2024 Validation Report

Review for: Ceresti Health

Validation Achieved: Savings

Valid through: December 2024

Company Profile

Category:	**Disease Management**
Website:	https://www.ceresti.com/
Year Established:	2013
Public or Private:	Private
CEO:	Dirk Soenksen
Company contact:	dirk.soenksen@ceresti.com

Description Provided by the company:

Ceresti Health is a digital health company that improves the quality, experience and cost of care for Medicare members with dementia by activating and supporting their family caregivers, at scale.

The company leverages data and predictive analytics to identify and enroll family caregivers (spouses, adult children) of frail elderly Medicare Advantage members, including those living with Alzheimer's Disease or other dementias, into its **Digital Caregiver Activation Program (DCAP)**, also known as the Ceresti Caregiver-Enabled Care Program (CECP). Ceresti's DCAP is a non-medical program comprising personalized health education, resources, social worker-led proactive coaching, and caregiver-enabled remote monitoring, all delivered via a dedicated tablet that is shipped to the caregiver's home.

Claim Assertion for Validation

Patients with Alzheimer's Disease or other dementias had lower total medical costs than similar patients when their family caregiver enrolled in Ceresti's Digital Caregiver Activation Program.

Method / Calculation / Examples

A total of 164 family caregivers (and their care-recipient patients) enrolled in the Ceresti Digital Caregiver Activation Program (DCAP). This program provides a family caregiver with a single-purpose tablet computer, personalized education and one-on-one remote coaching. The DCAP also monitors the patient's health status, via risk assessments voluntarily completed by their family caregiver.

Caregiver-patient dyads were included in the analysis if they met the following criteria:

- The patient's caregiver was enrolled in the DCAP for at least 45 days
- Patient claims data was available for at least 6 months pre-index
- The patient did not die during the first 6 months post-index
- Of the initial 164 enrolled caregiver-patient dyads, 131 dyads were included in the analysis. The remaining 33 dyads did not meet the criteria.
- Patients whose caregivers enrolled in the DCAP were matched to similar patients (whose caregivers were not enrolled). The following factors were used for matching patients: age, gender, geographic region, and the following during the 6 month pre-index period: Charlson Comorbidity Index; number of medical claims with a diagnosis of Alzheimer's Disease or other Dementia; the presence of a skilled nursing facility claim emergency department (ED) visits and costs; inpatient hospital admissions and costs; and costs for nursing or assisted living, office visits and other outpatient services, and other costs.

Method / Calculation / Examples

The evaluation compares changes in patient outcomes (post-index minus pre-index) between program enrollees and a matched comparison group using the "difference-in-differences" approach. The index date for program enrollee patients is their DCAP start date. For matched comparison group patients, the index date is the program start date of the enrollee to whom the comparison group member is matched.

Total medical and total inpatient costs were calculated during the 6 months pre-index period for both DCAP patients and for matched non-DCAP patients.

Similarly, the frequency of ED visits, inpatient admissions, and 30-day readmissions was calculated per patient per month. The same measures were calculated over the 12 months following each patient's index date, and for the same time period for the matched non-DCAP patients.

The change in costs and visit frequency that DCAP patients incurred over the 12-month post-index period was then compared to the change experienced by the matched non-DCAP patients. The relative differences were tested for statistical significance to determine whether the change was due to chance.

Method / Calculation / Examples

Aligning the index dates of the matched comparison group patients exactly with the index dates of enrolled patients was important, to ensure that claims runout (claims payment lag) would be the same between cohorts. Additionally, the analysis methodology Winsorized (truncated) outlier cost values at the 98th percentile rather than excluding patients with outlier costs in order to get a better estimate of total costs and to avoid reducing the sample size of the study.

Findings & Validation

Total Medical Costs (PMPM): All Enrolled

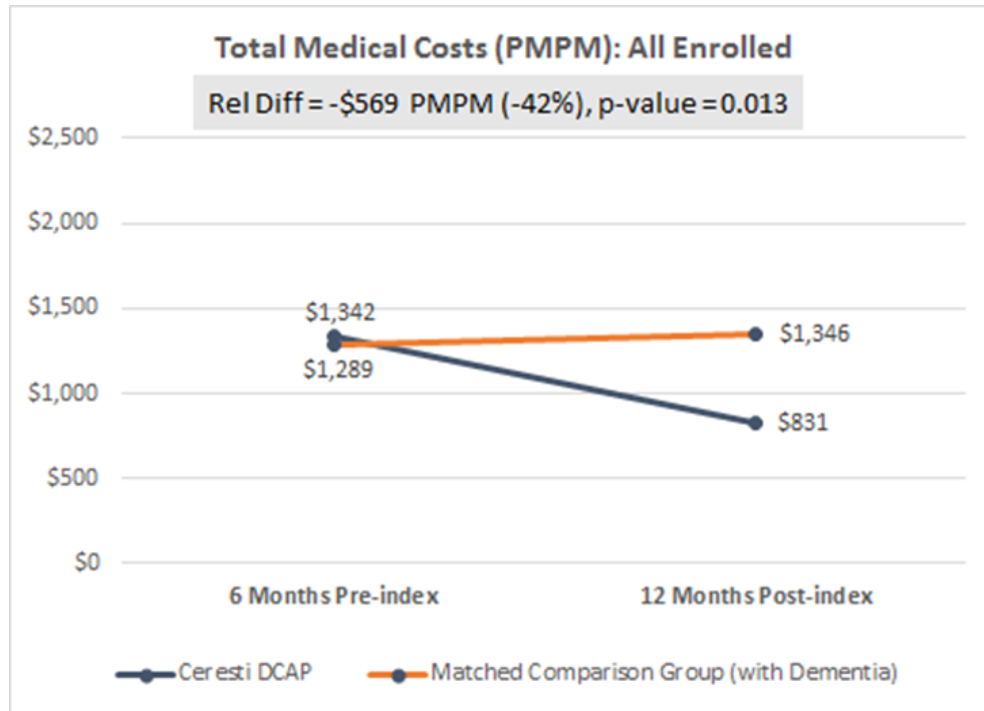Rel Diff = -$569 PMPM (-42%), p-value = 0.013

Figure 1

Figure 1 shows the DCAP group's total medical costs per member per month (PMPM) for the 6 months before the program began (pre-index), and for the 12-month post-index period. DCAP patient's total medical costs decreased by $511 PMPM, while the matched comparison group's costs increased by $58 PMPM; the relative difference between the two groups was $569 PMPM (-42%) and was statistically significant (p<0.05).
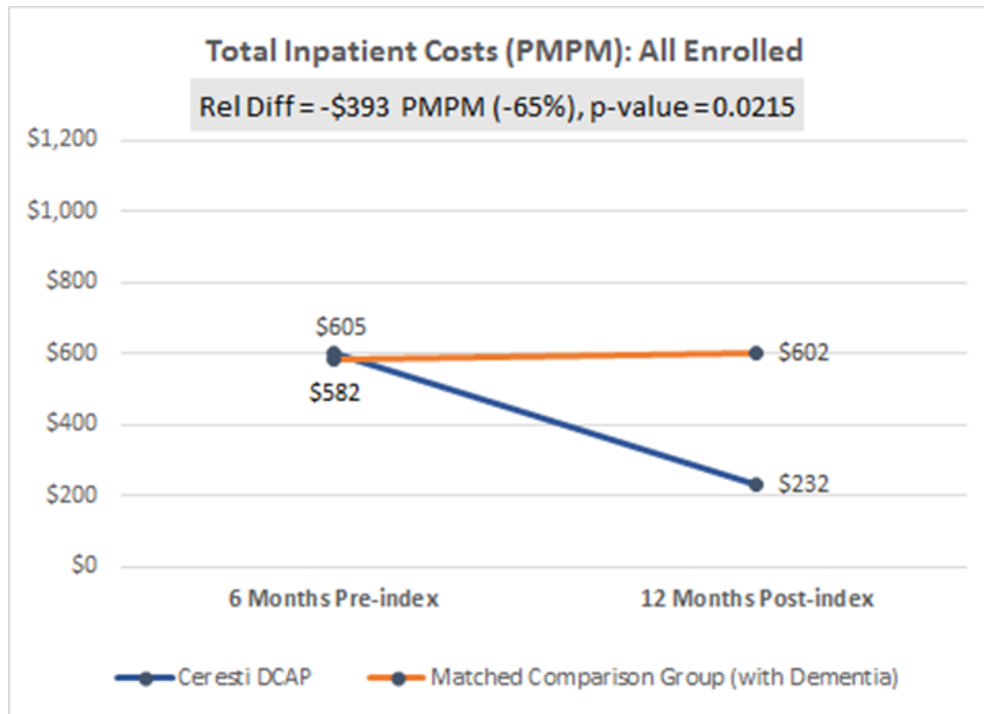
Findings & Validation

Figure 2

Figure 2 shows total inpatient costs PMPM. The DCAP group's inpatient costs decreased by $373 PMPM, while the matched comparison group's costs increased by $20 PMPM. The relative difference between the two groups was $393 PMPM (-65%) and was statically significant.

Findings & Validation

	DCAP Group		Matched Comparison Group		Relative Difference %
	Baseline	Post	Baseline	Post	
ED visits PMPM	0.084	0.053	0.074	0.073	-36%
Inpatient Admissions PMPM	0.053	0.033	0.048	0.067	-73%
30-day Readmission %	40.5%	25.5%	28.3%	43.0%	-73%

Table 1. Other Patient Outcomes for All DCAP Enrollees

Table 1 summarizes ED visits, inpatient admissions, and 30-day readmissions for the DCAP patient enrollees and the matched comparison group (non-DCAP) patients. The inpatient admissions and readmissions differences were statistically significant (p<0.05), and the ED visits differences were almost significant (p=0.0557).

Findings & Validation

	High Utilizers from the DCAP Group		High Utilizers from the Matched Comparison Group		Relative Difference %
	Baseline	Post	Baseline	Post	
Medical Costs PMPM	$2,424	$1,377	$1,930	$2,044	-48%
ED visits PMPM	0.161	0.091	0.118	0.114	-41%
Inpatient Admissions PMPM	0.111	0.069	0.080	0.112	-66%

Table 2. Other Patient Outcomes for High Utilizer DCAP Enrollees

Table 2 summarizes outcomes of a subset of DCAP patient enrollees with high utilization in the prior two years (>=1 inpatient admission or >=2 emergency department visits) relative to patients from the matched comparison group with high utilization in the prior two years. All of these differences were statistically significant (p<0.05).

Limitations

The matched comparison group may differ from the DCAP group in ways that were not accounted for in the matching process or in factors that cannot be measured. These unmeasurable and omitted factors may explain some of the outcomes.

Validation and Credibility Guarantee

Ceresti Health's Caregiver Activation Program achieved validation for **Savings**. Validation Institute is willing to provide up to a $100,000 guarantee as part of their Credibility Guarantee Program. To learn more, visit https://validationinstitute.com/credibility-guarantee/.

Savings
Can reduce health care spending per case/participant or for the plan/purchaser overall.

Outcomes
Product/solution has measurably improved an outcome (risk, hba1c, events, employee retention, etc.) of importance.

Metrics
Credible sources and valid assumptions create a reasonable estimate of a program's impact.

Contractual Integrity
Vendor is willing to put a part of their fees "at risk" as a guarantee.

ValidationInstitute

CERTIFICATE OF VALIDATION

Applicant: **Ceresti Health**

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Product: Caregiver Activation Program

Claim: Patients with Alzheimer's Disease or other dementias had lower total medical costs than similar patients when their family caregiver enrolled in Ceresti's Digital Caregiver Activation Program.

Validation Achieved: **Validated for Savings**

Validation Award Date: December 2021

Linda K. Riddell, MS
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About Validation Institute

Validation Institute is a professional community that advocates for organizations and approaches that deliver better health value - stronger health outcomes at lower cost. We connect, train, and certify health care purchasers, and we validate and connect providers delivering superior results. Founded in 2014, the mission of the organization has consistently been to help provide transparency to buyers of health care.

Validation Review Process

Validation Institute has a team of epidemiologists and statisticians who review each program. The team focuses on three components:

- Evidence from published literature that a similar intervention had similar results.
- The reliability and credibility of the data sources.
- The rigor of the approach to calculating results.

To achieve validation, the program has to satisfy each of these components. VI's team then summarizes the review into a report which is publicly available. Details of VI's review are available with the program's permission.