The Vision for a Coordinated Care Network (CCN)
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A. INTRODUCTION

Establishing a coordinated, whole-person care network across the post-acute care (PAC) continuum is essential for organizations to successfully operate under value-based payment models and to optimize patient outcomes. There are vast barriers to success, yet, a healthcare workforce with a clear purpose and a shared vision for the future can achieve the needed transformational change.

The traditional definition of PAC is confined to four care delivery mechanisms: Long-Term Care Hospitals (LTCHs), Skilled Nursing Facilities (SNFs), Home Health Agencies (HHAs), and Inpatient Rehabilitation Facilities (IRFs). This definition represents the legacy of a fragmented approach to healthcare that breaks patients into individual parts, segments care into “silos” and finances institutions to care for a “slice” of the patient instead of incentivizing whole-person, coordinated care. As the Medicare Payment Advisory Committee (MedPAC) has highlighted since 2008, the PAC sector’s current design and payment model results in “payments higher than the relative cost of care,” “an unfair advantage for some providers,” and “inequities that can affect Medicare beneficiaries access to care.”

It is in this system that patients turn to healthcare practitioners to cure their ailments, to provide comfort care, and to be a devoted steward committed to helping them achieve the best health possible. Thus, healthcare practitioners’ “job to be done” is to optimize the care experience, health outcomes, and utilization of services (value) for every patient based on their whole-person needs, preferences, goals, and circumstances. However, the current structure of PAC sector often impedes practitioners from fulfilling this “job to be done.”

To successfully achieve this “job to be done,” it is imperative that stakeholders not only change the way they think about delivering care, but actually shift the way they work – transitioning to an integrated and coordinated care network model that advocates for patients and enables a teams of care providers to provide the best whole-person care possible for every patient, every time. One cohort member, aptly stated, “many providers and communities are not very engaged in this type of value-focused work, and probably will not be until there is a compelling reason to do so. We need a call-to-action and guide to help us all “lean in” and create the pathway for a brighter future, together.”

In this spirit, in 2018 the Accountable Care Learning Collaborative (ACLC) organized a PAC Cohort (Cohort) of healthcare thought leaders from a variety of institutions (see Appendix F) to clarify the core competencies a system of care must establish to successfully achieve seamless and integrated care processes that fully support the needs of three target populations of individuals requiring assistance, those who are: (1) transitioning back to full-health from an acute episode; (2) optimizing quality of life and outcomes when living with a life-limiting condition or advancing illness; or (3) progressing through the final stages of life.

Through research, case study reviews, discussions, and tool development, the Cohort constructed a value-focused vision for the PAC sector called a “Coordinated Care Network (CCN)” and defined a pathway to achieve the new vision. The insights shared by Cohort members only further emphasized the need for accelerating the transition of the PAC services to a value-focused care system that advocates for patients, promotes an aligned and integrated system of care, and stimulates a new way of working among care delivery institutions. The Cohort intends that the insights and assets shared in this paper will prompt hesitant leaders to instigate local change and provide already-committed leaders the catalyst needed to accelerate the transformation underway.
**B. EXECUTIVE SUMMARY**

*The Vision: Post-Acute Care (PAC) shifts to a “Coordinated Care Network (CCN)”*

Fundamental to a transformation of the post-acute care space is having the right mindset, a clear focus on why change is needed. For most healthcare practitioners, that “why” stems from a sincere desire to care for people – to help people achieve the best possible outcomes for their circumstances. As such, the Cohort proposes using the term “Coordinated Care Network (CCN)” instead of PAC to help practitioners and healthcare leaders stay focused on the “why” as they seek to transform the PAC space – and healthcare overall – to an aligned and coordinated set of care services that optimize the care experience, health outcomes, and utilization of services for every patient in the target populations based on their whole-person needs, preferences, and circumstances.  

The conceptual model of the mechanisms and care delivery services envisioned in the CCN (Figure 1) visually displays the appropriate centering of all functions for the “job to be done.” As illustrated by the links displayed between and within the layers of the conceptual model, the CCN necessitates an intentional linkage of the patient characteristics, care delivery services, and core mechanisms that drive success.

The content within each layer in the conceptual model is briefly described below.

- **CORE:** The person served by the CCN – their physiological and psychological state
- **INNER LAYER:** The patient’s status, goals, and preferences that drive the functions of the network
- **SECOND LAYER:** The direct support system that can enable self-management and the achievement of a care plan co-produced with members of the CCN team
- **THIRD LAYER:** The health and social care services essential to the whole-person health and well-being of patients
- **OUTER LAYER:** The primary mechanisms that will facilitate the desired outcomes

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*A Coordinated Care Network optimizes the care experience, health outcomes and utilization of services for every patient based on their whole-person needs, preferences, goals and circumstances.*

*Registries, telehealth, EMRs, patient tools, etc.*

**Figure 1: A new mental model for post-acute care: A “Coordinated Care Network (CCN)” (a larger version of the model is available in Appendix B)**
The complexity and interrelated needs of the target population requires that the currently limited PAC mindset expands to an interdisciplinary group of care delivery services with the aptitude to deliver a core set of value-focused functions. A function could be any of the following: workforce or leadership skills, a governance strategy, an approach to organizational design and messaging, a measurement scheme, a process, or a technology.

To achieve a clear understanding of the essential value-focused functions, the Cohort analyzed more than 150 publications and dozens of case studies, created personas to understand the needs, preferences, and challenges of patients (see Appendices D through I), and, using the expertise of the group, identified 51 essential functions of a “CCN.”

To effectuate change, the Cohort converted the 51 functions into a “Coordinated Care Network Assessment” (Assessment) that can be used to: 1) assess the standing of each function either within one institution or a network of institutions, and 2) develop a change pathway that results in person-centered outcomes under the principles of value-based payment models. The Assessment, an Implementation Guide for successfully deploying the Assessment (Appendix L), and additional CCN resources can be found on the ACLC website at www.accountablecarelc.org/ccn.

C. CONTEXT – THE CASE FOR CHANGE

As discussed in the introduction, the traditionally defined PAC segment of U.S. healthcare serves an important role in helping a large number of individuals restore full-health, making sector-wide improvements a priority for many Americans. However, it also reflects troubling trends. A 2017 report from the Medicare Payment Advisory Committee (MedPAC) indicated that spending on PAC services had grown faster than any other Medicare spending category since 2001, increasing from $27 billion in 2001 to $60 billion in 2015 (approximately 10 percent of all Medicare fee-for-service expenditures). Furthermore, in 2013 The Institute of Medicine (IOM) found the design of the PAC segment resulted in PAC services accounting for 73 percent of spending variation in all Medicare spending. Comparatively, the proportion of variance attributable to acute care only and diagnostic tests were found to be considerably lower at 27 percent and 14 percent, respectively. Importantly, the IOM report upheld the numerous reports by The Dartmouth Institute for Health Policy and Clinical Practice and others over the past two decades that there is little or no correlation between spending and quality in the PAC segment.

The changing population demographics further substantiate the need to transform the PAC space to a “CCN.” The number of Americans ages 65 and older is projected to nearly double from 54 million in 2018 to 95 million by 2060, and the 65-and-older age group’s share of the total population will rise from 16 percent to 23 percent. For individuals progressing through the end-of-life – the third segment of the three target populations – we have an obligation to provide compassionate, preference-based care that harmonizes with the patient’s social, psychological, and spiritual goals and circumstances. The fragmented health care system, however, minimizes providers’ ability to easily share the information required to meet that obligation.

By 2030, an estimated 83.4 million people in the U.S. will suffer from three or more chronic diseases simultaneously, compared to 30.8 million in 2015. Currently, it is estimated that 40 million adults are living with or have had a life-limiting condition or advancing illness (such as cancer, COPD, congestive heart failure, dementia, and others) in the last three years. Because of the complex medical, psychological, and social needs that accompany such illnesses, these individuals (representing the second target population) require interdisciplinary care provided by a comprehensive care team – ranging from primary care, to acute care, social care, PAC services, and non-professional caregivers – to prevent complications, avoidable exacerbations, and frequent use of acute care services such as emergency department visits and hospital stays.

Demographic changes will reveal the flaws of the current system design for patients, increase the strain on the workforce, and weaken the budgets of governments, employers, and individuals. A “Coordinated Care Network” is an essential evolution of the industry to assure patients receive the high value care they deserve and desire.

The success of a CCN rests on the foundation of a payment structure that financially incentivizes the collective group of providers in the “Network” to achieve the health outcomes most meaningful to patients at the appropriate total cost of care. Many healthcare stakeholders perceive that a value-based payment model is the proper method to achieve this goal and will yield important benefits across the healthcare industry (see Figure 2).
A value-based payment model pays healthcare delivery institutions (e.g., hospitals, physicians, skilled nursing facilities) based on the care quality and patient outcomes compared to the cost of achieving the observed results. Under such arrangements, a healthcare delivery institution – and potentially one or more of their partners – are rewarded for helping patients optimize quality of life reducing the burden of disease and optimizing the care experience.\(^\text{11}\)

This paper introduces the core functions that value-minded leaders should implement to create a high-value CCN under the principles of value-based payment structures. Additionally, a number of tools and resources are introduced.

D. CLARIFYING THE “JOB TO BE DONE” AND HOW TO GET THERE

The subsequent sections describe the core insights and competencies care delivery institutions need to successfully achieve the “job to be done” for patients requiring a care partner to help them: (1) transition back to full-health from an acute episode, (2) optimize quality of life and outcomes with a life-limiting condition or advancing illness; or (3) progress through the final stages of life. The activities are broken down into the following phases:

**Phase I: Patient Personas — The Center of Gravity**

Critical to achieving the objective of a CCN is a persistent focus on each patient in the target population. The Cohort developed patient persona tools and examples to aid the CCN in capturing the experience of a patient and driving a service-design methodology. The persona examples depict the competencies, relationships, activities, and goals required to generate optimal outcomes and well-being for patients. The persona template should be populated through interviews with individuals in order to truly capture the patient voice. Provider organizations should use these patient personas to develop service-lines that focus not only on the clinical status of patients, but on their social needs, goals, and preferences, and to consider how patients navigate the various components of the health care system.

**Phase II: Core Competencies of a “Coordinated Care Network (CNN)”**

**Phase III: Target Behaviors Required for Success**
Using the cohort-constructed persona template, six example patient personas were developed that included (1) the patient’s profile – characteristics, whole-person challenges, etiology of their condition(s), and personal support, (2) the patient’s care preferences and goals, (3) the care team that should work together to optimize the needs, preference, and goals of the patient, and (4) the care setting pathway. The Cohort then translated each patient persona story into a visual diagram called the “value compass” (see Figure 3 below), named to reflect its similarity in layout to a navigational compass and designed to help care teams see their patients from multiple angles; as a whole-person with medical as well as quality of life goals, cost concerns, and care preferences.

The six persona samples were documented with the following primary diagnosis: Community Acquired Pneumonia, Hip Replacement, Idiopathic Pulmonary Fibrosis, Metastatic Lung Cancer, Dementia, Rapid Atrial Fibrillation. Patient personas and a sample of persona interview can be found in Appendices C through E and Appendix G. The first persona example is about Joseph, an individual with a surprise diagnosis of idiopathic pulmonary fibrosis. Each Persona uses an alternate name to protect the identity of the patient interviewed. The full library of personas can be found at www.accountablecarelc.org/ccn.

Persona #1: Joseph – An individual with a surprise diagnosis of idiopathic pulmonary fibrosis (IPF)

Patient Profile

Joseph is 72-year old gentleman with a wife of 48 years who is in reasonable health and three children who live out of state. Approximately one year ago, Joseph, who had controlled hypertension and was overweight (BMI 30.4), presented to the ED due to challenges breathing. During the visit he was found to have a pulse oximetry of 86 and fibrotic appearance of his lungs on chest radiography (CRX). He was immediately admitted to the hospital. A high-resolution CT scan confirmed diagnosis of Idiopathic Pulmonary Fibrosis (IPF) and further work-up uncovered an undiagnosed coronary artery disease (CAD) and a history of silent myocardial infarction (MI). He was started on oxygen. While Joseph was in the inpatient setting, he was evaluated by the lung transplant team and told he was not a candidate for a lung transplant due to his age, obesity level, and history of cardiac disease.

The following value compass for this persona reflects the full complement of needs and helps to identify the appropriate resources (and team) to address them. The interview guide and Joseph’s complete responses are included in Appendix B.

Figure 3: A value compass for a patient with idiopathic pulmonary fibrosis (IPF)
Phase II: Identifying the Core Competencies of a “Coordinated Care Network (CCN)”

Beginning with The Market-Tested Value-Based Readiness (VBRA)

The Cohort utilized the market-tested Value-Based Readiness Assessment (VBRA), developed by The Dartmouth Institute for Health Policy and Clinical Practice (TDI) in partnership with the ACLC, as a guide for developing the analysis and final outputs of the Cohort. The mission of the VBRA is to create a foundational assessment that is focused on helping health systems create a high-value health care system. By using a principle-based tool, validated by hundreds of expert leaders, providers, and care systems, leaders can understand their baseline state of value-based capabilities and measure the results at intervals over time to evaluate if the care system is progressing toward reliable, high-value care for every patient, every time. The VBRA has been used by more than 70 healthcare delivery institutions in the U.S and as part of the National Health Service (NHS) in England, collecting nearly two million data points from board member and executive leaders to front-line office staff. Healthcare leaders seeking to improve the PAC sector need to understand both the capabilities required for success and how their individual system’s current capabilities compare to the desired capabilities. As such, the VBRA was modified to include the insights captured over the course of the Cohort’s work and developed into a “Coordinated Care Network Assessment (Assessment).”

Prior to launching the research phase that would produce the content for the new “Coordinated Care Network Assessment,” Cohort members were asked to share their personal objectives to ensure that the voice of the healthcare leaders who are destined to use the Assessment to transform their local PAC environment to a CCN was represented and incorporated in the product design. Their voices were captured via a “user story” methodology: “As a < title >, I want <to…>, so I can <achieve a goal, overcome a challenge>.”

These user stories and others provided a foundation for the content and design of the Assessment and supporting materials leaders need to successfully transition to value-based care.

“As a strategy leader for a post-acute and long-term care provider, I want to develop opportunities for providers across the continuum to really work together, shoulder-to-shoulder, with aligned incentives and a true understanding of each other’s pain points, so, stronger together, we can close the gaps that frustrate and discourage our most vulnerable patients; deliver a more streamlined, coordinated and navigable healthcare system for our communities; and hold ourselves and each other accountable for the outcome of each patient we serve.”

“As a leader of home and community based care services within a large health system who believes that value based care models can deliver better outcomes and lower costs for those we are privileged to serve, I want to contribute to moving our network of providers toward being innovative and collaborative together, so we can demonstrate to our community that by working together, that we will deliver care that is safer; less costly; and delivers best experience and outcomes for our community, which is what they deserve from us!”

“As a young healthcare leader, I want to make advancing, and diversifying the clinical capabilities of skilled nursing facilities an extremely high priority, so I can better align with hospitals more complex needs, reduce costs and serve the most vulnerable patient populations.”

Research Methods and Insights

The original VBRA was built on more than 100 publications and 25 case studies and abundant input by healthcare leaders across the country. In keeping with continuous improvement methods and assuring a sound research foundation, the Cohort collectively reviewed 151 publications, including non-peer reviewed white papers, and case studies to develop the list of essential functions required for a CCN to optimize health outcomes, care experience, and the utilization of healthcare services for the target patient population.

Each Cohort member selected a set of publications (peer reviewed, case study briefs (CSBs), or white papers) and then documented why the selected publication offered compelling and relevant insights related to the purpose of the Cohort and collected the functions the publications identified as essential for success. These functions were then mapped to one of the four domains in the original VBRA. The Cohort identified a total of 238 functions across all the reviewed publications.

1. **Management Structures:** Comprehensive governance structures and processes are established, and leaders are positioned to design, promote, and manage a value-based delivery model, ensure alignment with health system goals, and foster continual improvement.

2. **Performance Management:** The digital infrastructure is in place to calculate financial risk, to measure and improve health and cost outcomes, to identify and track quality improvement initiatives, and to disseminate the information needed for efficient provider collaboration and patient engagement.
**Care Delivery:** The appropriate distribution of care personnel and care settings is available to meet the health needs of the population and the care management processes are in place to ensure patients receive the care they need at the right time and with the most suitable provider.

**Patient Engagement:** Providers and staff are trained to incorporate patient input in care processes, and patients are provided the education and tools they need to confidently take an active role in their health.

**Case Study Reviews**

The initial research described above was followed by a deep dive into industry case studies that helped finalize the content for the Assessment. The case studies validate the importance of the core functions identified in the research, illuminate how organizations are approaching the implementation of the core functions, and express how the functions drive the CCN’s desired outcomes.

**Cohort Member Case Study Highlights**

The Cohort’s three sponsors – The American Hospital Association (AHA), Managed Health Care Associates (MHA), and CareCentrix – shared their experiences collaborating with care delivery institutions to prove what is possible for the future of healthcare. The AHA and MHA highlighted how several health systems are successfully operating “care networks” consisting of all four types of PAC institutions and the local acute hospitals. Whereas, CareCentrix shared key insights they have learned working with Medicare Advantage plans.

The Cohort also documented brief cases of work conducted by some of the provider Cohort members. In all, the documented insights highlight the feasibility of the “Network” strategy proposed to optimize healthcare based on the principles of the job to be done and advance success under value-based payment models. See appendix X for the Cohort Member Cases.

**ACLC Case Study Briefs (CSBs) Highlights**

In addition to the cohort-member’s cases, 22 ACLC Case Study Briefs (CSBs) – from both PAC specific initiatives and value-based transformation strategies – influenced the final content of the Assessment. A brief summary of the key lessons from these CSBs are highlighted below by each of the four Assessment domains: Management Structures, Performance Management, Care Delivery, and Patient Engagement. To see all 22 CSBs, visit the ACLC website at accountablecarelc.org/case-study-briefs.

**Management Structures**

- Select participants that commit to changing practice patterns to improve quality, efficiency, and eventually generate savings
- Develop a communication strategy focused on aligning partners across the network and include building shared goals, shared knowledge, and mutual respect across organizations as key communication objectives
- Establish an overall governance committee that is representative of all key stakeholders, and smaller governance “pods” focused on key improvement opportunities or desired outcomes, such as addressing specific quality gaps, and facilitating “bottom-up” innovation
- Commit to openly sharing processes, decisions, and results – distributing individual provider results has been shown to increase accountability and drive referral patterns to higher quality providers

**Performance Management**

- Establish predictive models to drive proactive care management, providing targeted lists and rosters to individuals at the point-of-care, the outreach team, and case managers based on the combination of data from claims, EHR systems, hospital admission feeds, and patient-reported data
- Select a minimum number of high-priority quality and cost measures to focus on getting early “wins,” picking measures that improve performance while also shifting behavior to a value-focused mindset
- Allow time to select the appropriate value-focused measures for physician contracts (including the physicians on “compensation committees”) – discussions are likely to require striving for balance desire between specificity and the reality of having timely and accurate data
- Include “citizenship” in incentive contracts – attending meetings, taking a leadership role on a committee, timely and accurate documentation, etc.
Care Delivery

- Station “Ambulatory Care Managers (ACM)” in primary care practices and inpatient settings to conduct additional needs assessments, co-create care plans with patients, and serve as a care partner for the patient as they transition between care settings
- Assign “Ambulatory Care Managers” to a SNF provider – setting up “rounds” with the PAC provider over the phone to discuss the care plan and address any concerns about the patient’s discharge
- Assign each PAC partner a quality improvement specialist to identify areas for improvement and review quality performance on a regular basis
- Starting with partners committed to value-based performance, establish cross-system committees to identify and evaluate performance goals and select key improvement opportunities
- Develop specific performance and process goals (two-hour response time after a referral, seven-day follow-up appointment with the PCP post SNF discharge), and referral acceptance rates by PAC partners to avoid cherry-picking

Patient Engagement

- Integrate palliative care principles in primary care practice to promote proactive pain and symptom management and align treatments with the patient’s goals of care, including capturing advanced care planning
- Provide the PCP practices with the tools and training they need to succeed, including tools aligned with the Palliative Outcomes Scale (POS) and PHQ-2/9
- Ensure mobile-based application data is integrated into a multi-disciplinary primary care team that consists of the case manager, PCP, and behavioral health specialist (licensed clinical social worker or psychiatric consultant) to ensure effective care (e.g., symptom management, timely follow-up, etc.) and advance patient self-management

Phase III: Condensing the Research Insights into the Target Behaviors Required for Success

The Cohort’s work resulted in a final list of core functions and 51 target behaviors selected for the updated Assessment. The full list of core functions and target behaviors, a web-based version of the Assessment, an in-depth implementation guide, and other relevant resources are available through the ACLC at www.accountablecarelc.org/ccn. The target behaviors are organized according to each of the four Assessment domains: Management Structures, Performance Management, Care Delivery and Patient Engagement. A brief sampling of the Target Behaviors are included in figure X below.

Figure X: Sample Target Behaviors of a Coordinated Care Network

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<thead>
<tr>
<th>MANAGEMENT STRUCTURES CORE FUNCTIONS AND TARGET BEHAVIORS</th>
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<tbody>
<tr>
<td><strong>CORE FUNCTION</strong></td>
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<tr>
<td>Value-focused training (education) for front-line</td>
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<td>care provider that is offered in different modalities</td>
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<tr>
<th>PERFORMANCE MANAGEMENT CORE FUNCTIONS AND TARGET BEHAVIORS</th>
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<tr>
<td><strong>CORE FUNCTION</strong></td>
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<tr>
<td>Proactive identification of the health and well-being</td>
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<td>needs, risks and care needs of patients and</td>
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CARE DELIVERY CORE FUNCTIONS AND TARGET BEHAVIORS

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<th>CORE FUNCTION</th>
<th>TARGET BEHAVIOR</th>
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<tr>
<td>There is an appropriate mix of front-line care provider staffing ratios and care delivery settings required to provide timely, relevant care based on the needs and preferences of the patient population.</td>
<td>The Network and each organization has the ability match the type and volume of front-line care providers delivering direct patient care to the needs of the entire patient population, measures the impact on spending, quality and health outcomes, and continually optimizes the type and volume of providers.</td>
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<td></td>
<td>The Network and each organization has the ability match the type and volume of care delivery settings to the needs of the entire patient population, measures the impact on spending, quality and health outcomes, and continually optimizes the type and volume of care delivery settings.</td>
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<td></td>
<td>The Network and each organization provides timely access to primary care services for the entire patient population, measures the impact on spending, quality and health outcomes, and continually improves timely access to primary care.</td>
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<td></td>
<td>The Network and each organization ensures some patients discharged to home have the care support required to achieve optimal patient outcomes, measures the impact on spending, quality and health outcomes, and continually improves the ability to support optimal care for patients discharged to home.</td>
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<td></td>
<td>The Network and each organization offers telehealth services for all appropriate patient population, measures the impact on spending, quality and health outcomes, and continually improves the ability to support optimal care for patients through telehealth.</td>
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PATIENT ENGAGEMENT CORE FUNCTIONS AND TARGET BEHAVIORS

<table>
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<th>CORE FUNCTION</th>
<th>TARGET BEHAVIOR</th>
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<tr>
<td>Patients have direct access to their health care records and personally relevant health education materials.</td>
<td>The Network and each organization provides a comprehensive care summary to patients for all healthcare services and the patient can access the latest summary at any time.</td>
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<tr>
<td></td>
<td>The Network and each organization provides patients with personally relevant health information, measures the impact on quality, cost and health outcomes, and continually improves the content.</td>
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The subsequent section, titled “Using the Assessment to Catalyze a “Coordinated Care Network (CCN),” details the Assessment Glidepath, including the four key steps to using the Assessment to catalyze change: (1) Defining the purpose and scope; (2) Selecting the leaders and participants in the CCN; (3) Selecting the appropriate Assessment implementation option; and (4) Translating the Assessment insights into measurable change.

E. USING THE ASSESSMENT TO CATALYZE A "COORDINATED CARE NETWORK (CNN)"

Assessment Glidepath

There are numerous steps healthcare leaders should consider when using the Assessment to catalyze a CCN: (1) Define the purpose and scope; (2) Select the leaders and participants in the CCN; (3) Select the appropriate Assessment implementation option; and (4) Translate the Assessment insights into measurable change.

1 Defining the Purpose and Scope

To begin any initiative, it is critical an individual or group of leaders can clearly express a compelling reason(s) the status quo isn’t sustainable. The message the organizing leader or “Network” leaders develop should articulate why the CCN is a superior way of working for the workforce and express the expected impact to operations, organizational finances (including team incentives, when applicable), and both patient satisfaction and outcomes. The leader(s) can develop a compelling message by conducting three primary activities:
1. A detailed analysis of the local provider market and population needs to confirm whether the “Network’s” market coverage is sufficient and capable enough to have a material effect on the quality and cost of patient care in the local community;

2. An evaluation of current performance compared to existing performance-based or value-based contracts for each participating organization; and

3. An analysis of the performance or value-based contracting options in the local market.

### 2 Selecting the Leaders and Organizations for the “Network”

The success of the “Network” depends on the leader’s ability to effectively lead the transition to working under a value-based measurement system. This requires each “Network” leadership team member to be aligned and committed to the message, as well as represent the principles of value.12

The Cohort’s research suggests asking over a dozen questions when selecting individuals or organizations to be part of the “Coordinated Care Network.” Examples of questions include:

- Has the leader (or leadership team) already made efforts to adapt to value-based care?
- Do both leadership and staff at the organization feel ownership of their organization’s transition to value-based care?
- Is the leadership team willing to assume some level of financial risk for certain metrics (e.g., avoidable readmissions, failed discharge goals, etc.)?
- Is the leadership team willing to implement any of the functions identified as essential for success in the Assessment?
- Is the leadership team committed to engaging all staff – executives to front-line care givers – in the transformation, including asking a representative sample of the workforce to complete the Assessment?
- Is the leadership team willing to select a diverse governance team that represents key stakeholders in the local market (care providers, care system leaders, payors, patients, community-based organizations, etc.) to oversee the strategy and operations of the “Network?”

Additionally, the Cohort identified six key performance measures that should be considered when identifying the optimal PAC members for the “Network”:

<table>
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<th>CMS FIVE-STAR QUALITY RATING SYSTEM SCORES</th>
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<tr>
<td>2</td>
<td>STATE-BASED RATINGS OF EACH ORGANIZATION</td>
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<td>3</td>
<td>PATIENT LENGTH OF STAY (LOS)</td>
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<tr>
<td>4</td>
<td>HOSPITAL READMISSION RATES FROM THE INSTITUTION</td>
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<tr>
<td>5</td>
<td>THE CAPACITY TO MANAGE HIGH ACUITY PATIENTS</td>
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</table>

Due to market circumstances, one or more local care delivery organizations may choose not to participate in the “Network.” For ACOs or large health systems in a market, the research unanimously stated that sustained or increased referral volumes were the foremost driver of SNF participation in preferred networks and the ability to engage SNFs in improvement processes. When individual ACO referral volumes were not critical to SNF survival, partnerships formed on the basis of mutually beneficial two-way communication and shared ownership of improvement solutions were cited as most effective. When neither increased referrals nor a mutually beneficial strategy attracted care delivery institutions to the aims of value-based care, ACOs took a more dictatorial approach to defining SNF requirements for network participation.

### 3 Selecting the Appropriate Assessment Implementation Option

Two options have been identified and developed for using the web-based assessment: 1) an organizational or network option or 2) an individual or team option. An additional resource, the Implementation Guide (see Appendix L) provides a more detailed explanation of the options, the steps to implementing each option, additional tools and resources for implementing the assessment effectively, and the key success factors for translating the Assessment insights into measurable change. Table 2 below outlines how the Assessment can be used to catalyze organizational/network or individual/team change.

Table 2: Implementation options for the “Coordinated Care Network Assessment”
4 Translating the Assessment Insights into Measurable Change

Outlined below are a sample of key findings from the research that suggest important themes healthcare leaders should consider when leading the transformation to a CCN. Additional insight is offered in the Coordinated Care Network Assessment Implementation Guide which provides a thorough guide to translating the assessment results into an action plan.

- Allow time to build will for change and to develop a new mindset focused on partnership across the care continuum
- Have regular meetings between partners to discuss outcomes vs. aims and a methodology for remediating issues
- Convey and exhibit an openness to new ideas and experimentation
- Assign governance team members accountability for specific initiatives and outcomes; when applicable, assigning responsibility to individuals from the multiple institutions
- Establish clear and compelling aims for the Coordinated Care Network – and ensure the staff at each organization within the “Network” fully accepts and is working toward the aims
- Ensure senior leaders have experience or are trained on how to lead people through change
- Create organizational structures and communication patterns that promote transparent and timely information sharing within and across all “Network” partners
- Establish root cause analysis methods to ensure all parties agree to the processes that will guide the discovery of the primary causes of sub-optimal performance
- Ensure the leadership teams from each “Network” partner works with the workforce to ensure all staff understand the expected impact of proposed changes
- Ensure the leadership teams from each “Network” partner works with their workforce to ensure all staff understand how their performance goals relate to the “Network’s” goals
- Ensure the leadership teams from each “Network” partner with their workforce to clarify how they can adapt and improve current knowledge and processes based on new performance expectations.
F. SUMMARY

Through research, personas and case reviews, and discussions conducted by this Cohort, important constructs for a new way of working across the traditionally “silied” PAC sector emerged. Creating a change model, a CCN where healthcare practitioners can thrive and every patient receives the right care, at the right place, at the right time and at the least direct and indirect cost possible is the shared vision that can bring all stakeholders together.

This paper presents the urgency associated with the costs, both personal and financial, of continuing the ineffective and ineffectual system of disconnected, depersonalized and gap-riddled care for individuals navigating post-acute care. The leaders who contributed to this initiative used evidence, research and translational knowledge to coalesce a set of recommendations and tools to assist organizations in partnering to create a Coordinated Care Network (CCN). The ACLC has developed tools and support based on these learnings to assist value-minded leaders and others who are committed to using the recommendations in this white paper to execute change.

The need to operate with urgency is clear. A vision for change is presented. The transformation of the U.S. post-acute care sector to a CCN starts now.

NEXT STEPS

1. Use the language in this document to build your organization’s case for change: a compelling narrative that describes the “urgent” need for action and a case for a brighter future for the workforce you lead;

2. Select the Assessment implementation option best suited for your scenario (see table 2)

3. Contact the ACLC to get started on your team’s effort to transform your current PAC market into a high-value CCN at www.accountablecarelc.org/ccn

This paper and corresponding tools were funded in part by the generosity of these sponsors:
APPENDIX A: "Coordinated Care Network" Model

ACLC “Coordinated Care Network (CCN)” Model

A Coordinated Care Network optimizes the care experience, health outcomes and utilization of services for every patient based on their whole-person needs, preferences, goals and circumstances.

*Registries, telehealth, EMRs, patient tools, etc.
APPENDIX B: Personas: Interview Details

Persona #1: Joseph’s Interview and Perspective related to the four points of the value-compass

North: Functional Status / Quality of Life (North)

Questions: (1) What functional goals do you consider most important to you? (2) How would you describe your quality of life goals?

Response: Generally speaking, I feel pretty good at rest. I have very little endurance. I try to get out for walks with my wife. If we take it slow, I can get a couple of miles in, but that’s taking a break now and then. And the weather has to be good – too cold, too hot, too humid puts me down and I just can’t do it. Everything has to be done with my oxygen. I tried to play 9 nine holes a couple of times of golf this summer, and it was a chore. I liked being out, but it was just too much work. If I’m still around next summer, I probably won’t try it again. The doc says I probably won’t last more than another year or two. I’m grateful for my wife. She does a lot to help me, has been supportive and encouraging, but not too demanding when I can’t do the stuff that a husband should be able to do.

East: Patient-Centered Care (East)

Questions: (1) When you were (or are) going through your experience, what were (are) some of your goals and preferences for the care you received? A few goals and preferences we’ve heard other patients express are below (we shared examples); (2) Do these goals match your goals and preferences?; (3) Can you think of any others?

Response: I have several goals for my care. I would like me and my wife to be part of all decisions about my care. My preference is to work with my care team to determine how their care recommendations can match my life goals. Whenever possible, I prefer to have the conversations using decision-aids. Given our financial situation and my limited mobility, I also prefer to minimize the number of trips we have to take to see a care provider. I would like to start working on setting up my home for safe home care. Finally, we would appreciate receiving consolidated medical bills from care providers working for the same organization – the amount of paperwork can be overwhelming.

South: Cost / Efficiency (South)

Questions: (1) What are your primary concerns regarding cost? A few cost concerns we’ve heard from other patients are below (we shared examples); (2) Do these goals match your goals and preferences?; (3) Can you think of any others?

Response: I’ve been on a fixed income for five years. After I retired, I was able to do some odd jobs. Mostly puttering, but I was able to make a couple of bucks helping folks with simple household handyman stuff. I can’t do that anymore, so I’m stuck with a small pension and Social Security. My wife draws Social Security, too. All together, we probably get around $40,000 a year income. I’m glad my house and car are paid for! Medical expenses are tough. Medicare is good, but the deductibles and copays are really a stretch. I paid out nearly $6,500 out of pocket last year. And it’ll be similar this year. We haven’t had to hire out much household chores – mostly neighborhood kids to cut the grass and shovel snow. But I can see the day coming when I’ll need more help in the home. Alice won’t be able to take care of me by herself as my condition worsens.

West: Clinical / Biological Status (West)

Questions: (1) What are your primary goals regarding clinical outcomes? A few goals we’ve heard from other patients are below (we shared examples); (2) Do these goals match your goals and preferences?; (3) Can you think of any others?

Response: My clinical goals are focused on stabilizing my condition and avoiding exacerbation – controlling my HTN and BP, stabilizing my CAD (w/o surgery), controlling - hopefully reducing – fibrotic appearance, and ensuring I prevent any future MIs. While losing weight is preferred, it isn’t a primary concern for me at this point – this isn’t an issue I would like to stress over. I would also like to minimize the number of medications I have to take on a daily basis.
**Persona #2: William – An individual with co-morbidities requiring a knee replacement**

**Patient Profile**

William is a 75-year old male with a 20-year history of hypertension, a 30-year history of COPD, a long-history of smoking one pack per week, increasing weight gain, and intensifying pain in his left knee. Several years before his knee replacement, William wanted to start attending physical therapy when his knee pain first started to intensify. Unfortunately, he was unable to attend the sessions due to the care needs of his wife, who has multiple sclerosis (MS) and early stages of dementia. His wife is also his primary caregiver. William started using a cane and taking Advil, however, the pain grew to be too much for him, and he eventually received an x-ray that suggested a knee replacement was the best route to restoring mobility. William agreed.

William’s experience thereafter captures the need for coordinated care among professional and non-professional caregivers over the course of knee replacement episodes and beyond. William’s goals for the pre-admission, admission and discharge planning process, as well as his preferred discharge location of his home are captured in the value compass below (Figure D1).

**Care Team and Pathway**

William’s story illustrates the multifaceted care needs and care experience of a person with co-morbidities, limited finances, and limited care support from family and other concerned loved ones. As noted in the persona, restoring William to optimal health based on his goals and preferences required a coordinated team of care providers. The interdisciplinary care team included the following team members:

- **Primary Care Provider (PCP):** Partner with William and his care team to achieve his goals and preferences, and to help him manage his hypertension, COPD, and weight gain
- **Orthopedist:** Educate William on his options, ensure William’s decision is an informed choice, successfully perform the surgery and collaborate with other care team members to help William transition to full health and mobility according to his preferences
- **Hospital nursing staff:** Ensure William receives the best comfort care possible while in the hospital setting
Hospital nurse liaison: provided by his Medicare Advantage plan
Telephonic nurse: Support William through his anxieties concerning surgery and discharge
Pharmacist: Assist with medication management
Discharge planner: Assist William and his wife with the transition from hospital to home
Home health team: Assist with medical equipment needs, follow-up appointments, medication reconciliation, and self-management via regular visits or contacts for a 90-day period

Persona 3: Ms. Truth's Story: The Myth of Patient-Centered Care

Ms. Truth’s story shares the healthcare experience of an individual with metastatic lung cancer. Her story serves as an important reminder that patient care teams need to be guided by the patient’s goals and preferences, and that such preferences need to be considered when providers evaluate outcomes.

Ms. Truth’s story is shared by a physician Cohort member committed to centering the design of healthcare on the “job to be done”: optimize the care experience, health outcomes and utilization of services (“value”) for every patient based on their whole-person needs, preferences, goals, and circumstances.

Here is her story, and the Cohort members’ plea.

Ms. Truth had been diagnosed with metastatic lung cancer. At the time of diagnosis, it had already spread to the brain, with a solitary golf ball-sized tumor in the parietal lobe. Her oncologist, in whom she had great trust, recommended that she see a neurosurgeon to have the brain tumor removed. The first question that arose was the advisability of the surgery: there was no question that she had a terminal diagnosis – this was a cancer that had no cure, and with or without surgery, it would ultimately cause her death. The issue was therefore whether the surgery had any capacity to improve any symptoms, improve quality of life, or prevent future events. Since she had no symptoms related to this brain tumor, it was then a matter of trying to anticipate whether the location of the tumor might predict preventable challenges in the future. There was considerable uncertainty about this. The neurosurgeon, who was willing to do the procedure carefully outlined the risks of surgery and the need for rehabilitation following the surgery. Her oncologist pressed for the surgery, and she proceeded.

After the surgery, she had weakness and instability, and was transferred to an acute rehab unit. She wasn’t happy there, felt that she could do the same things at home, and signed out against medical advice. She struggled at home physically but was able to function nominally. During this time, her oncologist felt that chemotherapy should be instituted, and she agreed to start. Four months later, surveillance scans demonstrated extension of her primary tumor, new metastases in the bone, and three new lesions in the brain, one larger than the original tumor and invading her skull.

Again, the oncologist recommended surgery to remove the brain tumors. “With the surgery and more chemo, I can get you another year,” he proclaimed. The neurosurgeon was more reticent than the first time around, noting the extreme likelihood that she would have significant postoperative complications, and that she may not even survive the surgery. All this for a condition that is not curable, and for which there was, at best, dubious benefit. He did not want to do the surgery. He discussed frankly not only the challenges with the surgery itself, but also the reality that given the rapid growth the tumors, life expectancy was limited in the best of circumstances. The oncologist was less than forthcoming about prognosis, and simply affirmed the need to keep pursuing tumor-directed therapy. A palliative consultation was available, but not requested. Her trust and faith in the oncologist prevailed, and she consented to have the procedure done.

What her family knew about Ms. Truth was that she wanted to be at home. She wanted to sit around the pool and enjoy watching her grandkids play. That’s what made her life complete at this moment in her cancer journey. (That’s why she checked out of rehab – that’s not where life had meaning for her.) Ms. Truth believed that following the oncologist’s direction would allow her to realize this. What seemed to be missing in the translation was whether her choices would in fact give her more days, and if her physical and cognitive status after treatment would allow her to function and enjoy life. She thought that she would come through the treatments intact and none the worse for wear, able to resume what was important to her. She chose to believe that the “benefits” of the surgery were more likely than the “risks.” The neurosurgeon was skeptical and expressed such. Her family, more pragmatic, felt that she wouldn’t be the same after the operation. The oncologist, in whom she had the greatest trust, never asked the question.

So, Ms. Truth had the surgery. She survived the operation, but upon awakening, she was confused, did not recognize family, had difficulty speaking, and had profound weakness on one side of her body. She developed intestinal complications requiring a bowel resection and colostomy. She would never walk again. She lived out the rest of her life in a nursing home surrounded by people who she didn’t know and visited by people who she didn’t recognize.
This scenario repeats itself time and time again, on a daily basis, in every small and large health care system, in every academic medical institution across the country. How does this happen?

• People with incurable diseases pursuing treatments with no chance of cure, poorly defined benefit, and high likelihood of adverse outcomes.
• Doctors unwilling (or incapable) of having honest conversations about terminality and the reality surrounding the natural course of a disease.
• The sense that being honest and straightforward is equivalent to “taking away hope.”
• Physicians submitting patients to procedures and interventions that they know, intuitively and scientifically, will have no positive benefit to patients – often under the guise of promoting patient autonomy.

Beyond the inestimable cost, there is irreparable harm as too many patients are receiving the wrong treatment for the wrong reasons.

I’ve heard the term expertosis described as “a belief that the professional knows more than the patient what he/she needs.” A friend recently commented to me that “patients don’t know what they want until their doctor tells them what they want.”

What are the true motivations behind recommendations that physicians offer? I believe that the vast majority of doctors truly have their patients’ best interests at heart. They are compassionate souls who want to treat their patients and want them to get better. They do what they have been trained to do: treat, intervene, operate – in short, to do something. Unfortunately, the desire for their patients to do well often motivates them to aggressively treat the disease without acknowledgment of the impact on the person. There still is a strong ethic that subconsciously (and sometimes consciously) signals doctors that they have failed if their patients die. And all too often, the recommendations they make are made without the background of what’s truly important to the patient.

Until physicians reach a point where they integrate patient’s values as the core focus of their plan of care, I’m not sure that we can change the culture. And people like Ms. Truth will continue to have procedures and treatments that are wrong for them. The fact that she chose to have the surgery didn’t make it the right thing to do. I believe in autonomy, and in the importance of informed choice. We must continue to advocate for the integration of patients values and wishes into the consenting process – it can no longer simply be a listing of theoretical risks and benefits, side effects and expected outcomes, but rather a definition of how a treatment course will truly impact someone’s life, and how the intervention will be concordant with the patient’s values. Then, and only then, we can truly become patient-centered.

Patient Personas Summary

The personas created, as well as other patient scenarios reviewed, clarified the “job to be done” and offer an indispensable view into the collective challenges of patients that are served by the proposed “Coordinated Care Network.”

Joseph highlighted the complex needs and multi-disciplinary care team required to provide curative, palliative, and preference-driven care as he traveled on journey from a state of feeling healthy to an irreversible advancing illness that results in the unexpected announcement that life expectancy is two years or less. William illustrated the multifaceted care needs and care experience of a person with co-morbidities, limited financials, and limited care support from family and other concerned loved ones. Ms. Truth provided a cautionary tale about the “silent misdiagnosis,” and that patient-centered care is simply a myth without the entire system of care committed to working in partnership to consider and incorporate the goals and preferences of every patient.

Collectively, these insights provided the center of gravity needed to determine the focus for the research phase and to select the essential functions for the Assessment.
APPENDIX C: Value Compass

**FUNCTIONAL STATUS & QUALITY OF LIFE**
- Able to cook healthy meals with my wife, friends and children
- Able to travel out of state to visit my children
- Continue going on walks with my wife
- Live high quality of life until the end
- Socially active with wife
- Minimal coughing
- Minimal fatigue

**CLINICAL/BIOLOGICAL STATUS**
- Steady BMI
- Controlled BP
- Controlled HTN
- Prevent future MI
- Minimal polypharmacy
- Stabilized CAD w/o surgery
- Reduced Fibrotic appearance

**PATIENT-CENTERED CARE**
- We receive help with home care and setting up our home for my limited mobility
- We have minimal number of medical bills and contact with insurance companies
- I consider myself informed about every decision made for the care I receive. I prefer decision-aids when deciding on a care plan with my provider.
- My treatment plans are designed based on my decisions and I’m aware of all upsides and downside possibilities
- My wife is included in decision-making and is appropriately trained to help me care for my needs

**COST (EFFICIENCY)**
- Minimal co-pays
- Minimal imaging
- Minimal Rx costs
- No return ED visits
- Avoid inpatient visits
- Avoid hitting deductibles maximum
- Avoid leaving my wife with any medical debt

Figure H1: General value compass.
**APPENDIX D: Cohort Member Cases**

**Christiana Care Health System:** Christiana Care Health System (Christiana), part of eBrightHealth ACO, is one of the largest health care providers in the mid-Atlantic. The system comprises two hospitals and a variety of services spanning primary care to PAC services such as home health and rehabilitative services. Starting in 2014, in support of their ambitions to achieve the aims of their pending ACO, Christiana created a “continuing care network (CCN)” with a number of the non-Christiana Skilled-Nursing Facilities (SNFs) and the Christiana Care Visiting Nurse Association (CCVNA). The initial focus of the CCN was preventable readmissions for Chronic Health Failure (CHF) patients. Using remote telemonitoring and mutually agreed upon algorithms to identify early indicators of decline, CCVNA nurses monitored patients remotely and contacted the SNF clinical team to inform them of the issue and discuss possible interventions. The SNF clinical team then decided how to proceed. The CCN-initiative focused on CHF patients reduced all-cause readmissions from 18 percent to 12.5 percent in one year. This example offers a case advocating for establishing cross-institution partnerships with clearly defined aims, complementary skills across team members, using data to proactively identify patient needs and standard processes that ensure effective and timely action is taken on behalf of patients.

**Brooks Rehabilitation:** Brooks Rehabilitation (Brooks) in Jacksonville, FL is the largest Inpatient Rehabilitation Facilities (IRF) PAC system in the U.S. The Brooks system includes Skilled-Nursing Facilities (SNFs), Home Health Agencies (HHAs), outpatient clinics, assisted living facilities, and several other clinical programs such as memory care. Between 2013 and 2015, Brooks entered into two Bundled Payments for Care Improvement (BPCI) demonstrations (Model 2 and Model 3) to improve the collaboration with five health systems in the local area and to “test how a post-acute provider can take a leadership role in designing a future delivery system that optimizes the use of each care setting.” The Brooks leadership team, in partnership with their BPCI partners, setup a care model to cover the longitudinal needs of a patient across multiple provider types. The model included four key components: Selecting the right setting, standardizing care across settings, longitudinal care planning, and using nurse care navigators to ensure smooth transitions and effective care coordination. The results showed readmissions decreased by nearly 15 percent within the first six months. Additionally, functional improvement scores rated among the highest in the country and patients who used the tool reported a more than 96 percent satisfaction rating of their care experience.

**New York’s North Shore–Long Island Jewish Health System ACO:** New York’s North Shore–Long Island Jewish Health System ACO (North Shore LIJ) created an informal “continuing care network (CCN)” of independent post-acute care providers that includes 19 skilled-nursing facilities (SNFs). North Shore-LIJ identified a set of quality criteria that guided the selection of SNF partners in the CCN and then worked with them to improve care shared and patient transitions between the North Shore-LIJ acute settings and SNF partners. The participants in the CCN created treatment and assessment protocols for patients with severe conditions in both ACO and PAC settings and standardized the patient information shared between the institutions during any patient transition. The CCN reduced the North Shore-LIJ ACO’s all-cause readmission rate by 5.5 percent and heart failure rehospitalizations by 4 percent between 2010 and 2012.

**CareCentrix:** Of the many noteworthy functions captured during the publication reviews, CareCentrix shared important insights they’ve captured over the course of their lengthy partnerships with Medicare Advantage plans. CareCentrix and their partners identified several functions that are likely to enhance the success – or the likelihood, thereof – if implemented successfully. The key opportunities include the use of inpatient nurse navigators and care coaches who collaborate with hospital discharge planning teams, patients and families to ensure discharge planning instructions are clearly understood by patients and families, patients are coached on opportunities for self-management (e.g., measuring weight on a daily basis, etc.) and identifying physiological issues of concern (e.g., dehydration, holding onto fluid, etc.), the necessary follow-up appointments are made prior to discharge, and home-based services are schedule (e.g., home infusion therapy, durable medical equipment, etc.). To optimize impact, they’ve found live engagement between these roles and patients works best; using technology, such as remote monitoring, to supplement the relationship-based care offered by the person-to-person interactions required to build trust partnerships with patients. They also identified two key areas of focus for health plans moving forward: directing their members to home health as often as appropriate and offering members supplemental benefits that are focused on helping members address social determinants of health. In the case of home health, among a group of health plan executives surveyed by CareCentrix, 86% stated “care at home is an extremely or very important factor in post-acute care management.” CareCentrix also documented several key barriers to PAC success. They stated the limited availability of the appropriately skilled team-members (e.g., advanced practice nurses), advancing effective care coordination across providers and having suitable value-based financial arrangements with providers are three functions that inhibit success.

**FirstHealth of the Carolinas:** FirstHealth of the Carolinas’ (FirstHealth) story represents an additional example of a successful strategy for optimizing patient and system outcomes in the acute to post-acute care transition.

In 2013, FirstHealth opened their first Transition Care Clinic (TCC) in 2013 to create a post-acute discharge chronic disease care model in partnership with the FirstHealth primary care and specialty practices. The effort resulted in improved care coordination across inpatient and outpatient settings and a reduction in avoidable hospital readmissions and emergency department (ED) visits.

In addition to improving outcomes, the FirstHealth leadership also wanted to set the “bar” higher for the organization. According to the President of the FirstHealth Physician, “FirstHealth wanted to change the way our healthcare professionals worked with patients and with care teams across the continuum.” By working closely with both acute and ambulatory staff, the FirstHealth leadership team sought to use the TCC as a “what’s possible” scenario – to get a “win” for patients and staff – that would lead to ambulatory practices across the health system adopting a set of aligned practice patterns within their local clinics.
FirstHealth started the initiative by creating a high-need, high-cost patient segmentation methodology based on healthcare utilization data. The resulting dataset capturing individuals with a combination of physical co-morbidities, mental health challenges and barriers to health related to social determinants of health, showed that many of these individuals experienced avoidable hospital readmissions and emergency department visits due to system failures found across many other U.S. health systems; patients weren't scheduled for post-hospital follow-up visits with a primary care provider (PCP) in a timely manner, discharges instructions weren't based on patient circumstances (e.g., ability to afford medications, transportation, etc.), discharge medication plans weren't explained in a manner patients could easily follow, a patient's required support services (e.g., DME, home visits, etc.) weren't scheduled at discharge, and many others.

Prior to a patient being discharged from any FirstHealth hospital or ED setting, a hospitalist or emergency department physician examined a set of pre-defined criteria (e.g., number of co-morbidities, number of medications, complexity of care plan, patient circumstances, and others) to determine if the patient should be deferred to the TCC prior to going home. Although the TCC referral protocol targeted high-need, high-cost patients, any patient could be seen in the TCC within 48 to 72 hours of their discharge from a FirstHealth acute setting. In the TCC, each patient was assessed for a variety of needs and could receive services while at the TCC that included health coaching, medication assistance, respiratory therapy, home health, behavioral care, and tobacco cessation, in addition to direct clinical care from a multi-disciplinary care team member. Supporting the aim to set the "bar higher," the TCC also had case managers and health coaches prepared to help patients understand their healthcare insurance, apply for Medicaid or disability, complete applications for financial assistance, and secure legal aid through a Medical-Legal partnership.

The TCC design resulted in a 54 percent decrease in all-payor 30-day readmissions by the end of the first two years. Additionally, patient satisfaction increased, patient health outcomes improved, and the FirstHealth care staff expressed enthusiasm for the model's ability to facilitate improved relationships with patients due to the whole-person care model – especially for those who are most vulnerable to poor outcomes and unnecessary acute utilization.

**Wake Forest Baptist Health:** One year before the Cohort kicked-off, Wake Forest Baptist Health (WFB) used the original VBRA to identify the "blind spots" in the organization's capacity to succeed under value-based payment models. The result was a realization of the key system design gaps that were generating the observed post-acute care performance results (e.g., high readmissions from SNFs, lengthy length of stays (LOS) in SNFs, etc.). The VBRA highlighted design gaps in discharge planning, lack of alignment between care staff incentives and performance goals, poor inpatient quality gaps (e.g., ambulation, etc.), high variation in patient referral patterns, inadequate care settings for patient needs – including referring patients to PAC partners with poor quality, and others. The leadership team paired the VBRA insights with WFB and PAC providers performance data to narrow the improvement strategy and define a clear aim.

As a result, the WFB team defined the post-acute care strategic aim for the next twelve months: “Design a post-acute care (PAC) pilot program with a select group of SNF partners for our patients attributed to value-based contracts that can be used as a model to engage future PAC partners and scale our post-acute strategy.”

The program focused on the following with local SNF institutions:

1. Collaborate with a select number of quality SNF partners to develop the criteria for a narrow SNF network and begin testing the methods
2. Enhance non-SNF options and transition guidelines between WFB and PAC partners
3. Eliminate inpatient care gaps
4. Enhance WFB discharge management processes
5. Improve the ability to conduct timely financial analysis – striving to maximize financial opportunities, minimize penalties
6. Optimize patient satisfaction with discharge planning – incorporate patient circumstances and preferences into discharge planning and improving staff communication with patients
7. Optimize patients' health – ensure patients receive timely care post-discharge and the follow-up they require to achieve optimal health and avoid unnecessary acute utilization

The performance results are pending, however, the WFB leadership identified several key lessons when working through the VBRA, strategic plan, and initial implementation:

1. The VBRA results can guide a PAC strategy – informing readiness and establishing focus
2. It's a PARTNERSHIP!! Clarify benefits and establish co-ownership when engaging local PAC institutions
3. Developing a SNF market analysis and detailed quality profile that includes understanding the SNFs internal processes is labor intensive – be prepared, it takes time
4. The diversity of care staff and leadership capabilities within each local SNF makes it difficult to pick the appropriate improvement and care model strategy for reducing LOS
5. Real-time data sharing with SNFs is critical to developing an effective care model
6. Developing financial assumptions and margin analysis for each SNF partnership is essential
APPENDIX E: Additional Resources on Website

This Appendix lists resources developed in conjunction with the whitepaper. Some of the resources are shared in part within the white paper and are available in full on the ACLC website. Each resource, described here, can be found at www.accountablecarelc.org/acoleadershipteams/resources.

**Persona Interview Guide and Example Personas**

The patient persona interview guide helps an organization to capture the experience of a patient and to drive a service-design methodology. The persona template can be populated through interviews. Provider organizations should use these patient personas to develop service-lines that focus not only on the clinical status of patients, but on their social needs, goals, and preferences, and to consider how patients navigate the various components of the health care system. Example personas depict the competencies, relationships, activities, and goals required to generate optimal outcomes and well-being for patients.

**Target Behaviors and Core Functions of a CCN**

A Coordinated Care Network (CCN) requires competence in 51 core functions and associated target behaviors. These behaviors and functions are organized by four domains; Management Structures, Performance Management, Care Delivery, and Patient Engagement. Each of the core functions has been included in a CCN readiness assessment.

**Assessment Implementation Guidebook**

The Assessment Guidebook is designed to assist an organization to more effectively administer and analyze the VBRA. The interactive PDF includes an implementation guide, analytic guide, marketing materials, respondent template, definitions and references.
APPENDIX F: Cohort Participants

Aaron Wesolowski, VP, Policy Research, Analytics, and Strategy, American Hospital Association
Rochelle Archuletta, Policy Director, American Hospital Association
Joan Thomas, Special Consultant to the President, Beebe Healthcare
Michael Spigel, President & Chief Operating Officer, Brooks Rehabilitation
Leslie Hodge, Executive Assistant, Brooks Rehabilitation
Casey Silver, Vice President, Cadia Healthcare
Alison Gilligan, Chief Legal & Strategic Solutions Officer, CareCentrix
Lisa Mast, VP, Product Strategy, CareCentrix
Rekha Phillip, Chief of Staff, CareCentrix
Sheri Brand, SVP, Provider Management, CareCentrix
Lynn Jones, President, Home Health and Community Services, Christiana Care Health System
Patricia Resnik, Vice-President, Care Management, Christiana Care Health System
Karen Soja, Network Operations Director, Christiana Care Health System
Timothy Ihrig, Chief Medical Officer, Crossroads Hospice & Palliative Care
Perry Farmer, Founder, CEO, Crossroads Hospice & Palliative Care
Amy Graham, Vice President, Strategy and Innovation, FirstHealth of the Carolinas
B.J. Hauswald, SVP, Strategic Development, Genesis HCC
Thomas Miller, Regional Director of Operation, HCR Manorcare
Daniel Mendelson, Associate Chief of Medicine, Konar Professor of Medicine, University of Rochester Medical
Michelle Templin, VP, Strategic Business Development, Managed Healthcare Associates
William Davis, VP, Product Management and Innovation, Strategic Healthcare Programs (SHP)
John Mulder, Chief Medical Consultant for Hospice and Palliative Care, Holland Home
Dallas Nelson, Associate Professor of Medicine, University of Rochester Medical
Amy Crews, Administrative Director, Rehabilitation, Transitional and Supportive Care Services, Wake Forest Baptist Health
Chris Prouty, Director, Population Health, Wake Forest Baptist Health
Keya Eaton, Transitional and Supportive Care Manager, Wake Forest Baptist Health
Daniel Chipping, Manager, Accountable Care Learning Collaborative
Greg Kotzbauer, Former Managing Director at The Dartmouth Institute, currently a Visiting Fellow at the Duke Margolis Center for Health Policy


