The CARE Award Final Results

Executive Summary

INTRODUCTION

There are three million children in the United States with complex medical conditions, and the current health care system is not equipped to provide them optimal care. This is the nation's most vulnerable population with highly variable health care needs that often are not adequately met by the traditional health care system. Family resources are stretched thin bearing the brunt of coordinating care for their children. And with most of these children relying on Medicaid, the traditional fee-for-service payment model cannot adequately address the care coordination needs of this population.

"Coordinating All Resources Effectively" – the CARE Award – is a landmark national study aimed at improving quality outcomes and reducing the cost of care for children with medical complexity (CMC) enrolled in Medicaid. Funded by the Center for Medicare & Medicaid Innovation (CMMI), CARE is designed to test the concept of a new care delivery system supported by new payment models specific to CMC. Under the CARE Award, the Children's Hospital Association partnered with 10 of the nation's leading children's hospitals, 8 state Medicaid programs and Medicaid managed care organizations, more than 40 primary care practice sites and more than 8,000 children and their families.

More than 2 million children with significant chronic and medically complex conditions require intense care management. While these children comprise only 6 percent of the Medicaid population, they represent 40 percent of the Medicaid spend for children. This totals approximately $380 million in annual care costs. The CARE Award was designed to transform care for CMC through the provision of appropriate, coordinated care in the right setting – along with the development of alternative payment models that more effectively align with the new care model.

PROJECT AIMS

The CARE Award project's aim was to inform sustainable change in health care delivery through new payment models supporting better care, smarter spending and healthier children with medically complex conditions. In order to achieve these goals, the project team set out to:

- Decrease caregiver burden
- Enhance patient experience of care and care coordination
- Provide care closer to home and at lower cost
- Create payment models that support high-quality care and rewards savings
- Decrease utilization of health services

The Award targeted care delivered in hospitals, hospital-based complex care clinics and community-based primary care practices. Implementing evidence-based practices consistently across the continuum of care to improve care coordination, the Award aimed to achieve spending and utilization outcome goals based on an October 2013 Dobson | DaVanzo study of the medically complex pediatric population. Those goals – aggregated over a 3-year period – were to:

- reduce spending by 6.8 percent
- decrease inpatient days by 40 percent
- cut emergency department visits by 10 percent

Tackling such a major transformation of the health care delivery system for CMC required an enormous investment and commitment from the Children's Hospital Association, the CARE Award's sponsors and participating institutions. Specifically, this involved three primary project tracks:

- **Data and analytics** – provided the foundation of the work done within the Award – gathering and interpreting information from surveys, care coordination costs, project measurement and health care utilization and spending.
- **Care transformation** – dynamic care teams devised individualized access plans and care strategies complete with patient and family goals, effective transitions of care management across multiple providers and sustainability of high-quality care.
- **Payment reform** – involved the research and development of payment model options, negotiation and implementation of the new models and ongoing monitoring of payments and costs under the new models.

Learnings gleaned from this project may contribute to larger-scale innovations and transformation among the CARE hospitals and, ultimately, many others across the U.S.

PROJECT RESULTS

Methodology

Before diving into the numbers, it's important to understand the data sources. We can currently analyze data from about 3,200 (of the more than 8,000) CARE patients for a period of 12 months to establish a relatively stable cohort of patients exposed to care transformation during the Award period. We're still awaiting final data from two CARE hospitals, which – when included – will substantially change the number of enrollees included in the analysis. We'll continue to update these results as we get more data, but these preliminary results reveal a promising start.

Spending and utilization

An important aspect of the CARE Award is optimizing health care utilization while simultaneously reducing overall spend. The project's results show success in all three crucial target categories (see Figure 1):

Outcome Measures	3-Year Aggregate Goal	12 mos. 8 hospitals (Preliminary)
Decreased inpatient days	40%	32%
Decreased ED visits	10%	26%
Decreased spend	6.8%	2.6%

Figure 1

A breakdown of the spending and utilization results:

- Inpatient days actually increased beyond expectations during the period prior to Award enrollment and remained higher than expected during the Award ramp-up period (year one). Once the change interventions were fully implemented, inpatient days quickly declined to levels expected under successful care transformation.
- Emergency department visits declined – in fact, the decrease in ED visits exceeded our 3-year aggregate goal.
- Although controlling pharmacy utilization and spend was not a target intervention of the CARE Award, it did have an impact on overall spend figures. The Dobson | DaVanzo study predicted a 10 percent increase in pharmacy spend, and our experience exceeded those numbers – driving up overall spend.
- While the 3-year aggregate goal for decreased spend is 6.8 percent, the decline forecasted within the first year (equaling the current CARE Award dataset) is 3.6 percent.

Family-centered outcomes

Working toward a goal of 2,500 family surveys, CARE Award project institutions experienced a 90 percent follow-up from roughly 1,000 baseline surveys. Families reported no adverse impacts during the transformation of the care model – in fact, a 1 percent increase in family function was cited. Though the goal was a 10 percent increase, researchers found an already high baseline score suppressed improvement possibilities. This tells us that transformational work focused on utilization and spend can be done without creating a greater burden on families.

Care transformation

By focusing on core concepts with a staged implementation by site, best practices and project successes spread rapidly across CARE project teams. As a result, care transformation goals were met or exceeded ahead of schedule. Highlights include:

- The first patient was enrolled in May 2015, with the enrollment goal reached by November 2016
- Change concepts were fully implemented by May 2016
- A total of 51 quality improvement (QI) teams engaged, encompassing more than 265 people
- Implementation goals were broadly exceeded in the last year
- Process goals met or exceeded 100 percent of goal for three key change concepts – dynamic care teams, access plans and care plans
- Teams developed sustainability plans in the three months following the end of the Award, September- November 2017

PROJECT LEARNINGS

For those involved, the CARE Award project has been a long journey with significant learnings in abundance. Among the key takeaways:

Family engagement

Active engagement of families as essential and equal partners is crucial to optimize hospital utilization. This needs to be an early priority in future model redesigns. Partnering with families today is a very different story than it has been in the past. During the course of the project, the CARE Award institutions focused more and more on family engagement as the critical role of the family became even more evident. The role of parents and families as collaborators and partners in transformation design and implementation cannot be overstated.

From their unique vantage point, family members are able to shed light on gaps in the health care delivery system. Each CARE site actively sought this input, including family "champions" on QI teams. A prime example of how familial input effected process change: CARE Award teams interviewed more than 500 families after emergency department (ED) visits to better understand what led them to take their child to the ED and what could have been done to prevent the visit. Those findings strengthened strategies to avoid future ED utilizations – informing contingency plans, emergency care plans and family-focused goals.

Recognizing family engagement on a "new level" is an important finding from the CARE Award. Partnerships among families and health care teams have traditionally only impacted their own patient's care. But this project illuminated the profound impact families can have on health care system redesign and transformation. Understanding how families experience the care model must be incorporated into the design of new models of care. When families are included in the design process from the early stages, health care professionals and organizations can most successfully cultivate the resources families need – building a culture of family-centered care.

Care transformation

Transforming care models is a journey – not an operational template. Existing programs can adapt their model, while new programs can use CARE Award project successes to establish buy-in.

An optimal care delivery model creates shared goals across the care system. It should focus on the formulation of treatment plans that are based on families' wishes and concerns and are easy to understand – it's at the heart of quality care coordination.

Primary care physicians (PCPs) are also paramount to the quality of care coordination, but they need support to engage in transformation. Limited resources can be problematic for some PCPs in participating in CMC patient care plans. CARE Award funding helped PCP practices engage by providing resources, education and paid time and expenses. Practice transformation facilitators (PTFs) were critical to the implementation of change concepts with PCP sites in this project.

The partnership of providers and family in CMC care enhances everyone's knowledge of the child's conditions – and the plans for care. Addressing the family's needs and desires in this manner improves outcomes for the child.

Payment models

There are a number of sustainable alternative funding models with payers that children's hospitals may consider – though it remains to be seen if the risk and amount needed for care coordination costs can be covered.

CARE is unique among the 38 CMMI awardees in its ability to implement multiple types of payment models across states and Medicaid managed care organizations. Four children's hospitals developed and implemented new payment models within the CARE Award. Three others are currently in discussions with their respective states and payers regarding the creation of new payment models for the CMC population.

The CARE Award project demonstrated that new payment models can drive changes to the delivery system when they include:

- Resource support for a medical home care coordination infrastructure and technology resources specific to children with complex medical conditions. The medical home model prioritizes development of family-identified goals and shared plans of care including contingency, emergency and access plans and enables after-hours access to providers familiar with the child/family
- Incentives to providers who directly manage the child's care

CONCLUSION

The CARE Award project made significant strides in transforming health care delivery and payment models for CMC. Though not intended to be a complete playbook to implement, it provides examples of what's replicable to help children's hospitals initiate sustainable change in health care delivery – through new payment models supporting better care, smarter spending and healthier children with medically complex conditions.

While more work needs to be done, it's vital to protect these improvements. Without a written sustainability plan, it has been demonstrated that QI teams are 70 percent more likely to lose those gains and revert to pre-project levels.

The CARE Award developed a multidimensional approach for teams to recognize and analyze factors known to be critical to sustaining improvement. With the ultimate goal for teams to develop an effective sustainability plan, the four-step process helped teams:

- Understand each organizational system affecting sustainability and its components' importance to sustaining success
- Determine change concepts that were most essential to sustaining work
- Identify required resources within organizational systems necessary for long-term improvement sustainability
- Draft a comprehensive sustainability plan

Payment models

There is a variety of payment model options hospitals may pursue to serve this patient population. But given the administrative burden on payers in creating new models for small populations, the optimal route for expediting the movement to alternative payment models for this population is integration into state or Centers for Medicare & Medicaid Services (CMS) emerging models. State Medicaid programs and CMS are piloting new payment models for adult populations, such as health home models. These models will require adjustments for pediatric populations – but may serve as a more feasible starting point with payers.

Additional resources

For more information on the CARE Award – including the informational webinar series featuring presentations by each CARE institution – please visit https://www.childrenshospitals.org/