Plan Management Navigator

Analytics for Health Plan Administration

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Larger Health Plans and Economies of Scale

Blue Cross Blue Shield Plans that are 3.7 times larger have lower costs than Smaller Plans

A subset of larger Blue Cross Blue Shield Plans has costs that are lower than their smaller peers. After eliminating the effects of product mix differences, they are lower by about 8%, and by 13% after adjusting all expenses for local cost of living differences. However, the cluster of Account and Membership Administration costs are lower by about 1%, and lower by 6% after the effect of local costs of living is taken into account. We do not take this finding as assurance that mere scale provides an overwhelming competitive advantage.

Background

Economies of scale interests both policy makers and health plans for similar reasons. From a policy perspective, if economies of scale are overwhelming then from a consumer standpoint, perhaps the cost advantages outweigh the disadvantages from the loss of choice. In the case of Medicare, the Economic Policy Institute believes they are important but the Manhattan Institute for Policy Research does not.

From the perspective of the health plans themselves, if scale is significant then achieving scale is a strategy that health plans should emulate. The presence of significant economies of scale implies that new entrants assume high risk, while consolidation should drive down costs leading to a hard-to-surmount competitive advantage.

We have long been interested in this topic. As we have done for many years, in September, we will publish our economies of scale study in *Navigator's* sister publication, *PULSE*. More informally, the cost attributes for the much smaller Independent/Provider-Sponsored health plans summarized in the late July edition of *Navigator* can be compared with the Blue Cross Blue Shield edition of early July.

Figure 1. Sherlock Benchmark Summary
Larger Plans Functional Area Cluster Costs Relative to Smaller Plans, 2013 Data
Percent Differences in PMPM Costs

Functional Area	As Reported, Larger Mix	As Reported, Smaller Mix	Wage Adjusted, Larger Mix	Wage Adjusted, Smaller Mix
Sales and Marketing	-10.0%	-6.0%	-14.9%	-11.2%
Provider and Medical Management	-16.9%	-20.3%	-21.5%	-24.7%
Account and Membership Administration	-1.7%	-0.4%	-7.1%	-5.9%
Corporate Services	-10.2%	-9.3%	-15.1%	-14.3%
Total Expenses	-8.5%	-8.3%	-13.5%	-13.4%

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The focus of this analysis is what is sometimes called technical economies of scale. These stem from the intrinsic nature of the activities of health plans in ways analogous to a large cargo ship being more efficient than a smaller one. Conversely, we are ignoring other sources of scale such as purchasing economies and the sorts of scale diseconomies that health plans rapidly outgrow since all the plans in this study exceed 100,000 members.

This report will focus on the six largest Blue Cross Blue Shield Plans in our universe. We will call them Larger Plans and will sometimes compare these plans with the smaller 13 in the Blue Cross Blue Shield Plan universe (Smaller Plans). The Smaller Plans have an average membership of 827,000. The Larger Plans have an average membership of more than 3.0 million or 3.7 times larger.

What are Economies of Scale?

We consider economies of scale evident if unit costs are lower in larger organizations than their smaller peers. Unit costs in health plans are the costs to serve members, or costs per member per month. We segmented the 19 Plans into two groups, Larger Plans and Smaller Plans. The results are summarized in Figure 1 and the values are the percent that the Larger Plans differ from Smaller Plans. Note that costs are lower in every comparison of total and cluster costs. However the differences are least pronounced in the Account and Membership Administration cluster.

Differences After the Elimination of Product Mix Effects

In addressing scale, this analysis endeavors to overcome the complexities of differences in product mix, differences in segments served and differences costs of living. As shown in Figures 5 and 6, and in similar figures in the two July *Plan Management Navigators*, cost differences are quite pronounced between the products. This is reflected in combined costs of the reporting Plans. The Smaller Plans are less committed to ASO/ASC products, which have low marketing costs, and also to Medicare, which has higher costs in all functions. To eliminate the effect of the cost differences, the first two columns in Figure 1 reflect reweighting of the costs of the two groups of Plans so that they share a common business mix.

The first column shows that, when both sets of Plans costs are weighted by the product mix offered by the Larger Plans, administrative costs are lower by 8.5% overall. They are especially lower in Provider and Medical Management, at 16.9% lower. They are also lower in Sales and Marketing and in Corporate Services. The functions in Corporate Services, such as Corporate Executive and Governance and Finance and Accounting are often scalable.

Differences related to the distribution system for Blue Cross Blue Shield Plans may have affected Sales and Marketing costs. The average group size for

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commercial accounts in Larger plans was 84 members compared with 67 for all Blue Cross Blue Shield Plans. Individual membership for people not eligible for Medicare and Medicaid, who are intrinsically more expensive to market to, comprised 7.8% of the total for all Plans but 5.4% for Larger Plans.

Note however that Account and Membership Administration costs are lower by only 1.7%. This modest variance is a pattern that is evident in all comparisons in this chart. It is notable because this cluster contains a plurality of the total expenses and is comprised of the central insurance activities of Enrollment/Membership/Billing, Customer Services, Claim and Encounter Capture and Adjudication and Information Systems. (All clusters are defined in Appendix C.)

Another differentiating factor between health plans can be the segments that they offer to, such as individual, small group, large group and so forth. While desirable, not all Plans provide this segmentation. However, the mix of ASO/ASC versus insured captures some effects of this. Only large groups can self-insure and those who are able to often elect to since self-insurance provides cost and benefit design advantages.

The second column is similar to the first except that all product values in both the Smaller Plans and Larger Plans are weighted by the product mix of the Smaller Plan universe. At 8.3% lower, the cost advantage overall is similar to what we calculated when using the Larger Plan universe mix. The order of the cost advantages is the same as under the Larger Plan mix weighting. Provider and Medical Management has the greatest cost advantage while the advantage in Account and Membership Administration is the least at only 0.4%.

Differences After Elimination of Both Product Mix and Wage Effects

The next two columns reflect, in addition to the mix adjustments, an additional adjustment to eliminate differences due to costs of living. For the most part, Larger Blue Cross Blue Shield Plans operate in large states with large metropolitan areas. Since large metro areas tend to have high labor costs, larger health plans costs could be higher than smaller ones based solely on geographic differences.

The most appropriate wage index we found was that employed by the Centers for Medicare and Medicaid Services for the calculation of hospital payments in 443 urban areas under Medicare. It is developed for its use by the Bureau of Labor Statistics. Overall, Blue Cross Blue Shield Plans have lower costs than average due to which Plans are in this universe. Thus, WellPoint (Anthem) is not included in our universe so metro areas like New York (index of 1.2291) and Los Angeles (index of 1.2318) are excluded. The average Blue Cross Blue Shield value is 0.9317 compared to an unweighted average CMS index of 0.9559.

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We calculated each Plan's index based on the city where it is headquartered. The Larger Plans indeed do have a more expensive index average of 0.9702 versus the Smaller Plans which average 0.9317. We applied this index to each of the expenses for the Smaller and Larger Plans. In effect, we are assuming that each Plan is performing all services and incurring all costs at the city where it is headquartered.

This may overstate the differences in underlying costs in two ways. First, it applies an adjustment to all costs whereas only about one-half of health plan costs are labor. As CMS notes, "The costs of some inputs used in the production of health care vary geographically, whereas others do not. The price of the medical equipment that hospitals and physicians use is generally the same across all areas, and CMS does not adjust hospital or physician payment for any geographic differences in equipment costs."

The second reason has to do with where the administrative activities are performed. Health plan activities do not require face-to-face interaction between the plans and their customers or vendors. Simply because a health plan is headquartered in, say, Chicago (1.0451) doesn't mean it can't process claims and field customer services inquiries in Peoria (0.8836) or Springfield (0.9072). Moreover, since 12.5% of all Blue Cross Blue Shield activities are outsourced, and 31.9% of the information systems activities are outsourced, costs outside of the Plan's state, places like Bangalore or Mumbai, could be part of their cost mix.

With this wage difference considered, the differences are larger. Employing the product mix of the Larger Plans, the wage-adjusted differences increase from 8.5% lower to 13.5% lower. Once again, Account and Membership Administration differences are relatively small at 7.1% while Provider and Medical Management is high at 21.5%. The Corporate Cluster cost differences expand from 10.2% to 15.1%, while the Sales and Marketing difference increases from 10.0% to 14.9%.

Using the Smaller Plan product mix, the overall wage adjusted difference increases from 8.3% to 13.4%. Notably, the Account and Membership Administration difference remained the most modest, at 5.9%.

Scale Conclusions

The Larger Blue Cross Blue Shield Plans tend to have lower costs than their Smaller peers. As an illustration, a 13.5% administrative cost advantage on $30.53 PMPM costs typical of Blue Cross Blue Shield Plans, this equates to $4.12 PMPM. This is 1.2% of the median Premium and Equivalent value for Blue Cross Blue Shield Plans of $340.68, a modest advantage from a market perspective.

Since Blue Cross Blue Shield Plans on average reported operating *losses*, the cost advantage is far more important in its potential impact on profitability.

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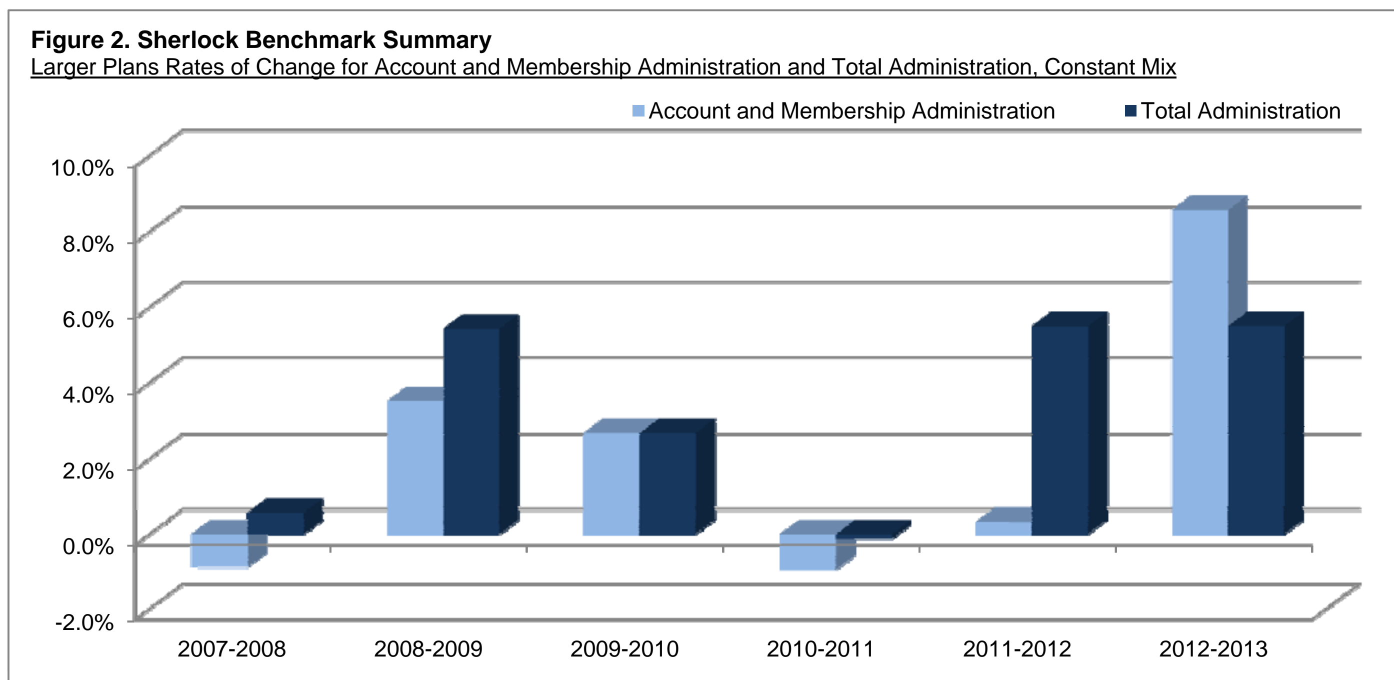
(Larger Plans operated more or less at breakeven in 2013.) Even in periods of normal levels of operating profitability, the cost advantage of Larger Plans is more important from a corporate finance perspective than a market perspective.

It is important to note that scale is not certain to lead to lower costs. In our sister newsletter *PULSE,* we will publish the results of our scale study showing the relationships between scale and costs. Notably, statistically significant relationships have been rare in the many years we have been performing similar studies. Perhaps 10-20% of administrative expenses show a robust relationship between scale and costs.

The modest degree of cost advantage for the Larger Plans in the Account and Membership Administration function should be encouraging to smaller participants. Remember, the Larger Plans are nearly 3.7 times the size of the Smaller Plans. Yet they are at most only 7.1% lower in this central set of activities. While the cost advantage exists, this does not appear to be an insurmountable barrier to success especially for organizations that enjoy strong brand recognition or have affiliates with the capacity to provide other health plan functions. Underscoring this is the fact that, despite their size, the lowest cost Plan and those ranked 4th through 7th lowest in Total Costs were all Smaller Plans.

The Results Themselves

Figures 2-7 are similar to the charts for Blue Cross Blue Shield Plans in the July 2014 *Plan Management Navigator*. Since the results are also similar, the figures will speak for themselves, except for the bullet points that follow.



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- The most notable difference between the Figure 2 trends and the comparable chart for Blue Cross Blue Shield Plans is the relative sharpness of the increase in Account and Membership Administration. While the cost increase in that function was similar to the Blues as a whole, the change in year-over-year trend was greater.
- Overall growth in cluster costs was lower than for Blues as a whole, as shown in Figure 3. This seems primarily due to lower Sales and Marketing growth followed by lower Provider and Medical Management growth. By contrast, Account and Membership administration cost growth was higher for the Larger Plans.
- Sales and Marketing Costs were lower for the Larger Plans, as shown in Figure 4. By contrast, Account and Membership Administration costs were higher. It is important to recognize that the product mixes were different, for instance the Larger Plans had greater exposure to Medicare Advantage.

Figure 3. Sherlock Benchmark Summary

Larger Plans Median Changes in Per Member Per Month Expenses

	2012 Data		2013 Data	
Functional Area	**As Reported**	**Constant Mix**	**As Reported**	**Constant Mix**
Sales and Marketing	9.5%	11.0%	6.9%	6.6%
Provider and Medical Management	9.2%	9.7%	3.4%	3.1%
Account and Membership Administration	0.1%	0.3%	9.4%	8.6%
Corporate Services	0.1%	1.1%	3.3%	4.5%
Total Expenses	5.3%	5.5%	6.3%	5.5%

Figure 4. Sherlock Benchmark Summary

Larger Plans Costs by Functional Area Cluster, 2013 Data

Per Member Per Month

Functional Area	25th Percentile	75th Percentile	Median	Coefficient of Variation
Sales and Marketing	$7.28	$8.58	$7.57	42%
Provider and Medical Management	3.65	4.04	3.98	18%
Account and Membership Administration	12.41	15.39	14.44	24%
Corporate Services	4.32	4.67	4.49	18%
Total Expenses	$28.17	$33.84	$31.39	23%

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- Figure 5 shows the costs by product. A comparison between this chart and the comparable one for all of the Blue Cross Blue Shield Plans shows that, in the cornerstone Indemnity and PPO products, Larger Plan costs are lower. They are also lower in FEP, Medicare Advantage and Medicare Supplemental. This reflects in part the scale advantages discussed earlier.

- In five of the six Commercial Products shown in Figure 6, the administrative expense to premium ratio is lower than for the Blues as a whole. All other products that both universes offer are lower for the Larger Plans compared to all Blue Cross Blue Shield Plans.

- Figure 7 shows the combined advantages of Larger Plans' scale and their emphasis on products that tend to have low administrative costs when calculated as a percent of premium basis. Examples of the latter include heavier exposure to Medicare and ASO/ASC products. Overall administrative costs are lower, at 8.2% of premiums and equivalents, as compared with 8.7%.

Figure 5. Sherlock Benchmark Summary
Larger Plans Costs by Product, 2013 Data
Per Member Per Month

Product	25th Percentile	75th Percentile	Median	Coefficient of Variation
Commercial HMO				
Insured	$37.76	$45.74	$42.88	30%
ASO / ASC	$21.14	$25.91	$22.39	21%
Commercial POS				
Insured	$38.10	$38.71	$38.41	2%
ASO / ASC	$20.86	$26.45	$23.65	33%
Indemnity & PPO				
Insured	$23.00	$49.35	$38.65	44%
ASO / ASC	$22.26	$25.00	$23.80	17%
FEP	$11.32	$18.92	$16.12	40%
Medicare Advantage	$67.79	$76.34	$71.03	32%
Medicare Supplemental	$16.74	$30.57	$23.34	46%
Comprehensive Total	$28.17	$33.84	$31.39	23%
Stand-Alone Medicare Part D	$13.25	$20.52	$17.09	32%
Stand Alone Dental	$2.94	$8.31	$3.01	95%

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Figure 6. Sherlock Benchmark Summary
Larger Plans Costs by Product, 2013 Data
Percent of Premium Equivalents

Product	25th Percentile	75th Percentile	Median	Coefficient of Variation
Commercial HMO				
Insured	8.6%	10.7%	10.1%	29%
ASO / ASC	6.9%	7.6%	7.0%	11%
Commercial POS				
Insured	14.4%	29.4%	21.9%	97%
ASO / ASC	3.7%	5.5%	4.6%	53%
Indemnity & PPO				
Insured	8.3%	14.9%	11.1%	36%
ASO / ASC	6.3%	8.0%	6.6%	19%
FEP	3.2%	4.3%	3.9%	42%
Medicare Advantage	7.1%	10.5%	7.4%	41%
Medicare Supplemental	10.9%	17.1%	15.1%	34%
Comprehensive Total	7.1%	9.5%	8.2%	22%
Stand-Alone Medicare Part D	9.4%	14.0%	11.7%	52%
Stand Alone Dental	20.1%	26.7%	22.8%	28%

Figure 7. Sherlock Benchmark Summary
Larger Plans Costs by Functional Area Cluster, 2013 Data
Percent of Premium Equivalents

Functional Area	25th Percentile	75th Percentile	Median	Coefficient of Variation
Sales and Marketing	1.2%	2.4%	2.0%	54%
Provider and Medical Management	1.0%	1.1%	1.1%	12%
Account and Membership Administration	3.1%	4.5%	3.9%	22%
Corporate Services	1.1%	1.6%	1.3%	24%
Total Expenses	7.1%	9.5%	8.2%	22%

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About the Sherlock Benchmarks and the Blue Cross Blue Shield Universe

These results are excerpted from the Larger Plan edition of the 2014 *Sherlock Expense Evaluation Report*. They are based on our detailed surveys of 2013 operating parameters of six of the largest Plans in our universe of Blue Cross Blue Shield Plans. Accordingly, much more information is available by licensing the Sherlock Benchmarks. We hope you will not hesitate to contact us (sherlock@sherlockco.com) if you are interested in licensing these materials or if we can answer any further questions.

Including all of our benchmarks over the past 17 years, those published in 2014 will comprise the cumulative experience of approximately 660 health plan years. We also have universes of Independent / Provider-Sponsored Plans, Blue Cross Blue Shield Plans, Medicare Advantage Plans and Medicaid Plans. While the Blue Cross Blue Shield, Independent/Provider-Sponsored and Larger Plans are already in print, we will be reporting on the results of the other universes in the months that follow.

The Larger Plan universe comprises the largest of the Blue Cross Blue Shield Plans. Because they serve more than 18 million people, they comprise more than 60% of the membership of our overall Blue Cross Blue Shield universe.

Approximately 15 million of the members served by the Larger Plans, or 82.8%, were commercial. Of the commercial members, 62.2% were served under some form of self-insurance arrangement.

Medicare Advantage, offered by 5 of the 6 Plans, comprised 4.0% of their total comprehensive membership. In two of those Plans, Medicare Advantage comprised one-third or more their total revenues, and in 4 cases, their Medicare Advantage revenues exceeded their historically important Medicare Supplemental revenues. Combining all of this universe's revenues, those from Medicare Advantage are 4.6 times larger than Medicare Supplemental.

The Blue Cross Blue Shield universe itself is comprised of approximately one-half of all primary licensees of U.S. Blue Cross Blue Shield Plans. They represent approximately 60% of the revenues of single state Blue Cross Blue Shield Plans.

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Appendix A. Sherlock Benchmark Summary

Larger Plans Costs by Functional Area Cluster, 2012 Data

Per Member Per Month

Functional Area	25th Percentile	75th Percentile	Median	Coefficient of Variation
Sales and Marketing	$6.70	$8.39	$7.01	40%
Provider and Medical Management	3.57	4.69	4.11	26%
Account and Membership Administration	11.81	14.02	13.32	20%
Corporate Services	4.29	6.20	5.48	27%
Total Expenses	$27.32	$32.64	$30.76	22%

Appendix B. Sherlock Benchmark Summary

Larger Plans Costs by Functional Area Cluster, 2012 Data

Percent of Premium Equivalents

Functional Area	25th Percentile	75th Percentile	Median	Coefficient of Variation
Sales and Marketing	1.8%	2.4%	2.2%	40%
Provider and Medical Management	1.0%	1.3%	1.1%	27%
Account and Membership Administration	3.1%	4.2%	3.8%	20%
Corporate Services	1.3%	1.8%	1.6%	30%
Total Expenses	7.4%	10.0%	8.2%	22%

Appendix C. Sherlock Benchmark Summary

Functions Included in Each Administrative Expense Cluster

Sales & Marketing
- Rating and Underwriting
- Marketing
- Sales
- Commissions (external)
- Advertising and Promotion

Provider & Medical Management
- Provider Network Management and Services
- Medical Management / Quality Assurance / Wellness

Account & Membership Administration
- Enrollment / Membership / Billing
- Customer Services
- Claim and Encounter Capture and Adjudication
- Total Information System Expenditures (as expensed)

Corporate Services
- Finance and Accounting
- Actuarial
- Corporate Services Function
- Corporate Executive and Governance
- Association Dues and License/Filing Fees

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