



MILLIMAN CASE STUDY

# Optimize your self-funded health benefit strategy with advanced analytics

How one organization used Milliman DEPTH™ to evaluate its cost management strategy and identify opportunities for savings

June 2023

Dustin Grzeskowiak, FSA, MAAA  
Les Kartchner, FSA, MAAA

Eleanor Hill, ASA, MAAA  
Shelley Moss, FSA, MAAA



# Table of Contents

- EXECUTIVE SUMMARY ..... 1**
- BACKGROUND..... 2**
- CHALLENGE..... 2**
- SOLUTION ..... 3**
- RESULTS AND INSIGHTS..... 3**
  - BASELINE EFFICIENCY OF THE PLAN..... 3
  - KEY STRENGTHS OF CURRENT COST MANAGEMENT STRATEGY ..... 4
  - LARGEST ACTIONABLE SA9VINGS OPPORTUNITIES..... 4
- PLAN OF ACTION..... 3**
- CAVEATS AND LIMITATIONS ..... 4**

## Executive summary

Milliman DEPTH™ is a strategic planning tool used by self-funded health benefit plans to assess their performance managing the total cost of care and to identify specific savings opportunities. The tool is uniquely able to identify strategic cost management opportunities by evaluating total cost of care performance across dimensions that align with actions plan leaders can take to manage costs.

This case study provides an overview of one client’s experience leveraging Milliman DEPTH to inform their cost management approach. The client sponsors a self-funded plan offering medical and pharmacy coverage to nearly 90,000 members across several states. In 2022, the client’s leadership team sought a healthcare analytics technology partner to help enhance the plan’s approach to managing rising healthcare costs. Client leadership selected Milliman DEPTH to answer key strategic questions:

1. How efficiently is the plan performing currently?
2. In what ways is the plan already achieving cost savings?
3. Where should the organization focus its efforts to reduce healthcare costs while improving member benefits and experience?

Milliman DEPTH produced the key strategic insights for the client and recommended action items corresponding to each insight, shown in Figure 1. Client leadership added the action items to their multiyear strategic road map for the plan, with each action item having specific planned steps, timelines, and leaders assigned to drive progress.

**FIGURE 1: KEY STRATEGIC INSIGHTS AND ACTION ITEMS**

KEY STRATEGIC INSIGHTS	ACTION ITEMS
The existing third-party administrator and pharmacy benefit manager relationships and frequent market checks are producing savings for the plan.	Continue current detailed market check approach and frequency.
The combination of existing pharmacy utilization management programs is producing savings for the plan.	Continue current pharmacy programs and investigate additional options from pharmacy benefit manager.
<p>Chronic cardiovascular and behavioral health conditions are two different areas of the plan with potential for significant savings to be achieved through point solutions, plan design changes, and other approaches that enhance member experience.</p> <ul style="list-style-type: none"> <li>▪ 15% of the client’s population has chronic cardiovascular conditions, and improved medical utilization for these members could reduce total plan costs by 4.25% to 8.50%</li> <li>▪ 18% of the client’s population has chronic behavioral health conditions, and improved medical utilization for these members could reduce total plan costs by 2.50% to 4.00%</li> </ul> <p>These populations are largely nonoverlapping and the total combined savings opportunity measured from 6.50% to 12.00%.</p>	<p>Map the current member journey for those with chronic cardiovascular or behavioral health conditions and identify plan design or benefit improvements that may enhance member experience and reduce barriers to care.</p> <p>Assess the landscape of point solutions available for these conditions, conduct requests for proposal (RFPs) tailored to the organization’s unique needs for each condition, and implement selected solution(s).</p> <p>Identify care management solutions available from the organization’s third-party administrator.</p> <p>Monitor implemented solutions and track the organization’s progress toward achieving the combined 6.50% to 12.00% savings opportunity for these cohorts identified by Milliman DEPTH.</p>

## Background

Milliman DEPTH is a performance measurement and savings opportunity identification tool used by self-funded health benefit plans. Milliman DEPTH compares an organization's own patient and service-level medical and pharmacy spending to customized performance benchmarks generated from Milliman's healthcare claims research database. These performance benchmarks are informed by rich data from over 80 million group-covered lives and are adjusted for the unique characteristics of each organization's population, including age, gender, geography, benefit design, and clinical conditions and health status.

Milliman DEPTH is uniquely able to identify strategic cost management opportunities for self-funded plans by evaluating total cost of care performance across dimensions that align with actions plan leaders can take to manage costs. They include: evaluating unit prices for third-party administrators (TPAs), pharmacy benefit managers (PBMs), and direct provider contracting relationships; utilization levels for services that can be addressed through plan design features; and total cost of care for subsets of the population with certain conditions that can be managed by point solutions and other approaches available from vendors, providers, and administrators.

Milliman is on the cutting edge of change in healthcare delivery and financing, and we provide our clients with a vast amount of in-the-trenches experience along with unrivaled data resources and proprietary analytic capabilities. We are not affiliated with any public accounting, insurance, or brokerage firms, nor are we paid on commission. We never seek a particular result, just accuracy and providing sound strategic insights supported by data. Milliman DEPTH encapsulates this approach for employers in a meaningful way.

## Challenge

The client organization sponsors a self-funded plan offering medical coverage administered by a third-party administrator and pharmacy coverage administered by a pharmacy benefit manager. The plan has around 90,000 enrolled members residing across several states, with concentrations in Colorado, Georgia, North Carolina, Oklahoma, and Texas. The covered population is about 52% female and 39% are children. For the most recent plan year, the plan's total cost of care was about \$460 million.

In 2022, the client's leadership sought a healthcare analytics technology partner to help enhance the plan's approach to managing rising healthcare costs. Historically, much of the client's cost management approach focused on third-party administrator/pharmacy benefit manager vendor and network selection to maximize discounts and limit unit prices paid by the plan. Looking forward, leadership was interested in also leveraging point solutions to enhance member benefits and experience, while also reducing the total cost of care. The client leadership selected Milliman DEPTH to answer key strategic questions:

1. How efficiently is the plan performing currently?
2. In what ways is the plan already achieving cost savings?
3. Where should the organization focus its efforts to reduce healthcare costs while improving member benefits and experience? What specific conditions present the biggest opportunities for total cost of care improvement?

## Solution

The client organization leveraged Milliman DEPTH to assess the total cost of care performance of its self-funded plan and provide data-informed recommendations on the top areas for potential savings to the plan.

---

### OVERVIEW OF KEY STEPS IN MILLIMAN DEPTH™ PROCESS

1. Milliman interviewed key plan leaders to gain an understanding of the organization's goals and objectives for its healthcare benefits, as well as its current approach to cost management and approaches that are being considered for the future.
2. Milliman collected patient and service-level medical and pharmacy claims data from the plan's third-party administrator and pharmacy benefit manager and validated the accuracy of the data. Milliman also collected plan designs and other documents from the plan's benefits team.
3. After the data was validated, Milliman processed it through the Milliman DEPTH engine to:
  - Measure the baseline efficiency of the plan
  - Determine key strengths of the current cost management strategy
  - Identify the largest savings opportunities
4. The analytic results generated by the Milliman DEPTH engine were then interpreted by a Milliman self-funded health plan expert and translated into actionable recommendations for plan leadership. The final analytic results and strategic recommendations were loaded into a Milliman DEPTH insights dashboard accessible by plan leaders via a secure web-based environment.
5. Milliman met with plan leadership to present the Milliman DEPTH insights dashboard, review the results, discuss strategic insights, and determine which savings opportunities and recommendations best aligned with benefit goals, objectives, and organizational philosophy.

## Results and insights

### BASELINE EFFICIENCY OF THE PLAN

Milliman DEPTH evaluated the overall performance of the client's plan using an efficiency index approach for three categories: overall claims expense (i.e., TCoC), utilization, and unit price.<sup>1</sup> The efficiency index categorized performance benchmarks into four intervals: poor, moderate, good, and great.<sup>2</sup> Actual plan results are compared to the benchmark intervals to determine the plan's result for a particular metric (e.g., TCoC). Moderate and good results indicate actual performance somewhat below or somewhat above average plan performance, respectively. Poor and great results indicate actual performance well below or well above average plan performance, respectively. Most plans will have total cost of care performance in either the moderate or good intervals, with more granular results such as utilization versus unit price performance showing greater variability depending on each plan's particular strengths or weaknesses. This approach to characterizing plan performance provides plan leaders with insights that can be used to set strategy and results that can be monitored over time to track performance. An overview of the client's results is shown in Figure 2.

---

<sup>1</sup> Overall claims expense reflects the plan's total cost of care (TCoC) or allowed claims spend. Utilization represents the plan's level of resource consumption as measured by hospital admissions, outpatient visits, prescriptions filled, etc. Unit price represents the plan's level of reimbursement relative to comparative benchmarks.

<sup>2</sup> The Milliman DEPTH efficiency index is centered around typical plan performance and extends to capture low-performing and high-performing plans. An efficiency value of zero corresponds to a low-performance benchmark and an efficiency value of 100 corresponds to a high-performance benchmark. These benchmarks represent approximately the 10th and 90th percentiles of theoretical plan performance, respectively.

FIGURE 2: CLIENT OVERALL MILLIMAN DEPTH™ EFFICIENCY INDEX RESULTS



**KEY STRENGTHS OF CURRENT COST MANAGEMENT STRATEGY**

Milliman DEPTH assessed the client’s total cost of care performance in aggregate as well as across the plan and population dimensions that align with actions the organization can take to manage costs.

**Plan dimensions evaluated included:**

- Medical and pharmacy performance
- Medical performance was further segmented by such categories as:
  - Acute hospitalization
  - Emergency department
  - Outpatient surgery
- Pharmacy performance was further segmented by:
  - Generic
  - Brand
  - Specialty

**Population dimensions evaluated included:**

- Member geography
- Plan design
- Employee versus dependent
- Age range and gender
- Chronic condition

Overall, Milliman DEPTH measured the client’s efficiency for nearly 1,000 cross-sections to identify key strengths of the current approach taken by the client to manage costs. It was critical for plan leadership to know what has worked well so that they can continue those approaches in the future. An overview of the client’s results is shown in Figure 3.

FIGURE 3: CLIENT KEY STRENGTHS

KEY STRENGTH	MEDICAL UNIT PRICE	PHARMACY UNIT PRICE	PHARMACY UTILIZATION
<b>What is it?</b>	Provider reimbursement rates negotiated for the client by its third-party administrator	Discounted drug costs negotiated for the client by its pharmacy benefit manager	Number and type of prescriptions filled by members enrolled in client plans
<b>Client’s current approach</b>	Leverage long-term third-party administrator partnership and conduct frequent market checks on network discounts	Leverage pharmacy purchasing coalition and conduct frequent market checks on discounted drug costs	Leverage a combination of utilization management programs available through its pharmacy benefit manager

**LARGEST ACTIONABLE SAVINGS OPPORTUNITIES**

Leveraging the same nearly 1,000 cross-sections used to identify key strengths of the client’s current cost management approach, Milliman DEPTH identified the largest savings opportunities for the plan. Among the actionable opportunities identified and discussed with plan leadership were the following, which aligned with the client’s intention of using point solutions to enhance member experience and reduce total cost of care. An overview of the client’s results and Milliman’s strategic recommendations is shown in Figure 4.




**FIGURE 4: CLIENT KEY ACTIONABLE OPPORTUNITIES**

ACTIONABLE OPPORTUNITY	WHAT IT MEANS
<p><b>CHRONIC CARDIOVASCULAR CONDITIONS – MEDICAL UTILIZATION</b></p>	<p>Milliman DEPTH identified 15% of the client’s population as having chronic cardiovascular conditions. The average age of this cohort was nearly 50% higher than the overall average for the population, and per member total cost of care for this cohort was nearly three times the population average.</p> <p>The estimated total cost of care savings opportunity if the client were able to improve medical utilization efficiency for this cohort ranged from 4.25% to 8.50% of total plan costs. Milliman DEPTH estimated savings for the plan by comparing actual total cost of care for the current performance level to benchmark total cost of care at moderate, good, and great performance levels.</p> <p>As a part of the Milliman DEPTH assessment, Milliman recommended the client consider the following strategies to pursue this savings opportunity:</p> <ul style="list-style-type: none"> <li>▪ Implement a point solution focused on cardiovascular and/or metabolic conditions, particularly one with a demonstrated track record of success, and a willingness to offer financial performance guarantees.</li> <li>▪ Identify product design or member cost-sharing changes that may enhance member access to cardiovascular-related services and better enable members to comply with evidence-based care guidelines for managing their conditions. This may include cost sharing related to certain medications, certain types of specialist care, and lab services.</li> </ul>
<p><b>CHRONIC BEHAVIORAL HEALTH CONDITIONS – MEDICAL UTILIZATION</b></p>	<p>Milliman DEPTH identified 18% of the client’s population as having chronic behavioral health conditions. The average age of this cohort was 10% lower than the overall average for the population, and per member total cost of care for this cohort was 10% higher than the population average.</p> <p>The estimated total cost of care savings opportunity if the client were able to improve medical utilization efficiency for this cohort ranged from 2.50% to 4.00% of total plan costs. Milliman DEPTH estimated savings for the plan by comparing actual total cost of care for the current performance level to benchmark total cost of care at moderate, good, and great performance levels.</p> <p>As a part of the Milliman DEPTH assessment, Milliman recommended the client consider the following strategies to pursue this savings opportunity:</p> <ul style="list-style-type: none"> <li>▪ Determine the ways in which most client members can or cannot access behavioral health-related services today, such as through an Employee Assistance Plan (EAP) or its medical plan. Inadequate access to timely and effective behavioral healthcare may be contributing to the poor total cost of care performance for this cohort.</li> <li>▪ Implement a point solution focused on behavioral health, particularly one whose services align with the client’s population and a willingness to offer financial performance guarantees.</li> <li>▪ Identify product design or member cost-sharing changes that may enhance member access to behavioral health-related services and provide timely and high-quality care to members in need of services. This may include cost sharing related to counseling services, outpatient behavioral healthcare, or inpatient behavioral healthcare.</li> </ul>

## Plan of action

Milliman DEPTH produced the key strategic insights for the client and recommended action items corresponding to each insight, shown in Figure 5. The client organization’s leadership added the action items to their multiyear strategic road map for the plan, with each action item having specific planned steps, timelines, and leaders assigned to drive progress.

FIGURE 5: CLIENT KEY STRATEGIC INSIGHTS AND ACTION ITEMS

KEY STRATEGIC INSIGHT		ACTION ITEM
<p>The existing TPA and PBM relationships and frequent market checks are producing savings for the plan.</p>		<p>Continue current detailed market check approach and frequency.</p>
<p>The combination of existing pharmacy utilization management programs is producing savings for the plan.</p>		<p>Continue current pharmacy programs and investigate additional options from PBM.</p>
<p>Chronic cardiovascular and behavioral health conditions are two different areas of the plan with potential for significant savings pursuable through point solutions, plan design changes, and other approaches that enhance member experience while reducing the TCoC.</p> <ul style="list-style-type: none"> <li>▪ 15% of the client’s population has chronic cardiovascular conditions, and improved medical utilization for these members <b>could reduce total plan costs by 4.25% to 8.50%</b></li> <li>▪ 18% of the client’s population has chronic behavioral health conditions, and improved medical utilization for these members <b>could reduce total plan costs by 2.50% to 4.00%</b></li> </ul> <p>These populations are largely nonoverlapping and the total combined savings opportunity measured from 6.50% to 12.00%.</p>		<p>Map member journey for those with chronic cardiovascular or behavioral health conditions and identify plan design or benefit improvements to enhance member experience and reduce barriers to care.</p> <p>Assess landscape of point solutions for these conditions, conduct RFPs tailored to the organization’s unique needs for each condition, and implement selected solutions.</p> <p>Monitor point solution performance and track organization progress toward realization of combined 6.50% to 12.00% savings opportunity identified by Milliman DEPTH.</p>



## Caveats and limitations

The authors are consulting actuaries for Milliman, as well as members of the American Academy of Actuaries who meet the qualification standards of the Academy to render the actuarial opinion contained herein. To the best of the authors' knowledge and belief, this information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

The material in this report represents the opinion of the authors and is not representative of the view of Milliman. As such, Milliman is not advocating for, or endorsing, any specific views contained in this report related to the optimal design of any particular self-funded health benefit plan. This case study does not constitute an assessment of the effectiveness or an endorsement of the client's self-funded health benefit program.

This report is intended to illustrate the information provided by the Milliman DEPTH healthcare analytics solution and give insight into how one client utilized this information to make strategic design decisions. This information may not be appropriate, and should not be used, for other purposes. The authors do not intend this information to benefit, and assume no duty of liability to, any third party that receives this work product. Any third-party recipient of this report that desires professional guidance should not rely upon this case study but should engage qualified professionals for advice appropriate to its specific needs.

Milliman has developed certain models to estimate the values included in this report. The purpose of these models is to analyze and evaluate self-funded medical and pharmacy benefit cost management. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

In preparing the analysis, the authors relied upon information provided by their client, which was accepted without audit. However, the authors did review the information for general reasonableness. If this information is inaccurate or incomplete, conclusions drawn from it may change. The results presented are based upon a set of assumptions, as described above. If actual results differ from the underlying assumptions, actual financial results may differ from those presented in this case study.

For more information about Milliman DEPTH™, please visit us at:

<https://www.milliman.com/en/Products/Milliman-DEPTH>



Milliman is among the largest privately held consulting and actuarial firms in the world and is providing self-funded plan sponsors with a fresh, innovative perspective on benefits design, strategy, and ongoing plan management. We are staffed by top industry consulting professionals, actuaries, and subject matter experts all keenly focused on delivering client value. Milliman is uniquely independent, built on integrity, and driven to help self-funded plan sponsors make informed, data-supported decisions regarding their benefit programs.

[milliman.com](https://www.milliman.com)

### CONTACT

Dustin Grzeskowiak  
[dustin.grzeskowiak@milliman.com](mailto:dustin.grzeskowiak@milliman.com)

Eleanor Hill  
[eleanor.hill@milliman.com](mailto:eleanor.hill@milliman.com)

Les Kartchner  
[les.kartchner@milliman.com](mailto:les.kartchner@milliman.com)

Shelley Moss  
[shelley.moss@milliman.com](mailto:shelley.moss@milliman.com)

© 2023 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.