CARE Award – Milliman White Papers

Milliman actuaries Juliet Spector, Matt Kramer, and Julia Kong provide actuarial support for the Children's Hospital Association (CHA) on behalf of 10 of its Coordinating All Resources Effectively (CARE) Award hospitals, as part of the CARE Award.

The CARE Award is a Health Care Innovation Award from the Center for Medicare and Medicaid Innovation (CMMI) to test the coordination of care for children with complex medical conditions.

One of the goals of the CARE Award is to assist CARE Award hospitals (sites) with the design of new payment models for the care of these children. For more information on the CARE Award, see https://www.childrenshospitals.org/.

The authors wrote three white papers summarizing research performed for Children's Hospital Association as part of the CARE Award.

This publication was made possible by Grant Number 1C1CMS331335 from the U.S. Department of Health and Human Services (HHS), Centers for Medicare and Medicaid Services (CMS). 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 NACHRI (CHA) and Milliman. Findings might or might not be consistent with or confirmed by the findings of CMMI's independent evaluation contractor.

CARE Award – Milliman White Papers

We produced the following three white papers summarizing research performed for Children's Hospital Association:

1. "Alternate payment models for children with complex medical conditions: Key actuarial lessons from the CARE Award" (Pub # 3087, Approved 6/15/2017)
2. "CARE Award patient acuity: Analysis of selection effects" (Pub # 3221, Approved 9/29/2017)
3. "What is the minimum number of members required to take downside risk in a payment model for children with complex medical conditions?" (Pub # 3337, Approved 4/27/2018)

These slides summarize the findings from those white papers.

Milliman White Paper #1:

Alternate payment models for children with complex medical conditions: Key actuarial lessons from the CARE Award (Pub # 3087, Approved 6/15/2017)

In this paper, we present five key lessons from our work during the CARE Award:

1. Look before you leap: It is worth the time for a careful review, as most payment models can introduce a material financial risk for the health care provider.
2. Population size matters: Children with complex medical conditions are a small portion of the Medicaid population, but the average claims per member per year (PMPY) can be volatile, which has implications for payment models.
3. The devil is in the details: Analyzing historical data and financial projections can uncover unforeseen obstacles for alternate payment models, including data quality and the potential for large claims.
4. Don’t reinvent the wheel: Some entities may not be ready to try complex new payment models so it may be better to start small and leverage existing programs as a first step.
5. It takes two to tango: Payers and providers need to be willing partners and agree on a wide range of contract terms.

Milliman White Paper #2:

CARE Award patient acuity: Analysis of selection effects (Pub # 3221, Approved 9/29/2017)

- In this paper, we summarize our findings regarding the CARE-enrolled population relative to the broader CARE-eligible population.
- The enrolled membership is typically a small subset of the eligible membership, around 5% to 10%.
- CARE Award hospitals selected higher-acuity members for enrollment in the program. Members are grouped by acuity using 3M's Clinical Risk Groups (CRGs).
- Enrolled members' claims PMPM are higher than the eligible members' average claims PMPM, and enrolled members' claims exhibit a significantly higher degree of claims volatility than the eligible members' claims.
- Because the members chosen for the program exhibited higher acuity to start with, there may be a potential for reversion to the mean for the enrolled members' claims. The members enrolled in the program may have been selected to enroll during an acute phase of their chronic illness which, for some, may have subsequently passed.

Milliman White Paper #3:

What is the minimum number of members required to take downside risk in a payment model for children with complex medical conditions? (Pub # 3337, Approved 4/27/2018)

- In this paper, we explore the number of members required to take downside risk in a payment model for children with complex medical conditions.
- The level of volatility in a cohort's claims per member per month (PMPM) decreases as the number of members in the cohort increases. High volatility makes downside risk undesirable.
- We investigated a number of scenarios:
  - Presence of stop loss
  - Exclude CRG 8
  - Exclude CRGs 7, 8, and 9
  - Exclude CRGs 5b and 6
  - Exclude home health
  - Exclude prescription drugs
  - Exclude coagulation defects
  - Exclude coagulation defects and prescription drugs
- We use eligible claims data for children with complex medical conditions. The datasets we received were from a number of different states, obtained for the CARE Award by CHA and CHA member sites.
- Ultimately, the minimum number of members needed depends on the risk tolerance of the entity taking the risk.

Statement of Actuarial Qualifications

Juliet Spector, Matt Kramer, and Julia Kong are actuaries for Milliman.

The authors are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein.