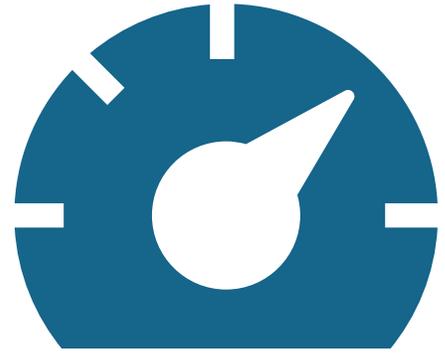


MedInsight Benchmarks



Combining the methods of the Milliman Health Cost Guidelines (HCGs) and years of benchmark experience, MedInsight® has created a tool with a core of vast empirical data, intimate local market knowledge for adjustment factors, and a wide number of plan and provider agreement variables. The result is MedInsight Benchmarks, a healthcare analytic tool designed for data warehouse integration that provides the ability to create a customized benchmark specific to any particular segment(s) of a client's population(s).

The combination of healthcare reform and trying economic times is driving healthcare organizations to find new ways to manage their financial and clinical performance. A crucial piece of every strategy is the use of benchmarks for setting goals, measuring performance, and communicating objectives to a wide range of stakeholders. Often, healthcare organizations perform one-time benchmark studies using external bodies and their static benchmarks. This use of external data is no longer adequate for today's fiercely competitive and rapidly evolving marketplace. MedInsight Benchmarks has the ability to provide details, size capabilities, and time frames that external benchmarks cannot rival.

MedInsight Benchmarks provides analysis of the population in various views, starting with a benefit service perspective based on the Milliman HCGs, an industry standard for more than 60 years for modeling healthcare utilization. The tool supports numerous means to aggregate and drill into data sets as its core capability produces benchmarks by procedure codes, revenue codes, diagnostic-related groups (DRGs), drug names, therapeutic classes, diseases, and other publicly available analytic methodologies.

The customized benchmarks enable an understanding of utilization and cost variance by HCG category through identification of under, over, and inappropriate usage patterns. By benchmarking, organizing, and grouping cost and utilization, MedInsight Benchmarks can help your organization better evaluate what is driving cost, utilization, and trend within your population.

Methodology

The MedInsight Benchmarks database is built upon one of the largest healthcare industry normative data sets in the country, and includes contributors such as national payors, large employers, and the Centers for Medicare and Medicaid Services 5% data sample, among others. The empirical database contains more than 75 million lives and 2.5 billion records of medical claims, pharmaceutical claims, and eligibility information. We employ rigorous data collection methods, along with Milliman adjustment factors, to create the most credible database for benchmarking.

The Milliman research team applies the highest standards of data integrity to the empirical data in order to create advanced adjustment factors, such as the following:

- Geography and industry
- Age and gender
- Benefit design
- Group size: Individual, small, and large groups
- Calculations of Milliman's Degree of Healthcare Management from a continuum of loosely managed to well-managed (strive for national best practices regardless of regional variation)
- Custom parameters that leverage the Milliman empirical database to create personalized adjustment factors

Figure 1 shows utilization for the top 10 DRGs for a health plan compared to Milliman's well-managed benchmark. In this example, \$3M can be saved if actual utilization matches the benchmark.

FIGURE 1

Top 10 DRG Codes	Annual Utilization/1000			Estimated Savings (,000)
	Actual	Benchmark	Variation	
SKIN GRAFTS FOR INJURIES	0.37	0.05	640%	\$690
SPINAL FUSION CERVICAL W/O CC	1.38	0.67	106%	\$419
OTHER O.R. PROCEDURES FOR INJURIES W CC	0.98	0.36	172%	\$312
OTHER CARDIOTHORACIC PROCEDURES	1.21	0.33	267%	\$308
MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	5.79	4.06	43%	\$268
MAJOR CARDIOVASCULAR PROCEDURES W CC	1.43	0.84	70%	\$220
STOMACH, ESOPHEGEAL, & DUODENAL PROCEDURES AGE>17 W CC	2.10	0.89	136%	\$209
SPINAL FUSION EXCEPT CERVICAL W CC	0.98	0.54	81%	\$208
CARDIAC VALVE & OTHER MAJOR CARDIOTHORACIC PROCEDURES W/O CARDIO CATHETER	0.96	0.59	63%	\$202
OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	1.20	0.39	208%	\$160
Estimated Total Savings				\$2,996

The Unique Value of Benchmarks

MedInsight Benchmarks offers the ability to generate custom benchmarks with deep drill-downs of insight for almost all commercial and Medicare and Medicaid populations, geographic regions, and benefit plans. The vast Milliman empirical database, rigorous organizational methods, and advanced adjustment factors let you effectively use your data for:

- Medical loss ratio analysis – Measure cost and rating development, benchmark provider reimbursement models to identify suboptimal contracting situations
- Healthcare reform and benefit modeling – Account for thousands of benefit combinations adjusting utilization down to the service and patient level
- Performance and trend management – Identify monthly trend factors comingled with population-adjusted benchmarks into your prospective review of inpatient and outpatient hospitalizations
- Custom methods – Combine your proprietary methods with Milliman's advanced local market adjustment factors and vast normative data set

About MedInsight Data Warehouse Tools

The MedInsight Benchmarks Tool is part of the MedInsight Tools portfolio, a suite of standalone analytic products developed and offered by the MedInsight team at Milliman. In working with our clients—health plans, at-risk providers/ACOs, employers, state governments, third-party administrators, and community health coalitions—we are keenly aware of the different business demands of each. Because one size does not fit all, Milliman has made MedInsight tools available for purchase outside the MedInsight Analytic Platform. These tools enable clients to customize their MedInsight experience by licensing only what they need.

Apply the same Milliman engineering to your populations as we use to create the famous Milliman Medical Index (MMI). To learn more about the MMI, visit milliman.com/mmi.