Health, from 2011 to 2016. One of the early successes for CrestPoint was serving as the third-party administrator for Mountain States’ 15,000 employees and their dependents. As an example of successfully lowering costs, in 2012, Mountain States’ employee and dependent costs were kept flat while the national employer trend was increasing about 8%. Notably, the losses experienced by CrestPoint are reported by Mountain States as occurring largely because there was a lack of critical mass of covered lives. As stated in this report, a lack of critical mass needed for attribution is a commonly reported cause for failure in risk-based models.

Wellmont-affiliated providers did not participate in CrestPoint, which limited the ability of CrestPoint to penetrate a larger number of lives.

Wellmont also has experience with bundled payments and value-based contracts (including contracts with three non-government payers), but has not engaged in the same level of risk sharing as Mountain States. Currently, Wellmont juggles over 20 different Pay-for-Performance contracts, which evaluate an amalgam of domains, including outcomes of care, patient satisfaction/experience, patient safety, clinical process, length-of-stay and utilization metrics for ED and radiology. Each contract is tied to financial impact based on a percentage of total payment, and current experience indicates future success in many of the programs. As an example, both Bristol Regional and Holston Valley Medical Center are projected to perform well under CMS’ value-based purchasing and hospital acquired condition penalty program in future years. (Both organizations are expected to avoid any penalties due to high quality and actually receive cumulative positive adjustments of $432,000 for FY2018-2019). These contracts showcase Wellmont’s ability to accurately capture and report quality data, which is a struggle for many health systems. The transition to value will require investments in reporting, but both organizations have the skillsets to tackle future needs. Additionally, Wellmont’s employed physician groups participate in value-based contracts with several non-governmental payers for both commercial and Medicare Advantage lines of business. Future risk contracts for Ballad Health will likely include risk on all types of medical spend (e.g., professional fees and pharmacy). Thus, experiences from the physician group contracts will be important to carry forward with new contracting opportunities.

While value-based contract experience and past success are important building blocks, gaining a critical mass of covered lives will be a crucial component for the combined entity to succeed in spreading actuarial and utilization risk as well as the fixed costs of infrastructure. As was proven through the million dollar losses Mountain States experienced operating CrestPoint Health with only 6,000 Medicare Advantage lives, it is difficult to achieve long-term success unless the fixed costs of investments in population health are spread across a larger base of covered lives.

The achievements each organization has had on its own are an impressive testament to the potential for the combined entity to be successful with value-based arrangements across a broader base of covered lives. The combined entity will have the financial strength and size to pursue risk-based contracts on a broad, population-wide scale and engage payers in a more meaningful way that complements the merger’s goals. The leadership teams of both organizations have made public commitments to a rapid transition toward risk with Ballad Health pursuing progressively higher levels of risk-based contracting with all of its payers. In particular, leadership has discussed the potential for full-risk arrangements (depending on payer interest) as soon as 2019 and wants risk-based models/partnerships in place with each of the Principal Payers by 2022.

2. A detailed understanding of costs will be critical to navigating the narrow corridor from fee-for-service to value-based contracts, and only a combined entity will be able to standardize and address unwarranted variation in underlying costs across facilities. As both systems engage in more bundled payment programs and as reimbursement trends stay flat (or decrease), they must understand the costs underlying care delivery and begin to manage those costs more judiciously. Both systems have cost accounting functions integrated with other clinical data sources that can be used to identify future efficiency opportunities across the new entity. With the transition to a common EMR and a unified cost accounting system, Ballad Health will be able to compare best practices and identify areas of variation from both a clinical and financial perspective. For example, a best practice clinical outcome may provide improved outcomes and show meaningful decreases in unnecessary consumption of hospital resources. Absent a merger, there is no legal or practical way that two competitors would be willing to share this level of underlying cost data and ultimately be able to take unnecessary costs out of the region’s health care delivery system and lower overall costs for consumers.

48) Pay-for-Performance Customized Assessment. The Advisory Board Company.
In order to achieve financial sustainability in a value-based environment, Ballad Health will need to devote resources to hospital-based process improvement activities. One of the primary data sources to help identify areas of opportunity will be financial/cost accounting data. Common drivers of the variation underlying efficiency opportunities include operational issues, non-standardized practice patterns and physician preference/choice. As an example of what is possible, Wellmont has a centralized analytic department that identifies areas of opportunity and helps understand the drivers of variation. Further, this group interfaces with a clinical informatics committee that addresses issues of standardization and physician preference. By creating consistent financial reporting activities across all service lines and all facilities, a centralized analytics team will be able to evaluate opportunities equally across all departments to identify opportunities and improve overall efficiency.

As an example of this work in practice, both systems are participating in the CMS Oncology Care Model, which ties episodic payments to Medicare beneficiary expenditures. CMS pays participating practices an enhanced services payment to provide care navigation, 24/7 patient access and detailed care plans. CMS also pays a Performance-Based Payment based on achievement of quality measures and actual episodic expenditures compared to target expenditures. Actual and target expenditures are based on Medicare Part A, Part B and Part D expenditures. Affecting all areas of episodic expenses requires data connectivity between systems that track clinical quality and systems that track costs. Ballad Health’s commitment to integrate and enhance both elements will help the combined organization perform well in the CMS Oncology Care Model and other like-models in the future. Additionally, the participation of both systems in the CMS Oncology Care Model is a prime example of the potential for administrative cost to be spread among a larger population for the achievement of the goals of the payer community.

Once variance in costs is identified, I feel confident that lean management principles will be able to be applied in a way that will rapidly address root cause of variance and remove waste from the system. Both Wellmont and Mountain States are on lean management journeys as organizations. Wellmont has two lean “Senseis” within its organization, and Mountain States has been working for years to implement its Value Optimization System (VOS). Mountain States is in year five of a six-year transformation to be self-sufficient with up to four internal Senseis, a dedicated staff of core team members at each facility trained in the use of lean tools and methodologies, and certified front-line team members using the methodologies. The VOS initiative has recognized a multitude of service improvements, quality improvements and savings to the organization of over $70 million. As one example of the success of Mountain States’ VOS work, the system analyzed opportunities to improve transitions of care relative to increased education on medication for patients with COPD and congestive heart failure. The team identified gaps in the discharge process and mechanisms to better educate and follow patients post-discharge from the acute care setting. The results were a 25% improvement in patients seen by a discharge pharmacist prior to discharge to educate them on medications; a 38% improvement in patients receiving enhanced care coordination post-discharge; and a 50% increase in the use of standard protocols for discharge teaching.  

3. **Both systems engage with physicians through data transparency and aligned incentives.** Both systems share performance data with physicians through ambulatory and acute-based quality scorecards. As an example, a wide variety of dashboards are available to Wellmont providers through its Epic EMR. Providers have the ability to see individual performance detail and compare their performance to the rest of the system as well as to external benchmarks for many metrics accessible through a data mart. Both systems indicate strong physician use of available data to help close quality gaps within ambulatory practices, track patients across the continuum and compare quality data. Additionally, both systems have gone through significant effort to ensure trust in the underlying data sources in order to improve physicians’ willingness to use data. For example, Wellmont has gone through a physician-driven process to determine physician attribution for each inpatient case in order to assign primary accountability for (both positive and negative) patient outcomes. Ballad Health has committed to pursuing clinical integration with independent providers, which will provide the benefits of data transparency to employed and independent providers as well as their patients.

51) Stakeholder interviews.
Importantly, both systems tie physician compensation to quality metrics. This alignment is particularly strong at Mountain States, where physician incentive metrics align with a core group of measures present in the system’s value-based contracts. As Ballad Health takes on more significant risk arrangements, provider incentives should follow accordingly, and a higher percentage of physician compensation will need to be aligned with the system’s population health goals rather than based on the volume of services provided. Both systems have already taken steps in this direction, but further efforts will require a more substantial cultural shift and could prompt more healthy skepticism in the data used to evaluate performance. The transition is best eased by increasing transparency throughout the process and involving physicians in the decision-making process early and often.
Key Strategies for Success

Critical Factors to Support the Transition to Risk

Based on the findings from my assessment, it is clear to me that Mountain States and Wellmont have the building blocks to succeed in a value-based care payment system.

Emerging from the building blocks I identified earlier in this report, I believe there are five key strategies that are critical for Ballad Health’s long-term success with population health management and risk-based contracting. The table below compiles the five key strategies and supporting success factors.

I strongly believe Mountain States and Wellmont have committed to these strategies and are well-positioned operationally to pursue them and ensure the long-term sustainability of their vision for improving the health of their region.

<table>
<thead>
<tr>
<th>Description of Success Factors</th>
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| 1 Board Involvement and Oversight | • Ballad’s Board must champion merger efforts through active involvement, leadership and advocacy  
• Board must hold system accountable to merger commitments via a well-defined measurement system and process |
| 2 Physician Alignment and Engagement | • Population health management success requires change in practice patterns and community physicians / stakeholders must be actively involved in care model execution for it to be successful |
| 3 Common Clinical IT Platform with Supporting Business Intelligence Capabilities | • A Common Clinical IT Platform is essential for the sharing of best practices, interoperability across care settings and real-time exchange of meaningful health information  
• Business intelligence tools (leveraging data from a common EMR and other sources) will be critical to effectively risk-stratify patients, identify opportunities and monitor progress toward goals |
| 4 Behavioral Health Integration into Care Model | • A holistic approach to care delivery requires a behavioral health focus that addresses the social determinants of health  
• Well-established behavioral health practices must be integrated into the care model with sufficient access points and care management functions to support the population’s needs |
| 5 Access to Primary Care in Rural, Underserved Regions | • Population health management requires an ambulatory primary care strategy that meets community demand and provides timely and accessible care delivery across the integrated delivery system’s service area – especially in regard to maintaining primary care access across the rural communities in the region |

- All of these critical success factors have been committed to in Ballad Health’s plans  
- The capital generated by the merger’s efficiencies is necessary to achieve these commitments, and without a merger the region will not receive the benefits of an integrated delivery system
Conclusion

High Likelihood of Success as an Integrated Delivery System

As illustrated by our assessment, Mountain States Health Alliance and Wellmont Health System together have the core capabilities to succeed in their pursuit of population health management and optimal risk-based contracting performance. Uniting their capabilities through the proposed merger will allow them to scale their collective strengths across the region, pursue value-based arrangements and maintain their financial viability. Only by operating at scale and jointly committing to a value-based strategy will the systems be able to succeed in population health management and risk-based contracting.

In conclusion, I find that Ballad Health will be well-positioned to achieve its population health management and optimal risk-based contracting performance goals as a merged integrated delivery system. I also believe that the leadership of the proposed entity has the right skill sets and competencies to effectively manage the transition into a risk-based future. Further, I find that Mountain States and Wellmont will only be able to achieve essential success factors to the benefit of the region as a merged integrated delivery system.

My team and I acknowledge the committed participation by both systems, especially the individuals listed in the Appendix, for providing their time and cooperation throughout this assessment. We also thank the many community stakeholders who have provided valuable insight to inform our assessment.
Appendix

Stakeholder Interviews

The Advisory Board team would like to express its deep gratitude to the individuals that shared their insights, analysis, and time with us.

### Mountain States Health Alliance

#### System Leadership

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
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<tbody>
<tr>
<td>Alan Levine</td>
<td>President and CEO</td>
</tr>
<tr>
<td>Allison Rogers</td>
<td>VP, Strategic Planning</td>
</tr>
<tr>
<td>Bo Wilkes</td>
<td>Assistant VP, Corporation Operations</td>
</tr>
<tr>
<td>David Sensibaugh</td>
<td>VP, President of Integrated Solutions Health Network</td>
</tr>
<tr>
<td>Dr. Clay Runnels</td>
<td>VP, Hospital Program and Service Line Development</td>
</tr>
<tr>
<td>Dr. Jeff Merrill</td>
<td>Medical Director, Patient Centered Medical Home and EHR</td>
</tr>
<tr>
<td>Dr. Morris Seligman</td>
<td>Executive VP, Chief Medical Officer</td>
</tr>
<tr>
<td>Graciela Pereira</td>
<td>VP, Outpatient Services and Post-Acute</td>
</tr>
<tr>
<td>Jason Carter</td>
<td>Director, Medical Economics</td>
</tr>
<tr>
<td>KJ Gulson</td>
<td>Director, Operations of Mountain States Medical Group</td>
</tr>
<tr>
<td>Laken Fritz</td>
<td>Corporate Operations Coordinator</td>
</tr>
<tr>
<td>Lynn Krutak</td>
<td>Senior VP, Chief Financial Officer</td>
</tr>
<tr>
<td>Marvin Eichorn</td>
<td>Executive VP, Chief Operating Officer</td>
</tr>
<tr>
<td>Melissa Cooper</td>
<td>VP, CEO Home Health, Hospice, DME</td>
</tr>
<tr>
<td>Paige Younkin</td>
<td>VP, President of AnewCare Collaborative</td>
</tr>
<tr>
<td>Pam Austin</td>
<td>VP, CIO, Information Systems</td>
</tr>
<tr>
<td>Paul Merrywell</td>
<td>VP, CIO, Information Systems</td>
</tr>
<tr>
<td>Paula Claytore</td>
<td>VP, Managed Care</td>
</tr>
<tr>
<td>Sheila Hayden</td>
<td>Director, Managed Care</td>
</tr>
<tr>
<td>Steph Dominy</td>
<td>Assistant VP, Chief Operating Officer of Mountain States Medical Group</td>
</tr>
<tr>
<td>Steve Kilgore</td>
<td>Senior VP, President of Blue Ridge Medical Management Corp</td>
</tr>
<tr>
<td>Tamera Parsons</td>
<td>VP, Performance Improvement and Quality</td>
</tr>
<tr>
<td>Tim Belisle</td>
<td>Senior VP, General Counsel</td>
</tr>
<tr>
<td>Tony Keck</td>
<td>Senior VP, Chief Development Officer</td>
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Board of Directors

Barbara Allen
MSHA Board of Directors, Chair

Bob Feathers
MSHA Board of Directors, Vice-Chair

Clem Wilkes, Jr.
MSHA Board of Directors, Past Chair

Dr. David May
MSHA Board of Directors, Community Physician

Dr. David “Rick” Moulton
MSHA Board of Directors, Community Physician, Medical Director of Clinical Integration for State of Franklin Healthcare Associates

Gary Peacock
MSHA Board of Directors

Joanne Gilmer
MSHA Board of Directors, Secretary

Mike Christian
MSHA Board of Directors, Treasurer

Community Stakeholders

Dr. Brian Noland
President, ETSU

Dr. Randy Wykoff
Dean, ETSU College of Public Health

Dr. Terry Kidd
CEO, Frontier Health

Dr. Wilsie Bishop
VP Health Affairs, ETSU

Rich Panek
CEO, State of Franklin Healthcare Associates

Physicians

Dr. Amit Vashist
Employed Physician

Dr. Anthony Palazzo
Employed Physician

Dr. BJ Smith
Community Physician

Dr. Greg Miller
Employed Physician

Dr. Ian Darling
Community Physician

Dr. Ron Blackmore
Community Physician

Dr. Shari Rajoo
Employed Physician

53) Physicians that were interviewed represent the following specialty areas: Anesthesiology, Cardiology, Cardiothoracic Surgery, Cardiovascular Disease, Family Medicine, Hospital Medicine, Internal Medicine, Pediatrics and Post-Acute.
Wellmont Health System

System Leadership

Bart Hove
President and CEO

Dale Clark
President Wellmont Lonesome Pine Hospital and Mountainview Regional Medical Center

Dale Poe
VP and Chief Financial Officer, Wellmont Holston Valley Medical Center

David Brash
President and CEO, Wellmont Medical Associates

Dr. Stephen Combs
Chief Executive Medical Officer, Wellmont Medical Associates

Eric Deaton
Executive Vice President and Chief Operating Officer

Gail Williams
Director Quality Improvement

Greg Neal
President Wellmont Bristol Regional Medical Center

Martha Chill
Chief Information Officer

Rebecca Beck
President Wellmont Hawkins County Memorial Hospital and Hancock County Hospital

Santana Mullins
System Quality Manager

Stephanie Metcalf
PHO Facility Contract Manager at Highlands Wellmont Health Network

Steve Albers
Chief Technology Officer

Steven McGaffigan
Case Management Consultant/Interim Leader at B.E. Smith

Sue Lindenbusch
Senior VP, Oncology Services and Wellmont Cancer Institute

Tammy Albright
President Takoma Regional Hospital

Terry Eads
Executive Director of System Quality & Patient Safety

Todd Dougan
Chief Financial Officer

Todd Norris
Senior VP, System Advancement, and President, Wellmont Foundation, SVP Marketing

Tonya Dykes
Case Manager

Vyyvan Derouen
VP and Chief Administrative Officer, Wellmont Medical Associates

Board of Directors

Roger Leonard
Wellmont Health System Board Chairman

Roger Mowen
Wellmont Health System Board Treasurer

Dr. David Sparks
Wellmont Health System Board Member, Community Physician

Dr. David Thompson
Wellmont Health System Board Member, Employed Physician

Dr. Doug Springer
Wellmont Health System Board Member, Retired Physician

Dr. Janet Pickstock
Wellmont Health System Board Member, Community Physician

Dr. William Smith
Wellmont Health System Board Member, Community Physician
Physicians

Dr. Chad Couch
Employed Physician, CMO for Bristol Regional Medical Center

Dr. Dale Sargent
Employed Physician

Dr. Herb Ladley
Employed Physician, CMO for Wellmont Holston Valley Medical Center

Dr. Jerry Blackwell
Employed Physician

Dr. Keith Kramer
Employed Physician

Dr. Landon Combs
Employed Physician

Dr. Marta Wayt
Employed Physician

Dr. Nelson Gwaltney
Community Physician

Dr. Stephen Combs
Employed Physician, CMO for Wellmont Medical Associates

Dr. William Messerschmidt
Employed Physician

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Physicians that were interviewed represent the following specialty areas: Anesthesiology, Cardiothoracic Surgery, Cardiovascular Disease, Gastroenterology, General Surgery, Hospital Medicine, Internal Medicine, Pediatrics, Radiology and Urology.