Economies of Scale in Health Insurance – 2026 Survey Results

Health plans participating in the *Sherlock Benchmarks* displayed economies of scale for a minority of administrative expenses, for which a doubling in size gave rise to expenses that ranged from 77% to 89% of the pre-doubling levels. This analysis summarizes regressions of cost and membership information drawn from surveys of 2025 health plan cost information that also populates the 2026 editions of *Sherlock Benchmarks*. The surveyed health plans were Blue Cross Blue Shield Plans (Blue) and Independent / Provider – Sponsored (IPS) plans.

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Summary and Conclusion

- The effect of scale on total expenses (excluding miscellaneous business taxes) or "subtotal" was significant for Blue Cross Blue Shield Plans and for the combination of Blue and IPS universes. Scale did not have a significant effect on total expenses for the universe of Independent / Provider – Sponsored plans.
- For Blue Plans, 21 functions or subfunctions and subtotal demonstrated economies of scale, using a p-value of less than 0.1 as the threshold for significance. Functions significantly subject to scale equaled 41.5% of Plan administrative costs. The slopes of the curves of the costs subject to scale meant that a doubling of the enterprise's membership caused such expenses to decline to 80.8% of its pre-doubling value (Figure 1). One function displayed diseconomies of scale.
- IPS plans had fewer functions displaying significant economies of scale. Six functions or subfunctions displayed significant economies of scale, three showed diseconomies. The functions subject to economies of scale comprised 13.2% of administrative costs. The slopes of the curves were such that a doubling of membership led to costs subject to scale that were 77.2% of their costs prior to doubling.
- We also combined the universes to estimate their economies of scale. Twelve functions or subfunctions, as well as subtotal, comprising 33.0% of administrative expenses, had economies of scale meeting our threshold for significance. The slopes implied that if membership doubled, costs in these activities would fall to 88.8% of their pre-doubling costs. Expenses for two of the functions or subfunctions increased with greater size.
- Applying the combined universe slopes to an administrative cost assumption of $67 PMPM (in line with commercial insured products), we calculate savings of $2.47 PMPM

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from doubling plan size, or 3.7% of total administration. However, because health insurance has low margins, the effect on combined earnings is much greater, 49.5%.

Figure 1

Overview of Economies of Scale

BCBS, IPS, and Combined

	Blue Cross Blue Shield Plans	Independent / Provider - Sponsored Plans	Combined Plans
Percent of Administrative Expenses Subject to Scale	41.5%	13.2%	33.0%
BCG Scale Slope of Functions Subject to Scale	80.8%	77.2%	88.8%

Background on Economies of Scale and Cost Identification

While the largest costs for health plans are health benefits, not every employer group pays health plans to assume health benefit variance risk. Among Blue Cross Blue Shield Plans, about 47% of comprehensive members are fully insured compared to roughly 76% for Independent / Provider – Sponsored plans. By contrast, *every* member and every group pays health plans to assume responsibility for administrative activities of their health benefit programs.

“Administrative,” means all health plan costs other than payments to health care providers for care rendered to health plan members. Health insurance administrative costs include salaries, benefits, depreciation and amortization, leases of office space, advertising costs, consulting services, outsourced costs and so forth.

These natural accounting categories have limited value in describing and managing the costs of the *activities* that health plans perform because of differences in *how* organizations execute their activities. For instance, natural accounting categories may provide insight on the aggregate use of internal staff versus outsourced staff, but not what activities staff are engaged in. So, to capture the cost of the activities, the *Sherlock Benchmarks* ask that health plans report functional costs that often cut across natural accounting categories. So, health plan activities in the *Sherlock Benchmarks* are captured in functional costs such as Provider Services, Claims Adjudication, Corporate Services and Medical Management. These functional expenses implicitly include component natural costs of labor, depreciation, etc.

This report analyzes only two sorts of functional economies of scale, technical and administrative. A *technical* economy of scale arises from an investment in a capital-intensive process. Automation of claims adjudication activities is an example. A successful investment in auto-adjudication systems and electronic claims submission systems can yield a return through a decline in the end-to-end cost of processing and paying claims, and those savings may increase with volume. In other words, technical economies of scale entails reduced marginal costs stemming from overcoming the capitalized cost of original investment.

An example of *administrative* economies of scale is covering relatively fixed Finance and Accounting costs with greater volumes of members. If the cost of preparing and issuing financial statements is largely independent of the size of the organization, then the larger the organization, the more members there are, the lower the per member cost of those financial

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statements. Unlike technical economies of scale, it is not necessary to automate the process to achieve the lower costs.

This analysis does not measure other forms of economies of scale. For instance, this analysis does not quantify purchasing economies of scale in which high market share may increase the bargaining power of insurers versus providers.

Understanding economies of scale, and optimizing functional costs at a particular scale, is important because, while scale effects on administrative costs may be modest, they have an impact on activities integral to health plan operations. And while administrative costs are small relative to premiums, scale can impact the ability of the health plan to internally fund investments. Finally, if health care costs are cyclical, optimized administrative costs can amplify the effect of favorable health care trends on operating profits and can mute operating losses.

This report quantifies the effects of economies of scale and also illustrates scale's scope and impact. This limitation means that many health plans of relatively modest size can achieve near administrative expense parity with their larger peers through effective execution, especially when combined with another attribute such as differentiation.

Method

This analysis is based on survey results of Blue Cross Blue Shield Plans and Independent / Provider - Sponsored health plans also used for the 2026 *Sherlock Benchmarks*. All data is for the 2025 calendar year and has undergone extensive validation procedures both by Sherlock Company and by the participating plans. Collectively, the 24 plans served 50.1 million Americans. The range of membership was from about 550,000 to more than 5 million among Blue Plans, and less than 100,000 to 1.4 million among IPS plans.

Economies of scale occur when unit costs decline as volume of enterprise output increases. Because the "output" of a health plan is health coverage service to its members, volume is defined as member months, which are reported by the plans. The costs that are the subject of this analysis are administrative, classified by function, described in the previous section. Each plan in the study reported its costs segmented into approximately 70-80 functions and sub-functions, depending on the universe, so that each of them may be analyzed individually. The unit costs in this analysis are the various administrative costs expressed Per Member Per Month (PMPM).

Any analysis of health plan economies of scale is complicated by the differences in the product mixes between the health plans. It costs much more to administer a comprehensive product sold to seniors than to people of working age since administrative activities are often related to the underlying health needs of the beneficiary: the older one is, the more health care one requires, and so the more claims processing costs are incurred by one's insurer.

To overcome this and similar biases, each organization participating in the *Sherlock Benchmarks* reported each function's costs segmented by product, such as Medicare Advantage and Commercial Insured. This makes it feasible to reweight each plan's PMPM costs to eliminate the

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effects of product mix differences. So when comparing costs between organizations we express each plan's PMPM expenses as *differences* from the mean universe values, *after reweighting the universe values* by each plan's own product mix. Health plans with high cost values are expressed as greater than 100% of the mean at each plan's product mix, while low values are less than 100%.

We measured economies of scale by regressing costs in each function (expressed as described above) against member months. A regression analysis fits a line through a scatter of each of the membership/cost points for each plan that minimizes the distance between those points and the line. Since technical or administrative economies of scale imply the existence of fixed and variable costs, where economies of scale exist, they plot as a curve. For ease and intuitive appeal, we converted the relationship to a straight line by calculating the regressions as the natural logs of the percent differences from mean values against the natural logs of the member months. (The use of natural logs requires positive values, so cost differences were expressed as percents of mean cost, as described in the previous paragraph.)

We considered the relationship between membership and costs to be significant if it displayed p-values of less than 0.1. A p-value is widely used to gauge the reliability of modeled relationships. Suppose a regression yields a 0.1 p-value: it can be interpreted as, "Assuming that there weren't economies of scale, you'd obtain the observed difference in 10% of such studies due to random sampling error." So, the lower the p-value, the more reliable the results.

Regression lines can have positive or negative slopes but, since economies of scale mean lower costs per member as membership increases, this discussion of the results is focused on negative slopes. The BCG (Boston Consulting Group) Slope is an intuitive way of expressing the slope of scale and it means the percent of the pre-doubling costs that the function will exhibit if the plan doubles in size. It is calculated as 2 to the power of the slope of the regression line.

Note that, where economies of scale exist, they are apparently not the only factor in cost differences. The R^2 describes the degree to which all the data points are found on the slope, and it is expressed as a percent. In other words, the predictive value of scale is that it explains R^2 percent of the differences between the points. It is unusual that the regression analyses have an R^2 that exceeds 50%. So, while scale plays an important role in those instances that we identify as significant, there are cost factors other than scale that may also help explain the differences between the plans' function costs. For instance, each health plan's information system investment cycle may also mute the relationship between costs and scale.

Figures 2-4 show the results of the regressions for each function in Blue Cross Blue Shield Plans, Independent / Provider – Sponsored Plans and the combination of both sets.

Blue Cross Blue Shield Results

Figure 2 shows the results of regression analyses of costs in each function and members for Blue Cross Blue Shield Plans. The 12 Plans included here range from about 550,000 to more than 5 million members.

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Of Blue Cross Blue Shield administrative expenses, 41.5% are in functions that are significantly subject to economies of scale. From the regression lines, we estimate that a doubling of the size of these plans is associated with unit costs subject to scale that are 80.8% of their pre-doubling costs. This conclusion is based on trends that are weighted by the costs of each function. The Subtotal Expenses (all expenses less Miscellaneous Business Taxes) also displayed economies of scale with a BCG slope of 94.2%.

Of the 80 functions and sub-functions (including Sub-Total, Miscellaneous Business Taxes, and Total), 22, including Subtotal, exhibited economies of scale at a p-value of less than 0.1. These included Information Systems, Actuarial, and Corporate Services functions and are shaded blue.

There was one Blue Cross Blue Shield function with a p-value of less than 0.1 that exhibited *dis*economies of scale. In other words, its slope displayed an *increase* in costs with an *increase* in scale. This function was BlueCard Home and Custom Par Fees. This is shaded lavender.

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Figure 2

Scalar Effect on PMPM Costs, Mix-Adjusted

Blue Cross Blue Shield Plans

	R^2	BCG Slope	P-Value	Number of Plans
1. Rating and Underwriting	3.9%	92.9%	0.536	12
(a) Employer Group Reporting	3.4%	79.8%	0.611	10
(b) Risk Adjustment	5.4%	91.2%	0.490	11
(c) Other Rating and Underwriting	4.4%	88.3%	0.514	12
2. Marketing	16.5%	91.8%	0.190	12
(a) Product Development and Market Research	6.8%	88.6%	0.412	12
(b) Member and Group Communication	0.7%	106.5%	0.805	11
(c) Other Marketing	6.1%	90.4%	0.439	12
3. Sales	11.7%	92.6%	0.276	12
(a) Account Services	10.7%	115.3%	0.298	12
(b) Internal Sales Commissions	17.3%	86.3%	0.203	11
(c) Other Sales	27.6%	83.0%	0.079	12
4. External Broker Commissions	18.4%	117.9%	0.164	12
5. Advertising and Promotion	43.6%	79.4%	0.019	12
(a) Media and Advertising	48.3%	76.8%	0.012	12
(b) Charitable Contributions	4.4%	146.9%	0.511	12
6. Provider Network Management and Services	0.1%	100.5%	0.938	12
(a) Provider Relations Services	2.6%	120.0%	0.618	12
(b) Provider Contracting	16.8%	77.9%	0.186	12
(1) Provider Configuration	0.3%	118.3%	0.885	10
(2) Other Provider Contracting	1.2%	92.2%	0.753	11
(c) Other Provider Network Management and Services	5.3%	120.1%	0.473	12
7. Medical Management / Quality Assurance / Wellness	0.7%	98.5%	0.799	12
(a) Precertification	49.8%	66.3%	0.010	12
(b) Case Management	24.1%	125.2%	0.105	12
(c) Disease Management	17.7%	61.8%	0.174	12
(d) Nurse Information Line	22.5%	136.5%	0.197	9
(e) Health and Wellness	10.4%	122.6%	0.334	11
(f) Quality Components	2.8%	109.0%	0.603	12
(g) Medical Informatics	3.8%	90.9%	0.563	11
(h) Utilization Review	0.5%	105.0%	0.824	12
(i) Other Medical Management	14.0%	89.5%	0.230	12
8. Enrollment / Membership / Billing	27.6%	85.5%	0.079	12
9. Customer Services	7.5%	93.5%	0.390	12
(a) Member Services	8.1%	92.4%	0.371	12
(c) Grievances and Appeals	2.0%	89.8%	0.677	11
10. Claim and Encounter Capture and Adjudication	23.8%	109.4%	0.108	12
(a) Coordination of Benefits (COB) and Subrogation	0.0%	99.5%	0.979	11
(b) BlueCard Home and Custom Par Fees	37.6%	149.3%	0.034	12
(c) Medicare Crossover Fees	11.1%	119.6%	0.348	10
(d) Payment Integrity	1.2%	109.2%	0.735	12
(e) Other Claim and Encounter Capture and Adjudication	0.5%	102.4%	0.820	12
11. Information Systems Expenses	71.1%	80.1%	0.001	12
(a) Operations and Support Services	4.2%	94.4%	0.524	12
(b) Applications Maintenance	64.0%	50.8%	0.002	12
(1) Benefit Configuration	27.6%	58.2%	0.097	11
(2) Other Applications Maintenance	4.7%	81.4%	0.524	11
(c) Applications Acquisition and Development	42.9%	62.6%	0.021	12
(1) Applications Amortization and Licensing Expenses	0.7%	92.6%	0.803	12
(2) Pre-Planning Project Costs	45.5%	42.5%	0.016	12
(d) Security Administration and Enforcement	30.3%	85.1%	0.064	12
12. Finance and Accounting	7.2%	92.1%	0.400	12
(a) Credit Card Fees	0.0%	98.9%	0.974	9
(b) Other Finance and Accounting	17.9%	89.1%	0.171	12
13. Actuarial	28.7%	86.0%	0.073	12
14. Corporate Services Function	51.2%	83.7%	0.009	12
(a) Human Resources	58.2%	73.6%	0.004	12
(b) Legal	30.1%	90.3%	0.065	12
(1) Compliance	37.1%	72.0%	0.036	12
(2) Government Affairs	35.0%	81.7%	0.055	11
(3) Outside Litigation	2.2%	105.5%	0.648	12
(4) Fraud, Waste & Abuse	40.3%	83.2%	0.027	12
(5) Independent Dispute Resolution Fees	1.4%	116.5%	0.778	8
(6) All Other Legal	46.5%	74.8%	0.015	12
(c) Facilities	19.7%	90.3%	0.148	12
(d) OPEB	0.0%	99.6%	0.995	8
(e) Audit	28.9%	84.8%	0.071	12
(f) Purchasing	5.2%	89.4%	0.476	12
(g) Imaging	5.7%	85.8%	0.478	11
(h) Printing and Mailroom	52.9%	58.7%	0.007	12
(i) Risk Management	5.0%	70.6%	0.536	10
(j) Other Corporate Services Function	23.4%	78.7%	0.111	12
15. Corporate Executive & Governance	2.3%	108.5%	0.635	12
(a) Strategic Expenses	0.6%	91.7%	0.811	12
(b) Management Consulting	5.8%	171.5%	0.646	6
(c) Other Corporate Executive and Governance	1.0%	105.9%	0.756	12
16. Association Dues and License / Filing Fees	8.2%	90.6%	0.368	12
Subtotal Expenses	36.7%	94.2%	0.037	12
17. Miscellaneous Business Taxes	4.9%	109.4%	0.490	12
Total Expenses	20.9%	95.5%	0.135	12

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Independent/Provider-Sponsored Plan Results

Figure 3 shows the results of regression analyses of costs in each function and member months for Independent / Provider – Sponsored plans.

The 12 plans used for this analysis range from fewer than 100,000 to 1.4 million members. Of their administrative expense, 13.2% are in functions that exhibit economies of scale at a p-value of less than 0.1. A doubling of the size of these plans is calculated to lead to unit costs for those functions subject to economies of scale that are 77.2% of their pre-doubling value. Again, this is cost weighted. The slope of Subtotal expenses was not significant and its BCG slope was 96.8%.

For IPS plans, six functions or subfunctions displayed economies of scale, such as Other Claim and Encounter Capture and Adjudication, Other Applications Maintenance, Finance and Accounting, All Other Legal, among others. These are highlighted in blue. Three functions exhibited statistically significant diseconomies of scale, and they were Internal Sales Commissions, Payment Integrity and Benefit Configuration. These functions are highlighted in lavender.

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Figure 3

Scalar Effect on PMPM Costs, Mix-Adjusted

Independent / Provider-Sponsored Plans

	R^2	BCG Slope	P-Value	Number of Plans
1. Rating and Underwriting	0.8%	102.7%	0.782	12
(b) Risk Adjustment	6.6%	109.1%	0.420	12
(c) Other Rating and Underwriting	0.2%	97.9%	0.892	12
2. Marketing	2.1%	95.6%	0.654	12
(a) Product Development and Market Research	2.4%	107.6%	0.634	12
(b) Member and Group Communication	1.6%	92.5%	0.692	12
(c) Other Marketing	4.7%	87.2%	0.501	12
3. Sales	2.6%	95.0%	0.616	12
(a) Account Services	11.8%	84.1%	0.274	12
(b) Internal Sales Commissions	43.9%	172.6%	0.052	9
(c) Other Sales	3.5%	90.9%	0.562	12
4. External Broker Commissions	2.0%	104.7%	0.661	12
5. Advertising and Promotion	0.1%	97.3%	0.914	12
(a) Media and Advertising	4.4%	120.5%	0.513	12
(b) Charitable Contributions	19.6%	56.9%	0.233	9
6. Provider Network Management and Services	0.7%	101.9%	0.803	12
(a) Provider Relations Services	10.5%	86.7%	0.304	12
(b) Provider Contracting	7.4%	111.5%	0.392	12
(1) Provider Configuration	2.3%	87.9%	0.656	11
(2) Other Provider Contracting	1.9%	107.1%	0.673	12
(c) Other Provider Network Management and Services	0.3%	103.5%	0.878	11
7. Medical Management / Quality Assurance / Wellness	0.8%	97.6%	0.782	12
(a) Precertification	20.1%	72.1%	0.166	11
(b) Case Management	8.9%	111.5%	0.345	12
(c) Disease Management	0.8%	107.5%	0.782	12
(d) Nurse Information Line	12.9%	66.2%	0.552	5
(e) Health and Wellness	0.0%	101.0%	0.967	12
(f) Quality Components	18.1%	91.4%	0.168	12
(g) Medical Informatics	6.4%	109.8%	0.429	12
(h) Utilization Review	2.3%	93.7%	0.677	10
(i) Other Medical Management	1.6%	94.0%	0.697	12
8. Enrollment / Membership / Billing	7.3%	106.3%	0.396	12
(a) Enrollment and Membership	4.6%	104.5%	0.504	12
(b) Billing	1.0%	95.2%	0.775	11
9. Customer Services	7.3%	106.4%	0.396	12
(a) Member Services	8.1%	106.8%	0.369	12
(b) Printed Materials and Other	3.4%	76.8%	0.612	10
(c) Grievances and Appeals	0.1%	101.4%	0.943	12
10. Claim and Encounter Capture and Adjudication	0.5%	101.4%	0.832	12
(a) Coordination of Benefits (COB) and Subrogation	0.1%	104.8%	0.927	10
(d) Payment Integrity	56.1%	193.5%	0.008	11
(e) Other Claim and Encounter Capture and Adjudication	50.2%	80.9%	0.010	12
11. Information Systems Expenses	4.7%	94.9%	0.497	12
(a) Operations and Support Services	2.9%	93.7%	0.597	12
(b) Applications Maintenance	3.7%	112.6%	0.550	12
(1) Benefit Configuration	58.5%	184.9%	0.010	10
(2) Other Applications Maintenance	37.7%	74.3%	0.079	9
(c) Applications Acquisition and Development	9.1%	86.8%	0.341	12
(d) Security Administration and Enforcement	4.1%	84.6%	0.574	10
12. Finance and Accounting	31.7%	83.9%	0.057	12
(a) Credit Card Fees	2.3%	85.0%	0.678	10
(b) Fund Accounting for Self-Insured Groups	49.9%	34.3%	0.293	4
(c) Other Finance and Accounting	28.8%	81.3%	0.072	12
13. Actuarial	20.1%	82.4%	0.144	12
14. Corporate Services Function	4.8%	94.5%	0.492	12
(a) Human Resources	12.8%	84.3%	0.253	12
(b) Legal	0.1%	98.8%	0.934	12
(1) Compliance	5.2%	89.8%	0.499	11
(2) Government Affairs	0.0%	99.7%	0.994	9
(3) Outside Litigation	7.0%	165.4%	0.566	7
(4) Fraud, Waste and Abuse	16.4%	68.1%	0.246	10
(6) All Other Legal	28.1%	65.0%	0.076	12
(c) Facilities	3.4%	106.3%	0.567	12
(e) Audit	5.1%	82.7%	0.532	10
(f) Purchasing	14.6%	36.0%	0.397	7
(g) Imaging	31.5%	57.6%	0.116	9
(h) Printing and Mailroom	2.9%	87.2%	0.595	12
(i) Risk Management	16.0%	61.2%	0.253	10
(j) Other Corporate Services Function	27.6%	66.6%	0.079	12
15. Corporate Executive & Governance	15.0%	81.1%	0.213	12
(a) Strategic Expenses	9.6%	85.2%	0.384	10
(b) Management Consulting	3.6%	76.3%	0.684	7
(c) Other Corporate Executive and Governance	16.2%	80.3%	0.194	12
16. Association Dues and License/Filing Fees	11.9%	78.7%	0.299	11
Subtotal Expenses	6.7%	96.8%	0.416	12
17. Miscellaneous Business Taxes	0.1%	100.9%	0.923	12
Total Expenses	6.0%	97.1%	0.443	12

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Combined Universe Results

The Blue Cross Blue Shield and Independent / Provider – Sponsored universes reflect their respective origins and their operational philosophies and cultures. For instance, unlike the Blue Cross Blue Shield universe, half of the Independent / Provider – Sponsored Plans are owned by health systems. One possible reflection of this strategic difference is that, holding product mix equal, IPS plans seem to spend more on Medical Management, as Blue Cross Blue Shield plans spend more on information systems.

Figure 4 shows the results of regression analyses of unit costs for each function and members for the combined set of Blue Cross Blue Shield Plans and Independent / Provider – Sponsored Plans. The combined universe has a larger sample size than each of the universes individually, and the range of plan size was greater.

The 24 plans included here range from fewer than 100,000 members to over 5 million members. Of their administrative expenses, 33.0% are subject to economies of scale. A doubling of the size of these plans is calculated to lead to those costs subject to economies of scale falling to 88.8% of their pre-doubling value. Again, these calculations reflect a weighting by their costs. The Subtotal Expenses also displayed economies of scale with a BCG slope of 96.1%.

Of the approximately 70 total functions and sub-functions for the combined universe, 13 displayed economies of scale, which includes subtotal. Some of these functions include Sales, Information Systems, Finance and Accounting and Actuarial, shown in Figure 4. The areas with statistically significant *diseconomies* of scale were Claim and Encounter Capture and Adjudication and Outside Litigation. (Miscellaneous Business Taxes also displayed a statistically significant diseconomy of scale, but it is not included in this count because it is not part of Subtotal Expenses.)

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Figure 4

Scalar Effect on PMPM Costs, Mix-Adjusted

Blue and IPS

	R^2	BCG Slope	P-Value	Number of Plans
1. Rating and Underwriting	0.0%	100.1%	0.985	24
(b) Risk Adjustment	0.7%	102.6%	0.706	23
(c) Other Rating and Underwriting	0.5%	97.7%	0.740	24
2. Marketing	3.5%	96.2%	0.384	24
(a) Product Development and Market Research	0.3%	97.8%	0.785	24
(b) Member and Group Communication	0.0%	99.2%	0.941	23
(c) Other Marketing	0.7%	96.3%	0.701	24
3. Sales	13.1%	92.2%	0.082	24
(a) Account Services	2.5%	93.9%	0.458	24
(b) Internal Sales Commissions	1.1%	105.1%	0.658	20
(c) Other Sales	13.8%	88.2%	0.074	24
4. External Broker Commissions	4.5%	106.1%	0.322	24
5. Advertising and Promotion	2.1%	93.1%	0.495	24
(a) Media and Advertising	0.0%	100.9%	0.939	24
(b) Charitable Contributions	1.2%	86.7%	0.636	21
6. Provider Network Management and Services	8.3%	94.3%	0.173	24
(a) Provider Relations Services	2.3%	89.5%	0.476	24
(b) Provider Contracting	11.3%	86.0%	0.109	24
(1) Provider Configuration	6.4%	60.4%	0.268	21
(2) Other Provider Contracting	0.1%	98.8%	0.916	23
(c) Other Provider Network Management and Services	0.0%	98.9%	0.936	23
7. Medical Management / Quality Assurance / Wellness	4.6%	95.9%	0.315	24
(a) Precertification	19.3%	79.4%	0.036	23
(b) Case Management	3.3%	106.2%	0.398	24
(c) Disease Management	0.0%	100.5%	0.985	23
(d) Nurse Information Line	2.4%	88.4%	0.601	14
(e) Health and Wellness	0.2%	102.6%	0.827	23
(f) Quality Components	7.1%	91.2%	0.208	24
(g) Medical Informatics	5.5%	91.8%	0.284	23
(h) Utilization Review	4.6%	90.0%	0.339	22
(i) Other Medical Management	5.9%	92.5%	0.251	24
8. Enrollment / Membership / Billing	0.6%	98.4%	0.723	24
9. Customer Services	0.0%	100.3%	0.933	24
(a) Member Services	0.3%	101.1%	0.810	24
(c) Grievances and Appeals	1.7%	93.2%	0.553	23
10. Claim and Encounter Capture and Adjudication	15.2%	106.9%	0.060	24
(a) Coordination of Benefits (COB) and Subrogation	1.2%	92.7%	0.639	21
(d) Payment Integrity	6.9%	120.5%	0.225	23
(e) Other Claim and Encounter Capture and Adjudication	1.5%	103.9%	0.565	24
11. Information Systems Expenses	27.4%	89.7%	0.009	24
(a) Operations and Support Services	2.8%	95.5%	0.438	24
(b) Applications Maintenance	12.4%	80.9%	0.091	24
(1) Benefit Configuration	5.1%	117.3%	0.325	21
(2) Other Applications Maintenance	7.8%	85.1%	0.232	20
(c) Applications Acquisition and Development	27.0%	77.0%	0.009	24
(d) Security Administration and Enforcement	0.9%	95.5%	0.669	22
12. Finance and Accounting	22.0%	88.1%	0.021	24
(a) Credit Card Fees	0.2%	103.6%	0.863	19
(c) Other Finance and Accounting	29.5%	85.5%	0.006	24
13. Actuarial	35.0%	82.3%	0.002	24
14. Corporate Services Function	4.4%	95.6%	0.326	24
(a) Human Resources	11.6%	88.3%	0.104	24
(b) Legal	0.1%	101.0%	0.868	24
(1) Compliance	30.7%	77.6%	0.006	23
(2) Government Affairs	2.1%	93.8%	0.538	20
(3) Outside Litigation	23.2%	180.1%	0.037	19
(4) Fraud, Waste and Abuse	26.3%	79.6%	0.015	22
(6) All Other Legal	3.5%	90.5%	0.382	24
(c) Facilities	0.0%	99.6%	0.941	24
(e) Audit	0.0%	99.2%	0.935	22
(f) Purchasing	0.0%	98.7%	0.947	19
(g) Imaging	1.3%	92.0%	0.638	20
(h) Printing and Mailroom	14.5%	78.5%	0.066	24
(i) Risk Management	3.9%	78.7%	0.402	20
(j) Other Corporate Services Function	3.9%	89.4%	0.353	24
15. Corporate Executive & Governance	0.9%	96.0%	0.663	24
(a) Strategic Expenses	2.5%	89.1%	0.483	22
(b) Management Consulting	4.3%	79.9%	0.498	13
(c) Other Corporate Executive and Governance	3.1%	92.4%	0.414	24
16. Association Dues and License/Filing Fees	0.2%	102.5%	0.828	23
Subtotal Expenses	19.0%	96.1%	0.033	24
17. Miscellaneous Business Taxes	12.9%	114.6%	0.084	24
Total Expenses	8.3%	97.5%	0.173	24

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Application

Understanding economies of scale can be helpful in situations in which it is necessary to estimate the cost structure of a health plan that is experiencing growth. Organic growth and acquisitions are two business situations in which such an analysis would apply.

Figure 5 illustrates how the values calculated in the combined universe case (Figure 4) would impact costs. This illustrates the case where a firm exactly doubles in size through an acquisition.

Recall that, for the Combined set of Blue Cross Blue Shield and Independent / Provider – Sponsored plans, the BCG Slope was 88.8% for the 33.0% of administrative costs that are subject to economies of scale. Expenses subject to economies of scale are 3.7 percentage points of the 11.2% total and are $22.11 of the $67.00 PMPM total. (This is similar to typical costs of commercially insured members.)

The effect of scale is calculated as the scale slope of 88.8% times the pre-doubling 3.7 percentage points represented by expenses subject to scale, or 3.3%. (The $600 PMPM is in line with premium revenues for commercial insured products.) This reduces the $22.11 PMPM in expenses subject to scale to $19.64 or by $2.47. That value times 2 million members, times twelve months models savings of $59 million on a combined administrative expense of about $1.6 billion or by 3.7% on a PMPM basis.

While the savings are modest in the context of the combined administrative expenses, the percent impact on combined operating profits is much greater. The increase from $120 million to $179 million is 49.5%.

Figure 5

Application of Scalability

BCBS Plans' Commercial Insured Cost Values, Combined Slopes

Assumptions	Suitor	Target	Total	Effect of Scale	Combined After Scale
Members	1,000,000	1,000,000	2,000,000		2,000,000
Revenues PMPM	$600	$600	$600		$600
Health Benefit Ratio	88.0%	88.0%	88.0%		88.0%
Administration/Premium	11.2%	11.2%	11.2%	-0.4%	10.8%
Total Administration PMPM	$67.00	$67.00	$67.00	-$2.47	$64.53
Scale Effect					88.8%
Scalable Proportion of Administration	33.0%	33.0%	33.0%		
Scalable Administration/Premium	3.7%	3.7%	3.7%		3.3%
Scalable Administration PMPM	$22.11	$22.11	$22.11		$19.64
Scalable Administration	$265,352,787	$265,352,787	$530,705,573	-$59,367,923	$471,337,650
Non Scalable Administration/Premium	7.5%	7.5%	7.5%		7.5%
Non Scalable Administration PMPM	$44.89	$44.89	$44.89		$44.89
Non Scalable Administration	$538,647,213	$538,647,213	$1,077,294,427		$1,077,294,427
Income Statement	Suitor	Target	Total	Effect of Scale	Combined
Revenues	$7,200,000,000	$7,200,000,000	$14,400,000,000	$0	$14,400,000,000
Health Benefits	6,336,000,000	6,336,000,000	12,672,000,000	0	12,672,000,000
Administration	804,000,000	804,000,000	1,608,000,000	-59,367,923	1,548,632,077
Operating Profits	$60,000,000	$60,000,000	$120,000,000	$59,367,923	$179,367,923
Operating Margin	*0.8%*	*0.8%*	*0.8%*	*0.4%*	*1.2%*

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While the BCG Slope is an intuitive way of expressing economies of scale, doubling the size of the firm is a special case. So, to calculate all possible alternatives, the BCG Slope must be converted to a *marginal* scale effect. The marginal scale effect is the BCG Slope adapted for the size of the smaller plan ("Target") relative to the larger plan ("Suitor"). We show its calculation in Figure 6.

Suppose a health plan increases its membership by 50%, rather than doubling. This could occur if a one million member plan was to acquire a 500,000 member plan. (For simplicity, we ignore the implications of scale on baseline expenses of the smaller plan.) The 79.8% marginal scale effect is the BCG Slope adapted for this 50% increase in membership. The steps for converting a BCG Slope to a marginal scale effect are described on the left side of Figure 6, and the right side applies them to the combined 88.8% BCG Slope as an example.

Incidentally, the use of the marginal scale approach can also be applied to the Figure 5 case of the combination of two similarly sized organizations. The steps used in Figure 6 yield a marginal scale effect of 77.6% which, when applied to the $265 million in the *Target's* scalable administration (rather than the combined companies), produces the same $59 million savings as found in Figure 5.

Figure 6

Calculation of Marginal Scale Effects

	Formula			Example				
Step 1	2^x	=	BCG Slope	2^x	=	88.8%		Scale Effect from Figure 1
Step 2	x	=	$\frac{\ln(\text{BCG})}{\ln(2)}$	x	=	$\frac{\ln(.888)}{\ln(2)}$	= -0.171	Derived Slope from BCG Slope in Figure 1
Step 3	$(1 + \text{Proportion of Target-to-Suitor})^x$	=	Target - Adjusted "BCG Slope"	$(1 + 0.5)^{-.171}$	=	93.3%		
Step 4	BCG Slope Target - Adjusted $\frac{}{\text{Proportion of Target to Combined Health Plan}}$	-	$\frac{1}{(1 + \text{Proportion of Target-to-Suitor})}$	$\frac{93.3\% - \frac{1}{(1 + 0.5)}}{0.5 \ / \ 1.5}$			= 79.8%	Marginal Scale Effect Applied to Figure 7

The phrase "BCG Slope" reflects the case where the target is the same size as the suitor.
The "Target-Adjusted BCG Slope" accommodates the cases in which other sizes are contemplated.

Note: The 79.8% marginal scale effect shown in Figure 6 and used in Figure 7 is built up function by function. These steps are applied to each function's BCG Slope from the regressions, and the results are weighted by each function's share of costs subject to scale. Working the example's steps by hand from the overall 88.8% BCG Slope gives 79.9%. The two differ slightly because combining the functions before the calculation gives a slightly different result than combining them after.

In Figure 7 we apply this marginal scale value to estimate the effect of economies of scale on a business combination where the Target is one-half the size of the suitor. To calculate the scale-related savings, we multiply the calculated marginal scale effect of 79.8% (see Figure 6) by $133

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million in the Target's expenses that are subject to scale. This reduces those expenses to $106 million and yields an estimated effect of scale on the target plan of $26.8 million.

Again, the percent effect on earnings is greater than that on costs. While scale reduces the Target's administrative expenses by 6.7% from $402 million to $375 million, its operating profits increase by 89.2% from $30 million to $57 million.

Once the framework for the marginal scalar effect is established, then it can be universally applied to any scale scenario. An estimate of the effect of economies of scale in this way can be helpful as an initial approximation or as a default assumption when more in-depth analysis is not feasible. Since each organization has its own unique cost structure and the slopes of the economies of scale vary by function, it would be more appropriate to apply each of the scale slopes to each functional area. While this greater granularity hones the estimate, due diligence will likely further modify that estimate.

Figure 7

Scalability For Plans of Different Sizes

BCBS Plans' Commercial Insured Cost Values, Combined Slopes

Assumptions	Suitor	Target	Effect of Scale On Target	Target After Scale	Combined After Scale
Members	1,000,000	500,000		500,000	1,500,000
Revenues PMPM	$600	$600		$600	$600
Health Benefit Ratio	88.0%	88.0%		88.0%	88.0%
Administration/Premium	11.2%	11.2%	-0.7%	10.4%	10.9%
Total Administration PMPM	$67.00	$67.00		$62.54	$65.51
Scale Effect				79.8%	
Scalable Proportion of Administration	33.0%	33.0%		28.2%	31.5%
Scalable Administration/Premium	3.7%	3.7%		2.9%	3.4%
Scalable Administration PMPM	$22.11	$22.11		$17.65	$20.63
Scalable Administration	$265,352,787	$132,676,393	-$26,756,153	$105,920,240	$371,273,026
Non Scalable Administration/Premium	7.5%	7.5%		7.5%	7.5%
Non Scalable Administration PMPM	$44.89	$44.89		$44.89	$44.89
Non Scalable Administration	$538,647,213	$269,323,607		$269,323,607	$807,970,820
Income Statement	Suitor	Target	Effect of Scale	After Scale	Combined
Revenues	$7,200,000,000	$3,600,000,000	$0	$3,600,000,000	$10,800,000,000
Health Benefits	6,336,000,000	3,168,000,000	0	3,168,000,000	9,504,000,000
Administration	804,000,000	402,000,000	-26,756,153	375,243,847	1,179,243,847
Operating Profits	$60,000,000	$30,000,000	$26,756,153	$56,756,153	$116,756,153
Operating Margin	*0.8%*	*0.8%*	*0.2%*	*1.6%*	*1.1%*

Other Observations

Diseconomies of Scale. In the Blue Cross Blue Shield set, there was one function that saw costs increase with scale. For IPS plans, three functions exhibited diseconomies of scale. The combined set had two functions with diseconomies of scale. We do not know why certain costs tended to increase with membership but it is possible that they reflect strategic investments in growth, membership retention and challenges associated with higher market share.

Qualifications. This study analyzes the experience of firms of various sizes to estimate scale, and its intent is to provide information to health plans as they consider their individual strategic situations. One qualification to the results is that each firm operates differently and in different competitive environments so that differences between firms that we attribute to scale may also

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stem from other factors. For instance, larger organizations may operate in service areas that have competitive environments that affect costs independently of the technical and administrative economies of scale.

Also, the size of the organizations may establish the bounds for which the conclusions are reliable. For instance, we suspect that organizations smaller than plans reflected here would enjoy steeper declines in PMPM costs as they grow. This is consistent with our earlier remark that the presence of fixed and variable costs in a function implies that economies of scale would resemble a curve.

Finally, in our measurement of economies of scale we focused on differences in actual scale as a point in time, that is, a cross-sectional analysis. Because strategic decisions are long term, we elected not to employ a short duration time-series analysis.

Closing Thoughts

We sometimes face skepticism concerning our conclusions of limited economies of scale. Many other industries such as manufacturing, transportation and farming are known to enjoy these economies. In the health care sector of the economy, hospitals, like hotels, also exhibit economies of scale which is why occupancy rates are an indicator of profitability in both sectors.

An intuitive way of considering economies of scale is to consider the actual activities of health plans and how they are executed. Many of the activities that health plans perform grow with membership, such as responding to customer service inquiries, processing manual claims and processing manual enrollment transactions. When a plan adds a new member, he or she requires the same services as all previous members. Other functions may also be linked to volume, though more loosely, like the Provider Network Management and Services and Information Systems functions. Even the few areas that appear fixed can increase with the size of the plan. While Corporate Executive and Governance would be expected to be relatively fixed, the numbers of support staff, compensation and the enterprise-wide consulting usually grouped in that function can increase in larger organizations.

Moreover, the technical economies of scale, such as those discussed at the beginning of this analysis, may at the same time give rise to higher costs that partially offset the advantage. Suppose the investment in claims autoadjudication achieves its objective of reducing the need to process claims manually, thereby allowing for the redeployment of the staff that performed it. This change will nevertheless not entirely eliminate claims processors. In fact, a countervailing effect may be that the claims beyond the capability of the autoadjudication system are more complex, and therefore require greater effort and knowledge than the average claim. This more complex claim adjudication could require the expertise of claims people who are higher level and better paid, which could offset the advantage of reduced staffing. This paradox may occur in many activities that health plans increasingly automate.

Another intuitive way of thinking about economies of scale is to compare costs across the actual industry structure. Consider the vast size differences between organizations providing

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health coverage. They range from UnitedHealth, at about 50 million members and almost $448 billion in annual revenues in 2025, to organizations that serve only tens of thousands of members. UnitedHealth's administrative expenses appeared slightly lower than those of Blue Cross Blue Shield Plans in calendar 2024, the most recent year of our public company analysis. In reaching this conclusion, we excluded the effect of differences in the mix of comprehensive products, excluded products such as Stand-Alone Part D as well as Optum service operations and added our estimate of UnitedHealth's medical management expenses to administration from health benefits. UnitedHealth and these smaller companies coexist in a low margin competitive market: the fact of numerous competitors of a wide range in size argues against overstating the significance of advantages stemming from scale.

Application of Economies of Scale to Your Health Plan's Administrative Costs

The content of this study is reflected in an Economies of Scale Model on our website (https://sherlockco.com/benchmarks/scale-calculators). It enables users to estimate how changes in membership size affect each cluster of expenses.

To use the model, first populate the percent difference between your current membership and your estimate of membership in the long term. Then enter the PMPM cost for any cluster or total value for which you wish to estimate the effect of that difference in size. The cost value after the effect of the difference in scale will be shown. Expense estimates may be calculated in total or by clusters of functions: Sales and Marketing, Medical and Provider Management, Account and Membership Administration, and Corporate Services.

Background on the Sherlock Benchmarks

This analysis is of data drawn from the 2026 editions of *Sherlock Benchmarks*, which reflects calendar year 2025 results. In most cases, survey materials that populate the Benchmarks were distributed in February, collected in April, validated in May and published beginning in June. Plans report costs to us segmented by product. This allows us to compare the plans while excluding the effect of mix differences between them. Collectively, the total participating plans in the 29th Annual *Sherlock Benchmarks* served about 53 million people.

The *Sherlock Benchmarks* themselves can be licensed. Please reach out to us if this is of interest.

In 2027, we will conduct our 30th annual Benchmarking Study for health plans and will reflect 2026 calendar year results. The Reports provided to participants are identical to licensed copies, plus we provide additional customized Reports that compare each plan to its peer group. We welcome Blue Cross Blue Shield Plans, Independent / Provider – Sponsored plans, Medicaid plans, Medicare plans and other plans.

The schedule should be similar to that of the 2026 cycle described above. In the coming weeks, plans that we understand to have an interest will receive an invitation including summary of

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our progress in 2026 and our intentions for 2027. Let us know if you would like to consider participation. *You will be among good company.*

Please do not hesitate to contact us with questions concerning this analysis, the *Sherlock Benchmarks* on which it is based or your interest in licensing or participating in the *Sherlock Benchmarks*. We can be reached at sherlock@sherlockco.com or (215) 628-2289.

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