Plan Management Navigator
Analytics for Health Plan Administration

Healthcare Analysts

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Why Scale Effects are Modest for Medicaid Plans

Background: This is the fourth of a series of Plan Management Navigators *focused on Medicaid and Medicare plans. They expand upon presentations made before Independent Provider-Sponsored and Blue Cross Blue Cross Plans in San Antonio in March in connection with the 18th Annual Sherlock Benchmarking study for health plans. The regression analysis based presentations were intended to draw comments from the participants on the scope of metrics to be included in the Benchmarking Study, and to sharpen the definitions of those metrics.*

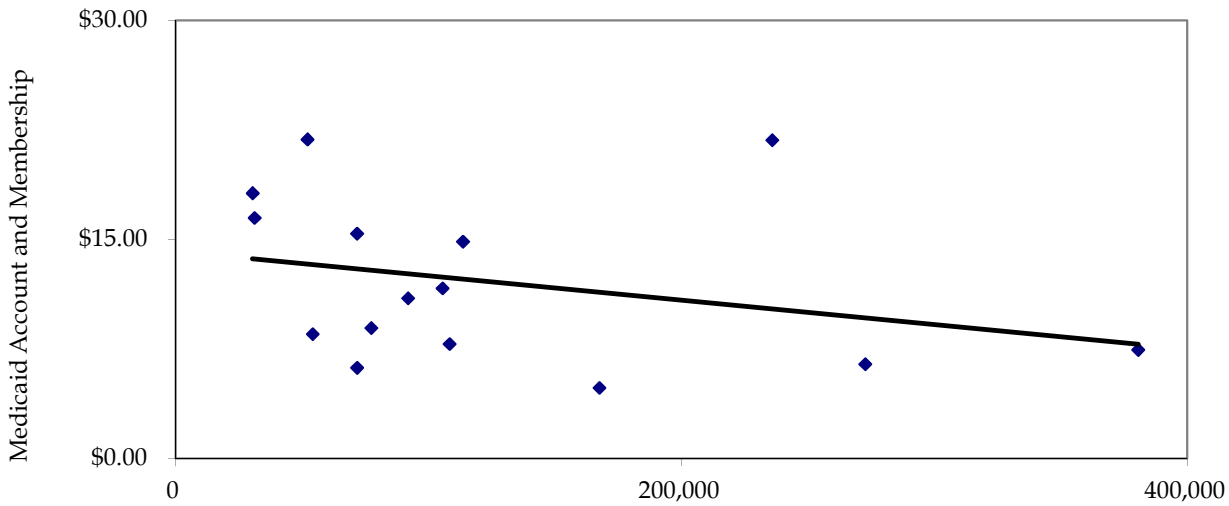
Whether health plan managers' focus is financial or operational, they are often surprised when we report that overall economies of scale are modest for health plan administrative costs. After all, what can the marginal cost of an electronically-processed claim or a customer service inquiry possibly be? And aren't other industries subject to economies of scale?

Figure 1 shows the modest effect of economies of scale in Medicaid Account and Membership Administration. The regression with an R^2 of 8.7% explains only 8.7% of the differences between the points. We normally don't consider P-Value greater than 10% to be significant and this relationship, with a P-Value of 28.6% is well above that level. Scale's role overall, at least in the functional areas of Enrollment, Customer Services, Claims and Information Systems, is apparently modest.

A closer look at individual cost drivers explains why managerial decisions rather than scale better explains Medicaid health performance. To sort through these drivers, it is helpful to think of administrative costs as a product of staffing ratios and total costs, expressed per FTE. In turn, those per FTE costs can be understood as the sum of labor and non-labor components.

Figure 1. Plan Management Navigator
Medicaid Members and Medicaid Account and Membership Administration
Dollars in Per Member Per Month

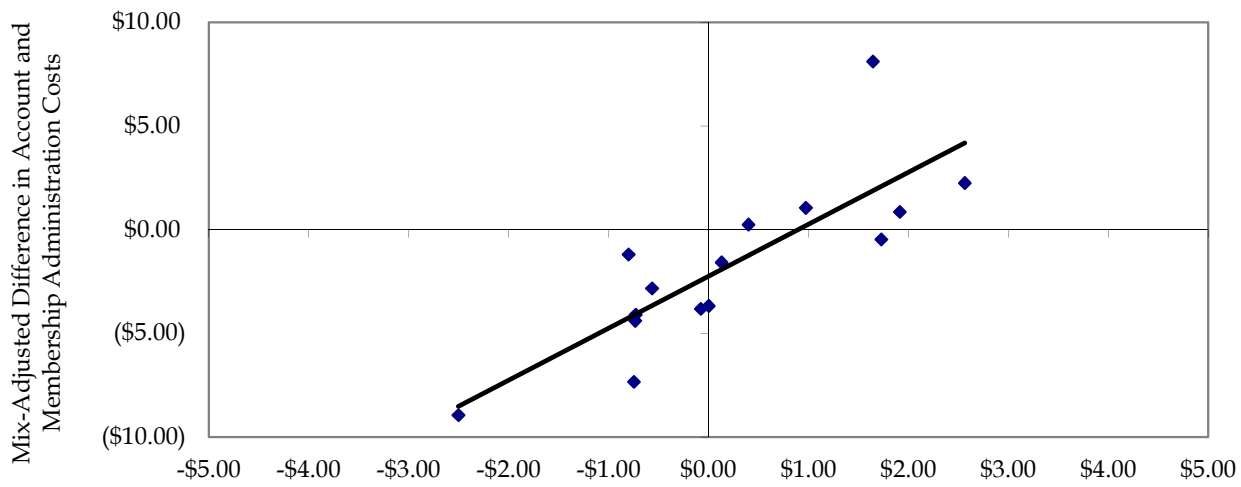
R^2 = 8.7%
P-Value = 28.6%



For this cluster of functions, staffing costs comprise approximately 57% of the costs for our universe of IPS plans. So staffing costs would be expected to be an important driver of expenses. From Figure 2, it is clear that differences in staffing costs explain much of the differences in costs between the plans. An increase of $1.00 in internal staffing costs is associated with a $2.51 increase in total costs for the Account and Membership Administration cluster, irrespective of size. The P-Value of 0.02% indicates a very low probability that this relationship can be explained by chance and the R^2 of 66.6% suggests that that the line best fitting the per member staffing costs and the per member total costs explains 66.6% of the difference between the points.

The importance of staffing costs sheds light on economies of scale. After all, while capital-intensive enterprises like hospitals, steel mills and cargo ships famously exhibit economies of scale, costs in health plans can over time be adjusted for volume by adding or subtracting staff. And the turnover among staff facilitates this – among customer service reps in the typically stable Blue Cross Blue Shield Plan, approximately 40% have fewer than five year's tenure, and 20% have less than one year's. By the way, in Figures 2-5, the points represent costs expressed as differences from the mean values for their universes. Crucially, each of the mean values to which each plan is compared is reweighted to match the product mix of each plan. In other words, the differences shown in the graph eliminate the effects of product mix differences, which is why we think that it is stronger analytically than the raw values for these expenses.

Figure 2. Plan Management Navigator
Medicaid Staffing Costs and Combined Costs for Account and Membership Administration
Dollars in Per Member Per Month



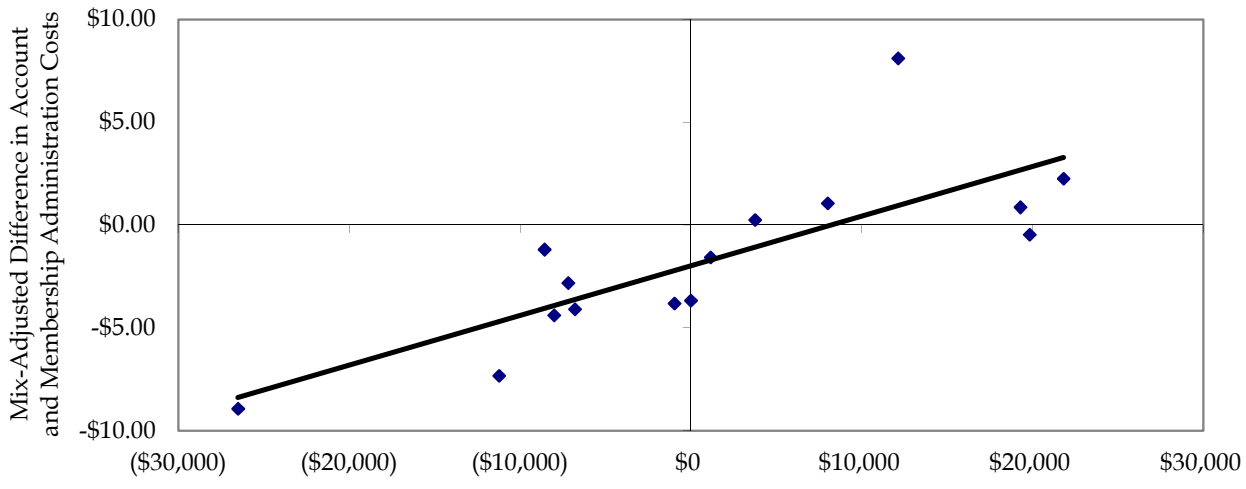
We can drill further into staffing costs because they are the product of the staffing ratio and the total compensation per FTE. As shown in Figure 3, per FTE compensation levels are an important factor in the costs of the Account and Membership Administration. With a P-Value of 0.1%, there is only a small probability that the relationship summarized by the regression line could occur by chance. The regression line explains 61.6% of the relationship between compensation and Medicaid Account and Membership Administration costs. Put concretely, for every $1,000 increase in the Account and Membership Administration per-FTE staffing costs, Medicaid PMPM costs increase by $0.24.

The staffing ratio is a second crucial cost driver. In fact, it is frequently a central focus for managers of health plans. It captures skill of the management team at assuring that staff closely matches the requirements of the population that it serves, something that the normal rates of employee tenure facilitates. Staffing ratios also bear on productivity in that the lower the ratio the higher the productivity must be.

The staffing ratio has a very strong relationship to Account and Membership Administration among Medicaid plans, as seen in Figure 4, on page 4. The P-Value of 0.04% suggests that there is very little chance that this relationship results from chance. The R^2 reflects that the staffing ratio explains 63.8% of the differences between the Account and Membership Administration costs. For every FTE per 10,000 members, PMPM costs increase by $1.33.

Figure 3. Plan Management Navigator
Medicaid Staffing Costs per FTE and Combined Costs for Account and Membership Administration
Dollars are Annual Per FTE Compensation or Per Member Per Month

R^2 = 61.6%
P-Value = 0.1%

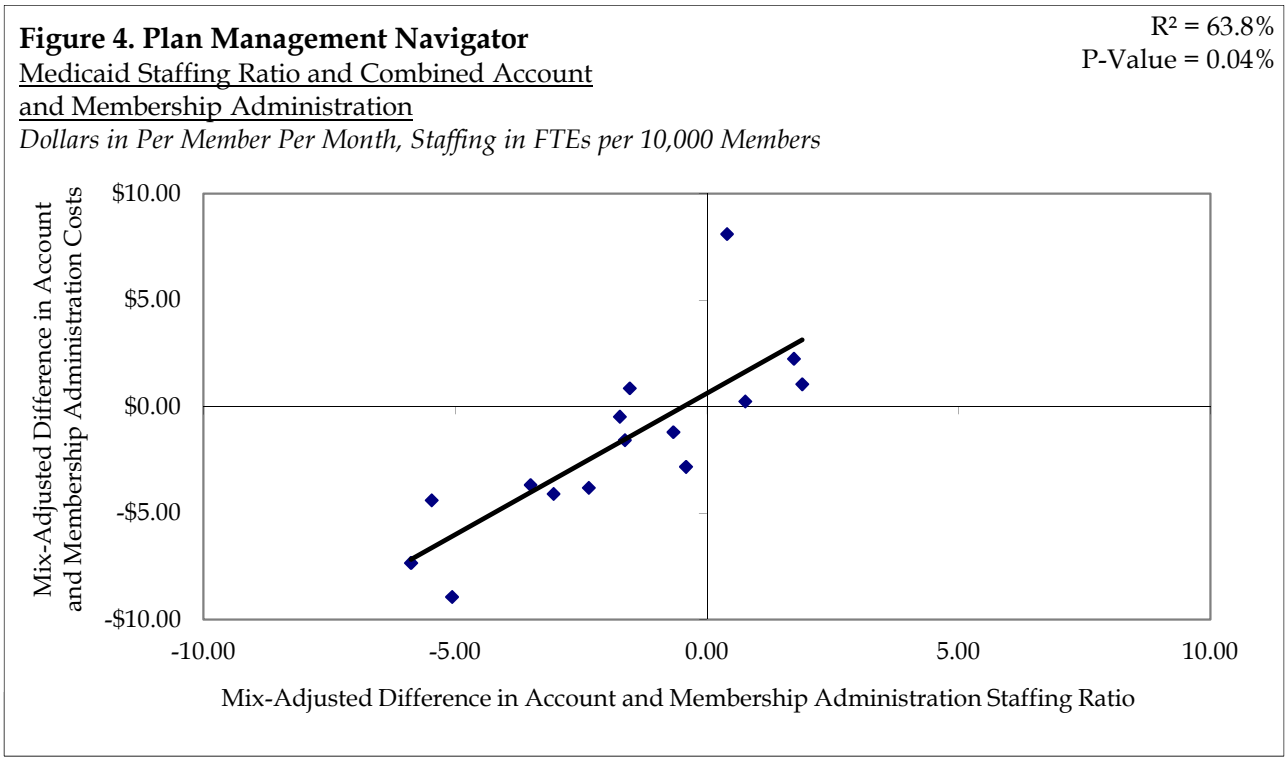


The final factor is the non-labor costs per FTE. As shown in Figure 5 (on page 5), non-labor costs for health plans track poorly with overall Account and Membership Administration. The downward sloping line suggests the possibility of expenses in non-labor yielding lower overall costs. But the relationship has no explanatory power with an R^2 of 1.0 and P-Value of 73.3%. (We omitted one outlier from the set.) We also measured the relationship between staffing costs and non-labor costs and the results were similarly weak.

It is beyond the scope of this analysis to statistically explain the absence of a relationship, and we offer this last analysis mainly for completeness, referencing the cost model we offered on the first page. We speculate that measurement of non-labor could reflect different operational strategies, in some cases with non-labor as complementary to staffing costs and in other cases, substitutes. For instance, some organizations may add cubicles and office equipment with staff where others may substitute Information Systems for staffing.

In conclusion, economies of scale are modest for Medicaid health plans. Instead, the importance of staffing costs as a driver of expenses is consistent with the notion that, as health plans grow, they add costs more or less proportionately. Happily, this implies that superior performance is available to all plans, regardless of their size.

Figure 4. Plan Management Navigator
Medicaid Staffing Ratio and Combined Account and Membership Administration
Dollars in Per Member Per Month, Staffing in FTEs per 10,000 Members



The cost drivers within management's direct control include staffing costs per FTE (compensation levels) and staffing ratios. Irrespective of size, low costs stemming from these two factors lowers the costs of operations. The efficacy of managing non-labor costs to achieve lower overall costs is much less clear, however.

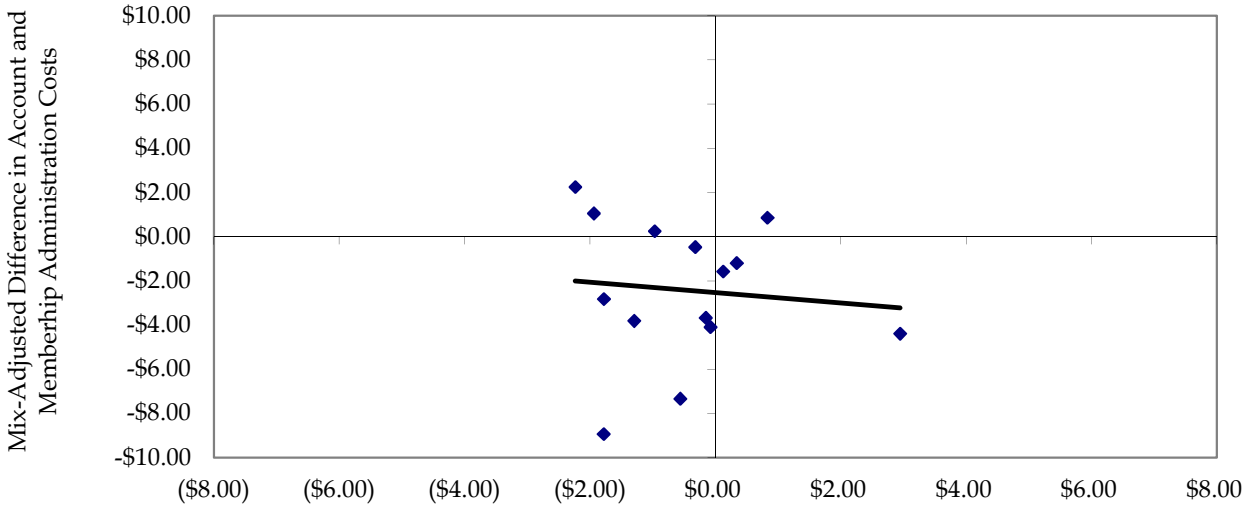
In closing, please note that this analysis focuses on the Account and Membership Administration cluster. It is the largest cluster of expenses and comprises the core operational activities of health plans. But we do not claim that these results are always similar in other expenses. For instance, we believe that the Corporate Services cluster would likely exhibit greater scalability. We know, for instance, that Finance and Accounting and Corporate Executive and Governance are more subject to economies of scale. This observable scalability would likely be especially pronounced in small start-ups. This analysis' other qualification is the presence of differences in the universes for which mix adjustments are calculated. We did this for simplicity and do not believe the effect to be significant.

Figure 5. Plan Management Navigator

R^2 = 1.0%
P-Value = 73.3%

Medicaid Account and Membership Non-Labor and Total Account and Membership Costs

Dollars in Per Member Per Month



Sherlock Benchmarks. The Sherlock Benchmarks are considered the "gold standard" for management of health plan administrative expenses. Health plans serving nearly 110 million people are users of the 2014 editions. Most Blue Cross Blue Shield Plans use the benchmarking studies and nearly one-half participate. The 23 participating plans in the Independent /Provider-Sponsored universe serve approximately 10 million members. We circulated the Blue and IPS surveys to their respective universes in late March.

Medicare and Medicaid surveys will begin later this spring. Because of the time required by finance and accounting personnel to prepare Medicare Advantage bids, we will distribute our Medicaid and Medicare benchmarking surveys in early June. *We are enthusiastically welcoming participants for these universes.* All functional area costs are segmented by product so it is noteworthy that the 16 so-far committed plans offering Medicaid recruited in other universes serve approximately 1.9 million Medicaid members. Similarly, the 29 so-far committed plans offering Medicare serve approximately 2.2 million Medicare Advantage members. The results for these plans will be included in the 2015 Sherlock Benchmarks.

Please contact Douglas B. Sherlock, CFA if you are interested in considering participation. He can be reached at sherlock@sherlockco.com.