Project Title: Patterns of Utilization and Cost in the Community Nursing Organization Medicare Demonstration
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Research Objective:
The study's objective was to measure the effect on utilization of services and cost of the Medicare Community Nursing Organization (CNO) demonstration. The CNO demonstration was based on a nursing case management service delivery system in which CNOs at four sites received a capitated payment for the provision of a subset of services normally covered by traditional Medicare.

Study Design:
The study used Medicare claims data from 1994 through 1999 for CNO enrollees (treatments and controls) and the non-enrolled Medicare population living near the four CNO sites. A randomized design was maintained for part of the study period and permits especially strong conclusions. A breakdown in the randomization of CNO applicants raised the possibility of confounding effects of selection bias. Thus, a risk-adjusted, difference-in-differences methodology using a Medicare population reference group supplements the analysis.

Population Studied:
The study population consisted of 11,066 CNO applicants who were randomized to the treatment group, 3,784 CNO applicants who were randomized to the control group, and 239,382 person-year records representing the Medicare population that did not apply to a CNO during the years 1994-1999.

Principal Findings:
Medicare spending per person per month was higher and statistically significant for members of the CNO treatment group as compared to both members of the control group and to the Medicare population reference group. Expenditures for CNO-covered services were higher for the treatment group as compared to the control or Medicare reference groups. Comparison of the CNO treatment group to the Medicare reference group suggested that CNO participation also induced higher utilization of non-CNO services at some sites. These findings were robust to variations in definition of treatment (e.g., restricting the treatment group to include only those who had been enrolled to treatment for at least six months).

Conclusions:
The CNO model of service delivery has been shown to increase utilization and cost for the Medicare program. This conclusion is strongest for CNO-covered services, implying that a reduction in capitation rates might make the CNOs budget neutral. However, our finding that the treatment group was more costly for non-CNO services as compared to the Medicare population reference group suggests that incentives exist for CNOs to shift utilization and cost to non-CNO services. A downward change in capitated payment rates to achieve budget neutrality for the CNO-covered services would only strengthen this incentive and likely offset any savings in reduced payment rates.

Implications for Policy, Delivery or Practice:
The CNO demonstration was, in essence, a demonstration of partial capitation since CNOs were paid a capitated rate for only a subset of Medicare-covered services. Our work highlights the fundamental cost management challenge associated with partial capitation and one that would be faced by other partially capitated Medicare programs (e.g., the provision of a prescription drug benefit through private plans that cover no other services). Our findings suggest that the provision of services under a partial capitation program might be made cost effective if the capitated payments are set correctly. However, organizations at risk for only a portion of Medicare benefits also have an incentive to shift utilization and costs to those still covered by Medicare. Decreasing capitated payments only strengthens this incentive, confounding the problem of setting appropriate payment rates.