MBBR

Bulletin on Aging and Health

NATIONAL BUREAU OF ECONOMIC RESEARCH

2017, No. 1



NBER Profile: Till von Wachter

Till von Wachter is an associate professor of economics at the University of California, Los Angeles. He is a research associate in the NBER's Aging and Labor Studies programs.

Professor von Wachter is the director of the California Census Research Data Center and the associate director of the California Center for Population Research at UCLA. He also heads the new California Policy Lab at UCLA, a joint initiative with UC Berkeley, to help evaluate government programs using administrative data. Professor von Wachter is also a research professor at the German Social Security Agency, the chair of the Faculty Advisory Board at the Institute for Research on Labor and Employment, an adjunct research affiliate of the RAND Corporation, as well as a research fellow at the Center for Economic Policy Research

(continued on page 2)

Does Better Health Reduce Domestic Violence and Illicit Drug Use?

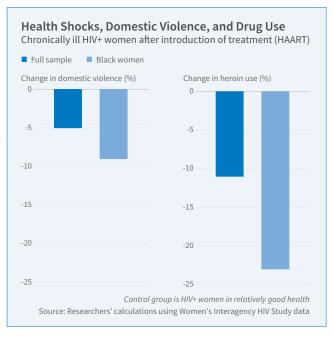
Domestic violence is a significant social problem in the U.S., with 4.5 million instances of domestic abuse annually and over one in five women experiencing physical assault

by an intimate partner at least once in her life.

Past research has established the dual relationship between education, employment, and abuse, whereby low education and poor labor market prospects raise the risk of domestic violence while abuse also undermines educational attainment and employment. Less well understood, however, is whether there are similar ties between health and domestic violence. Poor health and chronic illness may leave an individual more vulnerable

to abuse, and violence, by its very nature, poses a risk to health.

In "Health, Human Capital and Domestic Violence" (NBER Working Paper No. 22887), researchers Nicholas Papageorge, Gwyn Pauley, Mardge Cohen, Tracey

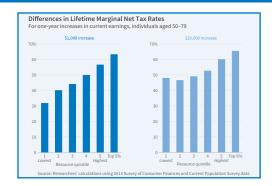


Wilson, Barton Hamilton, and Robert Pollak explore the effect of

(continued on page 2)

INSIDE:

- Do the Elderly Face Large Work Disincentives?
- Prospective Payment in Commercial Health Insurance



- NBER Affiliates' Work Appearing in Medical Journals
- Selected Abstracts of NBER Working Papers

Profile (from page 1)

and the Institute for the Study of Labor.

Von Wachter's research was subject of numerous testimonies before the U.S. Congress, and he has given expert advice to the U.S. Department of Labor, the International Monetary Fund, the OECD, the World Bank, the Government of Canada, and the City of Los Angeles. Von Wachter graduated summa cum laude with an M.A. in economics from the University of Bonn, Germany, and obtained his Ph.D. in economics from the University of California, Berkeley. Prior to joining the UCLA faculty in 2012, von Wachter was on the faculty at Columbia University and was a visiting scholar at the Russell Sage Foundation.

Von Wachter's research spans numerous topics in labor economics and the economics of aging. He has written extensively about the Unemployment Insurance and Disability Insurance programs, including their effects on employment and wages. His work also explores the long-term effects on employment outcomes and mortality of job displacement and of graduating in a recession. Current projects include the role of firms in explaining increasing earnings inequality, and to what extent firm characteristics and working conditions affect retirement behavior.

In his free time, von Wachter enjoys photography and swimming, when he and his wife, Julia, are not busy dragging their two young children to museums, beaches, nature, and the urban landscape of Los Angeles.

The Bulletin on Aging and Health summarizes selected recent Working Papers. It is distributed digitally to economists and other interested persons for informational and discussion purposes. The Bulletin is not copyrighted and may be reproduced freely with attribution of source.

Working Papers produced as part of the NBER's research program are distributed to make preliminary research results available to economists in the hope of encouraging discussion and suggestions for revision before final publication. Neither Working Papers nor issues of the Bulletin are reviewed by the Board of Directors of the NBER.

The Bulletin is edited by Courtney Coile.

To sign up to receive new Bulletin issues, and to access current and past issues electronically, please visit: www.nber.org/aginghealth

Health (from page 1)

health improvements on domestic violence.

Estimating a causal effect of health on domestic violence is made more challenging by the possibility that abuse may also affect health. Alternatively, omitted third factors could affect both health and violence. To overcome these difficulties, the researchers focus on whether an unexpected change in health due to a medical breakthrough is associated with a change in violence. Specifically, they look at how the introduction of highly active antiretroviral treatment (HAART) for women infected with HIV affected their exposure to violence and illicit drug use.

The researchers use data from the Women's Interagency HIV Study, a unique dataset that includes HIV-positive HIV-negative women with similar levels of risky behavior. The study began in 1994, prior to the widespread introduction of HAART in 1996, and followed women over time. The researchers compare domestic violence and illicit drug use before and after the introduction of HAART for chronically ill HIV-positive women, who stood to benefit from the new treatment; healthy HIVpositive women and HIVnegative women serve as control groups to capture any changes over time in violence or drug use that are unrelated to the new health technology.

The introduction of HAART is estimated to reduce domestic violence by 5 percent for chronically ill HIV-positive women. The effect for black women is even larger, 9 percent. To provide

a sense of the magnitude of these effects, the researchers note that another study found that the decline in the malefemale wage gap that occurred over two decades reduced domestic violence by 9 percent. The researchers also use their empirical approach to explore the effect of HAART on illicit drug use. They find that its introduction reduced heroin use by 11 percent for the full sample of chronically ill HIV-positive women and by 23 percent for black women in the sample.

In explaining their results, the researchers suggest that health may affect domestic violence through the channel of human capital. Economists have long viewed health as a form of human capital. Higher levels of human capital may enable women to leave abusive partners by providing better outside options. Women with more human capital also face stronger incentives to avoid risky behaviors with future negative consequences, such as illicit drug use.

The researchers note "our empirical results illustrate the far-reaching implications of medical innovation." They conclude, "our findings also suggest that policies that enhance women's human capital, such as access to better healthcare technology, can affect some of the most frustratingly persistent social problems."

At least one co-author has disclosed a financial relationship of possible relevance for this research. Further information is available online at: http://www.nber.org/papers/w22887.ack.

Do the Elderly Face Large Work Disincentives?

Older workers today confront many difficulties in financing their retirements, including longer life expectancies, low interest rates, a changing pension land-scape, and the possibility of future changes to Social Security, Medicare, and Medicaid benefits. In this challenging environment, working longer has often been presented as the key means to achieving greater retirement security.

Yet whether this is the case depends critically on the total net financial return to additional work. Calculating this net return requires incorporating not only standard federal and state taxes but also work disin-

centives arising from the structure of government transfer programs. In "Is Uncle Sam Inducing the Elderly to Retire?" (NBER Working Paper No. 22770), researchers Alan Auerbach, Laurence Kotlikoff, Darryl Koehler, and Manni Yu measure the work disincentives operating through the tax and transfer system for older workers in the U.S.

The researchers calculate "remaining lifetime marginal net tax rates" of those ages 50 to 79. These tax rates include explicit taxes, such as federal and state income taxes and

FICA payroll taxes, as well as implicit taxes, such as the loss of government benefits or increase in income-based premiums for government programs that may result from higher earnings. Losing eligibility for food stamp benefits or paying higher Medicare Part B premiums are examples of the latter. These tax rates are lifetime measures in that they incorporate changes in taxes and benefits that will occur in future years as a result of additional work today. The researchers use data from the 2013 Federal Reserve Survey of Consumer Finances, and run households through The Fiscal Analyzer, a software program they developed.

The researchers find that many older workers face high work disincentives result-

ing from the design of the U.S. fiscal system. An individual aged 50 to 79 in the lowest quintile of household resources who raises his or her earnings by \$1,000 this year can expect to lose over 30 cents for each dollar earned (or over \$300 total) in higher taxes paid and lower government benefits received this year and in the future. The tax rate is higher for those with more resources, reaching 56 percent for those in the top quintile and 63 percent for the top 5 percent of households. Even among the poorest households, the tax rate approaches 50 percent when one considers a \$20,000 increase in current earnings rather than a \$1,000 increase. The high rate is due to the threshold nature

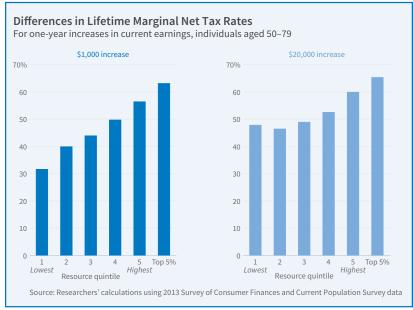
for Social Security recipients ages 62 to 65. At these ages, workers face a Social Security earnings test that reduces benefits above a certain earnings threshold; lost benefits are subsequently returned to workers in the form of a benefit increase, but this feature of the program is not well known. The researchers calculate tax rates both including and ignoring this misunderstood feature. Surprisingly, two sets of tax rates are relatively similar, as the higher Social Security benefits workers receive through this little-known provision can end up bringing them closer to the eligibility thresholds for Medicaid and other transfer payments. As the researchers

say, "In other words, lessening the importance of one marginal net tax can enhance the strength of others."

Finally, the researchers estimate the impact of longer work lives on retirement income. They find that working five additional years for an individual age 60 to 64 in the middle household resource quintile would raise retirement living standards by ten percent. This is substantially smaller than the increases estimated in the previous literature, which the researchers attribute to their inclusion of all transfer payments and other methodological differences between their

The researchers conclude, "older workers typically face high, very high, or remarkably high marginal net taxation on their extra earnings." They also note that it is unclear whether the elderly correctly perceive these disincentives, or indeed whether "policymakers, themselves, are cognizant of the level and spread of the work disincentives they are imposing on the elderly."

work and previous studies.



of eligibility for many programs, as a substantial increase in earnings may render individuals ineligible for benefit programs or tax credits that are targeted at lower-income households. These lifetime marginal net tax rates are far higher than the current-year tax rates normally considered, which the researchers view as highly misleading.

Another interesting finding is the large dispersion in lifetime marginal net tax rates facing households of the same age and resource level. For example, among those ages 60 to 64 in the lowest resource quintile, one-quarter of individuals face a tax rate of less than 40 percent, while one-half of individuals face a tax rate of over 80 percent.

The researchers also report incentives

The authors acknowledge funding from the Sloan Foundation, the Robert D. Burch Center for Tax Policy and Public Finance at the University of California, Berkeley, Economic Security Planning, Inc., and Boston University for research support. At least one co-author has disclosed a financial relationship of potential relevance for this work. Further information is available online at http://www.nber.org/papers/w22770.ack.

Prospective Payment in Commercial Health Insurance

Rising health care costs are a perennial concern for the U.S. health care system. Increasing the degree to which health care is funded via prospective payment is a frequently mentioned proposal for slowing health care cost growth.

Under prospective payment, providers are paid a fixed amount per episode of care, with the payment determined only by the patient's medical condition. Importantly, the payment is independent of the actual medical services provided, removing the financial incentive for providers to administer additional services in order to raise reimbursements. Such a scheme is in contrast to a fee-for-service payment system, in which providers are reimbursed based on the specific services provided.

The Medicare system introduced prospective payment in 1984, and many studies have explored the consequences of its adoption. But far less is known about the use of prospective payment in commercial health insurance.

This gap is filled by a new working paper by researchers Laurence Baker, M. Kate Bundorf, Aileen Devlin, and Daniel Kessler, "Why Don't

"Why Don't Commercial

Insurers Use Prospective Payment?" (NBER Working Paper No. 22709).

The researchers construct a measure of prospective payment use for 300 metropolitan statistical areas for the years 2008–12, using data from the Health Care Cost Institute on over five million claims from 1,300 hospitals. To do so, the researchers estimate separate models for each hospital and year in which they relate patient billings to diagnoses (defined by "diagnosis-related groups," or DRGs, the classification system used in Medicare prospect payment). Their prospective pay-

ment measure is the share of differences in patient billings that can be explained solely by patients' diagnoses. If this value is, say, 80 percent, then the remaining 20 percent of differences in billings is due to other factors — for example, the intensity of services provided, which is relevant for patients whose insurance uses fee-for-service reimbursement. This value is termed the prospectivity index.

The paper's first key finding is that prospective payment is less widespread in commercial insurance than in Medicare. In 2008, for example, the average prospectivity index value was 95 percent for Medicare billings versus 75 percent for commercial insurance billings. This suggests that a hospital's Medicare payments

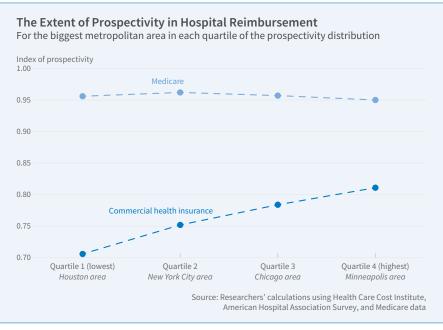
the Houston metro area to 81 percent in the Minneapolis-St. Paul area.

Finally, the researchers examine factors that may help explain differences across hospitals in prospectivity. They find that there is more prospective payment in commercial insurance when hospitals are in more competitive markets, have a greater share of patients in managed care insurance (health maintenance organization or point of service plans rather than preferred provider organizations), and have a larger share of Medicare patients. The first two findings suggests that hospitals may use market power to influence the terms of insurance contracts as well as price and that preferred provider products with

broad networks, which give insurers less bargaining power with hospitals, can have the same effect. The last finding suggests that there may be spillover effects whereby the DRG payment system influences treatment decisions for non-Medicare patients.

The researchers caution that their findings are based on a measure of payment incentives constructed from claims data rather than from actual contracts, and also that they cannot make a full assessment of the welfare effects of prospective

payment because they do not observe patient health outcomes or out-of-pocket spending. They note that this is clearly a fruitful area for future research, as there is "wide agreement in the health policy community that PPS [Medicare's adoption of its own Prospective Payment System] successfully lowered relatively unproductive health spending."



are determined almost entirely by the diagnosis mix of its patients, as would be expected under the DRG system, while this is considerably less true for payments from commercial insurance. The gap narrowed to 18 points by 2012, as prospectivity in commercial insurance increased slowly over time.

A second key finding is that the extent of prospectivity in commercial insurance varies considerably, not only across individual hospitals but also across geographic areas. In 2012, average prospectivity varied from 71 percent in

At least one co-author has disclosed a financial relationship of possible relevance for this research. Further information is available online at http://www.nber.org/papers/w22709.ack.

NBER Affiliates' Work Appearing in Medical Journals

Less Intense Postacute Care, Better Outcomes for Enrollees in Medicare Advantage Than Those in Fee-For-Service

P. J. Huckfeldt, J. J. Escarce, B. Rabideau, P. Karaca-Mandic, and N. Sood. Health Affairs, 36(1), January 2017, pp. 91–100.

The researchers compare the use of postacute care for Medicare Advantage (MA) and fee-for-service (FFS) Medicare patients. They find lower intensity of postacute care for MA enrollees relative to FFS enrollees for lower extremity joint replacement, stroke, and heart failure, after accounting for differences in patient characteristics. MA participants also were less likely to return to the hospital and more likely to return to the community.

Many NBER-affiliated researchers publish some of their findings in medical journals that do not allow prepublication distribution. This makes it impossible to include these papers in the NBER working paper series. This is a partial listing of recent papers in this category.

Nearly One-Third of Enrollees in California's Individual Market Missed Opportunities to Receive Financial Assistance

V. Fung, C. Y. Liang, K. Donelan, C. G. K. Peitzman, W. H. Dow, A. M. Zaslavsky, B. Fireman, S. F. Derose, M. E. Chernew, J. P. Newhouse, and J.

Hsu, Health Affairs, 36(1), January 2017, pp. 21-31.

Under the Affordable Care Act, lower-income Americans receive financial assistance to purchase health insurance if they buy a qualified health plan with a certain level of coverage ("silver tier" or higher) through a public insurance exchange. The researchers find that 31 percent of eligible enrollees in California purchased plans that were not eligible for subsidies because they were not at the silver tier level or were not purchased on the public exchange. Enrollees who purchased plans that were ineligible for subsidies were two to three times more likely to report difficulty paying medical costs, relative to those who chose qualifying plans.

Economic Effects of Medicaid Expansion in Michigan

J. Z. Ayanian, G. M. Ehrlich, D. R. Grimes, and H. Levy, New England Journal of Medicine, 376, February 2017, pp. 407–10.

U.S. states, due to the Affordable Care Act, had the option to expand Medicaid coverage to previously unqualified residents. To participate, states were required to cover 5 percent of the expansion in 2017 and 10 percent in 2021. The researchers project that the state costs of the expansion in Michigan will be fully covered through 2021 and likely beyond by additional state tax revenues and savings for mental health and other programs. Furthermore, the researchers expect employment to increase by roughly 30,000 jobs and, as a result, personal income to increase by \$2 billion per year.

Cost-Effectiveness of Combined Sexual and Injection Risk Reduction Interventions among Female Sex Workers Who Inject Drugs in Two Very Distinct Mexican Border Cities

J. L. Burgos, T. L. Patterson, J. S. Graff-Zivin, J. G. Kahn, M. G. Rangel, M. R. Lozada, H. Staines, and S. A. Strathdee, PloS One, 11(2), February 2016.

Costs per Diagnosis of Acute HIV Infection in Community-Based Screening Strategies: A Comparative Analysis of Four Screening Algorithms

M. Hoenigl, J. Graff-Zivin, and S. J. Little, Clinical Infectious Diseases, 62(4), February 2016, pp. 501–11.

Retail Clinic Visits for Low-Acuity Conditions Increase Utilization and Spending

J. S. Ashwood, M. Gaynor, C. M. Setodji, R. O. Reid, E. Weber, and A. Mehrotra, Health Affairs, 35(3), March 2016, pp. 449-55.

New Health Care Symposium: Consolidation and Competition in U.S. Health Care

M. Gaynor, Health Affairs Blog, March 2016.

The Effect of Physician and Hospital Market Structure on Medical Technology Diffusion

P. Karaca-Mandic, R. J. Town, and A. Wilcock, Health Services Research, May 2016.

Applying Behavioral Economics to Public Health Policy: Illustrative Examples and Promising Directions

J. L. Matjasko, J. H. Cawley, M. M. Baker-Goering, and D. V. Yokum, American Journal of Preventive Medicine, 50(5), May 2016, pp. S13–19.

Community Characteristics and Qualified Health Plan Selection during the First Open Enrollment Period

M. Boudreaux, L. A. Blewett, B. Fried, K. Hempstead, and P. Karaca-Mandic, Health Services Research, June 2016.

Search and You Shall Find: Geographic Characteristics Associated with Google Searches during the Affordable Care Act's First Enrollment Period

S. E. Gollust, X. Qin, A. D. Wilcock, L. M. Baum, C. L. Barry, J. Niederdeppe, E. F. Fowler, and P. Karaca-Mandic, Medical Care Research and Review, July 2016.

The Impact of Positive Income Shocks on Risky Sexual Behavior: Experimental Evidence from Tanzania

Z. Wagner, E. Gong, D. de Walque, and W. H. Dow, AIDS and Behavior, August 2016, pp. 1-5.

The Impact of Pharmaceutical Innovation on Cancer Mortality in Belgium, 2004–2012

F. R. Lichtenberg, Forum for Health Economics & Policy, September 2016.

The Impact of Pharmaceutical Innovation on Premature Cancer Mortality in Switzerland, 1995–2012

F. R. Lichtenberg, European Journal of Health Economics, 17(7), September 2016, pp. 833–54.

The Effects of Providing Fixed Compensation and Lottery-Based Rewards on Uptake of Medical Male Circumcision in Kenya: A Randomized Trial

H. Thirumurthy, S. H. Masters, S. Rao, K. Murray, R. Prasad, J. Graff-Zivin, E. Omanga, and K. Agot, Journal of Acquired Immune Deficiency Syndromes, 72, October 2016, pp. S309–15.

Genome-Wide Analysis Identifies 12 Loci Influencing Human Reproductive Behavior

N. Barban, R. Jansen, R. de Vlaming, A. Vaez, J. Mandemakers, F. C. Tropf, X. Shen, J. F. Wilson, J. J. Lee, D. J. Benjamin, D. Cesarini, P. D. Koellinger, M. den Hoed, H. Snieder, and M. C. Mills, Nature Genetics, 48, October 2016, pp. 1462–72.

Black Gains in Life Expectancy

V. R. Fuchs, JAMA, 316(18), November 2016, pp. 1869-70.

Time-Varying Associations of Suicide with Deployments, Mental Health Conditions, and Stressful Life Events among Current and Former U.S. Military Personnel: A Retrospective Multivariate Analysis

Y.-C. Shen, J. M. Cunha, and T. V. Williams, Lancet Psychiatry, 3(11), November 2016, pp. 1039-48.

Screening for Acute HIV Infection in Community-Based Settings: Cost-Effectiveness and Impact on Transmissions

M. Hoenigl, A. Chaillon, S. R. Mehta, D. M. Smith, J. Graff-Zivin, and S. J. Little, Journal of Infection, 73(5), November 2016, pp. 476–84.

Association of a Controlled Substance Scoring Algorithm with Health Care Costs and Hospitalizations: A Cohort Study

C. I. Starner, Y. Qiu, P. Karaca-Mandic, and P. P. Gleason, Journal of Managed Care and Specialty Pharmacy, 22(12), December 2016, pp. 1403–10.

Projections of Dental Care Use through 2026: Preventive Care to Increase While Treatment Will Decline

C. Meyerhoefer, I. Panovska, and R. J. Manski. Health Affairs, 35(12), December 2016, pp. 2183-89.

Uptake and Utilization of Practice Guidelines in Hospitals in the United States: The Case of Routine Episiotomy

K. B. Kozhimannil, P. Karaca-Mandic, C. J. Blauer-Peterson, N. T. Shah, and J. M. Snowden, The Joint Commission Journal on Quality and Patient Safety, 43(1), January 2017, pp. 41–8.

Social Determinants of Health: Caveats and Nuances

V. R. Fuchs, JAMA, 317(1), January 2017, pp. 25-6.

Son-Biased Sex Ratios in 2010 U.S. Census and 2011–2013 U.S. Natality Data

D. Almond and Y. Sun, Social Science & Medicine, 176, March 2017, pp. 21-4.

Abstracts of Selected Recent NBER Working Papers

w22712

Tort Reform and Innovation

Alberto Galasso, Hong Luo

Current academic and policy debates focus on the impact of tort reforms on physicians' behavior and medical costs. This paper examines whether these reforms also affect incentives to develop new technologies. We find that, on average, laws that limit the liability exposure of healthcare providers are associated with a significant reduction in medical device patenting and that the effect is predominantly driven by innovators located in the states passing the reforms. Tort laws have the strongest impact in medical fields in which the probability of facing a malpractice claim is the largest, and they do not seem to affect the amount of new technologies of the highest and lowest quality. Our results underscore the importance of considering dynamic effects in the economic analysis of tort laws.

w22745

When Discounts Raise Costs: The Effect of Copay Coupons on Generic Utilization

Leemore Dafny, Christopher Ody, Matthew Schmitt

Branded pharmaceutical manufacturers frequently offer "copay coupons" that insulate consumers from cost-sharing, thereby undermining insurers' ability to influence drug utilization. We study the impact of copay coupons on branded drugs first facing generic entry between 2007 and 2010. To overcome endogeneity concerns, we exploit cross-state and cross-consumer variation in coupon legality. We find that coupons increase branded sales by 60+ percent, entirely by reducing the sales of bioequivalent generics. During the five years following generic entry, we estimate that coupons increase total spending by \$30 to \$120 million per drug, or \$700 million to \$2.7 billion for our sample alone.

w22765

Inattention and Switching Costs as Sources of Inertia in Medicare Part D

Florian Heiss, Daniel McFadden, Joachim Winter, Amelie Wuppermann, Bo Zhou

The trend towards giving consumers choice about their health plans has invited research on how good they actually are at making these decisions. The introduction of Medicare Part D is an important example. Initial plan choices in this market were generally far from optimal. In this paper, we focus on plan choice in the years after initial enrollment. Due to changes in plan supply, consumer health status, and prescription drug needs, consumers' optimal plans change over time. However, in Medicare Part D only about 10% of consumers switch plans every year, and on average, plan choices worsen for those who do not switch. We develop a two-stage panel data model of plan choice whose stages correspond to two separate reasons for inertia: inattention and switching costs. The model allows for unobserved heterogeneity that is correlated across the two decision stages. We estimate the model using administrative data on Medicare Part D claims from 2007 to 2010. We find that consumers are more likely to pay attention to plan choice if overspending in the last year is more salient and if their old plan gets worse, for instance due to premium increases. Moreover, conditional on attention there are significant switching costs. Separating the two stages of the switching decision is thus important when designing interventions that improve consumers' plan choice.

w22815

The Affordable Care Act as Retiree Health Insurance: Implications for Retirement and Social Security Claiming

Alan L. Gustman, Thomas L. Steinmeier, Nahid Tabatabai

Using data from the Health and Retirement Study, we examine the effects of the Affordable Care Act (ACA) on retirement. We first calculate retirements (and in related analyses changes in expected ages of retirement and/or Social Security claiming) between 2010, before ACA, and 2014, after ACA, for those with health insurance at work but not in retirement. This group experienced the sharpest change in retirement incentives from ACA. We then compare retirement measures for those with health insurance at work but not in retirement with retirement measures for two other groups, those who, before ACA, had employer provided health insurance both at work and in retirement, and those who had no health insurance either at work or in retirement. To complete a difference-in-difference analysis, we make the same calculations for members of an older cohort over the same age span. We find no evidence that ACA increases the propensity to retire or changes the retirement expectations of those who, before ACA, had coverage when working but not when retired. An analysis based on a structural retirement model suggests that eventually ACA will increase the probability of retirement by those who initially had health insurance on the job but did not have employer provided retiree health insurance. But the retirement increase is quite small, only about half a percentage point at each year of age. The model also suggests that much of the effect of ACA on retirement will be realized within a few years of the change in the law.

w22835

The Evolution of Health Insurer Costs in Massachusetts, 2010–12

Kate Ho, Ariel Pakes, Mark Shepard

We analyze the evolution of health insurer costs in Massachusetts between 2010-2012, a period in which the use of physician cost control incentives spread among insurers. We show that the growth of costs and its relationship to the introduction of cost control incentives cannot be understood without accounting for (i) consumers' switching between plans, and (ii) differences in cost characteristics between new entrants and those leaving the market. New entrants are markedly less costly than those leaving (and their costs fall after their entering year), so cost growth of those who stay in a plan is significantly higher than average per-member cost growth. Cost control incentives were used by Health Maintenance Organizations (HMOs). Relatively high-cost HMO members switched to Preferred Provider Organizations (PPOs) while low-cost PPO members switched to HMOs. As a result, the impact of cost control incentives on HMO costs is likely different from their impact on market-wide insurer costs.

w22861

Geographical Distribution of Emergency Department Closures and Consequences on Heart Attack Patients

Yu-Chu Shen, Renee Y. Hsia

We develop a conceptual framework and empirically investigate how a permanent emergency department (ED) closure affects patients with acute myocardial infarction (AMI). We first document that large increases in driving time to closest ED are more likely to happen in low-income communities and communities that had fewer medical resources at baseline. Then using a difference-in-differences design, we estimate the effect of an ED closure on access to cardiac care technology, treatment, and health outcomes among Medicare patients with AMI who lived in 24,567 ZIP codes that experienced no change, an increase of <10 minutes, 10 to <30 minutes, and \geq 30 minutes in driving time to their closest ED. Overall, access to cardiac care declined in all communities experiencing a closure, with access to a coronary care unit decreasing by 18.64 percentage points (95% CI -30.15, -7.12) for those experiencing \geq 30-minute increase in driving time. Even after controlling for access to technology and treatment, patients with the longest delays experienced a 6.58 (95% CI 2.49, 10.68) and 6.52 (95% CI 1.69, 11.35) percentage point increase in 90-day and 1-year mortality, respectively, compared with those not experiencing changes in distance. Our results also suggest that the predominant mechanism behind the mortality increase appeared to be time delay as opposed to availability of specialized cardiac treatment.

w22899

The Long-Run Effects of Childhood Insurance Coverage: Medicaid Implementation, Adult Health, and Labor Market Outcomes

Andrew Goodman-Bacon

This paper exploits the original introduction of Medicaid (1966-1970) and the federal mandate that states cover all cash welfare recipients to estimate the effect of childhood Medicaid eligibility on adult health, labor supply, program participation, and income. Cohorts born closer to Medicaid implementation and in states with higher pre-existing welfare-based eligibility accumulated more Medicaid eligibility in childhood but did not differ on a range of other health, socioeconomic, and policy characteristics. Early childhood Medicaid eligibility reduces mortality and disability and, for whites, increases extensive margin labor supply, and reduces receipt of disability transfer programs and public health insurance up to 50 years later. Total income does not change because earnings replace disability benefits. The government earns a discounted annual return of between 2 and 7 percent on the original cost of childhood coverage for these cohorts, most of which comes from lower cash transfer payments.

w22909

Bombs and Babies: U.S. Navy Bombing Activity and Infant Health in Vieques, Puerto Rico

Gustavo J. Bobonis, Mark Stabile, Leonardo Tovar

We study the relationship between in utero exposure to military exercises and children's early-life health outcomes in a no-war zone. This allows us to document non-economic impacts of military activity on neonatal health outcomes. We combine monthly data on tonnage of ordnance in the context of naval exercises in Vieques, Puerto Rico, with the universe of births in Puerto Rico between 1990 and 2000; studying this setting is useful because these exercises have no negative consequences for local economic activity. We find that a one standard deviation increase in exposure to bombing activity leads to a three per thousand point (70 percent) increase in extremely premature births; a three to seven per thousand point – 34 to 77 percent – increase in the incidence of congenital anomalies; and a five per thousand point increase in low APGAR scores (38 percent). The evidence is generally consistent with the channel of environmental pollution. Given the well-documented relationship between neonatal health and later life outcomes, there is reason to believe that our substantial short-term effects may have longer-term consequences for this population.

w22942

Older Peoples' Willingness to Delay Social Security Claiming

Raimond Maurer, Olivia S. Mitchell

We have designed and fielded an experimental module in the 2014 HRS which seeks to measure older persons' willingness to voluntarily defer claiming of Social Security benefits. In addition, we evaluate the stated willingness of older individuals to work longer, depending on the Social Security incentives offered to delay claiming their benefits. Our project extends previous work by analyzing the results from our HRS module and comparing findings from other data sources which included very much smaller samples of older persons. We show that half of the respondents would delay claiming if no work requirement were in place under the status quo, and only slightly fewer, 46%, with a work requirement. We also asked respondents how large a lump sum they would need with or without a work requirement. In the former case, the average amount needed to induce delayed claiming was about \$60,400, while when part-time work was required, the average was \$66,700. This implies a low utility value of leisure foregone of only \$6,300, or under 20% of average household income.

w22955

Agricultural Fires and Infant Health

Marcos A. Rangel, Tom Vogl

Fire has long served as a tool in agriculture, but this practice's human capital consequences have proved difficult to study. Drawing on data from satellites, air monitors, and vital records, we study how smoke from sugarcane harvest fires affects infant health in the Brazilian state that produces one-fifth of the world's sugarcane. Because fires track economic activity, we exploit wind for identification, finding that late-pregnancy exposure to upwind fires decreases birth weight, gestational length, and in utero survival, but not early neonatal survival. Other fires positively predict health, highlighting the importance of disentangling pollution from economic activities that drive it.

Additional NBER Working Papers on Health and Aging

A complete list of all NBER Working Papers, with searchable abstracts, is available at http://www.nber.org/papers.html.