

# Plan Management Navigator

## Analytics for Health Plan Administration



Healthcare Analysts

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*Please see page 6 for our invitation to participate in the 2023 or license the 2022 Sherlock Benchmarks.*

## THE RELATIONSHIP BETWEEN SCALE, STAFFING RATIOS AND COMPENSATION

### Introduction and Conclusion

In early November, we wrote about economies of scale in health insurance. In this analysis, we look at two related factors, economies of scale in staffing ratios and compensation levels. We conclude that larger plans tend to have fewer employees but compensate at a higher rate. This is true for reported compensation and also when we control for cost-of-living differences.

The information used in these analyses is from the *Sherlock Benchmarks*, reflecting 2021 costs. Staffing Costs per FTE (Compensation), Member Months (Scale), and FTEs per 10,000 members (Staffing Ratio) data is compiled from the 16 Blue Cross Blue Shield Plans ("Blue") and 15 Independent / Provider - Sponsored plans ("IPS"), as well as a combined 31 plan universe.

The figures show the results of our regression analyses. All of the percents describe the slopes of the regression lines, expressed as the BCG Slope, and models the effect of doubling the membership of a health plan. A value of less than 100% shows economies of scale, a negative slope, and a value of greater than 100% shows diseconomies of scale, a positive slope.

**Figure 1. The Relationship Between Scale, Staffing Ratios, and Compensation**  
Scalar Effect on Mix-Adjusted Staffing Ratio  
*Blue Cross Blue Shield Plans*

Functions	Economies of Scale PMPM Costs	Economies of Scale in Staffing Ratios	Economies of Scale in Staffing Costs per FTE	Economies of Scale in Staffing Costs per FTE, COLA	Staffing Ratios and Staffing Costs per FTE	Staffing Ratios & Staffing Costs per FTE, COLA
1. Rating and Underwriting	89.1%	81.8%	102.5%	101.4%	22.3%	5.4%
2. Marketing	81.0%	84.6%	99.7%	98.5%	22.3%	29.6%
(a) Product Development and Market Research	73.6%	69.7%	102.1%	100.8%	62.6%	63.0%
3. Sales	101.9%	93.3%	104.1%	102.7%	67.9%	68.0%
5. Advertising and Promotion	94.6%	80.9%	101.6%	100.2%	68.7%	60.1%
(a) Media and Advertising	92.9%	80.9%	101.6%	100.2%	68.7%	60.1%
(b) Provider Contracting	87.4%	84.2%	102.6%	101.6%	66.6%	96.3%
7. Medical Management / Quality Assurance / Wellness	96.4%	87.2%	104.7%	103.4%	35.2%	39.2%
(a) Precertification	81.2%	73.6%	102.8%	101.7%	15.9%	31.0%
8. Enrollment / Membership / Billing	81.8%	77.5%	103.8%	102.9%	46.2%	49.5%
11. Information Systems Expenses	85.6%	85.8%	102.9%	101.2%	27.0%	33.9%
(b) Applications Maintenance	72.8%	64.3%	102.9%	101.8%	56.7%	358.3%
(1) Benefit Configuration	63.8%	61.4%	103.2%	103.5%	23.6%	24.1%
(d) Security Administration and Enforcement	80.4%	77.9%	104.1%	102.9%	12.6%	37.9%
12. Finance and Accounting	82.8%	84.3%	92.6%	91.5%	92.3%	95.5%
(b) Other Finance and Accounting	80.2%	84.3%	92.6%	91.5%	92.3%	95.5%
13. Actuarial	79.5%	77.9%	105.1%	103.8%	37.8%	40.8%
14. Corporate Services Function	90.6%	81.4%	103.7%	102.4%	54.5%	67.5%
(a) Human Resources	84.2%	79.8%	102.3%	101.0%	58.5%	68.5%
(b) Legal	81.4%	76.3%	103.2%	101.9%	20.9%	31.9%
(1) Compliance	73.1%	71.2%	103.6%	102.3%	3.6%	46.4%
(4) Fraud, Waste & Abuse	70.3%	75.5%	101.3%	100.6%	35.8%	55.6%
(5) All Other Legal	77.4%	73.2%	105.8%	104.4%	25.9%	27.0%
(e) Audit	83.1%	80.1%	101.9%	100.6%	29.6%	42.4%
Subtotal Expenses	93.7%	87.9%	102.1%	100.8%	30.9%	44.4%
Total Expenses	95.5%	87.9%	102.1%	100.8%	30.9%	44.4%

\*Shaded values are not significant.

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We considered the relationship between membership and costs to be significant if it displayed p-values of less than 0.1. If they are shaded, they are not significant. We include them as suggestive.

## Conclusions

1. From the *Navigator* earlier this month, we have found that there are some economies of scale in selected activities of health insurers. This is apparent in the functional PMPM costs, shown in that edition and also shown in these figures in the first column.
2. In this *Navigator* we show that economies of scale are even more evident in combined staffing ratios.
  - a. There more cases in which staffing shows economies of scale than PMPM costs.
  - b. Nearly all cases of PMPM cost economies of scale also show staffing economies of scale.
  - c. Where economies of scale in PMPM costs are evident, staffing ratio economies of scale are frequently steeper. That is, when the relationship exists the function's BCG slope is often lower.
3. One reason why scale-linked lower staffing ratios are not realized in lower PMPM costs is that companies with lower staffing ratios tend to have employees that are better paid. So it is commonplace for per FTE Staffing Costs to display a positive relationship with scale. Significance unusual for either of the two segments but more common for the set of all the plans. This is evident looking at unadjusted staffing costs per FTE.
4. We thought that the higher compensation might have stemmed from a positive relationship between cost of living and size of plan. Large plans may be found in large cities, and large cities may have higher costs of living. We did not display the results but there was no relationship.
5. When we back out the effect of differences in cost of living, we still found an inverse relationship between compensation and staffing ratios with patterns similar to the unadjusted values.
6. We also performed some related analyses of the relationship between Staffing Ratios and Staffing Costs per FTE. Note that this was irrespective of size. These tended to be steeper slopes and more likely to be significant than the relationships between Staffing Costs per FTE and scale. We performed this on an as-reported and cost of living adjusted basis with similar results.

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7. It appears that larger plans tend to have lower staffing ratios than their smaller peers. They also tend to have higher compensation, suggesting compensation may offset the benefits of lower staffing ratios. More generally, there is often an inverse relationship between low staffing ratios and high compensation, irrespective of the sizes of the plans. Staffing ratios have a stronger relationship to compensation than does scale.

One possible explanation for higher compensation being associated with low staffing ratios, including those in larger organizations, is that the fewer people may be more highly skilled.

### *Blue Cross Blue Shield Results*

The results of the Blue Cross Blue Shield BCG Slopes analyses are shown in Figure 1 on page 1.

- For the Blue Plans, Economies of Scale in Staffing Ratios were more likely to be significant than PMPM costs. There were 26 significant relationships between scale and staffing ratios as against 18 for PMPM costs. Every significant scale/cost relationship also had a significant scale staffing ratio relationship.
- The Economies of Scale slopes also tended to be steeper for Staffing ratios. That is, staffing ratios were less as the Plan size increased, even more so than PMPM costs. For instance, the BCG slopes for Provider Contracting staffing ratios was 84.2% as against 87.4% for PMPM costs.
- There was a positive, though usually insignificant, relationship between Scale and Staffing Costs per FTE, both as-reported and adjusted for cost of living. Larger Plans tended to pay their staff more. A doubling of the size of the Plan was associated with as-reported per FTE compensation in Information Systems of 102.9% of the pre-doubling value.
- More generally, Staffing Ratios and Staffing Costs per FTE appeared to have an inverse relationship, irrespective of the size of the Plan. For the Blue Cross Blue Shield segment, these relationships were mostly significant on an as-reported basis but only about one-half of the functions showed significant relationships after adjusting for cost of living.

## Independent / Provider - Sponosred Plan Results

Figure 2 shows the results for Independent / Provider – Sponsored plans. There were fewer functional areas that were significant with scale compared to the Blues and Combined universes.

- For the IPS plans, Economies of Scale in Staffing Ratios were much more likely to be significant than PMPM costs. There were 13 significant relationships between scale and staffing ratios as against 3 for PMPM costs. Every significant scale/cost relationship also had a significant scale staffing ratio relationship.
- Similarly to the Blue analyses, IPS plans’ slopes for scale and staffing ratios were steeper than those found in scale and PMPM costs analysis. The BCG slopes for Provider Configuration was 61.6% for PMPM costs and 45.1% for Staffing Ratios.
- The relationships between scale and staffing costs were generally positive for IPS plans, both on an unadjusted and cost of living adjusted basis. These relationships suggest that larger IPS plans compensate their FTEs more. A doubling of the size of the plan leads to 136.6% in per FTE Staffing Costs of the pre-doubling value in Provider Configuration.
- Generally, Staffing Ratios and unadjusted Staffing Costs per FTE appeared to have an inverse relationship. Meanwhile, cost of living adjusted compensation per FTE were all inversely related to staffing ratios for the functions shown in Figure 2. Most functions were not significant.

**Figure 2. The Relationship Between Scale, Staffing Ratios, and Compensation**

Scalar Effect on Mix-Adjusted Staffing Ratio  
Independent / Provider-Sponsored Plans

Functions	Economies of Scale PMPM Costs	Economies of Scale in Staffing Ratios	Economies of Scale in Staffing Costs per FTE	Economies of Scale in Staffing Costs per FTE, COLA	Staffing Ratios and Staffing Costs per FTE	Staffing Ratios & Staffing Costs per FTE, COLA
6. Provider Network Management and Services	88.0%	79.6%	106.8%	96.6%	62.5%	80.9%
(a) Provider Relations Services	90.6%	78.0%	111.0%	112.7%	53.1%	36.2%
(1) Provider Configuration	61.6%	45.1%	136.6%	138.0%	41.0%	44.0%
(d) Other Provider Network Management and Services	83.6%	58.7%	107.8%	107.7%	40.3%	16.3%
(f) Quality Components	73.4%	75.9%	105.8%	105.7%	100.5%	97.6%
(b) Billing	83.8%	62.7%	124.6%	126.7%	53.8%	51.7%
(c) Grievances and Appeals	76.2%	58.9%	106.6%	107.0%	107.5%	55.8%
12. Finance and Accounting	87.1%	73.7%	100.7%	100.3%	71.9%	88.4%
(b) Other Finance and Accounting	84.5%	73.7%	100.7%	100.3%	71.9%	88.4%
(2) Government Affairs	81.2%	57.1%	117.9%	116.7%	51.8%	29.2%
(i) Risk Management	66.8%	56.0%	120.7%	118.1%	50.7%	46.5%
Subtotal Expenses	90.5%	86.9%	104.8%	104.7%	71.7%	66.5%
Total Expenses	90.1%	86.9%	104.8%	104.7%	71.7%	66.5%

\*Shaded values are not significant.

## Combined Universe Results

Figure 3 shows the results for the combined universe of 31 Blue and IPS plans. Results were similar to the previous two figures, but the combined universe holds more significant relationships between Scale and Staffing Costs per FTE, both unadjusted and cost of living adjusted.

- For the combined universe, there were 25 significant relationships between Scale and Staffing Ratios. Of these 25, nine functions were significant between Scale and PMPM costs.
- The slopes for size and staffing ratio were generally steeper than the slopes in size and PMPM costs. For example, Rating and Underwriting had a BCG slope of 96.4% for scale and PMPM costs and 84.3% for scale and staffing ratio. The only functions that were not steeper was Nurse Information Line and Other Finance and Accounting.
- Similarly to the previous two figures, the relationship between scale and staffing costs per FTE were generally positive on both an unadjusted and cost of living adjusted basis. The Finance and Accounting and its sub-function were the only functional areas without a positive correlation. Many more of the relationships were significant unlike each of the universe segments.
- Unadjusted compensation per FTE and Staffing Ratios were all inversely related. On a cost of living adjusted basis, the relationships were generally inversely related except for Applications Maintenance, an IS sub-function. Only eight out of 25 functions were insignificant for Staffing Ratios and compensation per FTE. This number increases by 1 when adjusting for cost of living.

**Figure 3. The Relationship Between Scale, Staffing Ratios, and Compensation**  
Scalar Effect on Mix-Adjusted Staffing Ratio  
 Blue and IPS Plans

Functions	Economies of	Economies of	Economies of	Economies of	Staffing Ratios	Staffing Ratios &
	Scale PMPM	Scale in Staffing	Scale in Staffing	Scale in Staffing	Costs per FTE,	and Staffing
	Costs	Ratios	Costs per FTE	Costs per FTE,	COLA	Staffing Costs
				COLA		per FTE, COLA
1. Rating and Underwriting	96.4%	84.3%	106.8%	106.5%	30.9%	32.9%
(b) Risk Adjustment	97.7%	79.8%	105.8%	105.5%	31.4%	43.3%
2. Marketing	92.1%	89.8%	103.9%	103.6%	58.7%	58.7%
3. Sales	97.6%	87.9%	105.3%	104.9%	68.3%	71.0%
(c) Other Sales	97.6%	84.2%	108.1%	107.7%	82.6%	83.4%
6. Provider Network Management and Services	90.6%	83.7%	106.9%	106.4%	29.8%	43.6%
(a) Provider Relations Services	89.9%	83.2%	106.3%	106.0%	25.5%	22.9%
(b) Provider Contracting	85.3%	78.8%	107.8%	107.1%	32.5%	75.1%
(1) Provider Configuration	72.5%	60.2%	119.8%	120.6%	36.7%	39.5%
7. Medical Management / Quality Assurance / Wellness	94.9%	87.2%	105.6%	105.4%	44.1%	47.9%
(d) Nurse Information Line	76.9%	77.3%	104.6%	103.7%	23.2%	26.6%
(f) Quality Components	93.1%	86.0%	105.7%	105.3%	81.5%	60.0%
(g) Medical Informatics	84.9%	82.3%	107.2%	106.8%	28.1%	42.2%
8. Enrollment / Membership / Billing	93.0%	83.5%	110.6%	110.4%	59.5%	60.4%
(b) Applications Maintenance	82.1%	77.0%	106.0%	114.8%	47.4%	121.9%
(1) Benefit Configuration	83.6%	75.9%	106.2%	108.5%	26.1%	40.1%
12. Finance and Accounting	86.2%	86.0%	97.2%	97.1%	83.0%	89.4%
(b) Other Finance and Accounting	84.2%	86.0%	97.2%	97.1%	83.0%	89.4%
13. Actuarial	83.4%	81.4%	103.6%	103.6%	37.2%	31.4%
14. Corporate Services Function	95.3%	89.8%	106.8%	106.7%	80.6%	84.6%
(b) Legal	91.5%	81.5%	106.6%	106.4%	67.8%	57.6%
(1) Compliance	78.6%	74.3%	104.9%	104.7%	29.0%	42.6%
(2) Government Affairs	88.2%	79.4%	108.5%	108.4%	58.8%	47.8%
Subtotal Expenses	96.7%	89.2%	105.5%	105.3%	55.6%	57.7%
Total Expenses	98.4%	89.2%	105.5%	105.3%	55.6%	57.7%

\*Shaded values are not significant.

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## *Sherlock Benchmarks: Participation and Licensing*

This *Plan Management Navigator* analysis relies on the results of the 2022 *Sherlock Benchmarks* for universes of Blue Cross Blue Shield Plans and Independent/Provider-Sponsored health plans, our 25<sup>th</sup> annual study.

In this analysis, all data is for the 2021 calendar year and has been subject to careful validation both by us and by the plans themselves. Collectively, the 31 plans served about 60 million Americans in comprehensive products. The range of membership was from 178,000 to over six million among Blue Plans and about 215,000 to 1.6 million among IPS plans. In addition to the Blue Cross Blue Shield and Independent / Provider – Sponsored universes, we also have universes of Medicare, Medicaid, and Larger plans.

**Benchmarking Study for 2023.** Your health plan is invited to participate in the 2023 cycle based on 2022 results. We will send invitations out next week. *You will be among good company.*

**Licensing the Sherlock Benchmarks.** For those that cannot participate, licensing is available. Please see the following link <https://sherlockco.com/sherlock-benchmarks/> for additional information on the *Sherlock Benchmarks*. The Reports shown on that page are also the Reports received by the participants.

### *Contact*

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 the 2022 edition or participating in the 2023 *Sherlock Benchmarks*. We can be reached at [sherlock@sherlockco.com](mailto:sherlock@sherlockco.com) or (215) 628-2289.