BRIEF REPORTS

Evidence for the Will Rogers Phenomenon in Migration of Employees to Managed Care Plans

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Employees have increasing opportunities to enroll in managed care plans, and employers tend to favor these plans because of their lower costs. However, lower costs may be the result of selection of healthier patients into managed care plans. This study measured differences in health care utilization across an indemnity plan and a managed care plan, and for all employees together. We found that apparent increases in utilization in both indemnity and managed care plans disappeared when the plans were viewed together, reflecting the migration of sicker patients from indemnity plans to managed care plans.

KEY WORDS: employees; managed care; indemnity insurance plans; utilization.

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Employers who are challenged by the rising costs of health care as a major component of employee compensation and benefits increasingly look to managed care plans to reduce their costs. Controversy continues regarding the actual ability of managed care to decrease costs and the mechanisms it uses to do so. In particular, selection bias of accepting healthier patients into managed care insurance plans has been cited as the primary means to decrease utilization.¹⁻³ The aim of this study was to explore how migration of employees from one type of health insurance plan to another affects the perception of the efficiency of the two types of plans and the health care costs for the population as a whole.

METHODS

Lehigh Valley Hospital and Health Network (LVHHN) is a large (700-bed) health care system in southeastern

Pennsylvania. Health insurance benefits for employees provide two major options: "Choice Plus" and "Valley Preferred." Choice Plus is a standard-design HMO program with a required primary care provider, utilization review procedures, and copayment for prescription drugs. The plan is a self-insured product offered only to LVHHN employees. Valley Preferred is a preferred provider organization (PPO) indemnity program that is available to both hospital employees and employees of small businesses throughout the region. Physician availability is equivalent in that virtually all physicians on the hospital staff participate in both insurance plans.

Utilization data were obtained for 1996 and 1997 from the claims system for the two insurance plans. In 1996, a random sample of 300 employees received the 36-Item Short Form (SF-36) health status assessment and a questionnaire that examined their experiences in seeking health services. A change in benefits structure was intended by LVHHN to have more employees choose the managed care plan. There was no charge to full-time employees and their families for the managed care insurance in either 1996 or 1997. For the indemnity insurance, there was a substantial change from no charge in 1996 to \$80.00 per month in 1997.

RESULTS

Table 1 demonstrates that in 1996 the per-member costs for HMO/managed care plan employees ($n = 1,313$) were lower than those for the indemnity plan (PPO) employees ($n = 2,620$) (the overall number of covered lives for both plans was 10,615 because of family coverage). The HMO patients also had shorter lengths of stay and lower rates of utilization than did the PPO group. However, after a hospital policy change in benefits coverage, another 1,840 employees and their dependents switched to the managed care plan. This change resulted in apparently increased utilization rates for both managed care and indemnity employees.

Despite these apparent increases in utilization, when each plan is observed separately, the actual changes in resource consumption disappear from a population perspective. That is, hospital days per 1,000 members were 330.6 in 1996 and 329.2 in 1997; the average cost per member per month was \$116.00 in 1996 and \$123.00 in 1997.

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Table 1. Cost and Utilization Data For Hospital Employees*

Cost/Utilization Variable	Fiscal Year 1996	Fiscal Year 1997
Choice Plus (managed care) total cost, \$	98 PMPM	119 PMPM
Monthly charge to employee, \$	0	0
Valley Preferred (indemnity) total cost, \$	126 PMPM	142 PMPM
Monthly charge to employee, \$	0	80
Choice Plus inpatient days/1,000	216	273
Valley Preferred inpatient days/1,000	387	554
Choice Plus average length of stay, days	3.47	4.01
Valley Preferred average length of stay, days	4.18	4.58
Overall inpatient days/1,000	330.6	329.2

*Total covered lives = 10,615. PMPM indicates per member, per month.

Figure 1 compares the results of the SF-36 health status assessment survey for the HMO group and for the indemnity group in 1996. Response rates were 42% of 100 HMO employees and 32% of 200 indemnity employees. Employees in the managed care plan were significantly ($p < .05$) healthier on five of the eight SF-36 subscales.

DISCUSSION

This study of the impact of managed care is unique because it directly measured both the local effect of migration across plans and the overall effect across a fixed population. The initial selection bias of healthier patients

in the 1996 cohort is likely to have been followed by migration of patients who were sicker and higher utilizers in the 1997 cohort—a difference spurred by changes in hospital benefits coverage. In other words, unit costs were higher in both populations after migration of the one group. However, overall costs for the entire population did not differ before and after the movement of patients. Thus, the illusion of higher costs occurs, but without a change in the systems of care, no real savings—or increases—will take place. These results suggest that employers seeking to shift more of their employees to managed care need to observe overall utilization in order to distinguish the effects of plan activities from the effects of employee migration.

FIGURE 1. SF-36 subscale results. *Indicates significance; P.H., personal health; E.M., emotional health.

Will Rogers is alleged to have said, "When the Oakies left Oklahoma and moved to California, it raised the I.Q. of both states." Feinstein and colleagues coined the term "Will Rogers phenomenon" to refer to the stage migration in cancer that they attributed to changes in imaging technology.⁴ Patients often moved from a lesser stage to a more severe stage because of diagnostic imaging results, artifactually improving survival rates of both groups. We suggest the same term is appropriate to describe the change in utilization observed in our population.

We speculate this phenomenon will occur on a wide scale as more patients with significant illnesses shift from standard Medicare to managed Medicare products. These results have important implications for designing systems of care that genuinely improve the care processes for pa-

tients with disease rather than merely select for healthy individuals.

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REFLECTIONS

The Scar

Studying the trigeminal nerve late,
dry eyes burn red.
Scanning my reflection in the mirror,
nascent wrinkles and thinning hair,
I notice the scar and remember.

Riding speed over time down a sheer wave followed by a crack.
Warm blood on my face makes the water feel cool.
What was inside is outside.
Shrill sounds of chaos absorbed by the indifferent sea.
All witnessed through a swollen eye.

A beacon of serenity holds my head.
Giant, calm hands—soft and warm—
envelop the gaping hole.
He carries all of me.
I am half of him.

He guides me through
a sterile maze of stainless steel and oxidizing deodorant.
I sit.
The chair crunches,
disrupting the prophylactic covering.

Soft words ease me
Ebbing brimming tears forbidden to flow.
A waxing needle, drooling venom, coils to a hiss,
It approaches my eye
attached to a steady hand.

Stung and stun again.
The hot injections pierce my skin
As the lacrimation spills over the dam
Flooding a numb cheek.
I let go.

Harbored pride for him
fills my heart.
Sutures tug my brow.
He is my doctor.
He is my dad.

Scars of memories haunt me,
Some happy, some sad,
as they lay the tracks I follow in my subconscious
to where I am now,
studying the trigeminal nerve late.

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