Executive Summary

Digital caregiver empowerment program reduces utilization and costs for Medicare Advantage members with Alzheimer's Disease and Other Dementias (ADOD)

Results of pilot study conducted in Harvard Pilgrim Health Care's Medicare Advantage population; presented by Point32Health, a leading New England health plan during a national webinar[1] hosted by CCMI, the federal government's Medicare innovation center, on October 7, 2021.

Overview.

Alzheimer's Disease and Other Dementias (ADOD) is the condition feared the most by adults aged 60 years and older. In a typical Medicare Advantage (MA) population, ADOD drives 27% of hospital admissions and 21% of total medical costs.[2] Members with ADOD require high levels of caregiver support because they lose the ability to self-manage their health and because ADOD has a multiplier effect on their comorbid conditions.[3] Caregiver support is recognized by clinicians at leading health systems as one of most impactful initiatives to improve dementia care.[4] Members with ADOD frequently rely on family caregivers (e.g., spouses, adult children) to implement their care plans, yet most family caregivers are stressed, and lack the knowledge, skills and confidence required to provide effective care for a loved one.

In this study we deployed the Ceresti Caregiver Empowerment Program (CCEP) to family caregivers of Medicare Advantage members with ADOD. We evaluated the impact of this digital health program on member healthcare cost and utilization, and on caregiver healthcare cost, mental health and satisfaction. CCEP process metrics were also tracked to evaluate caregiver engagement and compliance to completing remote risk assessments.

Ceresti Caregiver Empowerment Program (CCEP)

Caregivers enrolled in the CCEP (N=164) received a Ceresti-supplied, cell-enabled, single-purpose tablet with an elder-friendly user menu. Caregivers engaged in a comprehensive 6-month program of personalized education, evidence-based support, proactive coaching and participated in remote monitoring of their loved one's (i.e., the member's) health via tablet-based risk assessments.

Outcomes

Member. Member outcomes were compared to outcomes from a 3:1 propensity matched control group using a difference-in-differences approach. Enrollees and control group members were matched on a variety of variables, including age, sex, Charlson comorbidity index, geographic region, utilization and six cost categories.

Table 1 details member outcomes, including a decrease in medical cost of $666 PMPM, for members enrolled > 45 days, and high utilizers enrolled > 45 days. High utilizers are defined (by Ceresti) as members with at least one hospitalization or two ED visits in the prior 24 months. Figure **1** is a plot showing pre-index costs and costs 30-days post index for enrollees and the matched control group. The increase in drug costs suggests an increase in medication adherence. P-values less than 0.05 are considered statistically significant.

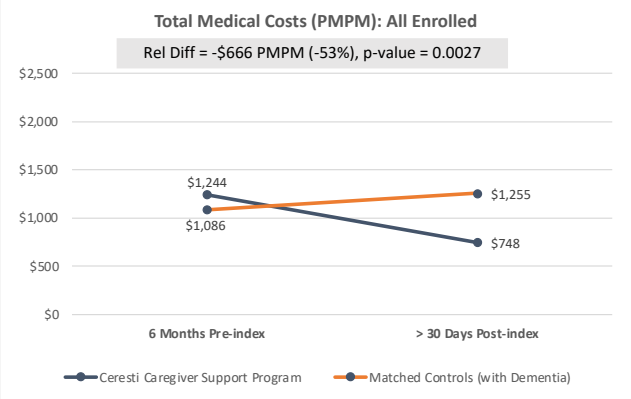
Caregiver. Medical costs for spousal caregivers enrolled in the same MA plan decreased by $251 PMPM (-75%, p=0.02). In addition, the number of mental unhealthy days (MUHD) reported by caregivers on the CDC-developed Healthy Days assessment[5] declined by 3.1 days over the course of their CCEP, suggesting that caregiver mental health improved as a result of engaging in the CCEP. Caregiver's net promoter score (NPS), a measure of caregiver satisfaction, was 75. Scores above 70 are considered to be excellent.[6]

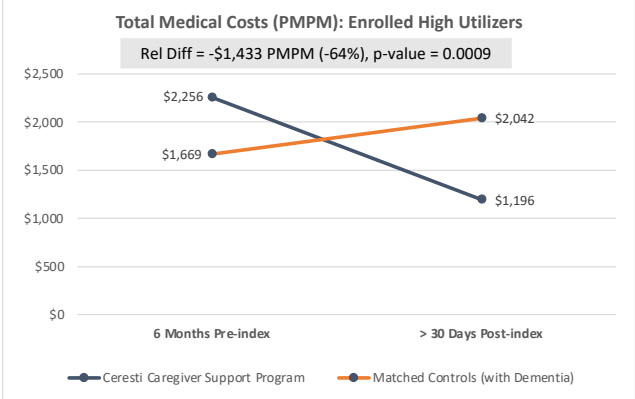
Process. An average of 93% of caregivers engaged in their CCEP. Engaged caregivers spent an average of 39.5 minutes per week engaging in education, coaching calls, messaging, assessments and digital therapies, and completed an average of 2.2 remote risk assessments per week.

Table 1. Summary of Member Outcomes

Outcomes for Enrollees vs Control, more than 30 days post-Index, to end of claims data	ALL ENROLLED (N= 131, Eligibility = 7.24 mos)			ENROLLED HIGH UTILIZERS (N= 62, Eligibility = 7.12 mos)		
	Relative Diff.	**P-value**	**% Relative Diff.**	**Relative Diff.**	**P-value**	**% Relative Diff.**
Medical Costs PMPM	**-$666**	0.003	-53%	**-$1,433**	0.0009	-64%
Inpatient Costs PMPM	**-$491**	0.003	-96%	**-$985**	0.002	-91%
Inpatient Admissions per 1,000 Members per year	**-513**	0.02	-80%	**-994**	0.02	-73%
ED Visits per 1,000 Members per year	**-424**	0.03	-42%	**-1,112**	0.003	-56%
30 Day Readmissions Rate	**-30%**	0.02	-73%	**-30%**	0.02	-73%
Drug Costs PMPM	**$53**	0.05	17%			

Figure 1. Member Medical Costs PMPM





References

[1] CMMI Webinar: Unleashing the Capabilities of MAOs to Deliver Health Innovation for Older Adults in Underserved Settings (Oct 7, 2021), recording of Point32Health presentation

[2] Smith M et al., Prevalence and Treatment Costs for Alzheimer's Disease and Other Dementia, Stroke-Like Conditions and Parkinson's Disease, Milliman white paper (July 2021)

[3] Salber P et al, Impact of Dementia on Costs of Modifiable Cormorbid Conditions, Am J Manag Care. 2018;24(11):e344-e351

[4] NEJM Catalyst Insights Report, Innovations in Care Delivery: The Growing Challenge of Dementia Care, Sept. 2021

[5] Measuring Healthy Days, Population Health Assessment of Health-Related Quality of Life, U.S. CDC (Nov 2000)

[6] What is a Good Net Promoter Score (2021 NPS Benchmark)