Plan Management Navigator
Analytics for Health Plan Administration June 2010

SEER Participation as Indicator of Administrative Cost Focus

Weak economic trends and health care reform have focused managements' attention on administrative cost management. One indicator of this is the increase in new participation in our benchmarks, as shown in the Figure 1. We estimate that the organizations who are participating in our benchmarking study serve more than 45 million Americans, up from 39 million in our last survey.

Participation reflects substantial commitment by participants. It entails that organizations commit efforts to supply accurate, granular information so that the resulting report can be relied on for improving processes. Plus, there is a fee involved. On the other hand, since the participation fee amounts to five weeks compensation for one FTE, and even a health plan serving 100,000 members is likely to have 200 employees, participation is not difficult to cost-justify.

While occasionally firms that commit drop out, the indications are for a significant increase in participation. While the deadline has passed for data submission to the Independent / Provider-Sponsored and the Blue Cross Blue Shield universes, *if your organization is Medicare focused, Medicaid focused or a TPA, you may submit your survey as late as the third week in July. Let us know if your organization would like to participate.* Because of the efforts involved we would encourage you to let us know soon.

Figure 1. Plan Management
SEER Participation as Indicator of Administrative Cost Focus

	New Participants	*Total Participants*	*Survey Distribution*	*Benchmark Released Beginning*
Blue Cross and Blue Shield	3	24	March 2010	July 2010
Larger Plans	1	6	March 2010	July 2010
Independent / Provider-Sponsored	5	17	March 2010	July 2010
Medicare	1	10	June 2010	August 2010
Medicaid	7	11	June 2010	August 2010
TPA *	8	8	June 2010	August 2010

* This universe is new.

Please see *Dashboard* Summary on Page 6.

Navigator Content Notes

As you may have noticed, the past several issues of *Plan Management Navigator* have focused on operational issues affecting health plans doing business with public benefit programs. While health care reform will affect commercial health plans in important ways, it's most immediate and direct impacts will be on government programs such as Medicare and Medicaid. Both will face pressures on top lines, which will require more aggressive management of administrative expenses of health plans serving those markets.

However, beginning in July, we will begin to publish summary results for this year's editions of our benchmarks. The Blue Cross Blue Shield, Larger Plan and Independent / Provider – Sponsored universes will likely be published in July and August, with Medicare, Medicaid and TPA summaries to be published in September and October. We will host web conferences on these to discuss the results.

Drivers of Customer Services Costs for Medicare and Medicaid Plans

As Medicare and Medicaid plans endeavor to manage their administrative costs in an increasingly challenging operating environment, a number of functional areas will be a central focus of the management team, including claims, information systems, and customer services. In 2009, we surveyed 20 health plans whose focus was on Medicare or Medicaid. This was part of an enterprise-wide benchmarking study, which process we have found helpful in assuring the accuracy and completeness of the data.

Customer Services is the communication with members regarding health plan services, resolutions of claims, enrollment and other issues and the cost of associated printed materials

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issued to customers. It comprises a significant proportion of total administrative expenses and has unique interrelationships with other functional areas. It can also be understood in light of simple algebraic expressions as well as operational metrics. In this analysis, we quantify these relationships.

Algebraic Relationships

Figure 2 analyzes the administrative expenses of PMPM customer services costs for the 20 plans that participated in *SEER* in 2009 focused on Medicare and Medicaid. The expenses for customer services may be thought of as the product of the number of manual inquiries per member, the productivity of manual inquiries, the cost to process each inquiry, the costs per FTE and the staffing ratio. Manual inquiries per member is primary demand, and the cost to process each inquiry is unit cost.

Figure 3 shows statistical relationships between the factors noted above and customer services costs PMPM. With the exception of manual inquiries per FTE per year and customer services costs per manual inquiry, the p-values are extremely low, with three of the six factors at 0.1% probability or lower. (The p-value is the probability that there is *no* relationship between the factor and costs PMPM. Thus a p-value of 10% means that there is a 10% chance of there being no relationship between the variables.) Another driver, costs per FTE, has 4.9% p-value probability. Since our formula is algebraically developed, it makes

Figure 2. Plan Management Navigator
Customer Services Costs Summary

Primary Demand	x	Staffing Ratio	=	Productivity	x	Unit Cost	=	Per FTE Cost	x	Staffing Ratio	=	Costs PMPM
Manual Inquiries per Member	x	Members per FTE	=	Manual Inquiries per FTE per Year	x	Cost per Manual Inquiry	=	Costs per FTE	x	FTE's per 10,000 Members	=	Costs per Member per Month

Figure 3. Plan Management Navigator
Statistical Relationships between Customer Service Cost Summary and Costs PMPM

	Manual Inquiries per Member	*Members per FTE*	*Manual Inquiries per FTE per Year*	*Cost per Manual Inquiry*	*Costs per FTE*	*FTE's per 10,000 Members*
R^2	54.8%	47.8%	5.0%	2.8%	19.9%	59.0%
p-value	0.0%	0.1%	34.6%	48.1%	4.9%	0.0%
Slope	0.65	(0.00089)	0.0002	0.07	0.00003	0.52
English Translation	The greater the number of manual inquiries, the higher the costs. For each additional manual inquiriy per member, PMPM customer services costs increase by $0.65.	The greater the members per FTE, the lower the costs. For each additional 1,000 members per FTE, PMPM customer services costs decrease by $0.89.	The higher the manual inquiries per FTE per year, the greater the PMPM costs. This relationship is not meaningful.	The higher the cost per manual inquiry, the greater the PMPM costs. This relationship is not meaningful.	The higher the cost per FTE, the greater the PMPM costs. For each additional $1,000 increase in costs per FTE, PMPM customer services costs increase by $0.03.	The higher the number of FTEs per member, the higher the PMPM costs. Each additional Customer Services FTE per 10,000 Members will increase PMPM claim costs by $0.52.
Observations	20	20	20	20	20	20

sense that for the most part, these relationships are strong, assuming the metrics are calculated in a consistent way. It is important, however, to recognize that all of these factors *combine* to produce the costs of the function. To explain these relationships, we have interpreted the math into an English translation, as shown in the Figure.

The two notable deviations in the algebraic relationship are manual inquiries per FTE per year and cost per manual inquiry. These metrics had essentially no meaningful effect on costs.

We do not why the manual inquiries per FTE per year would have such a limited influence on the overall costs PMPM. Possibly it is that the manual inquiries per FTE per year is more complicated than it appears; after all, it is the product of manual inquiries per member and members per FTE, both of have significant relationships to costs PMPM. One explanation for the complexity of manual inquiries per FTE per year is that *each* component in this algebraic relationship explains the relationship better than the product of these components.

Another explanation could be manual inquiries per FTE per year is an imperfect metric of the productivity of customer service FTEs. While in some contexts, low calls per FTE could be an indicator of low productivity, in a highly automated environment it could mean that fewer but more complex calls are the only ones entailing human intervention. The weak explanatory power of Cost per Manual Inquiry on Customer Service costs PMPM may be a different side of the same complexity coin. Infrequent but complex calls are expensive calls. While these are plausible explanations, they are conjectures.

Even though, manual inquiries per FTE per year and cost per manual inquiry were not meaningful relationships on overall customer services costs PMPM, costs per FTE was a significant independent variable. But it is the least significant of the significant relationships and has the least explanatory power.

This weakness may relate to the complexity in the activity of handling customer service inquiries that we mentioned previously. Recall that Costs per FTE are composed of staffing costs and non-labor costs such as desktop computers and chairs. Because customer services is a labor intensive function, with staffing costs comprising 85% of the total for this function. So, not surprisingly, staffing costs have some explanatory power in and of themselves, in that staffing costs per FTE explains 23.4% of costs PMPM, with a p-value of 11.1%. Counter-intuitively, the slope of this is negative. In other words, as staffing costs *increase* per FTE for this function, total customer services costs actually *decline*. Perhaps highly automated customer service functions require the highest skilled representatives for the calls they must handle.

This analysis, therefore, suggests the following strategies for lowering costs in the customer services function in a Medicare or Medicaid plan:

- Keep the number of manual inquires to a minimum, possibly through web portals.
- Maintain the highest possible productivity.
- Minimize the cost per manual inquiry.
- Make sure that the staff is deployed to answer inquiries as efficiently as possible. Plainly, the staff should achieve quality consistent with limiting the need for the member to inquire about that question.

Operational Activity Metrics within Customer Services

The financial and operational benchmarks above provide a broad-brush outline of solutions. But the specific activities of a function can bring solutions into higher relief.

It is said that leaders of customer service departments pay very close attention to such metrics as the media through which the inquiry is received, and the time required to answer the inquiry and the abandonment rate.

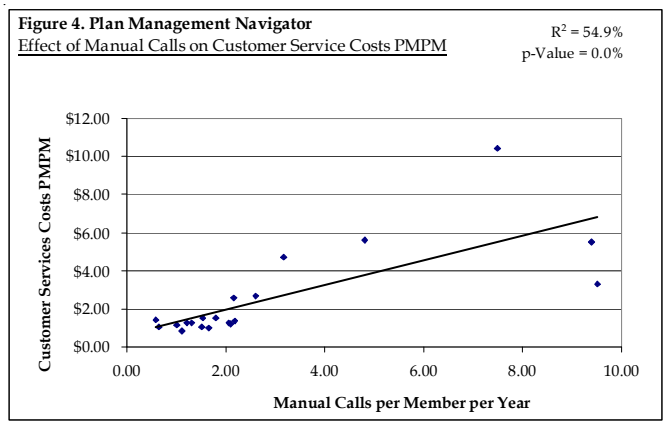
Some of the key "activities" of customer services of Medicare and Medicaid plans entails the method the customer services inquiry is received, whether it be a manual call, automated call, or paper/written inquiries.

Number of Manual Customer Service Inquiries. The number of customer services inquiries has a significant effect on the cost of the Medicare and Medicaid and customer services function. Our participants provide the number of inquiries via various forms of media. Inquiries can be in the form of manual calls, automated calls or in paper/written inquiries, manual electronic, and manual automated.

The Medicaid and Medicare plans in our survey had 98.5% of their customer service inquiries in form of manual calls. Manual calls are a subset of manual inquiries, which may also include manual responses to e-mail or written inquiries. Manual Calls entail greater costs than automated inquiries since they entail human intervention in the call center.

As shown in Figure 4, manual calls contribute to high customer services costs. For each additional manual call per member per year, customer services costs PMPM increase by $0.65.

Figure 4. Plan Management Navigator
Effect of Manual Calls on Customer Service Costs PMPM



All other forms of inquiries, such as automated calls, paper/written inquiries did not show a significant relationship. These metrics had limited observations.

Telephone Response Time. The time required to answer the inquiry is likely a direct and an indirect metric of costs. For instance very rapid response time can be an indicator that all of the systems are functioning well, and that productivity is high. However, speed also can indicate that perhaps the function is too highly staffed. Only seven firms completed these metrics so that the conclusions should be used with caution.

As shown in Figure 5, the strongest relationship is between Average Speed of Answer in Seconds and customer services costs. The longer the Average Speed of Answer in Seconds, the *higher* the customer services costs PMPM. This relationship has an R^2 of 71.8% and a p-value of 1.6%. An additional second in the average speed of answer is associated with a $0.01 increase in customer services costs PMPM.

This suggests that a less efficient customer service department is manifest not only in higher costs but lower quality, measured by speed of answer, as well. One way that this could occur is a slow ASA causes the caller to hang up and call back again.

Reinforcing this is that the Average Speed for Answer Service Level, at 30 Seconds had also negative effect on costs. For each additional percentage in the percent of calls answered in 30 seconds, costs for this function declined by $0.02 decrease per member per month.

Returning to the possibility that a slow speed of answer may trigger a repeat call, there is another strong relationship between abandonment rate and customer services costs PMPM. This relationship has an R^2 of 62.7% and a p-value of 3.4%. An additional percentage in abandonment rate is associated with a $0.68 increase in costs PMPM. A high abandonment rate could increase a plan's customer services cost possibly due to the fact that the caller terminated the call before the representative answered, leading to a repeated effort to get the inquiry answered.

Interactions between Customer Services Costs and Other Functions

Health plans are complex organizations in that the activities in one function also affect those in other functions. In this section we touch upon a few of the measurable relationships between Customer Services costs and metrics of Enrollment / Membership / Billing and Claim and Encounter Capture and Adjudication. Figures 6-7 summarize the low p-value relationships. In other words, these figures show the

Figure 5. Plan Management Navigator
Statistical Relationships between Telephone Response Time and Costs PMPM

	R^2	p-value	Slope	Observations
Average Speed of Answer in Seconds	71.8%	1.6%	0.01	7
Average Speed of Answer in Seconds, *at 30 Seconds*	48.2%	8.4%	(1.92)	7
Abandonment Rate	62.7%	3.4%	6.79	7

values of the relationships in cases where the probability of there being no relationship was minimal.

We do not pretend to understand the mechanisms between the relationships we measure, but to underscore that they exist. Since health plans are unified organizations, changes that one makes in one functional area often have impacts on others.

Enrollment / Membership / Billing. Enrollment / Membership / Billing function was examined to see how its activities relates to customer services costs.

As shown in Figure 6, enrollment costs per transaction is associated with the customer services costs. For each $1.00 increase in enrollment costs per transaction, the customer services costs per member per month increases by $0.12. It is possible that the functional areas of Enrollment / Membership / Billing and Customer Services reflect common ways of doing business such that, when a firm is efficient in one functional area, it will most likely be efficient in another. Alternately, external factors, like a surge of more expensive new enrollments (to set up a customer relationship), could entail greater customer service activity as well as greater enrollment activity.

The relationship between Enrollment staffing and Customer Services costs PMPM may be another reflection of the same dynamics. For each additional enrollment FTE per 10,000 member, the customer services costs per member per month increases by $0.40. Similarly, Enrollment costs PMPM also had a positive relationship with Customer Services costs PMPM. This relationship had a low p-value and high R^2. For each additional dollar increase in enrollment costs PMPM leads to a $0.74 increase in customer services costs per member.

Claim and Encounter Capture and Adjudication

Customer Service also has a significant association with the cost of Medicare and Medicaid Claims functions. One possible mechanism for this relationship is that an inefficient claims function can increase Customer Service inquiries and hence costs. If claims are not processed in accordance with customer expectations, they may express their concerns via an inquiry. Alternatively, even when the claims processes are efficient, some claims procedures are likely to result in a customer service inquiry.

As shown in Figure 7, there is in fact a link between claims processed and customer service inquiries. Claims processed per member explains 60.2% of the difference between customer services costs with a p-value of 0.0%. In other words, an additional claim processed per member leads to a 0.24 increase in customer services manual inquiries.

These additional processed claims also lead to higher customer service costs as well as volumes. An additional claim processed per member increases cus-

Figure 6. Plan Management
Statistical Relationships between Customer Services and Enrollment/Membership/Billing

Independent Variable	Dependent Variable	R^2	p-Value	Slope	Observations
Enrollment Cost/Transaction	*Customer Services Costs PMPM*	49.0%	0.0%	0.120	19
Enrollment FTE's /10,000 Members	*Customer Services Costs PMPM*	37.0%	0.4%	0.533	20
Enrollment Costs/Member / Month	*Customer Services Costs PMPM*	84.7%	0.0%	0.456	20

Figure 7. Plan Management
Statistical Relationships between Medical Management and Claims

Independent Variable	Dependent Variable	R^2	p-Value	Slope	Observations
Claims Costs PMPM	*Customer Services Costs*	76.5%	0.0%	0.738	16
Claims Processed per Member	*Customer Services Costs*	60.2%	0.0%	0.237	20
Claims Processed per Member	*Customer Services Manual Inquiries/Member*	58.1%	0.0%	0.267	20

tomer services costs by $0.24. The p-value of this relationship was 0.0% and the R^2 of 60.2%.

The strongest relationship between the Claims function and Customer Services was claims processing *costs* on customer services *costs*. This relationship had the highest explanatory power, an R^2 of 76.5%, and a p-value of 0.0%. An additional $1.00 increase in claims cost per member is associated with a $0.74 increase in customer services costs per member.

Conclusion

In the more challenging environment of health care reform, customer services costs, as well as those of other functional areas, will be under increasing scrutiny to assure that it is optimally provided. Operational metrics can be a helpful guide to this. Algebraic metrics such as staffing ratios are associated with low costs. A low average speed of answer, in seconds and low abandonment rate can lower the cost of customer services. There is also some indication that, for Medicare and Medicaid plans, the customer services and enrollment / membership / billing reflect common practices or common external causes. Also, members may have increased customer services costs and inquiries due to members calling with questions about claims. We think that these patterns illustrate that process improvement in health plan activities has effects that span functions.

Dashboard Summary: March 2010

Sherlock Company polls privately held health plans for value and trend information on their operations. The metrics collected are intended to be easily compiled and indicative of broad trends within health plans. The following is a summary. Subscriptions and participant opportunities are available.

Among our participants, total membership grew but ASO, Medicaid and Medicare Advantage increased at the expense of insured commercial. This mix shift, combined with price weakness in Medicare Advantage, had the effect of making total price increases essentially nil.

Health benefit ratios generally improved among participants in our monthly *Dashboard*, though for Blues they worsened and improved among Provider Sponsored plans. Commercial managed care products worsened, but that was the sole exception, and Medicare and Medicaid improved. Hospital days per thousand seem to have declined significantly especially in commercial managed care and Medicare Advantage. Per capita script volume was generally unchanged, though down in Medicare Advantage and ASO / ASC. E/R visits were also down significantly.

Administrative expenses declined slightly as a percent of Blue Cross Blue Shield premiums and equivalents and increased slightly for Independent / Provider – Sponsored plans. Overall, ratios were unchanged, below 10%, and PMPM administration grew by 3.1%.

Administrative expense activities generally showed a moderating trend. Claims processed, customer service inquiries and staffing ratios all declined on a per member basis.

Operating income trends were negative. For Blues, an increase in health benefit ratio overwhelmed improvements in administration. For Independent / Provider Sponsored Plans, administrative expense ratio increases were greater than health benefit ratio improvements.