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State Unemployment In Recessions During 1991–2009 Was Linked To Faster Growth In Medicare Spending

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ABSTRACT During the US recession of 2007–09, overall health care spending growth fell, but Medicare spending growth increased. Using state-level data from the period 1991–2009, we show that these divergent trends were also observed within states. Furthermore, increases in state unemployment rates were associated with higher Medicare spending per capita and increased hospital use by Medicare beneficiaries. For example, a one-percentage-point point rise in the unemployment rate was associated with a $40 (0.7 percent) increase in Medicare spending per capita. Our results suggest that economic downturns contribute to Medicare spending and use. One of many possible explanations may be that health care providers have greater capacity, inclination, and financial incentive to treat Medicare patients during recessions as a result of slackening demand from the non-Medicare population.

The recession that officially began in December 2007 and ended in June 2009—sometimes popularly dubbed the Great Recession—appears to have slowed health care spending growth overall. In 2008 and 2009, overall US health care spending rose by 4.4 percent and 4.0 percent, respectively—the slowest growth rates in fifty years.[1,2] Cuts in overall consumer and business spending on health insurance and health care contributed to the slowdown. One study showed that more than one-fourth of people ages 18–65 reported a drop in routine medical care during and after the economic crisis.[3]

In contrast, patterns of Medicare spending growth and use during this same period looked very different. Total Medicare spending grew by 7.9 percent each year in 2008 and 2009—an increase from 7.1 percent growth in 2007. Growth was particularly high in the traditional, fee-for-service portion of the Medicare program, in which per enrollee spending grew by 6.9 percent in 2009, up from 4.7 percent in 2008. Medicare

fee-for-service spending growth resulted from increases in hospital spending and use[1,2] and outpatient use. Medicare outpatient visits increased by 4.4 percentage points in 2008, representing the "largest single-year increase in the last 10 years."[4(p81)]

These patterns are worth examining, given the sizable government resources devoted to Medicare and persistent calls to contain the program's costs. In this study we used nearly twenty years of data to investigate whether the relationships between all-payer and Medicare spending growth and economic conditions hold historically. We captured the effects of economic conditions with the unemployment rate—a measure often used in the health economics literature to quantify the relationship between economic recessions and health outcomes and health care use.[5–9]

We first explored whether the relationships between spending growth and national unemployment rates that were observed during the Great Recession also held overall during recessions between 1991 and 2009. We then examined whether the relationships observed in na-

tional data were seen in state-level analyses linking changes in unemployment rates to changes in all-payer and Medicare health care spending growth.

We found weak evidence that all-payer spending growth slowed as state unemployment rates rose. In contrast, we found robust and statistically significant evidence that Medicare spending growth and hospitalization rates increased as unemployment increased.

Evidence of faster growth and more utilization runs counter to expectations that lower earnings, lost insurance coverage, or even better health that may result from poor economic conditions[5] would reduce demand for health care. But since Medicare recipients are largely insulated from business-cycle fluctuations in insurance and earnings, we posit that increased Medicare spending growth may arise from either health care suppliers' greater capacity or stronger financial incentives to deliver care to Medicare beneficiaries when demand by the privately insured falls.

A better understanding of these mechanisms is important for policy makers. If providers alter the provision of care to Medicare beneficiaries in response to unemployment rates, then improvements in economic conditions and perhaps expanded private insurance coverage, assuming that capacity stays equal, may reduce access for Medicare beneficiaries.

Study Data And Methods

We first analyzed unemployment rates and health care spending growth by examining long-term trends and correlations with annual national data from the period 1991–2009. We then estimated state-level multivariate regression models to examine the links between unemployment, health care spending growth and levels, and health care use after adjusting for a number of other state-level factors that might be correlated with both unemployment and health care spending.

One example is per capita income, which may be directly related to health care spending and inversely related to unemployment. Adjusting for these factors helps determine the association between unemployment and health care spending holding all else equal. We used national and state annual unemployment rates from the Bureau of Labor Statistics Local Area Unemployment Statistics division.[10]

HEALTH CARE SPENDING MEASURES We used annual data on health care spending by state of residence from the Centers for Medicare and Medicaid Services for the period 1991–2009. These data were based on the National Health Expenditure Accounts and represented total personal health care spending by all payers and total personal health care spending by Medicare. Spending data were available for the United States overall and for all fifty states and the District of Columbia.[11]

Our national analysis focused on annual US growth rates. We converted nominal spending data into constant (2000) dollars using the all-items Consumer Price Index.[12,13] We calculated annual growth rates from spending estimates for each year from 1992 to 2009.

Our state-level analysis used several different measures of spending. First, we examined the growth rate in all-payer personal health care spending and the growth rate in Medicare spending.[14] As in the national analysis, we first converted nominal spending into constant 2000 dollars using the Consumer Price Index, and we calculated annual growth for each year from 1992 to 2009.

Since aggregate spending growth could rise because of population or enrollment increases, we next examined spending growth per capita or per enrollee. Then, to explore the components of spending growth, we examined spending growth by major type of provider, such as physicians, hospitals, and nursing homes. Finally, we examined all-payer and Medicare per capita spending levels, both overall and by provider of care.

MEDICARE UTILIZATION MEASURES Our analysis of state-level Medicare utilization used data from the *Dartmouth Atlas of Health Care* from 1992 to 2007 (the latest year for which data are available).[15] The *Dartmouth Atlas's* Medicare utilization data are produced from Centers for Medicare and Medicaid Services claims databases.[16] We examined both medical and surgical discharge rates.

For each rate, the denominator was defined as the number of Medicare enrollees ages 65–99 with full hospital insurance (Part A entitlement) and not enrolled in health maintenance organizations in the state and year. The numerator was defined as the number of discharges in that state and year with a set of procedure and diagnosis codes associated with a particular type of discharge (defined from the *International Classification of Diseases*, Ninth Revision, Clinical Modification).

We also used two measures of end-of-life utilization available from the *Dartmouth Atlas* beginning in 1994: the number of inpatient days per decedent in the last six months of life, and the number of intensive or critical care unit days per decedent in the last six months of life. For these two end-of-life measures, the denominator was defined as all Medicare enrollees ages 65–99 who died during the measurement year and had

full Part A entitlement and no health maintenance organization enrollment that year, and the numerator was the number of inpatient days within six months of the death date.

All rates were adjusted to reflect the age, sex, and racial composition of the state's Medicare population. For example, unadjusted utilization rates are likely to be higher in a state with a relatively older Medicare population. Adjusting the observed rate to reflect a state's age distribution allows for a clearer comparison of discharge rates across states with different compositions of Medicare enrollees.[17]

MULTIVARIATE REGRESSION ANALYSIS We estimated multivariate regression models of state-level growth rates, spending, and Medicare use. All models controlled for various state-level traits that also contribute to health care spending variation, such as demographic and economic characteristics. State-specific measures of the shares of the population that are female, black, and of Hispanic ethnicity were constructed from the annual March Current Population Survey.[18]

We also included shares of the population ages 20–24, 25–44, 45–64, 65–74, and 75 and older, as defined from the Surveillance Epidemiology and End Results program.[19] Controls for socioeconomic differences affecting health care spending and use were constructed from data on per capita income in constant (2000) dollars from the Bureau of Economic Analysis.[20] We also controlled for the shares of adults age twenty-five and older with less than a high school education, with some college education, and with a college degree or more, as well as the shares of adults age twenty-five and older working in the construction and manufacturing industries (calculated from the March Current Population Survey).

Because of data limitations, we did not include measures of Medicare managed care penetration, hospital beds per capita, and physicians per capita in our main models. These variables were not available for all years in our time period, and including them would result in a loss of nearly 30 percent of the sample.[21] We addressed this limitation in two ways. As described below, our main results include state-specific time trends to account for other factors within a state that vary over time. We also included these measures in a separate analysis using the subset of states and years for which these variables were available.[21] (For more detail, see the online Appendix.)[22]

In our preferred models, we included year and state fixed effects. Year fixed effects control for time-varying influences on health care spending that are common to all states, such as the introduction of certain medical treatments or technologies. State fixed effects capture state-specific influences on spending that are persistent over time, including unobserved regional factors that influence health behavior.

Finally, we included a set of state-specific time trends that account for additional but unobserved factors that vary within states over time, such as the Medicare managed care penetration rate. Including these controls reduced the potential for biased estimates of the link between unemployment and spending. It also increased the chance that our estimates represent causal effects of unemployment. However, the state-specific time trends captured much of the variation in unemployment and spending, so their inclusion posed a stringent test to the data. Therefore, we tested the sensitivity of our results to dropping the state-specific trends (details are in the online Appendix).[22]

All models were estimated using ordinary least squares, and observations were weighted by the square root of the state population to account for variance in spending that differs by state (that is, heteroskedasticity). For example, states with smaller populations may exhibit more variation in health care spending than states with larger populations.

Study Results

ALL-PAYER AND MEDICARE HEALTH CARE SPENDING GROWTH We first examined whether the divergent trends observed during the Great Recession—a decline in overall spending growth but an increase in Medicare spending growth—held historically. From 1992 to 2009, the annual US unemployment rate averaged 5.6 percent, ranging from a low of 4 percent (in 2000) to a high of 9.3 percent (in 2009). Between 1992 and 2009, annual growth in real spending averaged 3.8 percent for all-payer personal health care spending and 5.4 percent for personal health care spending paid for by Medicare.

During this period, the national unemployment rate was positively correlated with both the annual growth rate in real all-payer spending ($\rho = 0.24$) and the annual growth rate in real Medicare spending ($\rho = 0.44$) (Exhibit 1). However, only the latter correlation is significant ($p = 0.07$).

We next turned to state-level regression models to determine if these patterns held when we controlled for factors such as per capita income, population age, and education. When we controlled only for demographic and economic factors, the state unemployment rate had a positive but nonsignificant relationship with the growth rate in all-payer personal health care spending (Exhibit 2). This relationship tracked the posi-

Annual Employment And Health Care Spending Growth Rates, United States, 1992–2009
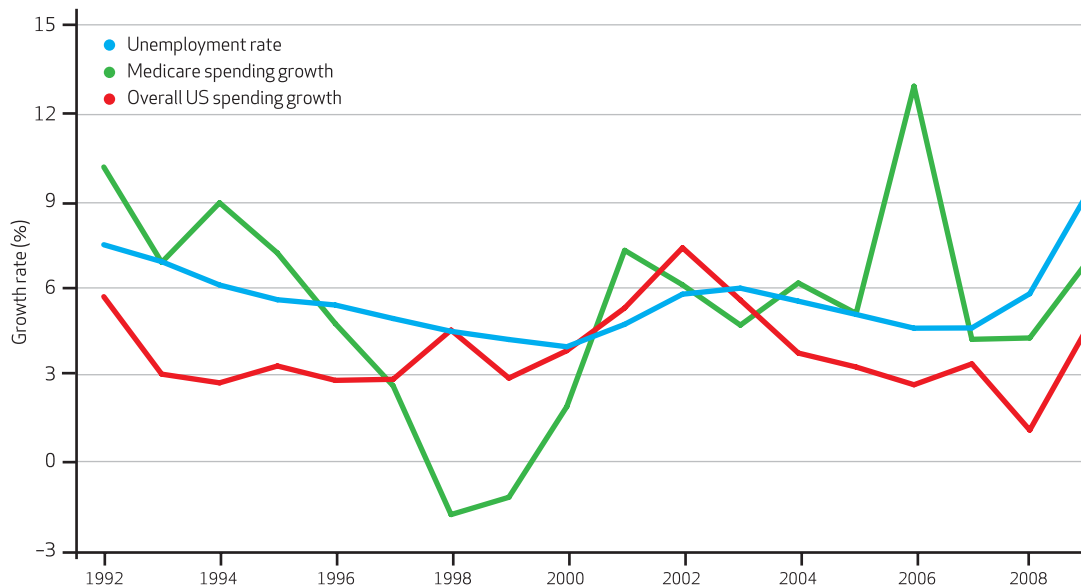
tive correlation observed in the national time-series data, since during much of this period the unemployment rate was falling and growth was slowing modestly.

After we accounted for time-varying influences on spending that were common to all states, such as the introduction of certain medical treat-ments, and state-specific influences on growth that are fixed over time, including unobserved regional factors that influence health care use, the association between unemployment and all-payer spending growth became negative and significant (Exhibit 2). A one-percentage-point increase in the unemployment rate was associated

Effects Of A One-Percentage-Point Rise In Unemployment On Real Health Care Spending Growth, All-Payer And Medicare, 1992–2009

Controls	All-payer health care spending growth			Medicare spending growth		
	Model 1 Demographic and economic factors	**Model 2** Demographic and economic factors, state and year fixed effects	**Model 3** Demographic and economic factors, state and year fixed effects, state-specific time trends	**Model 1** Demographic and economic factors	**Model 2** Demographic and economic factors, state and year fixed effects	**Model 3** Demographic and economic factors, state and year fixed effects, state-specific time trends
Effect of a one-percentage-point rise in the unemployment rate on spending growth	0.05 (0.05)	–0.15* (0.08)	–0.09 (0.10)	0.55*** (0.09)	0.45*** (0.13)	0.66*** (0.16)

with a 0.15-percentage-point reduction in overall growth—a reduction of nearly 4 percent from mean spending growth of four percentage points per year.

This finding suggests that poor economic conditions slow growth somewhat; however, the finding did not hold after we accounted for unobserved factors that vary within a state over time. In that specification, we saw that unemployment no longer had a significant relationship with all-payer spending growth (Exhibit 2).

In contrast to the results for overall spending growth, regression results for Medicare showed that the positive and significant relationship between unemployment and spending growth persisted after adjustment for state and year fixed effects (Exhibit 2). A one-percentage-point climb in unemployment was associated with a 0.45-percentage-point increase in Medicare spending growth, compared to mean growth in this period of 5.65 percent. When we added more stringent controls in the form of state-specific time trends, the positive association between Medicare growth and unemployment remained significant ($p < 0.01$). A one-percentage-point rise in the unemployment rate increased growth by 8–12 percent from mean growth of 5.65 percentage points a year.

Thus, the historical data from the period 1991–2009 support the pattern suggested by recent statistics on Medicare growth in the Great Recession: Medicare spending growth increased as the unemployment rate rose. We found only weak evidence that all-payer spending growth slowed as state unemployment rates rose.

PER CAPITA SPENDING GROWTH AND LEVELS, BY PROVIDER OF CARE To better understand the findings for overall growth rates, we examined the relationship between state unemployment and other measures of health care growth and spending. First, since changes in spending growth may be driven by population or enrollment increases, we examined growth in spending per capita.

Second, since patterns in overall health care spending may mask differences by type of health care, we examined growth in spending for three of the largest categories of spending: hospital care, physician and other clinical services, and nursing home care. Spending in these categories accounted for more than two-thirds of all-payer personal health care spending and 85 percent of Medicare personal health care spending in our data set.

Third, we examined variations in the level of per capita spending. Looking at spending levels by type of care helps interpret the size of various effects, since large percentage increases in spending growth may not necessarily translate

into large dollar increases in spending. To simplify the presentation of results, we report estimated unemployment effects from models that controlled for state and year fixed effects as well as state-specific time trends.

The results are reported in Exhibit 3; the top panel reports associations between the unemployment rate and all-payer spending, and the bottom panel reports results for Medicare spending. Results for per capita spending growth were comparable to those seen for overall growth (Exhibit 3). A one-percentage-point rise in unemployment had no significant effect on all-payer spending growth per capita but was associated with an increase in the growth rate of Medicare spending per enrollee of approximately 0.66 percentage points ($p < 0.01$).

Additional results show that hospital care was positively associated with increases in the unemployment rate. A one-percentage-point rise in the unemployment rate was associated with a 0.32-percentage-point increase in hospital spending growth per capita for all payers and a 0.67-percentage-point increase in hospital spending growth per capita for Medicare.

Notably, the effect for Medicare was more than twice as large as the effect for all payers. This suggests that responses in Medicare spending may be driving the response for all payers. For physician and clinical services and for services provided in nursing home facilities, we saw no significant relationship between unemployment rates and all-payer growth per capita. However, we observed significant positive relationships between unemployment rates and Medicare growth in these areas.

These findings were consistent with the recent pattern from the Great Recession in which Medicare spending responded differently to recessions than all-payer spending did.

In terms of spending levels per capita, we again saw differences between all-payer and Medicare spending responses to unemployment (Exhibit 3). For overall health care, the Medicare spending response was almost twice as large as the all-payer response ($40 and $22 per capita per year, or 0.7 percent and 0.5 percent increase in spending per capita per year, respectively), and unemployment effects on Medicare hospital spending and nursing home care spending were much larger in size and statistical significance than were these effects on all-payer spending. All-payer per capita spending for physician and clinical services was positively associated with the unemployment rate, and the association was stronger than it was for Medicare physician spending per capita (an increase of $13.94 per capita per year versus $7.29).

Several factors may explain this result. First,

EXHIBIT 3

Effect Of A One-Percentage-Point Rise In Unemployment On Health Care Spending Growth And Spending Per Capita, By Payer And By Type Of Health Care, 1992–2009

	Spending growth per capita				Amount of spending per capita			
	Overall	Hospital care	Physician and clinical services	Nursing home care	Overall	Hospital care	Physician and clinical services	Nursing home care
ALL-PAYER SPENDING								
Effect of rise in unemployment	0.09 (0.10)	0.32** (0.16)	−0.03 (0.24)	0.19 (0.21)	21.88*** (5.14)	4.23 (2.97)	13.94*** (2.83)	0.19 (0.82)
Mean spending growth (or mean spending) per capita	3.05%	2.58%	2.66%	2.37%	$4,363.71	$1,662.65	$1,048.91	$311.12
MEDICARE SPENDING								
Effect of rise in unemployment	0.66*** (0.15)	0.67*** (0.19)	0.34* (0.20)	1.82*** (0.68)	40.17*** (10.68)	15.06** (7.35)	7.29** (3.17)	4.22*** (1.63)
Mean spending growth (or mean spending) per capita	3.80%	2.23%	2.73%	13.40%	$5,706.52	$3,300.77	$1,319.32	$256.79

SOURCE Authors' analysis of data from the State Health Expenditure Accounts, Centers for Medicare and Medicaid Services, 1991–2009. **NOTES** We used ordinary least squares regression to test for a significant relationship between the state unemployment rate and health care spending growth per capita and per capita spending. All models include controls for state and year fixed effects; state-specific time trends; proportions of the population ages 20–24, 25–44, 45–64, 65–74, and 75 and older; proportion black, proportion Hispanic, and proportion female; per capita income and its square; proportions of the population with less than a high school education, with some college, and with a college degree or more; and proportions of the population employed in construction and manufacturing. Standard errors are in parentheses. The number of observations used in each model is 918. $*p < 0.10$ $**p < 0.05$ $***p < 0.01$

although patient volume decreases during recessions, the intensity of treatment may increase.[2] Second, since Medicaid spending increases during economic downturns as more people become eligible for public insurance, this result could reflect the countercyclical nature of the Medicaid program combined with the pattern we observed for Medicare.[1]

Regardless, the main conclusion that unemployment has a different effect for Medicare spending than for all-payer spending persists. In every case, higher unemployment rates were positively and significantly associated with increased spending per Medicare enrollee.

We next examined changes in spending levels, because large increases in spending growth might not result in large increases in spending. In fact, comparing effect sizes in Exhibit 3 shows that even though Medicare skilled nursing home spending had the largest response to unemployment in terms of its growth rate (1.82 percent annually), hospital spending experienced the largest increase in spending ($15 per capita per year, compared to $7 and $4 for physician and clinical services and for nursing home services, respectively; these increases correspond to 0.5 percent, 0.6 percent, and 1.6 percent increases, respectively, in spending per capita per year). Thus, increases in hospital spending dominated the increases in Medicare spending per enrollee that were associated with rising unemployment.

MEDICARE UTILIZATION Increased Medicare spending per capita may have reflected increased prices or reimbursement rates, utilization, or both. Given the significant relationship between the unemployment rate and Medicare hospital spending per enrollee, we next estimated a series of multivariate regression models of Medicare inpatient utilization measured with *Dartmouth Atlas of Health Care* data on Medicare fee-for-service enrollees (Exhibit 4). Again, for simplicity, only results controlling for year and state fixed effects and state-specific time trends are shown.

For all measures except intensive or critical care unit days, unemployment rate increases were positively and significantly associated with inpatient use. Thus, higher unemployment was associated with increased medical and surgical discharge rates and end-of-life inpatient days ($p < 0.05$).

All of our main regression results were robust to a number of specification changes, such as excluding state-specific time trends. More detail is available in the online Appendix.[22]

Discussion

Recent studies have documented a slowdown in all-payer health spending growth during the Great Recession. The slowdown may be explained by reductions in job-based health insurance coverage that cause people to forgo health care. In contrast, reports suggest that Medicare

Effect Of A One-Percentage-Point Rise In Unemployment On Medicare Hospital Utilization, 1992–2007

	Medical discharges per 1,000 enrollees	Surgical discharges per 1,000 enrollees	Inpatient days per decedent, last 6 months of life	Intensive/critical care unit days per decedent, last 6 months of life
Effect of rise in unemployment	1.82*** (0.50)	0.31** (0.15)	0.11*** (0.03)	0.004 (0.01)
Mean hospital utilization	228.34	96.72	10.17	2.39

SOURCE Authors' analysis of data from the *Dartmouth Atlas of Health Care*, 1992–2007. **NOTES** We used ordinary least squares regression to test for a significant relationship between the state unemployment rate and hospital utilization. All models include controls for state and year fixed effects, state-specific time trends; proportion Hispanic; per capita income and its square; proportions of the population with less than a high school education, with some college, and with a college degree or more; and proportions of the population employed in construction and manufacturing. Because the dependent variables are adjusted for age, race, and sex using indirect methods, we omitted these controls. Standard errors are in parentheses. Models of discharge rates were estimated using a sample of 816 observations, and models of end-of-life care were estimated using a sample of 714 observations. **$p < 0.05$ ***$p < 0.01$

hospital spending growth increased during the Great Recession.[1,2]

In our analysis of data from the period 1991–2009, we found this same pattern for Medicare spending growth. Furthermore, higher unemployment rates across states and over time were associated not only with faster Medicare spending growth, but also with more Medicare spending per capita—especially more hospital spending and more hospital use by fee-for-service Medicare beneficiaries.

Our findings add another area-specific trait, state economic conditions, to the list of those that contribute to geographic variation in spending.[23–27] We found that a one-percentage-point rise in employment brought about a 0.7 percent increase in Medicare spending per capita (Exhibit 3). Although the contribution was relatively small in a given year, this estimate takes on greater significance when considered in the context of recent large unemployment increases. If applied to all beneficiaries, this figure implies that the nearly five-percentage-point rise in unemployment from 2008 to 2010 increased Medicare spending by more than $9 billion.[28] By comparison, an estimated savings of $8.6 billion was associated with reductions to Medicare Advantage payments in the Affordable Care Act.[29]

Given the need to contain Medicare costs, it is important to consider why unemployment contributes to higher Medicare spending growth and spending per capita. A small group of studies has quantified the link between health care use and recessions in different settings.[3,5–7] Most of these studies have examined working-age people and found that increases in the unemployment rate either decreased or had no effect on health care use.

One exception was a study by Christopher Ruhm, who examined selected state-level surgical discharge rates for Medicare enrollees treated for heart disease.[7] In that study, increases in unemployment rates were associated with increases in surgical discharges for coronary artery bypass graft surgery, percutaneous transluminal coronary angioplasty, and coronary angiography.

Our results build on this study by examining the relationship between unemployment and health care use among Medicare beneficiaries for a broader set of hospital utilization measures—all surgical and medical discharges plus end-of-life hospital use—over a longer time period (seventeen years as opposed to ten). We also confirm that the relationship is robust to the inclusion of a number of additional controls. Together, both sets of findings suggest that unemployment and health care use were positively associated in the Medicare population, unlike findings from studies of the population under age sixty-five.

So why would Medicare use rise during times of higher unemployment? A possible demand-side explanation for our results is that before reaching age sixty-five, some people postpone medical treatment because of recession-induced drops in insurance coverage or perhaps even fear of job loss. This possibility might also explain increased Medicare spending during recessions, provided that the increased use is concentrated among newly enrolled beneficiaries—something we were unable to test with aggregate spending data.

Alternative explanations for the positive correlation between Medicare utilization and unemployment may work through suppliers of

health care and their responses to changes in private insurance coverage. Other studies show that unemployment reduces insurance coverage among the working-age population.[30,31] Perhaps medical care providers made financially worse off by a recession's effect on their privately insured patients increase the provision of services to the Medicare population.

In the context of theoretical models of physician-induced demand, the rise in Medicare utilization could be the effect of lost income from non-Medicare patients.[32] Although this possibility is difficult to test, one study found that reductions in fertility rates, which reduce obstetricians' incomes, led to increased use of cesarean section—a method of delivery reimbursed at higher rates by most insurance plans.[33]

More recent analysis of the impact of Medicare on hospitalizations suggests that supply-side characteristics such as ownership status and technology may interact with Medicare eligibility to produce sizable jumps in inpatient use when people reach age sixty-five.[34] Another possible supply-side explanation is that rising unemployment causes a decline in health care demand by the non-Medicare population and, in turn, increases providers' capacity to treat Medicare patients. If providers face excess demand from Medicare patients during times of high demand by the privately insured, then economic downturns could increase Medicare spending, as providers have more time to accommodate Medicare patients.

A recent study reports evidence consistent with this kind of physician response to worsening labor-market conditions. In analysis conducted with four waves of data from the Community Tracking Study Physician Survey, higher state unemployment rates were associated with an increase in physicians' willingness to accept new Medicare patients.[35]

These types of supply-side responses are worth additional consideration by policy makers for several reasons. First, we observe increases in use by fee-for-service beneficiaries timed with higher unemployment. If this higher use reflects demand inducement, it suggests a need for alternative forms of provider payment for cost containment.

Second, if utilization responds to declining unemployment in the same way it does to rising unemployment, then as economic conditions improve and demand by non-Medicare patients increases, access by Medicare patients may decrease if providers do not increase their capacity to see and treat patients.

Another source of increased demand by non-Medicare patients—the health insurance expansions of the Affordable Care Act—might also reduce Medicare patients' access to care if providers engage in substitution across patients and do not increase capacity. Determining whether these supply-side explanations fit the data, and with what consequences for health, requires more careful study of individual consumers and providers.

The results of our aggregate analysis suggest that such a closer look could offer some insight into a significant but modest contributor to Medicare spending and use. ∎

NOTES

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22 To access the Appendix, click on the Appendix link in the box to the right of the article online.

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In this month's *Health Affairs*, Melissa McInerney and Jennifer Mellor, colleagues at the College of William and Mary, report on their surprising finding that since 1991, increases in state unemployment rates were associated with higher Medicare spending per capita and increased hospital use by Medicare beneficiaries. This relationship held even as overall health spending slowed decidedly during the recent deep recession. The authors cite a number of possible explanations, including that

providers may have greater capacity, inclination, and financial incentive to treat Medicare patients during recessions as a result of slackening demand from the non-Medicare population.

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