Plan Management Navigator
Analytics for Health Plan Administration

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Please see invitation to participate in the 2017 edition of the Sherlock Benchmarks on Page 4.

Resolving the Paradox of Scale Among Blue Cross Blue Shield Plans

There is a common intuition that there should be economies of scale in the administration of health insurance. After all, economies of scale exist in other business environments. We recently had the opportunity to test this intuition using the results for the Blue Cross Blue Shield Plans that participated in our Sherlock Benchmarking study of 2016. This *Navigator* describes what we found.

First, only a minority of functions are subject to economies of scale to a statistically significant degree. These thirteen functions and sub-functions collectively compose only 16.1% of total administrative costs. Only four of them are functions. (We classify health plan administrative costs into 16 functional areas, and almost sixty if sub-functions are included. An example of a function is Information Systems. A sub-function example is Information Systems Application Acquisition and Development.)

Even in cases in which economies of scale exist, their role is modest. For example, when a health plan doubles in size, its PMPM costs for functions subject to economies of scale fall to 81.2% of the pre-doubling value. In other words, this implies that these few functions have costs that are 62% variable and 38% fixed, on a weighted basis. A doubling in size leads to only a 3.1% reduction in PMPM costs.

Second, and perhaps contributing to the illusion of economies of scale, staffing economies of scale are more prominent. The percent of staff subject to economies of scale is 36.2%. Statistically significant relationships are found in 16 functions and sub-functions, five of which are functions. Their slope is also gradual at 83.1%, meaning that only 34% of the costs are fixed while 66% were variable. A doubling in size leads to a 6.5% reduction in staffing ratios. This is greater than scale's effect on *costs* but still relatively modest.

While the modest effect of economies of scale is notable, it is important to observe that every function subject to cost economies of scale also is subject to staffing economies of scale. In other words, staffing ratio economies of scale are a necessary condition for realizing economies of scale in costs. They are not, however, enough to create large and noticeable total cost economies of scale.

Paradox

So why aren't superior staffing ratios among larger Plans enough to create large economies of scale for total administrative costs?

The first answer is that Staffing Costs per FTE nearly always displays *diseconomies* of scale. That is, the larger the Plan, the higher the compensation per employee. (Many of these functions displayed relationships that were not statistically significant, but eight of the functions and sub-functions were. Two functions were significant for either Combined or Internal Staffing costs per FTE.)

The statistically significant relationships collectively compose 12.0% of the total FTEs. A doubling of the size of the Plan would result in Staffing Costs per FTE of 108.9% of the pre-doubling value for the staff in these functions and sub-functions. To understand how this impacts overall costs consider that on average about half of a Plan's costs are staffing, and the total dollar amount of staffing costs is the product of its staffing ratio and staffing costs per FTE. This means that half of any potential scale effect on total costs resulting from staffing levels would be muted by the countervailing tendency toward higher levels of compensation.

Possible Explanations

We don't know for certain why scale in health plans tends to produce both lower staffing ratios and higher staffing costs per FTE, but we have a couple of theories. One is that larger Plans may be in high cost of living areas. Another is that larger Plans may hire people with more expensive skills.

The first theory has appeal. After all, a larger Plan *could* be large in part because of the market that it serves. Many of the urban centers of large markets are high-cost areas. Support for this theory exists. There is a significant relationship between average staffing costs per FTE and their associated wage index as developed by the Centers for Medicare and Medicaid Services. High cost of living, however, explains only about 35% of the difference in per FTE costs between the Plans.

In light of this, we directly analyzed whether large Plans tended to be in high wage index areas. There was no apparent trend, and what trend existed was not remotely statistically significant. We can rule out that large Plans' high staffing costs per FTE stem from being in high population, high cost of living areas.

Based on the absence of a cost of living effect, we think it's possible that the larger Plans have a different *mix* of staff than do the smaller plans. Accordingly, the fewer staff in larger Plans would be more likely to possess skills that would command higher compensation. For example, larger organizations may be more automated. Accordingly, any manual process that remains would require higher level of expertise.

We have more work to do on this topic, but we can draw the following conclusions:

1. Relatively few functions are subject to economies of scale.

2. Economies of scale are more important in staffing ratios than total administrative costs.

3. If a function exhibits economies of scale in total costs, it always has economies of scale in staffing ratios. This means that staffing economies of scale are necessary, but not sufficient to achieve large and noticeable cost economies of scale.

4. Staffing costs per FTE overwhelmingly exhibit *diseconomies* of scale. This mutes any economies of scale in costs that would arise from the economies of scale in staffing levels.

5. One plausible reason for the higher per FTE costs in larger, low-staff environments is the skill set of the FTEs, especially since cost of living is apparently not plausible.

This analysis was adapted from a presentation to Blue Cross Blue Shield Executives at the Kick-off meeting for the 19th Annual Sherlock Benchmarking Study for Blue Cross Blue Shield Plans in Nashville, February 23, 2017.

Would Your Health Plan Like to Participate in the 2017 Sherlock Benchmarking Study?

The highly respected, well-populated Sherlock Benchmarks provide an unbiased ranking and helps prioritize cost management activities to have the greatest impact on improving your health plan's overall operating performance. The combination of the current environment of the Affordable Care Act along with the distinct possibility of changes in law and regulation may make participation by your health plan an appropriate and necessary response to the strong incentives to cost efficiency.

Many of your peers have concluded that participation is timely. The overwhelming proportion of health plans participating last year are participating this year, and we have added several plans. Please see the Selected Characteristics chart for what last year's participation looked like.

While the calendar varies by universe, broadly speaking we will distribute the survey forms in March, collect the completed surveys in May and publish beginning in late June or early July. Participation entails notable efforts on your part since useful outputs require relatively granular inputs. However, the cost is relatively modest.

Please reach out to Douglas Sherlock at sherlock@sherlockco.com or 215-628-2289 if you are interested. You will be among good company.