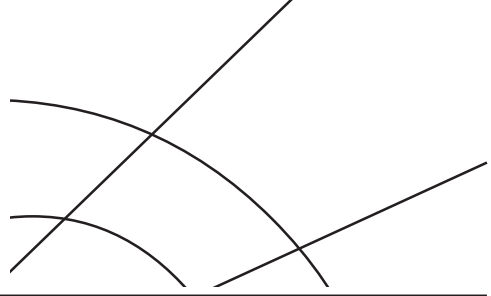


Plan Management Navigator



Analytics For Health Plan Administration

Mid April 2010

TIMING OF 2010 BENCHMARKING STUDIES

This year we have 25 Plans serving 33.6 million members in our 2010 Blue Cross and Blue Shield universe, an increase of three Plans. For the Independent/Provider-Sponsored plan universe, we have 17 plans serving 6.5 million members. We have distributed the survey materials for these universes and will publish the final benchmarking studies in early July. Panels for the Medicare and Medicaid-Oriented universes are currently being developed. A universe of Third-Party Administrators is under development this year, but we already have nine firms that have orally committed to participate. Let us know if you would like to learn more about participation in or licensing any of these benchmarking studies.

GENERAL NOTE REGARDING NAVIGATOR

Health care reform'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. Because of this, we are focusing the next several issues of *Plan Management Navigator* on operational issues affecting health plans doing business with public benefit programs.

Figure 1. Plan Management Navigator
Timing of 2010 Benchmarking Studies

	2010		Change		Survey Distribution	Benchmark Publication
	Members Served	Plans Included	Members Served	Plans Included		
Independent/Provider-Sponsored	6.5 million	17	13.1%	6.3%	Mar-10	Jul-10
Blue Cross and Blue Shield	33.6 million	25	7.6%	13.6%	Mar-10	Jul-10
Medicare-Oriented		Building the Universe			Jun-10	Aug-10
Medicaid-Oriented		Building the Universe			Jun-10	Aug-10
TPA		Building the Universe			May-10	Aug-10

DRIVERS OF CLAIMS PROCESSING 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 22 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.

Claims processing is perhaps the core operating activity of Medicaid and Medicare plans. The term, "third-party payor," implies the central role of claim and encounter capture and adjudication. 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 outlines the administrative expenses of PMPM claims costs for plans that participated in SEER in 2009 that were focused on Medicare and Medicaid. The expenses for claim and encounter capture and adjudication may be thought of as the product of the number of claims per member, the productivity of claims processed, the cost to process each claim, the costs per FTE and the staffing ratio. Generally, claims processed per member is primary demand, and the cost to process each claim is unit cost.

Figure 3 shows statistical relationships between the factors noted above and claims processing costs PMPM for the 20 Medicare and Medicaid plans for which data was available. With the exception of costs per FTE, the p-values are extremely low, with three of the five factors at 0.0% probability that there is no relationship between the factor and costs PMPM. Another has 0.6% probability. Since our formula is algebraically developed, it is surprising that the p-value is ever above zero. It is important, however, to recognize that all of these factors combine to produce the costs of the function. To

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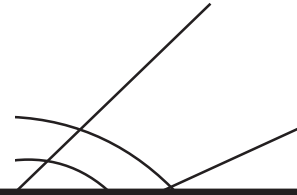


Figure 2. Plan Management Navigator
Claims Processing Cost Summary

Primary Demand	x	Staffing Ratio	=	Productivity	x	Unit Cost	=	Per FTE Cost	x	Staffing Ratio	=	Costs PMPM
Claims Processed Per Member	x	Members Per FTE	=	Claims Processed Per FTE Per Year	x	Cost per Claim Processed	=	Costs per FTE	x	FTE's per 10,000 Members	=	Costs per Member Per Month

Figure 3. Plan Management Navigator
Statistical Relationships between Claims Processing Cost Summary and Costs PMPM

	<i>Claims Processed per Member</i>	<i>Claims Processed per FTE per Year</i>	<i>Cost per Claim Processed</i>	<i>Costs per FTE</i>	<i>FTE's per 10,000 Members</i>
R²	83.0%	41.6%	83.6%	2.4%	86.8%
p-value	0.0%	0.6%	0.0%	56.8%	0.0%
Slope	0.32	(0.00005)	2.68	0.00002	0.57
English Translation	The greater the number of claims, the higher the costs. For each additional claim processed per member, PMPM claim costs increase by \$0.32.	The lower the number of claims processed per FTE, the higher the costs. For each decrease of 1,000 claims processed per FTE, PMPM claim costs increase by \$0.05.	The higher the cost per claim, the higher the costs per member. For each additional \$1.00 increase in Cost per Claim Processed, PMPM claim costs increase by \$2.68.	The higher the cost per FTE, the greater the PMPM costs. This relationship is not meaningful.	The higher the number of FTE's per member, the higher the PMPM costs. Each additional Claim FTE per 10,000 Members will increase PMPM claim costs by \$0.57.
Observations	20	17	16	16	16

explain these relationships, we have interpreted the math into an English translation, as shown in the Figure. This analysis, therefore, suggests the following strategies for lowering costs in the claims function in a Medicare or Medicaid plan:

- Keep the number of claims submitted to a minimum. (For the purpose of our survey, we count claims that are resubmitted as an additional claim. This suggests the importance of keeping errors in submitted claims to a minimum, perhaps through increased provider training.)
- Maintain the highest possible productivity.
- Minimize the cost per claim processed.

- Make sure that the staff deployed to process claims is as small as possible. Plainly, the staff should achieve quality consistent with limiting the need to reprocess claims for the same events.

The one notable deviation in the explanatory power of algebraic relationships is Costs per FTE. This metric had essentially no meaningful effect on PMPM costs. Since the cost per FTE and the staffing ratio are algebraic factors of costs PMPM, we interpret this finding as indicative that the staffing ratio is by far the dominant factor. This is shown in Figure 4.

We do not have a definitive answer why the cost per FTE would have such a limited influence on the overall costs PMPM. We think that the answer may be that the cost per FTE

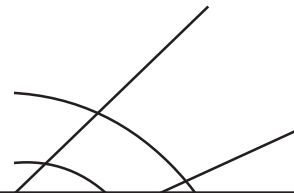
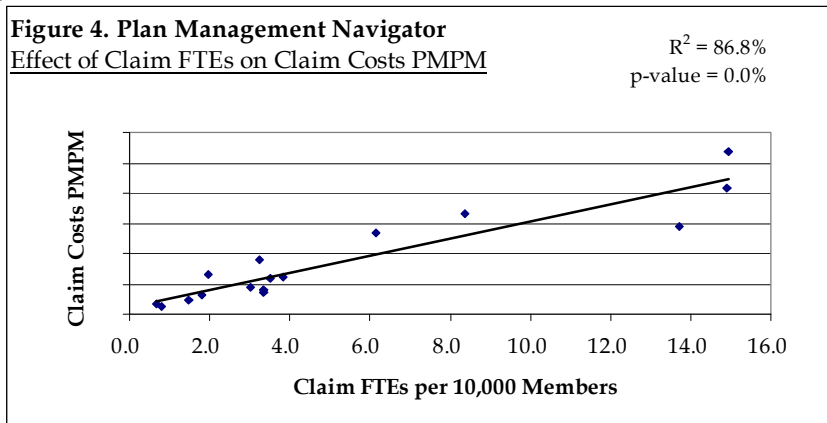


Figure 4. Plan Management Navigator
Effect of Claim FTEs on Claim Costs PMPM



processed. One overall metric of the efficiency of claims is measured by the time required to honor these claims.

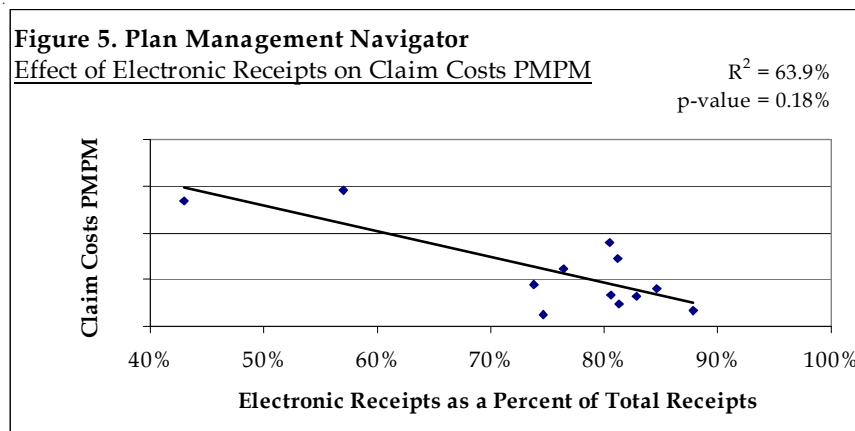
Method of Claims Submission. The method of claims submission has a significant effect on the cost of the Medicare and Medicaid and claims function. Claims can be submitted electronically or they can be submitted in paper form. The Medicaid and Medicare plans in our survey had 80.6% of their claims submitted electronically. Paper claims submissions entail greater costs since they entail preprocessing, including mail room and scanning activities. In our survey, 19.4% of paper claims of Medicare and Medicaid plans were scanned.

is more complicated than it appears; after all, it is composed of staffing costs and non-labor costs such as desktop computers and chairs, which may have their own relationships to costs PMPM. For instance, while we have not noticed economies of scale in claims processing *costs*, we have noticed economies of scale in claims processing *staffing*. But offsetting this apparent scalability is higher staffing costs per FTE. (This may be due to the need to assure that the few claims that reach the attention of the processors are handled with the greatest expertise, but there are other theories as well.) So, suppose there is a large plan: One would expect it to have a lower staffing ratio and higher compensation per FTE. But the non-labor costs may be higher or lower than average depending on the way that the plan elects to do business.

As shown in Figure 5, paper claims contribute to costs while electronic submissions diminish costs. For each additional percentage point of claims submitted electronically, claims processing costs PMPM decrease by \$0.11. Similarly, an additional percentage point of claims submitted in paper form, however, is associated with a \$0.11 increase in claims processing costs PMPM.

More specifically, staffing costs as a percent of total costs explains 33.1% of costs PMPM and has a strong p-value of 3.9%. The slope is negative. In other words, as staffing costs increase as a percent of total costs for this function, total costs actually decline. If, within the function itself, one substitutes capital for labor, costs actually increase.

Figure 5. Plan Management Navigator
Effect of Electronic Receipts on Claim Costs PMPM



Operational Activity Metrics

The financial and operational benchmarks point the direction of variances and the broad-brush outline of solutions. But the activities of functions can bring these solutions into higher relief. Some of the key activities of claims of Medicare and Medicaid plans entail the receipt of claims and how they are

Method of Processing. The method of processing also affects the cost of claim and encounter capture and adjudication for Medicaid and Medicare plans. Autoadjudicated claims require no human intervention in the claims process: not only are costs less, but they are also borne by the information systems area rather than the claims area. Some claims, however, must be manually processed, which increases costs.

As shown in Figure 6, when Medicare and Medicaid plans have an additional percentage point increase in autoadjudication rates, they experience a \$0.06 decline in the



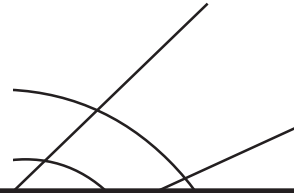


Figure 6. Plan Management Navigator
Statistical Relationships between Method of Claims Processing and Costs PMPM

	R²	p-value	Slope	Observations
<i>Autoadjudication Rate</i>	51.7%	0.6%	(6.43)	13
<i>Manual Intervention Rate</i>	20.0%	14.5%	3.59	12

incurred to receipt is associated with a \$0.09 increase in costs PMPM. If claims submitted electronically entails the shortest periods between when the claim is incurred until receipt, then perhaps this duration is an indirect measurement of electronic submissions.

costs of claim and encounter capture and adjudication. Similarly, an additional percentage point increase in claims requiring manual intervention is linked with a \$0.04 increase in PMPM costs of this functional area. Medicare and Medicaid plans that wish to lower their claims costs should autoadjudicate as much as possible and minimize the degree to which claims require human intervention.

Speed of Claims Processing. Speed of processing can be a proxy for how streamlined and efficient the systems are. It can also reflect the underlying

philosophy of the health plan on the depth of focus on any particular claim. Only five firms completed these metrics so that the conclusions should be used with caution. The effect of Average Days Incurred to Receipt, however, is emblematic, and we explore it further below.

Claims processing can be thought of as taking place in four steps: processing begins when the claim is incurred, then the claim is received, then it is approved for payment and finally it is paid. These are measured in three distinct time intervals. Average Payment Period is the sum of all of those steps. As shown in Figure 7, the longer the Average Payment Period, the higher the costs of this function. This relationship has an R² of 71.5% and a p-value of 7.1%. An additional day in the average payment period is associated with a \$0.04 increase in costs PMPM.

The strongest relationship among the various steps, interestingly enough, is between costs PMPM and the Average Days Incurred to Receipt. This relationship has an R² of 83.7% and a p-value of 2.9%. An additional day in the average time

Average Days Incurred to Approved also had a positive effect on costs. An additional day in these steps is associated with a \$0.03 increase in costs per member per month. The p-value of this relationship was 10.9% and the R² was 63.0%.

Figure 7. Plan Management Navigator
Statistical Relationships between Speed of Claims Processing and Costs PMPM

	R²	p-Value	Slope	Observations
<i>Average Payment Period in Days</i>	71.5%	7.1%	0.04	5
<i>Average Days Incurred to Receipt</i>	83.7%	2.9%	0.09	5
<i>Average Days Receipt to Approved</i>	41.7%	23.9%	0.06	5
<i>Average Days Approved to Payment</i>	42.9%	23.0%	0.24	5
<i>Average Days Incurred to Approved</i>	63.0%	10.9%	0.03	5
<i>Claims Turnaround Time</i>	43.5%	22.6%	0.05	5

The Average Days Receipt to Approved and Average Days Approved to Payment each had relatively low R² and relatively high p-values. Similarly, the Claims Turnaround Time, the sum of these two values, also had weak predictive value.

Conclusion

Claims processing activities are central to third-party payors, including Medicare and Medicaid plans. In the more challenging environment of health care reform, claims processing costs, as well as those of other functional areas, will be under increasing scrutiny to assure that they are optimally provided. Operational metrics can be a helpful guide to this. Algebraic metrics such as staffing ratios are associated with low costs. High electronic claims submissions and autoadjudication rates can lower the cost of claim and encounter capture and adjudication. There is also some indication that for Medicare and Medicaid plans, a faster payment cycle is associated with lower costs.

