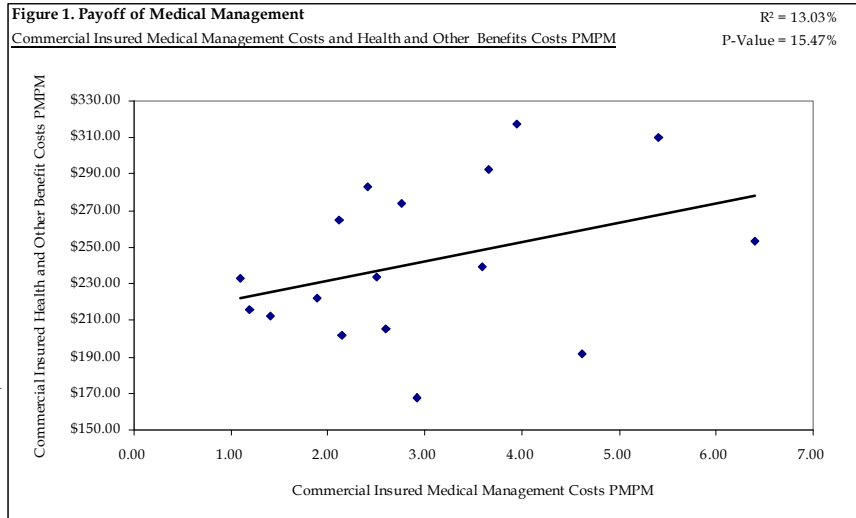




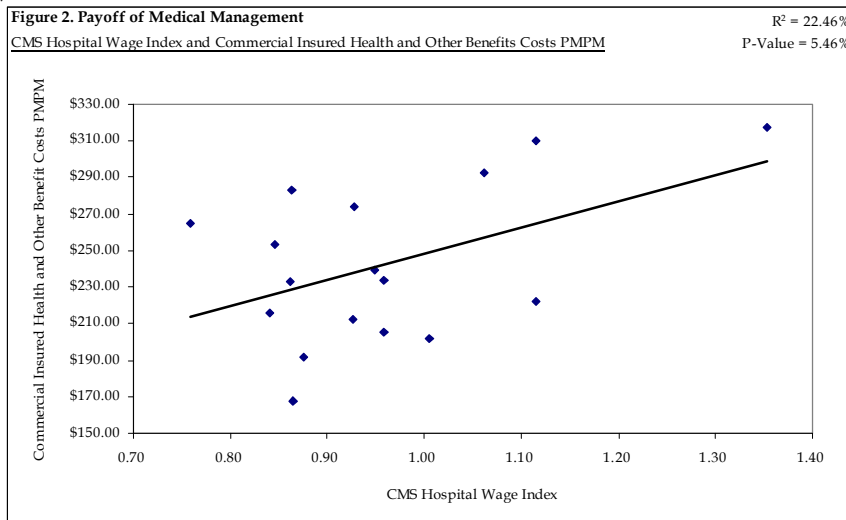
A METRIC FOR THE PAYOFF OF MEDICAL MANAGEMENT

We have developed a new metric to measure the efficacy of the medical management effort and intend to use this in coming analyses for health plans using the Sherlock Benchmarks. The metric is deviations from predicted gross profits at the health plan's level of medical management expenses. **If you use this approach, we ask that you kindly cite Sherlock Company.** A Sherlock Company client was the catalyst for this.

To measure the efficacy of the medical management function on health care costs, we have often regressed them and usually with unsatisfactory results. Figure 1 provides an representative example. It includes only insured commercial products, to make sure that the plan had a strong stake in the outcome of its medical management efforts, and that that the effect of product mix is limited. The positive slope indicates that the more a health plan spends on medical management the higher ones health care costs are.



While possibly reflective of many things, it poorly captures the return on investment in medical management. One possible reason for this is that both health care costs and medical management may be affected by local costs of health care. In fact, as shown in Figure 2, there is a relatively strong relationship between the CMS Hospital Wage index and the PMPM costs of Commercial Insured Health and Other Benefits. There is a similar relationship between PMPM administrative costs and the CMS Hospital wage index.

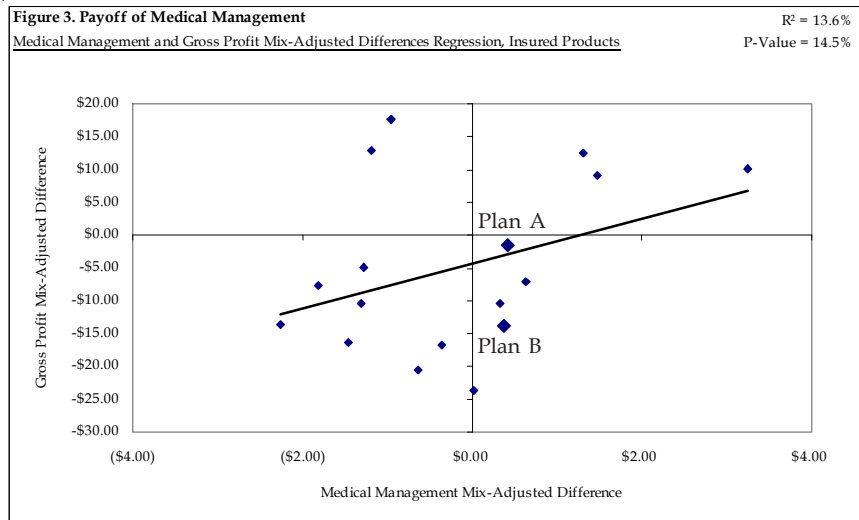


Using gross profit (premiums less health benefits) may be a solution to this problem. In the first place, it captures an actual return, rather than the costs. Second, it also mirrors the actuarial approach of developing premiums by building up from the costs. Put a different way, the gross profit margin reflects an amount necessary to cover earnings and administrative costs which may be less sensitive to local costs of health

care: administering health insurance is feasible in locations remote from the delivery of care.

Figure 3 shows the regression of gross profit to medical management costs in one of the Sherlock universes. The values are both positive and negative because they are differences from the average based on the product mix of each plan. (The use of differences, rather than their actual values is necessary in order to adjust for the differences in the product mixes between the plans.) The relationship can be described as a payoff of \$3.40 in gross profits for every \$1.00 in medical management cost. The relationship is not especially strong but, at a P-Value of 14.5%, it is also improbable that there is no relationship.

The low R^2 indicates that the dollars spent on medical management explain relatively little in health care costs. This is not surprising for several reasons. Premiums, not just costs, are reflected in the operating profit margin. Development of medical management practices is continuously improving. Pricing may be inefficient for externally delivered medical management services. It is even hard to test efficacy of specific techniques since open panels permit passive realization of reduced benefit costs by low spending plans. One of the other plans whose results are included in this study observed that its performance may be due to outstanding provider contracts. Accordingly, the best use of this approach may be to compare relative performance. In other words, a company earning \$2.00 more than predicted from the regression line could be said to outperform plans earning \$2.00 less than predicted from the regression line. Accordingly,



Health Plan A outperforms Health Plan B in the Figure 3 graph.

We were concerned that the gross profit itself might be sensitive to local health cost differences. Once again, we regressed it against the CMS hospital cost index. This is shown in Figure 4. A correspondence would suggest that health care costs affect gross profits. But since the relationship is exceedingly poor, we can be confident that the relationship between gross profit margin is probably not affected by local health care costs measured by the CMS hospital wage index.

