



Changes in Health Care Financing & Organization (HCFO)

findings brief

key findings

- Health maintenance organizations (HMOs) decrease inpatient utilization for Medicare enrollees.
- California group and staff HMO enrollees used 18 percent fewer inpatient days than had they continued in Medicare fee-for-service (FFS) plans, with an 11 percent reduction for independent practice association (IPA) HMO enrollees.

Medicare Advantage and the Impact of Medicare HMOs on Inpatient Utilization

Introduction

Since the passing of the Medicare Modernization Act and the establishment of Medicare Advantage in 2003, the number of Medicare beneficiaries choosing to enroll in managed care has increased. Medicare Advantage plans, the majority of which are health maintenance organizations (HMOs), are administered by private health plans and provide Medicare Part A, Part B, and prescription drug benefits.

Although their beneficiary cost-sharing requirements are often less than for Medicare fee-for-service (FFS) plans, total out-of-pocket spending varies by beneficiary depending on the plan chosen and the services utilized.¹ HMOs can spend less because they manage care efficiently and, evidence shows, because healthier individuals requiring fewer medical services often choose these plans.

However, little is known about the impact of managed care or HMOs on the inpatient utilization of Medicare beneficiaries. To shed

light on this issue, a research team from the University of Southern California, led by Glenn A. Melnick, Ph.D., examined the differences in hospital utilization for Medicare FFS and Medicare risk HMO enrollees.

They found that HMOs did not affect the likelihood of having a hospitalization. However, lengths of stay (LOS) for those in managed care were shorter, and total inpatient utilization was less. While the data analyzed preceded the establishment of Medicare Advantage, findings from this longitudinal study are relevant to the current debate about whether Medicare Advantage plans use health care resources efficiently.

The Debate Surrounding Medicare Advantage

Medicare Advantage beneficiaries may receive additional benefits that are not included in traditional FFS plans. Plans provide these benefits from cost savings they achieve when they efficiently manage care and provide care at a cost that is less than their capitated reimbursement.



Robert Wood Johnson Foundation

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Private health plans provide the Centers for Medicare & Medicaid Services (CMS) with an estimated cost to provide enrollee benefits. If the estimated cost is greater than the pre-determined CMS benchmark for that specific geographical region, then Medicare beneficiaries pay the difference through a supplemental premium. If the estimated cost is less than the benchmark, 25 percent is allocated to the Medicare trust fund, and 75 percent is apportioned to the health plan to provide beneficiaries with additional benefits.²

Although approximately 20 percent of Medicare enrollees currently participate in Medicare Advantage plans, and enrollment is expected to increase, the future of the program is under debate as some argue that Medicare Advantage increases overall Medicare spending. Medicare Advantage health plans are reimbursed approximately 12 percent more than traditional FFS plans.³

Medicare Payment Advisory Commission (MedPAC) representatives suggest that the CMS benchmarks used to determine reimbursement no longer provide health plans adequate incentive to efficiently manage enrollees' care. They maintain that the current amount reimbursed allows health plans to offer supplementary benefits with additional funding, not with the savings from increased efficiency.⁴ Moreover, Medicare Advantage spending has increased Part B premiums paid by all Medicare enrollees. Experts also estimate that the increased spending will exhaust the Medicare Part A trust fund two years earlier than predicted.⁵

Methods

Researchers assembled a database linking California Medicare data from the CMS Denominator files and Enrollment Database with hospital discharge data obtained from the California Office of Statewide Health Planning and Development. They identified a sample of Medicare beneficiaries covered by both Medicare Parts A and B who were entitled to Medicare benefits as of January 1, 1991.

Enrollees who had end-stage renal disease, lived in counties with less than 500 Medicare enrollees, were enrolled in any Medicare Advantage plan that was not a risk HMO, or were less than 65 years of age were excluded.

Using a pre- and post-analysis as well as a comparison group, researchers assessed HMOs' effect on inpatient utilization.⁶ Three study cohorts were formed from the sample population. One group included Medicare beneficiaries who were originally enrolled in FFS plans but switched to Medicare risk HMOs in 1992 or 1993. This cohort of beneficiaries was compared to two cohorts whose enrollees were either continuously enrolled in traditional FFS or HMOs between 1991 and 1995.⁷

The FFS cohort allowed researchers to control for changes in utilization that were unrelated to HMOs. The HMO group allowed researchers to control for utilization differences between those always enrolled and those newly enrolled in HMOs, possibly because of health status differences or the propensity to seek care.

When comparing inpatient utilization, each individual was evaluated independently. The individual's utilization per year was the unit of analysis. Thus, each individual had five observations, or one per year for the duration of the study. Because inpatient utilization is often dependent on the decision to admit a patient and the physician's decision regarding the patient's length of stay, researchers utilized a two-part model.⁸

The model determined the probability of at least one inpatient day (the few hospitalizations with length of stay equal to zero were excluded) and predicted total hospital days per year given one hospital day. After combining the two parts of the model, researchers were able to determine the effect of HMOs on inpatient utilization relative to FFS. In addition, HMOs were categorized by their model type, either group and staff or independent practice association (IPA).

Results

Researchers found no difference in the probability of hospitalization between HMO and FFS enrollees. However, the number of inpatient days for HMO enrollees, after controlling for selection, was fewer. The impact of group and staff model HMOs was greater than IPA HMOs.

Specifically, researchers found that the California group and staff HMO enrollees used 18 percent fewer inpatient hospital days than if they had continued in FFS, with an 11 percent reduction for IPA enrollees. California Medicare IPA HMO enrollees used 928 hospital days per 1,000 beneficiaries, while FFS enrollees used 1,679 days per 1,000 beneficiaries. The difference was 751 days in 1995.

Melnick concluded that 115 days, or approximately 15 percent of this difference, resulted from the managed care effect, and 636 days, or 85 percent, was a result of favorable selection. Moreover, California group and staff HMO enrollees used 976 hospital days per 1,000 beneficiaries. Approximately 70 percent of the difference between group and staff HMO and FFS inpatient days was attributed to selection and 30 percent to the managed care effect.

Conclusion

These findings support earlier research indicating that healthier individuals often select HMO health plans and require less inpatient care than those remaining in traditional Medicare FFS. These findings, however, also indicate that HMOs decrease inpatient utilization for Medicare enrollees. This study did not address or measure the intensity of inpatient services, and therefore, whether other aspects of inpatient care were affected is unknown.

Policy Implications

Findings from this study support the notion that HMOs use health care resources differently and use fewer inpatient days

than Medicare FFS. Melnick and colleagues note, “Research continues to show that under current payment methods, Medicare HMOs are overpaid and increase Medicare program costs.” Melnick’s findings are consistent with these analyses.

“Given increasing fiscal pressure on the Medicare program due to demographic shifts, the high cost of medical technology, and implementation of Medicare Part D, Congress needs to determine whether the government should continue to support Medicare Advantage plans in this way or realign the reimbursement system forcing them to compete on a level playing field,” he states.

He suggests one way of finding appropriate reimbursement rates is by allowing health plans to compete for Medicare Advantage contracts through competitive bidding, thereby letting the market determine the appropriate level of reimbursement.

About the Author

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Endnotes

1 Kaiser Family Foundation, “Medicare Advantage: Key Issues and Implications for Beneficiaries,” Testimony of Patricia A. Neuman, Hearing of the House Committee on the Budget, United States House of Representatives, June 28, 2007. Also see www.house.gov/budget_democrats/hearings/

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- 2 “Medicare Advantage,” Medicare Fact Sheet, The Henry J. Kaiser Family Foundation, June 2007. Also see www.kff.org/medicare/upload/2052-10.pdf
- 3 *ibid.*
- 4 Miller, M. “The Medicare Advantage Program and MedPAC Recommendations,” Statement before the Committee on the Budget, U.S. House of Representatives, June 28, 2007. Also see http://www.medpac.gov/documents/062807_Housebudget_MedPAC_testimony_MA.pdf.
- 5 “Medicare Advantage,” Medicare Fact Sheet, The Henry J. Kaiser Family Foundation, June 2007. Also see www.kff.org/medicare/upload/2052-10.pdf
- 6 Cook, T.D. and D.T. Campbell. 1979. *Quasi-Experimentation: Design and Analysis Issues for Field Settings*. Chicago: Rand McNally College Publishing.
- 7 Dhanani, N. “The Effect of HMOs on the Inpatient Utilization of Medicare Beneficiaries,” *Health Services Research*, Vol. 39, No. 5, October 2004.
- 8 *ibid.*