Hospital Prices and Health Spending Among the Privately Insured

The cost of an MRI of the lower limbs varies by a factor of 12 between the most and least expensive hospitals in the United States for patients who are covered by employer-sponsored health insurance. Similar disparities are observed for many other standard procedures. For patients covered by Medicare, under which prices are regulated by the federal government, the price disparities are much smaller, and the range of prices typically varies by less than a factor of three.

These are among the findings in The Price Ain’t Right? Hospital Prices and Health Spending on the Privately Insured (NBER Working Paper No. 21815) by Zack Cooper, Stuart Craig, Martin Gaynor, and John Van Reenen, a study that examines the prices hospitals negotiate with private insurance companies. After comparing pricing in the private and public sectors, the researchers caution against drawing lessons from Medicare spending data in formulating policies to rein in health care costs among the privately insured.

Many previous studies of health care costs have relied on Medicare payments to hospitals to compare costs in different locations and across providers. While government reimbursement rates are public, the prices hospitals negotiate with private insurers have usually been treated as commercial secrets and are not generally available to researchers. Medicare covers 16 percent of the population, roughly 50 million individuals, while over 60 percent of the population (nearly 190 million people) are covered by private health insurance. This study analyzes newly available data on private health insurance expenditures for 88 million Americans covered by three of the five largest U.S. insurance companies.

The researchers find that hospitals negotiate higher prices when they face less competition: Those with monopoly power charge an average of 15 percent more than those in areas with four or more hospitals.

Hospital prices are positively associated with hospital market power; in monopoly markets they are 15.3 percent higher than in markets with four or more hospitals.

Looking across geographical areas in the U.S., they find that per-patient spending by Medicare is not highly correlated with per-patient spending by private insurers. For example, three cities that have been widely cited by policymakers and in the press for their low per-capita Medicare spending, Grand Junction, CO, Rochester, MN, and La Crosse, WI, have among the highest per-capita private health insurance spending.

One of the study’s key findings is that while variation in the quantity of care provided is a key source of the geographical variation in Medicare spending, variation in the price of particular services is a much larger factor in explaining geographic differences in private health insurance spending.
The study draws data from insurance claims paid between 2007 and 2011 by employer-sponsored plans issued by Aetna, Humana and UnitedHealthcare. The database, assembled by the Health Care Cost Institute, includes all 50 states. The study controlled for a number of other factors that could affect pricing, such as for-profit status, the presence of high-tech equipment, labor costs, hospital size, regional demographics and percentage of Medicare and Medicaid patients.

Average overall health care spending per privately insured individual in 2011 varied by a factor of three across locations, from $1,700 in Honolulu to $5,500 in Napa, CA. The researchers find much larger variations, a factor of eight nationwide, in the negotiated prices for seven standard procedures, including hip and knee replacements, cesarean sections, and diagnostic colonoscopies.

Medicare reimbursement rates are substantially below those of private insurance plans. If “private prices were set 20 percent higher than Medicare rates, inpatient spending on the privately insured would decrease by 17.4 percent,” the researchers calculate.

— Steve Maas

The Cap-and-Trade Sulfur Dioxide Allowances Market Experiment

Since the passage of the Clean Air Act of 1990, the federal government has pursued a variety of policies designed to reduce the level of sulfur dioxide emissions from coal-fired power plants and the associated acid rain. In The Market for Sulfur Dioxide Allowances: What Have We Learned from the Grand Policy Experiment? (NBER Working Paper No. 21383), H. Ron Chan, B. Andrew Chupp, Maureen L. Cropper, and Nicholas Z. Muller evaluate the cost savings and the health consequences of relying on a cap-and-trade sulfur dioxide allowance market to implement emissions reductions.

The key argument advanced by proponents of cap-and-trade programs for pollution reduction is that they are less costly than regulatory programs that impose the same abatement requirements on all polluters. By allowing emission sources with high abatement costs to offset higher on-site emissions by purchasing additional reductions from other, lower-cost polluters, they assert trade in pollution allowances reduces the total cost of achieving a given reduction in aggregate emissions.

To study the cost savings associated with the Acid Rain Program, which allowed such trade, the authors model the cost of abatement for individual coal-fired power plants. They estimate how firms choose between the two leading technologies for sulfur oxide abatement, burning low-sulfur coal and installing flue-gas desulfurization units. They use these estimates to compare abatement decisions corresponding to the Acid Rain Program and standards that achieve the same aggregate reduction in emissions by making uniform requirements on coal-fired plants, with no trading allowed. They find cost savings in 2002, with the Acid Rain Program in full swing, of approximately $250 million from trade in emission allowances. This is less than half of the previously estimated saving from tradable permits. The data suggest that many generating units were not complying with the Clean Air Act in the most economical manner.

One potential drawback of a cap-and-trade system is that in some areas the level of local pollutants — those which pose the greatest health threat near their place of emission — can be higher than under uniform emission standards. This could occur if, for example, utilities in the densely populated eastern United States, where emission
reduction can be comparatively costly, pay utilities in less-populous western regions, where abatement is cheaper, to cut emissions there. The aggregate national reduction may still be achieved, but many more people in the densely populated east could be exposed to pollutants.

The researchers find a greater level of particulate air pollution and associated premature mortality under the Acid Rain Program than under a hypothetical no-trade scenario in which units emitted SO2 at a rate equal to 2002 allowance allocations plus observed drawdowns of their allowance banks. They estimate the cost of health damages associated with observed SO2 emissions in 2002 under the Acid Rain Program to be $2.4 billion higher than would have been the case under the no-trade scenario. They conclude that the health impact of a cap-and-trade program depends on how the program is structured and on the correlation between marginal abatement costs and marginal damages across pollution sources.

— Matt Nesvisky

When Mom and Dad Both Can Get Paid Family Leave

California was the first U.S. state to offer paid family leave to new parents. Its program, started in 2004, offers up to six weeks of paid leave, replacing 55 percent of wages up to a maximum benefit of $1,104 per week in 2015. The program also funds leave to care for a parent, child, spouse, or registered domestic partner with a serious health condition. Most private sector workers are eligible. Leave may be taken all at once or in small increments.

In Paid Family Leave, Fathers’ Leave-Taking and Leave-Sharing in Dual-Earner Households (NBER Working Paper No. 21747), Ann Bartel, Maya Rossin-Slater, Christopher Ruhm, Jenna Stearns, and Jane Waldfogel find that, in dual-income households, the use of paid family leave increased. Father-only leave-taking rose by nearly 50 percent and joint leave-taking—both parents on leave at the same time—rose by 28 percent. The effects for fathers were much larger for sons than daughters, and almost entirely driven by fathers of first-born children and fathers in occupations with a high share of female workers.

Before the program began, an estimated 2 percent of fathers were on leave during the week before the survey. The availability of paid leave increased the percentage to about 3 percent, a 46 percent increase. Additionally, after the law went into effect, an estimated 2.3 percent of mothers were on leave, a 13 percent increase from the pre-law baseline of 2 percent. The program increased leave in households with two employed parents by 4 percentage points, or 22 percent of the pre-program level. The increase in fathers’ leave was composed of a 0.4 percentage point increase in leave taken while both parents were on leave, and a 0.5 percentage point increase in leave taken while the mother was at work.

The researchers estimate that fathers on average responded to the availability of paid leave by taking an additional 2.4 days off, from a baseline of 5.2 days of leave before the program began. In 2005, 19.6 percent of paid leave claims were filed by men. In 2013, men filed 30 percent of claims.

The leave estimates were based on data from the 2000 Census and the 2000–2013 American Community Survey (ACS). Both data sets ask whether individuals are “temporarily absent from work during some portion of the week” in the week prior to the interview. Data limitations prevent the authors from determining whether a survey respondent was eligible for paid leave; the estimates assume that all employed fathers in California were eligible. The findings may underestimate the true effects of the program if a substantial fraction of employed fathers was not eligible.

The researchers conclude that a gender-neutral paid family leave policy may “have
important implications for addressing the
gender wage gap. The unequal burden
faced by women in the home, combined
with a lack of flexibility in work schedules at
most jobs, may be an important explanation
for why the gender wage gap still exists....

— Linda Gorman

Current Population Survey Overestimates Poverty Rate

Researchers and policymakers have
long relied upon survey data, especially from
the Current Population Survey (CPS), as a
critical input for measuring unemployment
and for analyzing the effects of government
policies, such as anti-poverty initiatives.

In Using Linked Survey and
Administrative Data to Better Measure
Income: Implications for Poverty,
Program Effectiveness, and Holes in
the Safety Net (NBER Working Paper
No. 21676), Bruce D. Meyer and Nikolas
Mittag compare government survey figures
to administrative records of key welfare pro-
grams in New York State. Their findings
raise questions about the accu-
racy of survey data on house-
hold incomes. They find wide-
spread misreporting and other
survey errors that ultimately
overstate the incidence of pov-
erty, the degree of income
inequality, and the number of people falling through the
safety net in the United States.

In recent years, an increas-
ing number of researchers
have expressed concern about
the overall quality of house-
hold survey data from the CPS,
which is conducted by the Bureau of the
They argue that the accuracy of CPS data
is getting progressively worse, largely due
to misreporting of key information by sur-
vey respondents. For instance, the CPS
missed over one-third of housing assistance
that recipients received, 40 percent of food-
stamp assistance, and 60 percent of TANF
and General Assistance aid to recipients.

Researchers find underreporting of transfers in federal survey leads to
overstating of poverty and inequality.

The researchers conclude that the CPS
data significantly understated the income
of poor households and the effects of anti-
poverty programs.

“Using the combined data rather
than survey data alone, the poverty reduc-
ing effect of all programs
together is nearly doubled
while the effect of housing
assistance is tripled,” the
researchers find.

Using the administrative
data, the researchers note that
the number of single moth-
ers who are falling through the
safety net is much smaller, per-
haps only half as large, as previ-
ously suggested by survey data.

“We find that underre-
porting of government transfers
severely understates income of
those in deep poverty and thereby makes
poverty look more severe and inequality
look worse than it truly is,” the authors
note. “Using the administrative variables,
poverty and inequality are lower than offi-
cially reported, program effects are larger,
and fewer individuals have fallen through
the safety net.”

— Jay Fitzgerald
The Number of High-Growth, Job-Creating Young Firms is Declining

The number of start-up firms in the United States has been declining in recent decades. Prior to 2000, the employment effects of this decline were partly offset by the presence of a small number of high-growth young companies. That pattern seems to have changed.

In Where Has All the Skewness Gone? The Decline in High-Growth (Young) Firms in the U.S. (NBER Working Paper No. 21776), Ryan A. Decker, John Haltiwanger, Ron S. Jarmin, and Javier Miranda show that the general decline in new firms has been accompanied, since around 2000, by a corresponding decline in the number of high-growth start-ups.

New firms accounted for about 13 percent of all companies in the late 1980s, but only about eight percent two decades later. In the 1980s and 1990s, however, a small number of young, innovative, and dynamic companies grew at very high rates. This “skewness” in the rate of job creation among young firms increased the contribution of young firms to overall job creation.

The researchers measured skewness patterns and other business trends within industries, from manufacturers to mom-and-pop retailers to technology start-ups. Relying largely on statistics from the U.S. Census Bureau’s “Longitudinal Business Database” (LBD) for the years 1976 through 2011, they analyzed information on firm growth rates by detailed

Since 2000, both the number of start-up firms and the number of these firms that display very rapid growth has been declining.

The researchers measured skewness patterns and other business trends within industries, from manufacturers to mom-and-pop retailers to technology start-ups. Relying largely on statistics from the U.S. Census Bureau’s “Longitudinal Business Database” (LBD) for the years 1976 through 2011, they analyzed information on firm growth rates by detailed sectors of the 1980s and 1990s. As late as 1999, a firm at the 90th percentile of the employment growth rate distribution grew 31 percent faster than the median firm. In addition, the jobs-growth differential between firms at the 90th and 50th percentiles was 16 percent larger than that between firms at the 50th and 10th percentiles, again suggesting positive skewness in employment growth rates. But the employment-growth distribution changed substantially in the post-2000 period. By 2007, the 90-50 differential was only 4 percent larger than the 50-10, and it continued to decline throughout the period analyzed.

These trends suggest that startups contributed less to U.S. job creation in the post-2000 period than they did in earlier decades, but the researchers cannot yet explain the dynamic. “While we have attempted to describe in detail several aspects of declining skewness in the U.S. using industry, size, and age comparisons,” they write, “we have not identified the underlying causes of these trends.” Among potential explanations are credit constraints, rising investments in equipment that reduce the need for new employees, outsourcing of work to developing countries, and larger companies acquiring younger firms at an earlier stage of development.

The researchers note that the Great Recession had a negative effect on employment growth, but they point out that the decline in the number of high-growth young firms started well before that downturn.

“Historically, the U.S. has exhibited a high pace of entrepreneurship with a small share of fast growing young firms disproportionately accounting for job creation and productivity growth,” they conclude. “The decline in startups and the accompanying decline in high growth young firms either suggests adverse consequences for U.S. economic growth or a change in the way that such growth will be achieved.”

—Jay Fitzgerald
Immigrants and Gender Roles: Assimilation vs. Culture

Immigrants are an increasing presence in the United States. The share of the foreign-born in the population grew from 4.8 percent in 1970 to 12.9 percent in 2012, and the share of U.S. children who were immigrants themselves or who had at least one immigrant parent increased from 13 percent in 1990 to 23 percent in 2008.

Along with the rise in immigrant population has come a shift in the predominant origins of immigrants. The principal source of immigrants has shifted from countries in Europe, with cultures that are broadly similar to that of the United States, to regions with very different cultures and traditions. How much does an immigrant’s source country affect their adjustment to American life? What role does assimilation play in that adjustment? Do differences between immigrants and natives in labor supply, education, and fertility carry over to the second generation, or do second generation women fully assimilate to native patterns?

In Immigrants and Gender Roles: Assimilation vs. Culture (NBER Working Paper No. 21756), Francine D. Blau reports on a research program with Lawrence M. Kahn that examines the roles of assimilation and source country culture as influences on immigrant women’s behavior. The research focuses in particular on labor supply because immigrants increasingly come from countries that have a more gender-based division of labor than is currently the case in the United States. Typically, the source countries have lower female labor force participation rates and higher fertility rates than the United States. There has been a growing gap between the labor supply of native and immigrant women in the U.S. since 1980.

The researchers find considerable evidence that source country gender roles influence immigrants’ behavior. This influence appears to extend to second-generation women. At the same time, they also find evidence of assimilation. Immigrant women narrow the labor supply gap with native-born women as they spend more time in the United States. There is also considerable convergence of immigrants to native levels of schooling, fertility, and labor supply across generations. For second-generation women, fertility and labor supply in their mother’s source country have a larger association with their behavior than the corresponding practices in their father’s source country.

Blau points out that in the future, immigrant source countries may become more similar to the United States, thus reducing the effect of source country gender roles on the behavior of first- and second-generation immigrant women. This has already begun to happen with respect to fertility. The fertility of immigrant women relative to natives has been falling rapidly in the most recent immigrant cohorts.

— Les Picker