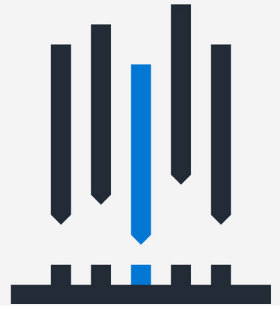


CASE STUDY | MISSOURI HEALTH VALUE COLLABORATIVE (MHVC)

From manual to modern: Automation cuts review time 50% and frees analysts to focus on savings-driving insights



Missouri Health Value Collaborative (MHVC), a St. Louis-based health collaborative, partners with self-insured employers to provide detailed population health data as part of a program aimed at improving care while controlling costs in the region.

Diving deeper into population health for healthcare plan savings and insights

MHVC draws on a wide range of healthcare data to produce annual population health scorecards, utilization trend reports, market share analyses, and other research that gives healthcare purchasers a clearer view of the needs and costs within their populations. For a non-profit with a four-person analytics team, it is an ambitious effort that has grown in scope and impact through the use of Milliman MedInsight tools and support.

In recent years, MHVC has expanded its geographic reach, adding population health scorecards for Kansas City and Springfield alongside its original St. Louis reporting. The scorecards are used by self-insured employers, among other stakeholders, as part of a collaborative effort to improve healthcare quality and affordability.

After moving its analytics to the [MedInsight Platform](#) and [Innovation Portal](#), the team can now finish the one to three data extractions per measure needed for the 45 to 60 measures on its population health scorecards in roughly an hour — a task that used to require one or two full days. This increased efficiency has allowed the team to create more scorecards and investigate more challenging health topics.

The organization has conducted more advanced analyses, including monitoring emergency department visits by migraine patients and evaluating the quality of care for highly prevalent cancers.

Missouri Health Value Collaborative scaled scorecards across new regions, reduced errors, and delivered actionable insights for self-insured employers.

Outcome highlights:

data extracts for 45–60 measures in ~1 hour; peer review time cut by **50%**; expanded coverage from St. Louis to 3× the original **footprint**.

Impact: faster, more reliable analytics shorten the path from signal to savings decisions

“The Innovation Portal helps me trust the results more because there is less opportunity for human error.”

- **Kelci Hannan**, MHVC Director of Research and Analytics



Key Highlights

MHVC stakeholders

- Self-insured employers
- Labor union representatives
- Local health organizations
- Health plan representatives
- Hospital association liaisons
- Health system leaders

Milliman MedInsight tools and analytics

- Innovation Portal
- Health Cost Guidelines (HCG)
- Chronic Condition Hierarchical Grouper (CCHG)
- MARA Risk scoring

Results



Expanded coverage

3X more geographic areas covered

Addition of custom and specialized queries in high-cost care areas

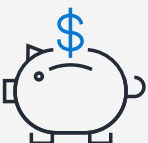
Example analyses conducted include:

- Assessing the rates at which migraine patients receive follow-up care after emergency department visits
- Evaluating the prevalence of cancer within the population
- Investigating the utilization of secondary drug classes in the treatment of individuals diagnosed with major depressive disorder



Improved capabilities

- More flexible and complex queries
- Faster data access
- Streamlined peer review process
- Enhanced ability to produce population health scorecard reports
- Custom provider attribution



Time savings

Peer review time reduced by 50%: from two analysts to one

Reduced time to complete data extract process: from 8-16 hours to about one hour

CHALLENGE: Expand healthcare scorecards and other reporting to cover more regions and deliver deeper, more actionable insights about community health

To serve employers with workers beyond the St. Louis area covered in MHVC's original healthcare scorecard, and to answer more complex questions, the organization needed a more advanced analytics environment for faster, more insightful queries. The organization also wanted to address more complex analytic requests from stakeholders, but with a small team, could not as easily take on multiple large projects that required a significant amount of time and manual calculation.

ACTION: Adoption of MedInsight Platform and Innovation Portal to speed and refine analysis, incorporating Health Cost Guidelines (HCGs) benchmarks and Chronic Condition Hierarchical Groups (CCHG)



The MHVC analytics team began to leverage the Innovation Portal for their population health scorecard reporting a little over two years ago, boosting both their capacity and confidence in the results. The MedInsight Data Confidence Model ensures that healthcare data is accurate and reliable with a structured process incorporating both formal steps and tools as well as peer review.

Enhanced data accessibility, together with the integration of high-quality groupers and benchmarks, significantly strengthened the team's capacity to generate reports and address a broader range of increasingly complex inquiries. "It has opened a lot of doors for us, especially with a small team and I feel like we've just broken the surface of what we can do with that," said MHVC Director of Research and Analytics Kelci Hannan.

One example was a detailed analysis of individuals with major depressive disorder taking both a primary and secondary line drug class. According to Hannan, without the AI-enabled automation and advanced analytics capabilities of the Innovation Portal, the effort would have required a painstaking level of manual calculations and time.

"As a manager of a team, I probably would have tried to steer away from a question like this," she said. "Without the right tools, steering away from more complex questions is key."

RESULTS: Faster and more flexible queries for richer insights, smoother peer review, and reduced risk of human error

With the MedInsight Platform and Innovation Portal, Hannan's team was able to reduce the effort required to analyze the data around the drugs prescribed for major depressive disorder, as just one example of MHVC's expanded ability to run more complex and flexible queries.

The new tools also streamlined the peer review process — cutting review time in half and improving calculation accuracy.

"The Innovation Portal helps me trust the results more because there is less opportunity for human error," said Hannan.

It has also enabled MHVC to do significantly more for its stakeholders, she said. "We're able to take on more ambitious, complex questions for them because of the flexibility that the Innovation Portal offers."

"MedInsight has been a really great partner for us as a nonprofit organization. When I bring a question to them ... they are always willing to search for a solution."

- Kelci Hannan, MHVC Director of Research and Analytics

Going forward, Hannan envisions doing even more with the Innovation Portal, incorporating additional data sources and using demographic details to "add another level of rigor" to the effort of providing healthcare purchasers with the transparency they need to control costs and improve care for their populations.

About Missouri Health Value Collaborative:

Missouri Health Value Collaborative (MHVC) brings together those who provide, pay for, and use health care to share knowledge and develop regional solutions for the problems that vex our health care system. As a nonprofit, regional health improvement collaborative, MHVC is dedicated to generating data insights that support multi-stakeholder collaboration for higher quality, more affordable health care.

Learn more: www.mhvcollaborative.org



Interested in learning more about Milliman MedInsight?

Contact us at info@medinsight.com or visit medinsight.com