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How do Medicare Advantage Plans Benefit from Expenses for Medical Management?

"On May 2, 2009, Brill writes, the domestic-policy group at the White House blindsided the economic team with a second memo. It concerned something called the medical loss ratio, or M.L.R… The rule would make it impossible for one of the economy's least liked sectors to make excess profits. The feeling was, Brill says, that 'it might end up being the single most politically appealing piece of healthcare reform.'

The economic team, however, wasn't so sure:

> Summers called it a 'stupid idea,' and told his people to try to kill it. It was "dumb for us to cap anyone's profits," he said, dismissing the idea much the way the legendarily blunt Summers might have taken down a freshman economics student at Harvard who said something in class that he thought was 'dumb.'

Summers's point was that an M.L.R. floor distorted the insurer's incentives… In other words, if insurers do what we want them to do—cut costs and rein in premiums—it is likely that their loss ratios will fall. Why, Summers wondered, would you want to penalize them for doing that?"

> "The Bill", Malcolm Gladwell's review of America's Bitter Pill by Steven Brill, *The New Yorker*, January 12, 2015

Medical Management is integral to the success of Medicare Advantage plans. In the Sherlock Benchmarks, Medical Management comprises all of the activities of Medical Management / Quality Assurance / Wellness. It is divided into sub-functions: (a) Precertification, (b) Case Management, (c) Disease Management, (d) Nurse Information Line, (e) Health and Wellness, (f) Quality Components, (g) Medical Informatics, (h) Utilization Review, and (i) Other Medical Management.

Medical Management is reported to the Sherlock Benchmarks in its entirety. That is, despite MLR rules that permit classification of Medical Management as "medical losses," Sherlock Benchmarks' emphasis on actionability means that we report Medical Management as administrative, leaving health benefits solely as direct payments to hospitals, physicians and others.

For Medicare Advantage products of health plans, Medical Management costs average about $11 to $12 PMPM or about 1.5% of premiums. Costs in 2015 were substantially identical to that of 2012 among the fourteen continuously reporting health plans. Yet there is a wide variation in the use of medical management: the costs for this function range from $6 to $22 PMPM.

While we define the Medical Management activities of Medicare Advantage activities with precision, their business purpose is little understood. *We believe that, in the Affordable Care Act environment, the return on investment can be better measured by membership growth through lower premiums than by lower health care expenses or higher per member earnings.*

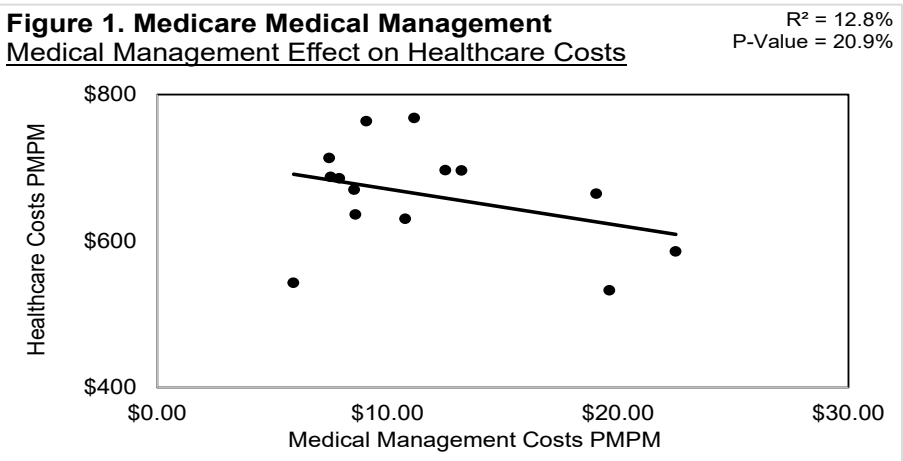
Using the Sherlock Benchmarks

Sherlock Company is in its 20th consecutive year of benchmarking health plans, and health plans serving most Americans are users of the Sherlock Benchmarks. Over each of past four years, from 24 to 27 health plans that participated in the Sherlock Benchmarks offered Medicare Advantage products to seniors. All of them reported detailed information on Medical Management administrative activities, including sub-functions, and each health plan reported premiums and health benefits. All data was gathered through surveys, and was validated after we received it. Costs are segmented by product (e.g., Medicare Advantage, PPO, etc.) as well as by function.

Of these plans, 14 participated in all four years. In the analyses that follow, we focused on the continuing plans for several reasons. These plans were demonstrably mature in their commitment to the Medicare Advantage product and the infrastructure required to make it successful. The plans have a track record of accurately reporting to the Sherlock Benchmarks, strengthening this analysis. Because of their continuity of the product offering, it is likely that the plans have a similar continuity of strategy. Finally, since the participation was the same over the years, any comparisons between the years would not be affected by changes in the sample.

Collectively, the 14 plans served 1.2 million members in 2015, comprising 8% of total Medicare Advantage members. Medicare SNP members were specifically excluded from this analysis.

Figure 1. Medicare Medical Management
Medical Management Effect on Healthcare Costs



Return on Managing Health Costs

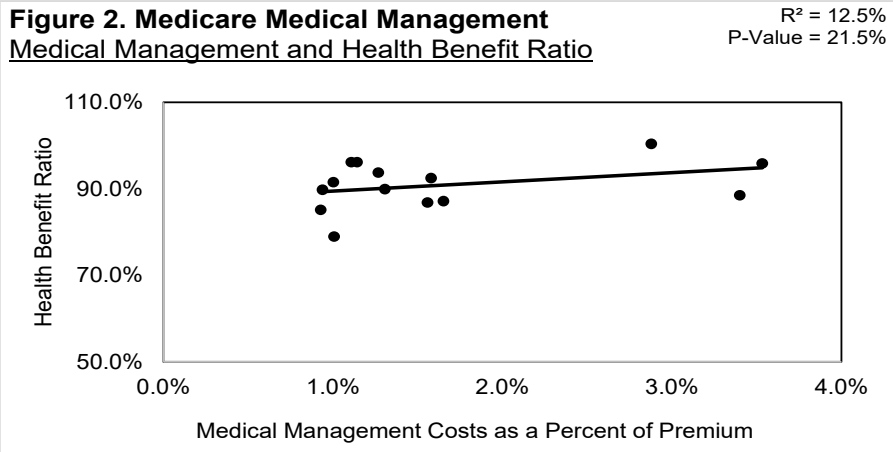
Medical Management activities are central to health plan efforts to "cut costs and rein in premiums." We began our analysis by testing whether Medical Management was effective. In other words, were higher medical management expenses associated with lower health care costs? Figure 1, on page 2, shows that the effects are suggestive but inconclusive, with a P-Value of 21%. In addition, the explanatory power is modest at a 13% R^2. Having said that, the slope is an impressive 4.95.

For the previous three years, the relationship was similarly inconclusive, and perhaps offers a context diminishing the reliability of the return identified above. In the Appendix, we summarize these and other similar analyses in each of the periods. The results vary greatly in their P-Values, the R^2 is higher only in 2012 but remains modest, the slope reverses three times and the P-Value is never lower than 14%.

We also considered the possibility that Medical Management in the current period could yield lower Health Benefit expenses in the following period. We did not show the results in this study, but they were even weaker.

We then considered whether a stronger relationship could be observed if health benefits and Medical Management expenses were expressed in percents. A potential advantage of this form of standardization is that some local cost of living effects could perhaps be eliminated. In this case, the relationship was somewhat similar to when the costs are expressed in PMPM dollars. With a P-Value of 22%, this approach had similar explanatory power to the dollar-denominated expenses, with a R^2 of 12%. But note that the health benefit ratio *increases* as Medical Management expenses increase. This is shown in Figure 2 and would on its face imply a *negative* ROI on Medicare Advantage Medical Management activities.

Figure 2. Medicare Medical Management
Medical Management and Health Benefit Ratio



Like the 2015 results, illustrated in Figure 2, the slopes were positive in the prior three years, as shown in the Appendix. This provides more comfort than in the volatility of the dollar-denominated analysis of Medicare Health Benefits and Medicare Medical Management. While 2014 displayed a stronger relationship between the two variables, overall the relationships were as inconclusive as for 2015.

Trying a third approach to assessing the Return on Investment by Medicare Advantage Plans in Medical Management, we recognized that the return could be measured as the additional profits that were realized. The previous approaches only focused on health benefit expenses.

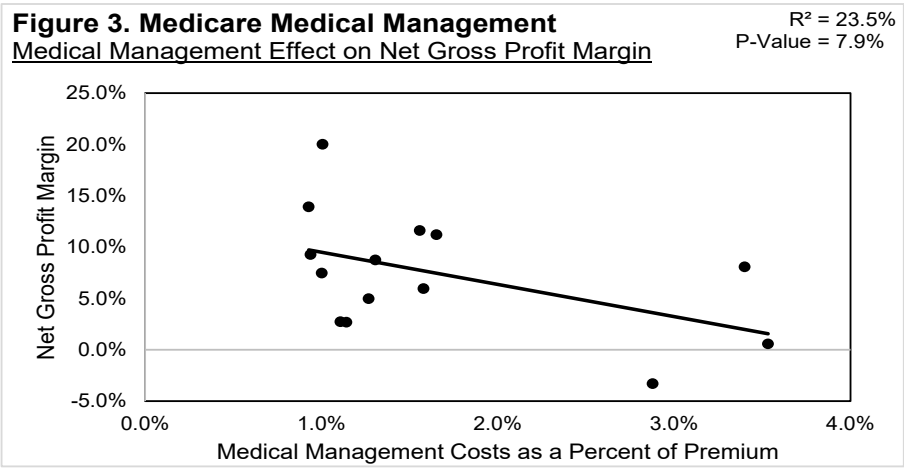
We measured Gross Profits as Premiums less Health Benefits *and* the cost of Medical Management. The independent variable was Medical Management. Like the analysis in Figure 2, we expressed both variables as a percent of premium. This analysis is shown in Figure 3.

For the first time in this series analyses for 2015 results, we discovered a promising relationship in that the P-Value was less than 10%. However, the slope was negative. In other words, the *more* one spends on Medical Management, the *lower* the profit margin is. The R^2 was 24%.

The Appendix shows the results of regressions that we performed in each of the four years. The 2014 results are stronger, with a P-Value of 4%. However, the relationships are much weaker in 2012 and 2013. In all cases, the slope remained negative: profits were less as investment in Medical Management increased.

As with the relationship between Medical Management and Health Benefits shown in Figure 1, we considered the possibility that the higher Medical Management in a given year would yield higher profits in the subsequent year. These relationships were stronger with a P-Value of 6% in 2014 and 2% in 2015.

Figure 3. Medicare Medical Management
Medical Management Effect on Net Gross Profit Margin



As with the relationship between current period Medical Management percents and Health Benefit percents, the slopes were downward sloping. These analyses are not shown.

We also discovered similar results when calculating based on dollar values rather than percents, using prior year Medical Management expenses. Again, the more a plan spends on medical management, the lower its gross profits, after the cost of medical management is considered.

From the previous series of analyses, it appears that Medical Management does not lead to a measurable reduction in Medicare Advantage health care costs, or an increase in profits. So why expend the effort on precertification, case management and other Medical Management, especially since consumers can find these efforts displeasing?

Changes in the Regulatory Environment

A possible contributing factor to the elusive returns on Medical Management results from the Affordable Care Act. According to the CMS website, "For contracts beginning in 2014 or later, (Medicare Advantage Organizations), Part D sponsors, and cost plans are required to report their MLRs and are subject to financial and other penalties for failure to meet the statutory requirement that they have an MLR of at least 85 percent…"

Figure 4 shows that the Health Benefit Ratio increased between 2012 and 2015, from an average of 89.3% to 91.3%. The results were also more clustered as the standard deviation and the coefficient of variation fell between the two periods. Three of the plans had a Health Benefit Ratio that was lower than 85% in 2012, falling to one by 2015. Over the four-year period, the largest increase in Health Benefit Ratio occurred between 2013 and 2014, corresponding with Dr. Summers' view and the initiation of the MLR requirement beginning in 2014.

As mentioned previously the Health Benefit Ratio is narrower, and more analytically useful, than the Medical Loss Ratio. Nevertheless, we have found that it tracks closely with the regulatory ratio after considering the differences in reporting Medical Management between what the Sherlock Benchmarks and CMS request.

Figure 4. Medicare Medical Management
Trends in Health Benefit Ratio

	2012	2013	2014	2015
Average	89.3%	90.9%	93.8%	91.3%
Median	88.9%	89.6%	91.6%	91.4%
Standard Deviation	5.6%	4.2%	6.6%	5.0%
Coefficient of Variation	6.3%	4.6%	7.0%	5.5%

This increase in the Health Benefit Ratio is especially interesting in the context of the relation between Medical Management expense percent and Premiums PMPM. We found that, as Medical Management increases, premiums fall. The P-Value is 2% and the R^2 is 39%. Shown in Figure 5, this was the strongest Medical Management relationship that we tested.

Importantly, the P-Values of this relationship improved in each of our measurement years; and it was 18% in 2013 and 5% in 2014. In all years, the relationship had a negative slope. The R^2 increases in each year as well. This series of analyses is summarized in the Appendix.

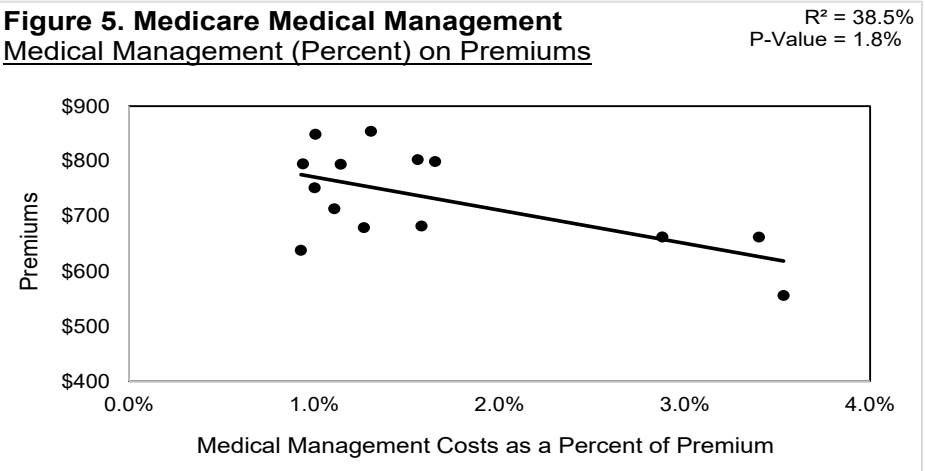
In other words, for these established organizations, it is possible that cost savings stemming from medical management in Medicare Advantage are being redeployed for premium reduction, not retained as profits. This would lead to higher Health Benefit Ratios.

Conclusion

The analyses presented here suggest a nuance to Dr. Summers' assessment that the MLR rules would disincentivize insurer behavior that would otherwise lead to premium restraint. The effect of the MLR rules may have been to encourage some plans to immediately redeploy the returns on Medical Management in lower premiums. Because the premiums are priced lower in real time, they are making invisible the lower costs or higher earnings that would otherwise be the returns on Medical Management.

In other words, rather than banking the operating earnings in the current period and then redeploying them as lower premiums in future periods, the health plans in our sample may have anticipated their success in managing health care costs and concurrently passed through lower premiums to consumers. The available data cannot prove this theory, but it appears consistent with the available information.

Figure 5. Medicare Medical Management
Medical Management (Percent) on Premiums



Such behavior would be expected to yield a return in growth. In fact, within this sample, Figure 6 shows that "reining in premiums" is associated with rapid growth, a negative slope. With a P-value of 0.8%, the R^2 of the relationship is 45%. These changes are between 2012 and 2015.

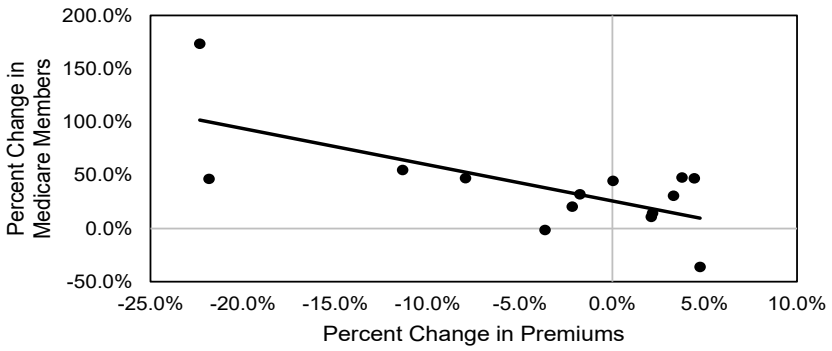
Moreover, Medicare Advantage membership in the Sherlock Benchmark plans grew at a median and average rate of 38% from 2012 to 2015. The total increase for Medicare Advantage members was 29% over this period. We think that, on the grounds that "you manage what you measure," the Medicare Advantage health plans in the Sherlock Benchmarking panel may be an elite sample.

The strategy of "reining in premiums" concurrently with medical management efforts has a cost. Because health care costs are definitively known to health plans only after a lag, premium pricing that anticipates the cost savings from medical management, especially in an environment of lower margins, is inherently riskier.

If this theory that premium moderation and broader benefits is the redeployment of the savings resulting from medical management, then other aspects of the relationships we analyzed can be better understood. Perhaps the higher medical costs and lower margins that were associated with Medical Management reflect management's decision to reinvest the savings in a broader scope of benefits, supplying to consumers a higher non-price value proposition. Examples of richer benefits may include a hearing aid benefit or a reduction in copayments.

Accordingly, in the ACA environment, the appropriate metric for ROI may be the additional membership realized from the more attractive value proposition, rather than higher earnings or lower health costs.

Figure 6. Medicare Medical Management
Effect of Premium Increase on Growth



Appendix. Medicare Medical Management

Summary of Regression Analyses

	Calendar Year			
	2012	**2013**	**2014**	**2015**
Medical Management Effect on Health Care Costs *(Dollars)*				
P-Value	14.4%	89.9%	76.4%	20.9%
Slope	5.82	(0.98)	2.73	(4.95)
R^2	16.9%	0.1%	0.8%	12.8%
Medical Management Effect on Health Care Costs *(Percent Premiums)*				
P-Value	20.1%	72.8%	6.2%	21.5%
Slope	3.85	1.12	8.25	2.14
R^2	13.3%	1.0%	26.1%	12.5%
Medical Management Effect on Net Gross Profit *(Percent Premiums)*				
P-Value	11.4%	51.3%	3.9%	7.9%
Slope	(4.85)	(2.12)	(9.25)	(3.14)
R^2	19.5%	3.7%	30.8%	23.5%
Medical Management *(Percent)* Effect on Premiums				
P-Value	96.4%	18.2%	5.5%	1.8%
Slope	(195.09)	(7,765.92)	(8,741.10)	(6,023.46)
R^2	0.0%	14.4%	27.4%	38.5%