An aerial photograph of a surfer riding a wave, viewed from above. The surfer is positioned in the center of the frame, riding a white wave that is breaking. The water is a deep teal color, and the sky is a lighter blue. The surfer is wearing a red shirt and dark shorts. The wave is breaking to the left of the surfer, creating white foam. The overall scene is dynamic and energetic.

# UnitedHealthcare Surest

Cost Efficiency Measurement 2021-2022

March 2024



## Preparation of This Report

This report has been prepared to present Aon's analysis of Surest's impact on its customers' medical and pharmacy plan spend in 2021 and 2022. The analysis was commissioned by Surest.

In conducting the analysis, Aon has relied on detailed medical and pharmacy claims, and membership provided by Surest. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonability. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. Please refer to the last section of the report for data limitation disclosures.

Aon's professional services do not in any case include legal, investment, or accounting services and Aon is not a fiduciary to your plans. This analysis has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. The methods used in this report are described in the Data Sources and Methodology sections of this report.

Todor Penev, FSA  
Senior Vice President

Eric Jung  
Data Scientist

Leanne Metcalfe, PhD  
Vice President

Eric Peng  
Lead Data Scientist

Jim Staib, MPH  
Assistant Vice President

Ritu Balani, MS  
Data Scientist



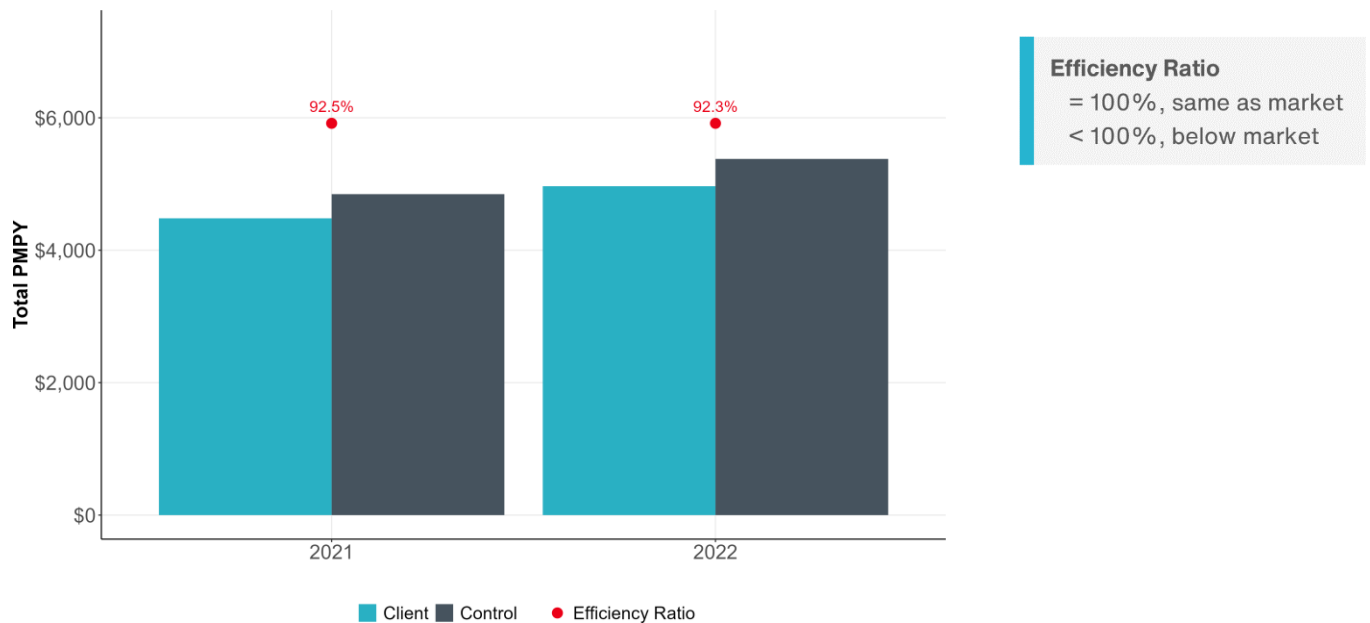
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# Executive Summary

Aon conducted an actuarial analysis of Surest customers representing 92,221 and 156,828 eligible members in 2021 and 2022 respectively. The analysis utilized Aon’s member-level Cost Efficiency Measurement (CEM) methods comparing the experience of Surest members to that of a Control group composed of members from a multi-employer database with matching geography, demographics, and medical and mental health comorbidities for the same time periods. Compared to the matched Control group, Surest members had \$365 lower total spend per-member per-year (PMPY) in 2021, and \$412 lower spend PMPY in 2022.

**Figure 1:** Total Allowed Spend Per Member Per Year (PMPY)



Other key findings include:

- Surest Total Cost of Care (PMPY) was 7.5% lower than the matched Controls in 2021 and 7.7% more efficient in 2022.
- Result was driven by both medical and drug allowed claims being lower than Control groups at 96.7% and 78.8% of market, respectively in 2022.
- Key drivers of the cost efficiency were lower professional spend (93.1% of market level in 2022), and lower specialty spend in pharmacy (71.5% of market level in 2022).
- Cost performance was consistent across demographic groups, and multiple chronic conditions and comorbidities analyzed.
- Members in the top quartile of PMPY Spend had an efficiency ratio of 89.7% and 91.1% in 2021 and 2022, respectively, lower than the overall efficiency ratios in both years.

This study evaluated the impact of the medical and prescription drug allowed claims spend. Aon did not analyze the costs of the Surest services. A detailed description of data and methods is included in the report.



## Description of Surest

Surest is an employer-sponsored health plan for employers with 51+ employees providing comprehensive medical coverage. With Surest, there is no deductible or coinsurance, so members can see clear, upfront prices in the form of a copay via an intuitive digital experience and app. Members have access to the broad, national UnitedHealthcare provider network. The Surest approach to evaluating providers is used to inform value-based, variable copays. Lower copays indicate providers evaluated as high value based on quality, efficiency, and effectiveness of care. The plan is designed so that members who choose high-value, quality providers and treatment options receive lower copays.

## Plan Designs

Surest offered plans above market in plan richness. The table below compares Paid-to-Allowed Ratio (actuarial value) between Surest and the matched Control. The higher than Control ratio translates to a richer plan design with lower member liability. To reduce the significance of differences in plan design, all costs in the report were calculated on an “allowed” basis prior to application of member cost sharing.

Paid-to-Allowed Ratio	2021	2022
Surest	88.4%	87.8%
Control	83.5%	83.3%

**Efficiency Ratio**  
 = 100%, same as market  
 < 100%, below market

## Detailed Results

### PMPY Comparison by Benefit and Service Category

Compared to the matched Control group, Surest members had an overall efficiency ratio of 92.5% in 2021 and 92.3% in 2022. (Values less than 100% indicate better efficiency, relative to the matched Control group.) Total PMPY allowed cost was \$365 below Control in 2021 and improved to \$412 below Control in 2022. Compared to the matched Control group, Surest member medical cost profile was 94.2% of the market in 2021 and 96.7% of the market level in 2022. Pharmacy efficiency among Surest members was 86.6% of market level in 2021 and 78.8% in 2022. All results were statistically significant.

**Table 1:** Medical and Pharmacy PMPY by Year

Component	2021				2022			
	Surest n= 92,221	Control n= 276,663	PMPY Difference	Efficiency Ratio	Surest n= 156,828	Control n= 470,484	PMPY Difference	Efficiency Ratio
Medical	\$3,536	\$3,754	-\$218	94.2%	\$3,925	\$4,059	-\$134	96.7%
Rx	\$946	\$1,093	-\$147	86.6%	\$1,041	\$1,321	-\$280	78.8%
<b>Total</b>	<b>\$4,482</b>	<b>\$4,847</b>	<b>-\$365</b>	<b>92.5%</b>	<b>\$4,967</b>	<b>\$5,379</b>	<b>-\$412</b>	<b>92.3%</b>

Medical efficiency was primarily driven by physician spend at 10.5% and 6.9% more efficient than market in 2021 and 2022, respectively. Inpatient and outpatient spend do not show significantly different results compared to market in both years.

**Table 2:** Medical Spend by Component and Year

Component	2021				2022			
	Surest n= 92,221	Control n= 276,663	PMPY Difference	Efficiency Ratio	Surest n= 156,828	Control n= 470,484	PMPY Difference	Efficiency Ratio
Inpatient	\$736	\$747	-\$11	98.5%*	\$768	\$768	\$0	100.0%*
Outpatient	\$1,207	\$1,226	-\$19	98.4%*	\$1,396	\$1,399	-\$3	99.8%*
Physician	\$1,594	\$1,782	-\$188	89.5%	\$1,762	\$1,892	-\$130	93.1%
<b>Medical Total</b>	<b>\$3,536</b>	<b>\$3,754</b>	<b>-\$218</b>	<b>94.2%</b>	<b>\$3,925</b>	<b>\$4,059</b>	<b>-\$134</b>	<b>96.7%</b>

\* Differences in Surest and Control were not statistically significant



Pharmacy efficiency was primarily driven by specialty spend, which was 76.4% and 71.5% of the market level in 2021 and 2022, respectively. Brand Rx was the only less efficient item under pharmacy spend at 7.6 points below the matched Control in 2021 however, all are favorable in 2022.

**Table 3:** Pharmacy Spend by Drug Type and Year

Component	2021				2022			
	Surest n= 92,221	Control n= 276,663	PMPY Difference	Efficiency Ratio	Surest n= 156,828	Control n= 470,484	PMPY Difference	Efficiency Ratio
Generic RX	\$169	\$207	-\$38	81.4%	\$179	\$224	-\$45	79.9%
Brand RX	\$350	\$325	\$25	107.6%	\$354	\$386	-\$32	91.8%
Specialty RX	\$427	\$560	-\$133	76.4%	\$508	\$711	-\$203	71.5%
<b>Rx Total</b>	<b>\$946</b>	<b>\$1,093</b>	<b>-\$147</b>	<b>86.6%</b>	<b>\$1,041</b>	<b>\$1,321</b>	<b>-\$280</b>	<b>78.8%</b>

## Details for Outpatient Services

Surest members saw more efficient spend for almost all outpatient services measured in the study in both 2021 and 2022. Radiology visits were 4.7% less efficient than market in 2021, and became 10.7% less efficient in 2022, primarily driven by unit cost changes.

**Table 4:** Outpatient Services Detail

Detailed Components	2021						2022					
	Surest PMPY	Control PMPY	Efficiency Ratio	Surest Utilization	Control Utilization	Util Ratio	Surest PMPY	Control PMPY	Efficiency Ratio	Surest Utilization	Control Utilization	Util Ratio
Emergency Department	\$131	\$155	84.6%	128	141	90.9%	\$170	\$189	90.2%	160	162	98.9%
Radiology Visits	\$197	\$188	104.7%*	809	839	96.3%	\$227	\$205	110.7%	875	909	96.3%
Outpatient Surgery	\$313	\$349	89.6%	93	98	94.5%	\$355	\$402	88.2%	102	111	92.3%
Outpatient Drugs	\$142	\$169	84.5%	254	255	99.4%*	\$153	\$178	85.8%	286	284	100.5%*
Lab Visits	\$190	\$210	90.5%	4,543	4,763	95.4%	\$218	\$235	92.5%	5,307	5,313	99.9%

\* Differences in Surest and Control were not statistically significant. Utilization is per 1000 members.

## Details for Physician Services

Within Physician services, 20% are related to office visits. Office visits efficiency improved from 96.9% in 2021 to 95.3% in 2022. Telehealth spend was less efficient than the matched Control with an efficiency ratio of 109.2% in 2022, driven mostly by 30.0% more utilization among Surest members.

**Table 5:** Physician Services Detail

Detailed Components	2021						2022					
	Surest PMPY	Control PMPY	Efficiency Ratio	Surest Utilization	Control Utilization	Utilization Ratio	Surest PMPY	Control PMPY	Efficiency Ratio	Surest Utilization	Control Utilization	Util Ratio
Office	\$317	\$328	96.9%	2,368	2,390	99.1%	\$353	\$370	95.3%	2,642	2,684	98.4%
Preventive	\$102	\$106	96.7%	557	589	94.6%	\$101	\$104	97.1%	559	602	92.7%
Mental Health	\$94	\$110	85.6%	918	979	93.8%	\$117	\$127	92.7%	1,068	1,073	99.5%*
Telehealth	\$52	\$47	111.5%	495	376	131.6%	\$51	\$47	109.2%	495	381	130.0%

\* Differences in Surest and Control were not statistically significant. Utilization is per 1000 members.





## PMPY by Medical Comorbidities

Favorable efficiencies were seen across all comorbidity groups measured. Cost efficiency ratio deteriorated from 92.2% in 2021 to 94.9% in 2022 for those with one comorbidity. However, those without chronic conditions saw an improvement from 93.9% in 2021 to 89.0% in 2022.

**Table 6:** Comorbidity PMPY by Year

Comorbidity	2021					2022				
	Surest Member	Surest PMPY	Control PMPY	PMPY Difference	Efficiency Ratio	Surest Member	Surest PMPY	Control PMPY	PMPY Difference	Efficiency Ratio
0	59,380	\$1,613	\$1,717	-\$104	93.9%	96,351	\$1,671	\$1,876	-\$205	89.0%
1	20,808	\$6,352	\$6,892	-\$540	92.2%	37,271	\$6,673	\$7,035	-\$362	94.9%
2	8,095	\$12,080	\$13,263	-\$1,183	91.1%	15,249	\$12,196	\$13,423	-\$1,227	90.9%
3+	3,938	\$21,138	\$22,828	-\$1,690	92.6%	7,957	\$21,880	\$23,557	-\$1,677	92.9%



## PMPY by Conditions

Favorable cost efficiency was observed across most of the top fifteen most prevalent conditions by member count. Efficiency for members with neurodevelopmental disorders were more efficient at 83.8% of market level in 2021 and 84.9% of market level in 2022. Members with diabetes were less efficient compared to market by 2.9 points in 2021 however members with this condition were 7.5 points more efficient in 2022.

**Table 7:** Top 15 Conditions PMPY by Year

Conditions	2021				2022			
	Surest	Surest	Control	PMPY	Surest	Surest	Control	PMPY
	Member	PMPY	PMPY	Ratio	Member	PMPY	PMPY	Ratio
Anxiety/Adjustment	8,319	\$7,630	\$8,753	87.2%	15,547	\$8,378	\$9,295	90.1%
Asthma / COPD	1,784	\$9,786	\$10,546	92.8%*	3,665	\$9,896	\$10,840	91.3%
Cardiovascular	3,316	\$20,875	\$21,116	98.9%*	6,473	\$21,358	\$21,140	101.0%*
Diabetes	3,196	\$15,595	\$15,163	102.9%*	6,415	\$14,992	\$16,213	92.5%
Esophageal/Upper GI	1,296	\$12,377	\$13,461	91.9%*	2,322	\$12,920	\$13,857	93.2%
Hypertension	3,376	\$7,912	\$8,221	96.2%*	6,814	\$8,149	\$8,782	92.8%
Joint Disorders	4,923	\$10,220	\$11,003	92.9%	8,839	\$10,547	\$11,657	90.5%
Lower Back/Disc	5,588	\$9,816	\$11,470	85.6%	10,236	\$10,841	\$11,836	91.6%
Metabolic/Nutritional	2,414	\$11,445	\$13,520	84.7%	5,145	\$12,634	\$13,360	94.6%
Migraine	1,480	\$9,966	\$10,844	91.9%*	2,633	\$10,689	\$12,163	87.9%
Mood Disorders	4,807	\$9,250	\$10,645	86.9%	8,736	\$10,082	\$11,334	89.0%
Neurodevelopmental	3,221	\$6,484	\$7,734	83.8%	6,218	\$7,205	\$8,491	84.9%
Neurological	2,975	\$16,717	\$18,701	89.4%	5,688	\$18,233	\$20,102	90.7%
Osteoarthritis	1,028	\$14,115	\$16,248	86.9%	2,005	\$15,907	\$17,813	89.3%

\*Differences in Surest and Control were not statistically significant



## PMPY by Percentile

Surest cost efficiency relative to the market was maintained among the more costly members in the study. While overall Surest spend was 92.5% and 92.3% relative to the matched Controls in 2021 and 2022, members in the top quartile of PMPY Spend had an efficiency ratio of 89.7% and 91.1% correspondingly. The costliest 2% of members had an efficiency ratio of 90.4% and 92.3%, at or better than the overall Surest result.

**Table 8:** PMPY by Year and High-Cost Percentile

Percentile	2021					2022				
	Client	Client	Control	PMPY	Efficiency	Client	Client	Control	PMPY	Efficiency
	Member	PMPY	PMPY	Difference	Ratio	Member	PMPY	PMPY	Difference	Ratio
Top 25%	22,646	\$15,758	\$17,561	-\$1,803	89.7%	41,551	\$16,312	\$17,896	-\$1,584	91.1%
Top 20%	17,942	\$18,870	\$20,873	-\$2,003	90.4%	33,513	\$19,281	\$21,227	-\$1,946	90.8%
Top 10%	8,968	\$30,805	\$34,007	-\$3,202	90.6%	16,821	\$31,542	\$34,631	-\$3,089	91.1%
Top 5%	4,462	\$47,447	\$52,129	-\$4,682	91.0%	8,484	\$48,399	\$53,192	-\$4,793	91.0%
Top 2%	1,791	\$78,053	\$86,309	-\$8,256	90.4%	3,421	\$80,445	\$87,179	-\$6,734	92.3%
Top 1%	898	\$109,202	\$119,526	-\$10,324	91.4%	1,712	\$112,484	\$119,773	-\$7,289	93.9%

\*Differences in Surest and Control were not statistically significant

## PMPY by Age Group

Favorable cost efficiencies were seen across all age groups in both years. Cost efficiency among Surest members under 30 and between 40-49 were most favorable, with efficiencies under 92% in both 2021 and 2022.

**Table 9:** PMPY by Year and Age Group

Age Group	2021				2022			
	Surest	Client	Control	Efficiency	Client	Client	Control	Efficiency
	Member	PMPY	PMPY	Ratio	Member	PMPY	PMPY	Ratio
0-18	27,979	\$2,667	\$2,982	89.4%	44,542	\$2,994	\$3,314	90.3%
19-29	15,927	\$3,061	\$3,415	89.6%	27,713	\$3,379	\$3,748	90.2%
30-39	16,264	\$4,858	\$5,262	92.3%	27,174	\$5,178	\$5,532	93.6%
40-49	15,773	\$5,255	\$5,778	90.9%	27,167	\$5,851	\$6,399	91.4%
50-59	12,454	\$7,089	\$7,533	94.1%	22,719	\$7,720	\$8,229	93.8%
60-64	3,824	\$9,766	\$9,374	104.2%*	7,513	\$9,589	\$10,098	95.0%

\*Differences in Surest and Control were not statistically significant



## Description of Data Sources and Methods

This report compares the cost profiles of Surest members to that of a Control group composed of members from a multi-employer claims database, precisely matched on geography, demographics, and health comorbidities for the same time periods.

### Multi-Employer Benchmark Control Group

The multi-employer Control population was derived from the Merative MarketScan® Research Databases using claims incurred in 2021 and 2022 with three (3) months runout. These datasets represent the claims experience of hundreds of employers and payers nationally in the commercial market, allowing for robust Control group development. Employers in the MarketScan® databases represent large, self-insured entities with sophisticated multi-vendor benefit programs. We believe the cost and utilization profiles represented by these databases are an appropriate market benchmark for this evaluation.

### Surest Member data

Detailed medical and prescription drug claims experience and corresponding eligibility data for the Surest members was provided to Aon by Surest, covering medical and prescription drug claims incurred in 2021 and 2022 with three (3) months runout. These data included 52 (17 large, 35 mid-market) and 147 (26 large, 121 mid-market) customers in 2021 and 2022, respectively, representing approximately 100,000 members in 2021 and 175,000 members in 2022. All Surest customers for which we had both complete medical and pharmacy data were included. We did not include customers that did not have complete pharmacy data.

All records were fully de-identified and no personally identifiable information or customer-identifiable information was received by Aon. To achieve robust matching and measurement, the following eligibility restrictions were equally applied at the member level for both Surest and the multi-employer benchmark Control group members:

- Members under age 65
- Members with under \$300,000 in total allowed cost in a single calendar year
- Members on plan for at least 8 months unless they were less than 2 years old.
- SARS-CoV-2 claims associated with screenings, tests and vaccines were excluded.

Aon performed sensitivity testing evaluating higher and lower catastrophic limits. Higher limits were not supported by the available Control population, resulting in incomplete cohort matching, while lower limits eliminated significant portions of the population.



## Member Matching and Control Group Derivation

Each member within each year, was matched to the most similar member in the multi-employer database. The matching was based on the demographic, geographic and exact matching of diagnosed medical condition profile for each member compared to eligible Control members across each dimension.

- Members were matched by age and gender to the nearest available Controls. Members aged 0 and 1 were always exactly matched on age, and a caliper of (+/-) five (5) years was applied for other members.
- Members were only matched to Control members with the exact same diagnosed medical conditions and combinations of conditions present. Members with no chronic conditions were always matched to Controls with no chronic conditions.
- The chronic condition indicators for each member were based on primary medical diagnostic codes and diagnostic code to condition mapping sourced from the Clinical Classifications Software Refined (CCSR) developed by the AHRQ Healthcare Cost and Utilization Project (HCUP). Diagnostic Laboratory and Imaging claims were excluded from the development of the indicators. The set of chronic conditions used for member matching were selected based on the highest ranked explanatory power with respect to member allowed medical and pharmacy claims costs.

The following chronic health condition indicators were used for member matching:

Asthma / COPD	Migraine
Anxiety-related Disorders	Multiple Sclerosis
Blood Disorders	Mood disorders
Cancer	Substance Use Disorder
Diabetes	Musculoskeletal Joint Disorders
Diabetes With Complications	Musculoskeletal Lower Back / Disc Diseases (including Spondylosis)
Diverticulitis	Neuro-developmental disorders
Endocrine Disorders	Neurological Disorders
Esophageal / Upper GI Diseases	Osteoarthritis
Hepatitis	Pregnancy and Labor Categories
HIV	Regional Enteritis and Ulcerative Colitis
Hypertension	Renal Failure
Cardiovascular Disease	Rheumatoid Arthritis
Immune System Diseases	
Metabolic and Nutritional Disorders	



Members were matched to the closest geographical Controls using the following proximity hierarchy:

- 1st Preference: Within same Metropolitan Statistical Area (MSA) or Combined-MSA level: 95.47% of members were matched locally in 2022.
- 2nd Preference: Within same State: additional 2.73% of members were matched outside their MSA but within the same State in 2022
- 3rd Preference: National: remaining 1.8% of members where local MSA or State Control were not found were matched at the National level in 2022.

Select smaller MSAs were combined with adjacent large MSAs to improve local sample sizes.

Members for whom a matched Control member could not be identified were dropped from the measurement due to insufficient data overlap and support where no appropriate Controls could be found. Unmatched members were typically patients with rare combinations of demographics and multiple chronic conditions. For members where multiple identical matches were found, up to three Controls were selected at random from the identical match candidates.

Pre-and post-matching testing was performed on all matching variables confirming that post-matching standardized mean differences were minimized and confirming appropriate balance of the covariates between the Surest members and the derived Control groups. All differences in costs between Surest members and the matched Controls were tested for statistical significance at the 95% confidence level using two-sample unequal variances t-tests. Non-statistically significant results at  $p < 0.05$  are identified with an asterisk (\*).

All measurements of cost and utilization metrics were derived from the detailed claims of the matched members and calculated using identical methods for Surest members and the matched Controls. Pharmacy rebate data were not available and was not incorporated. The costs of Surest services were not available to Aon for this measurement.

## Limitations and Disclosures

The results in this study are based on observational data contributed by Surest. The customers included in the data may differ from customers in the Control group due to socioeconomic, geographic, demographic, vendor, benefit level or other differences. The member-level matching algorithms of this study present a rigorous normalization for risk exposure within a given plan year that avoids the use of external assumptions such as trend, geographical and demographic factors, while capturing broad market-level trend such as utilization and treatment pattern changes. Factors that could positively or negatively impact the cost comparisons that could not be controlled for in this study include:

- Unobserved confounders such as socioeconomic or cultural differences or job type differences
- Unobserved indications of a member's condition severity.
- Differences in claims administration, coding or quality of data provided.
- Differences in provider affiliation between Surest and the Control population, and in turn differences in the diagnostic rates between the two populations.
- Differences in additional benefit programs, and vendors utilized by Surest customers that have influenced patient care cost and utilization patterns.
- Differences in provider contracted rates and network arrangements among Surest customers vs the general market.
- Induced or suppressed utilization because of Surest customers' plan design or plan design incentives relative to market.
- Differences in Out-of-Network utilization patterns and management.
- Significant growth in enrollment due to new client additions in 2022, which make comparisons between 2021 and 2022 difficult to interpret.

This study attempts to provide objective cost and utilization comparisons of Surest members compared to Controls. Differences in coding specific to physical therapy utilization between Surest and the Control population could not be reconciled and so were not included the analysis. All other utilization coding differences however, were validated and included. Aon did not evaluate the costs of Surest services. Some comparisons were limited in credibility as noted in the report.