



Estimated Cost Savings of Case Management Services Provided by Guardian Nurses:

Supplemental Analysis for Teamsters Case Study

At the request of Guardian Nurses Healthcare Advocates (GN), Open Health LLC analyzed claims data provided by Teamsters Health & Welfare Fund of Philadelphia & Vicinity (Teamsters), a Taft-Hartley fund with 17,000 lives, to supplement a prior study of the Schools Health Insurance Fund population. The Teamsters dataset included 908,803 claims from 16,733 members during the period January 1, 2022 to October 31, 2023.

The cost analysis was based exclusively on adjudicated paid claims provided by Teamsters and program participation rosters from GN (Acute Care Episode Support: 442 member records, Diabetes Management: 207 member records).

Teamsters provide GN's Mobile Care Coordinator (MCC) Program to its members as part of a coordinated strategy to elevate the quality and responsiveness of member services and reduce medical costs. While GN services may be available broadly, the Mobile Care Coordinator nurses are focused on supporting two primary types of members: (1) acute care episodes requiring hospitalization and (2) uncontrolled diabetes. In this population there is an extraordinary acuity, GN supports members whose HbA1c is greater than 10.0.

Service Line 1: Diabetes Management Support

Highlights:

- **GN engages high-cost, high-risk members in Diabetes Management Support, noting a 10x average monthly cost before enrollment.** The comparison is made to members who decline to participate: GN-engaged members \$5,061 vs. declined \$513 PMPM. The sample for this study includes 72 GN-engaged members and 71 members who declined.
- In comparison to non-participants (i.e., declined), GN-engaged members' mean total cost of care is **lowered by \$21,600 per case** over 6 months after enrollment (or mean \$3,658 PMPM), which is **72% lower on a PMPM basis**. In contrast, the PMPM cost of care for non-participants falls 30% lower to \$357 during a comparable 6-month follow-up period.
- Given the current operating costs and typical caseload of 80 members per nurse case manager per year, the near-term **ROI^{1,2} to Teamsters is 7.5 (or \$1,728,000 per nurse)**. If a more conservative estimate of a per-case cost savings is used (i.e., \$1,800 PMPM), the near-term ROI is 3.8. The estimated ROI could be more favorable if the caseload increases while maintaining a similar risk profile of participating members.
- In addition, cost savings can accrue past the 6-month window of analysis. For example, members with clinically significant improvements in glycemic control, blood pressure, and dyslipidemia can have lower medication costs (e.g., optimal use of generics) and lower risk of hospitalization many years later.

For purposes of ROI calculation, the annual cost of 1.0 FTE Mobile Care Coordinator nurse is \$230,000.

Service Line 2: Acute Care Episode Support

Highlights:

- GN engages high-cost, high-risk members in the Acute Care Episode Support program. The mean total cost of care (during the month of the eligible acute care episode) of GN-engaged participants is 58% higher than those who declined: \$45,556 vs. \$32,088. The difference is negligible during the month following the episode, which was also observed in the SHIF population.
- At 58%, the relative mean total cost of care for GN-engaged participants in Teamsters was higher than SHIF (30% to 55% higher, depending on acuity level).
- While attributable cost-savings estimates cannot be derived from the actual claims data available, the high cost of GN-engaged members presents an opportunity for significant cost savings.
- If GN contributes a 10% reduction in the total cost of care for an acute episode and a typical caseload is maintained per year (120 engaged members per nurse case manager per year), the return on investment (ROI) to Teamsters is 2.4 (or \$547,000) for each 1.0 FTE nurse deployed¹.

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² The near-term ROI includes an estimate of savings during the 6 months following enrollment in GN services. Longer-term savings are not considered.