

Innovative Approach to Rehabilitation Care Improves Patient Outcomes

Allina Health 💸



HEALTHCARE ORGANIZATION

Integrated delivery healthcare system & Pioneer ACO

PRODUCTS

> Health Catalyst[®] Analytics Platform built using the Late-Binding[™] Data Warehouse Architecture

SERVICES

Professional Services

 Clinical Improvement Services

EXECUTIVE SUMMARY

Disability is one of the United States' most important public health issues—with approximately 15 percent of citizens affected. Allina Health created The Courage Kenny Rehabilitation Institute (CKRI) to help people with disabilities, injuries, or complex medical conditions achieve the highest possible degree of health, functioning, and quality of life. CKRI recognized that achieving that goal would require focusing on the care people needed before considering what that care cost.

CKRI therefore embarked on a journey to create a new model for rehabilitation care that focuses on the whole person, one that looks beyond the medical to address vocational, social, and emotional needs. This collaborative model enables comprehensive and seamless care across the continuum while preparing the organization to operate in a value-based, at-risk environment. CKRI also implemented an analytics infrastructure to help focus its resources appropriately and to measure success.

Key results of the effort to date include:

- Creation of an innovative model and culture that optimizes patients' quality of life
- Annual community cost savings of \$11.2 M
- Up to 76 percent reduction in hospitalizations and 53 percent reduction in ED visits

THE IMPORTANCE OF REHABILITATION THERAPY FOR DISABILITY AND INJURY

For the ill or injured, a comprehensive rehabilitation program plays an essential role in maximizing improvement and quality of life. Such programs touch the lives of millions of Americans. After all, disability impacts approximately 15 percent of citizens and many other individuals experience changes in physical function as a result of disease, injury, surgery and increasing frailty.



At CKRI, we saw a need to redefine how health system and community support services collaborate to achieve the best outcomes for patients. Our focus was on creating the delivery system of the future, one that would benefit patients and their families. What has grown out of that vision is an innovative model for comprehensive rehabilitation designed to optimize care for patients in a valuebased reimbursement environment.

> Dave Slowinske VP of Operations, CKRI

Rehabilitation therapy is a proven way for people of all levels of physical ability to improve physical function and well-being and to increase independence. Working collaboratively with patients, families and other clinicians, rehabilitation therapists can improve outcomes and enhance overall quality of life in a wide variety of clinical situations.^{1,2,3}

In recognition of the importance of this therapy, Allina Health created The Courage Kenny Rehabilitation Institute (CKRI) in 2013 by merging its existing rehabilitation center with another local rehabilitation center. This combination enabled Allina to offer a more comprehensive set of services and skilled providers to the community. CKRI is now the fifth largest non-profit rehabilitation program in the country, with 45 locations, 1,500 employees, 2000 volunteers, and over 95,000 lives touched each year.

CKRI exists to help people with disabilities, injuries, or complex medical conditions achieve the highest possible degree of health, functioning, and quality of life. Like most healthcare organizations throughout the country, the organization is striving to do what is right for patients in the midst of unprecedented reimbursement pressures and the transition to value-based care. A new coordinated care model, supported by data and analytics, is helping CKRI overcome the challenges inherent in this transition.

FOCUSING ON PATIENTS' NEEDS IN THE FACE OF REIMBURSEMENT PRESSURES

CKRI's leaders had a vision of innovating to make rehabilitative care better for patients and for the community. Yet they recognized that such innovation would require them to overcome many challenges faced by rehabilitative care providers.

Perhaps the greatest of these challenges was a lack of coordinated care. System services and community support programs existed in silos, resulting in disjointed care and a less-than-ideal support relationship for patients. CKRI wanted to offer consistent support services for discharged patients—such as ongoing rehabilitation, medication compliance, and follow-up appointments—to ensure continued recovery. Not only did CKRI need to improve coordination among inpatient, rehabilitation, and outpatient settings, but it also sought to establish a more holistic approach to serving patients with chronic needs, a care model that looked beyond the medical to address vocational, social, and emotional needs. As such, leaders recognized that a lack of engagement with community services was hampering its efforts to support patients' long-term quality-of-life goals.

What is particularly innovative about our approach is that we consider the whole person and all of the factors that contribute to that person's health. This means focusing not only on traditional medical services but also on recreational and vocational activities and other services that promote well-being. This whole-person approach requires us to take crosscontinuum care to the next level, coordinating not just between inpatient, rehabilitation, and outpatient care, but also with a wide range of other community services.

> Linda Krach, MD President, CKRI

Rising costs and decreasing margins also presented a challenge for CKRI. Although the organization decided to treat reimbursement as a secondary consideration (for the time being) and to focus first on doing what was right and best for the individual, it still faced the pressures of the emerging pay-for-outcomes reimbursement model. These models place particular pressure on CKRI, because it is an expensive care model that is primarily government funded. Therefore, the organization's leaders knew that they needed to become better stewards of their resources. They needed to determine more judiciously which patients to include in the program and which programs to support to optimize patients' quality of life while keeping costs as low as possible.

Overcoming these challenges would require a more deliberate focus on gathering data and making it available to help the organization achieve the best outcomes and the highest patient satisfaction at the lowest cost. However, CKRI had no single source of truth to help it accurately identify patients in need of services and to manage their care and support effectively across the care continuum. CKRI had trouble accessing existing data that was stored in disparate silos. CKRI needed longitudinal, cross-continuum views of data and drilldown capability in order to adequately manage and support patients' care and support needs.

A NEW CARE MODEL FOR COMPREHENSIVE REHABILITATION

CKRI leaders knew that supporting its high-risk, high-cost population required disability-competent primary care and specialty services, high-touch care management, creative engagement strategies, excellent access to comprehensive data, and a blend of clinical and community services. As such, they concluded that they would serve the needs of patients better by creating a new, multidisciplinary and highly collaborative model designed to provide comprehensive and seamless care across the continuum. In this model, experienced registered nurses serve as care coordinators. These critical members of the care team—available to patients from diagnosis through treatment and long-term follow up—help patients understand and navigate the complex delivery system.

There are many specialty programs within the CKRI care model, including:

- Stroke Specialty
- Advanced Primary Care Clinic
- Transitional Rehabilitation

CKRI started with a vision that we could better serve patients. But vision alone can't drive success. We were lucky to have the support of senior leadership from the beginning. We also had engaged nurses, coordinators, therapists, patients, and advocates who were excited about innovating with us.

> Judy Hoaglund, RN Director of Clinical Programs CKRI

FIGURE 1: CKRI CARE AND SUPPORT ASSESSMENT DASHBOARD

- Tabs support views of care and functional levels across the continuum
- Ability to filter by group, location, diagnostic code, patient and provider and time period
- Patients with disabilities identified for CKRI consult within 24 hours of admission

Increasing the flexibility and patient-centricity of the care model will require CKRI to transition from fee-for-service payments toward outcomes-based reimbursement and, eventually, management of a total budget that encompasses acute, post-acute, and medical and social services for this population. Therefore, CKRI knew that while they needed to improve quality and accessibility of care for the underserved, they also needed to address lowering the cost of that care.

This approach required new attention to methodologies for defining and measuring health for people with disabilities and complex medical conditions. It required CKRI to address the line that often separates the care that is reimbursable from that which patients truly need. Because the organization focuses on the patient first and then determines where reimbursement will come from, it needed to optimize the efficiency and effectiveness of its services—and data and analytics played a key role. The organization implemented a data warehouse and analytics platform from Health Catalyst[®], providing access to highly integrated clinical, demographic, cost, claims and functionality data from across the continuum.

CKRI has developed analytic tools that allow team members to identify and target populations, evaluate clinical processes and business operations, manage care and support across the continuum, measure patient outcomes, and evaluate return on investment for each sub-program and for the program as a whole. For example, the dashboard below supports early identification of patients with disabilities for timely intervention (Figure 1).

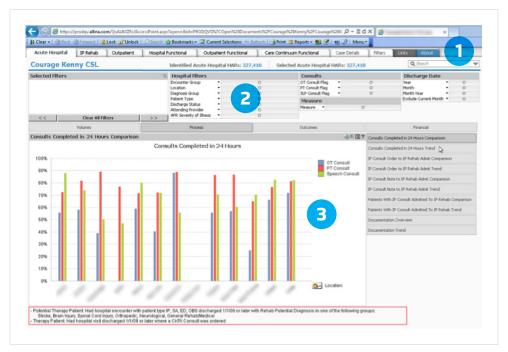


Figure 1: CKRI care and support assessment dashboard

The dashboard also delivers functional assessments (such as patient mobility, stability, cognitive, and pain) across the care continuum by location, encounter type, and time-period. Importantly, it gives the CKRI team the ability to drill down into high-level data to discrete views at the patient and provider level (Figure 2).

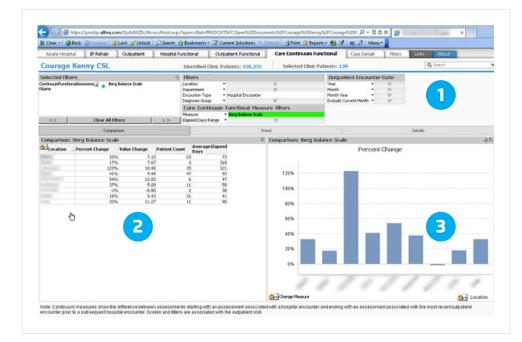


Figure 2: Functional assessment dashboard

Implementing a new care model was no easy task. CKRI leaders identified the following as key contributors to the success of this transformative initiative:

- Strong support from senior leadership
- Creation of a multi-disciplinary Value Committee to design, implement, and manage the new care model
- An effective engagement strategy, targeted at providers and care givers across the health system, based on involvement and education (including the use of stories to raise awareness and illustrate success)
- A strong culture of learning and innovation
- A high degree of patient involvement and advocacy
- Involvement of nurse and lay coordinators

FIGURE 2: FUNCTIONAL ASSESSMENT DASHBOARD

- Ability to filter by group, location, diagnosis, encounter type and time period
- Numerical data showing functional performance by location over time
- Trends in function comparisons by location over time

CKRI is committed to quality and continuous improvement based on measurable outcomes. We knew we couldn't consistently improve or measure outcomes without access to all of the necessary data. Having integrated data at our fingertips and being able to evaluate outcomes using our analytics infrastructure has been key to our success.

> Sarah Jenson Senior Data Analyst

INNOVATIVE CARE MODEL YIELDS BETTER FINANCIAL AND CLINICAL OUTCOMES

The following are key results of CKRI's initiative to date.

Creation of an innovative care model that optimizes care and support across the continuum

CKRI has successfully implemented a highly collaborative and multidisciplinary approach to comprehensive rehabilitation characterized by a holistic view of health. This new care model features an effective blend of health system and community services in support of patients, focusing not only on patients' medical needs, but also on their vocational, social, and emotional needs. This program, which focuses primarily on the needs of patients, also tackles the challenges of healthcare reform and includes a learning laboratory for the emerging value-based reimbursement environment.

Cost savings of \$11.2M for the community

CKRI and its parent organization, Allina Health, achieved significant cost savings, as well as better coordinated care, thanks to the new, data-driven care model. Using the analytics infrastructure to compare service utilization pre- and post-program, Allina discovered significant reductions in many areas, including hospitalizations, length of stay, and emergency department visits.

Up to 76 percent reduction in hospitalizations and 53 percent reduction in ED visits

The most dramatic cost savings resulted from reductions in hospitalizations and ED visits. CKRI leaders attribute these results to a combination of analytics insights and better care coordination. Using analytics, CKRI successfully identified the highest-risk patients and was then able to give them focused care that would prevent future catastrophic health events. The analytics infrastructure not only targeted the right patients to receive the right care, but it also enabled CKRI to measure outcomes improvement and dollars saved—thus helping demonstrate value for its relatively high-cost programs.

WHAT IS NEXT?

CKRI will continue to improve the model with hopes of being able to expand its services to support even more individuals. The organization is working continuously to refine its ability to manage its populations well, as well as to apply lessons from its learning laboratory to help rehabilitation services operate more effectively under a value-based, risk-based reimbursement system. CKRI will also focus on enhancing its processes for collecting necessary clinical, utilization, functionality, and cost data from across the continuum into its integrated analytic environment. *****

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