Health Care Spend for Children with Significant Chronic Diseases – The CARE Award

Historical spend: 2012-2014

Please Note: This paper presents data on patterns of care on the enrolled children prior to the start of the CARE Award. Final results post Award will be available June 2018.

CARE Award: "Coordinating All Resources Effectively." CARE is the basis of a national hallmark study aimed at improving quality outcomes and reducing the cost of care for children with complex medical conditions enrolled in Medicaid. Children’s Hospital Association partnered with 10 of the nation’s leading children’s hospitals, 10 state Medicaid programs and Medicaid managed care organizations, over 40 primary care physicians and 8,000 children and their families. CARE is funded by the Center for Medicare and Medicaid Innovation.

The CARE Award\(^1\) enrolled population represents a medically fragile group of children with varying levels of complexity requiring extensive health care services. The Children's Hospital Association engaged Truven Health Analytics to standardize claims data\(^2\) from this population across 10 geographic regions and create a baseline data set to better understand historical spend patterns of the enrolled population. The Association then monitored changes in utilization and spend over three years to understand the impact of the Award’s newly designed clinical model of care. Following are the details of the historical spend and utilization patterns for children enrolled in CARE across a specific subcategory of service: children with significant chronic diseases.

Please note, the relative acuity of children enrolled in the CARE Award ranges from one to three times higher across the individual sites as compared to a national population benchmark.

To more finely assess historical utilization and spend, the CARE population is characterized by their level of medical complexity using the 3M Clinical Risk Group\(^3\) (CRG), shown in Table 1. This grouper categorizes the population by health characteristics and complexity of needs. Children with significant chronic diseases are characterized under CRG 6.

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\(^1\) Coordinating All Resources Effectively (CARE) for Children with Medical Complexity. This publication was made possible by Grant Number 1C1CMS331335 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies. The research presented here was conducted by the awardee. Findings might or might not be consistent with or confirmed by the findings of the independent evaluation contractor.

\(^2\) CARE enrollees, age 0-21. Baseline claims data submitted by states or managed care organizations representing enrollees across eight sites in the CARE Award. Dates of service represent January 2011- May 2015. Data and analytics support provided by Truven Health Analytics™.

\(^3\) The 3M Clinical Risk Group™ (CRG) grouper is a categorical clinical system that classifies individuals into mutually exclusive categories and assigns each person to a severity level if s/he has a chronic health condition. CMC in the award are identified as CRGs 5b-9.
Table 1: Clinical Risk Groups (CRGs)

<table>
<thead>
<tr>
<th>Clinical Risk Group (CRG)*</th>
<th>CRG level</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant lifelong chronic condition</td>
<td>5b</td>
<td>ADHD, asthma, depression</td>
</tr>
<tr>
<td>Significant chronic diseases in multiple organ systems</td>
<td>6</td>
<td>Epilepsy, obesity, diabetes</td>
</tr>
<tr>
<td>Dominant chronic diseases in 3 or more organ systems</td>
<td>7</td>
<td>Cerebral palsy, hydrocephaly, encephalopathy, neuromuscular diseases</td>
</tr>
<tr>
<td>Dominant metastatic malignancy</td>
<td>8</td>
<td>Leukemia, lymphomas, solid organ malignancies</td>
</tr>
<tr>
<td>Catastrophic</td>
<td>9</td>
<td>Spina Bifida; progressive Muscular Dystrophy, congenital hemi-, di-, quadriplegia</td>
</tr>
</tbody>
</table>

Figure 1 depicts the proportion of CARE enrollees and annual spend across each risk group. Children with significant chronic conditions are represented in CRG 6 which includes over half of the CARE enrolled population and accounts for a third of total spend.

**Figure 1: Total Annual Spend and Percentage of Beneficiaries by Health Status Group**

![Graph showing total annual spend by health status group](image)

Figure 2 illustrates the Medicaid spend for children with significant chronic health conditions across health service categories. Forty percent of the spend within CRG 6 represents inpatient spending, as seen in Figure 2. The next two highest spend categories include prescriptions filled and home health days. Together, these three categories represent 65 percent of CRG 6 annual spend.
Figure 2: Category Spending Distribution for Health Status Group CRG 6

Discussion
Further analysis reveals mental health spend represents 7 percent of CRG 6 spend, twice that of enrollees in the highest complexity group, CRG 9. The management of these relatively lower complexity children may require a service line approach (e.g. managing hospital days, prescription spend, and home health services), as opposed to children with higher complexity conditions where the emphasis likely requires management of acute conditions.

More work is also required to develop a national data set representing utilization and spend across the continuum of care for these children to enable a better understanding of the patterns of care and the impact of care management.