



The Effect of Medicaid Physician Payment Policy on Access to Care

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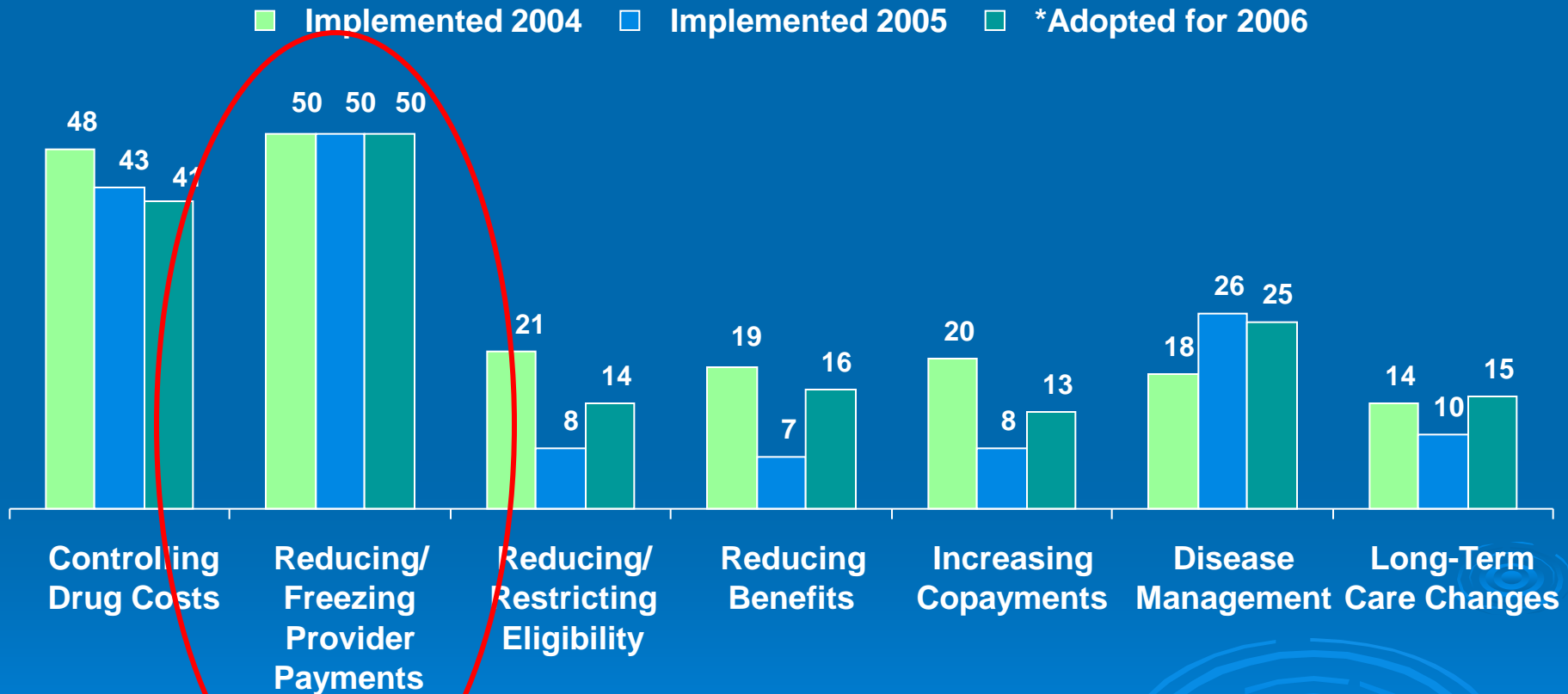


General Question

How do aspects of the Medicaid program across states affect Medicaid patients' use of and access to ambulatory medical care services?



States Undertaking New Medicaid Cost Containment Strategies FY 2004 – FY 2006



This slide is taken from the Kaiser Family Foundation.

NOTE: Past survey results indicate not all adopted actions are implemented.


SOURCE: KCMU survey of Medicaid officials in 50 states and DC conducted by Health Management Associates, September and December 2003, October 2004 and October 2005.



Specific Questions

(1) Do state Medicaid physician payment levels affect the number of times a Medicaid patients visits a physician?


(2) Do state Medicaid physician payment levels affect where Medicaid patients get care – physicians' offices vs. hospital outpatient departments (OPDs) vs. emergency departments (EDs)?



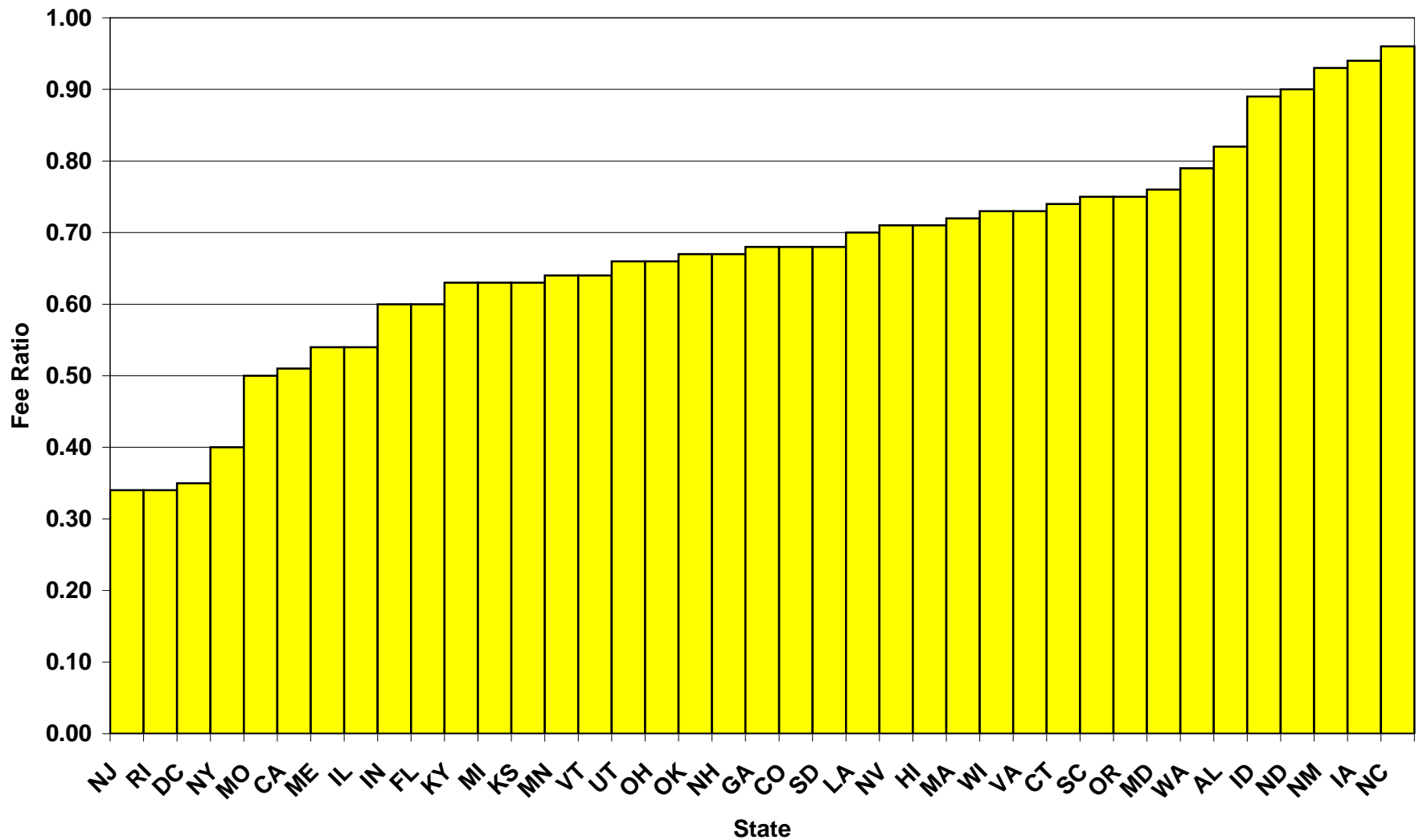


These analyses come from:

**Decker, Sandra L. 2009.
“Medicaid Physician Fees and
Ambulatory Care of Medicaid
Patients,” Inquiry 46(3): 291-
304.**

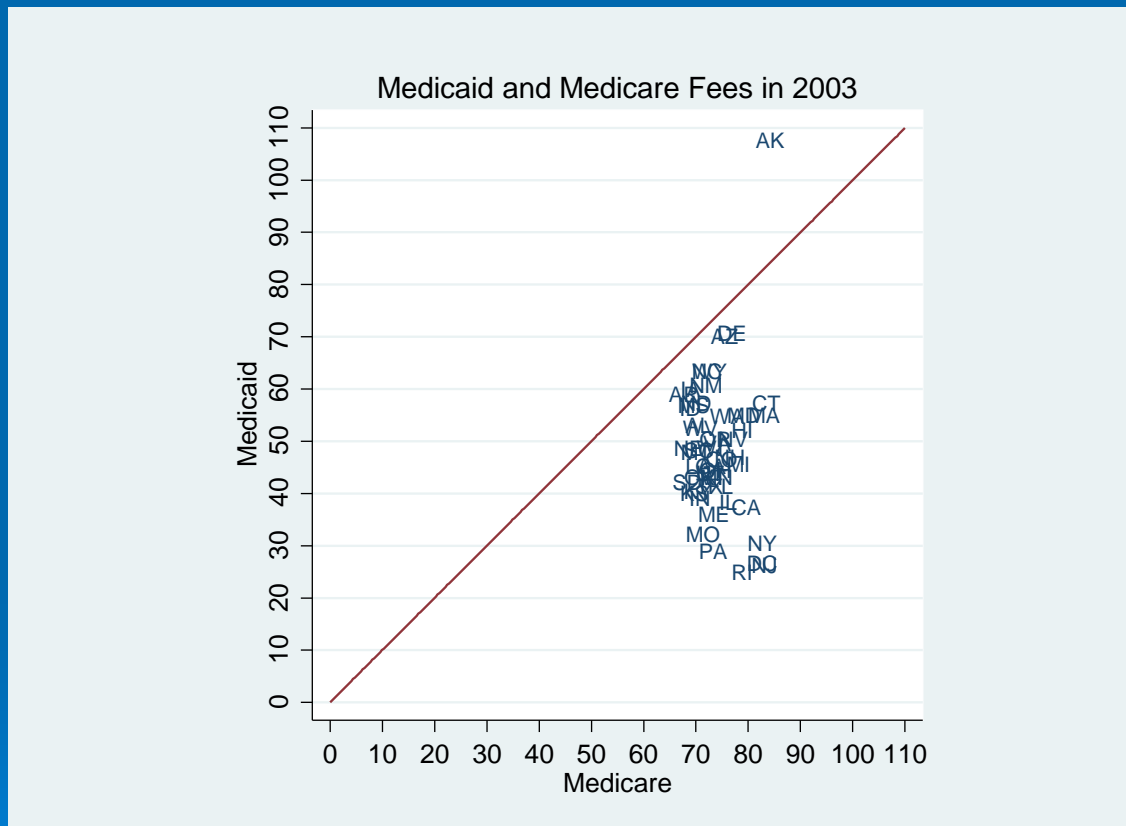


Medicaid-to-Medicare Fee Ratios by State, 2003



Source: Zuckerman, S., J. McFeeters, J. Cunningham, and L. Nichols. 2004. Changes in Medicaid Physician Fees, 1998-2003. *Health Affairs* W4: 374-384.

For a sample of primary care services, Medicaid fees in 2003 were lower than Medicare fees in all states except Alaska.....



Source for Fee Data: Zuckerman, S., J. McFeeters, J. Cunningham, and L. Nichols. 2004. Changes in Medicaid Physician Fees, 1998-2003. *Health Affairs* W4: 374-384.

Source for Graph: Decker, Sandra L. 2007. "The Effect of Physician Reimbursement Levels on the Primary Care of Medicaid Patients," *Review of Economics of the Household* 5(1): 95-112.

Analysis

Merge information on Medicaid-to-Medicare fee ratios by state and year with information on the number of self-reported physicians visits using the **National Health Interview Survey (NHIS)** and the site of visit (office-based physician, OPD and ED) using the **National Ambulatory Medical Care Survey (NAMCS)** and the **National Hospital Ambulatory Medical Care Survey (NHAMCS)**.

Data from 1993, 1998, and 2003 are used.

Empirical Specification

$$Y_{jst} = \beta_0 + \beta_1 \text{Medicaid}_{jst} + \beta_2 \text{SUnins}_{jst} + \beta_3 \text{Fee Ratio}_{st} + \\ \beta_4 \text{Medicaid}_{st} * \text{Fee Ratio}_{st} + \beta_5 \text{Year}_t + \beta_6 \text{STATE}_s + \\ \text{Control}_{jst}'\beta + \varepsilon_{jst}$$

...for patient j in state s and year t.....

Specific Questions

(1) Do state Medicaid physician payment levels affect the number of times a Medicaid patients visits a physician?

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Unadjusted national estimates of volume visits by expected source of payment

	All	Private insurance	Medicaid	Uninsured
NHIS				
Fraction of sample	1.000	0.732	0.088	0.180
Distribution of number of visits				
0	.203	.165	.124	.396
1	.210	.212	.166	.223
2-3	.282	.303	.272	.200
4-9	.204	.217	.267	.116
10-12	.045	.046	.072	.030
13+	.057	.057	.099	.036
All	1.000	1.000	1.000	1.000

Notes: The sample for number of physician visits consists of 226,384 individuals from the NHIS 1993/1994, 1998/1999, and 2003/2004.

Effect of Medicaid physician fees on the number of physician visits and the site of visit

	<u>Number of visits</u>	<u>Place of visit (relative to physician office)</u>	
		OPD	ED
Medicaid	.068* (.030)	1.985* (.257)	.881* (.153)
Uninsured	-.620* (.010)	.483* (.075)	.569* (.056)
Medicaid-to-Medicare fee ratio	.042 (.062)	.821* (.343)	.515* (.209)
Medicaid * Medicaid-to-Medicare fee ratio	.292* (.058)	-1.932* (.381)	-.621* (.226)
Female	.372* (.006)	.001 (.016)	-.173* (.014)
Black	-.165* (.011)	.307* (.068)	.445* (.048)
Other race	-.219* (.014)	.001 (.070)	-.186* (.059)
Age	-.004* (.000)	-.002* (.001)	-.006* (.001)

Notes The table contains coefficients and standard errors (in parentheses) from an ordered probit model (for number of visits) and probit models (for place of visit) controlling for state fixed effects. Although not reported, all analyses control for several county characteristics (physicians per capita, hospital beds per capita, median family income, and population), year effects and metropolitan status. The number of visits model also controls for self-reported health status. The sample size for number of visits is 226,384, for OPD is 175,226, and for ED is 169,264. The data source is NHIS 1993/1994, 1998/1999, and 2003/2004 for number of visits. The data source for place of visit is NAMCS/NHAMCS 1993/1994, 1998/1999, and 2003/2004.

*Statistically significant effect ($p < 0.05$).

Effect of Medicaid physician fees on the number of physician visits

<u>Number of visits</u>	<u>Medicaid</u>		<u>Difference</u>	<u>Difference-in-difference</u>	<u>Percent DD</u>
	<u>High fee</u>	<u>Low fee</u>		<u>(DD)</u>	
0	.127 (.005)	.153 (.003)	.026* (.005)	0.022 (0.005)	17.3
1	.178 (.004)	.194 (.002)	.016* (.003)	0.014 (0.003)	7.9
2-3	.289 (.001)	.291 (.001)	.002* (.001)	0.002 (.001)	0.7
4-9	.250 (.004)	.231 (.002)	-.019* (.003)	-0.016 (.003)	-6.4
10-12	.064 (.002)	.055 (.001)	-.009* (.002)	-0.009 (.002)	-14.1
13+	.093 (.004)	.075 (.001)	-.018* (.004)	-0.016 (.003)	-17.2

Notes: Predicted marginals and bootstrapped standard errors (in parentheses) from an ordered probit model controlling for gender, race, MSA status, age, self-reported health status, county doctors and hospital beds per capita, county median family income and population, and year and state effects. The sample consists of 226,384 individuals from the NHIS 1993/1994, 1998/1999, and 2003/2004.

*Difference statistically significant ($p < 0.05$).



Specific Questions

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Unadjusted National Estimates of Site of Visit By Expected Source of Payment

	All	Private Insurance	Medicaid	Uninsured
Fraction of sample	1.000	0.695	0.176	0.129
<i>Distribution of Site of Visit</i>				
Physician Offices	0.795	0.861	0.610	0.689
Emergency Departments	0.117	0.082	0.191	0.200
Outpatient Departments	0.089	0.057	0.198	0.111

The sample consists of 309,559 patient visits from the NAMCS/NHAMCS 1993/94, 1998/99, and 2003/04. All estimates use sample weights.

The Effect of Medicaid Physician Fees on the Probability that a Visit Takes Place In a Physician Office (Compared to an ED or OPD)

	High Fee	Low Fee	Difference	
Medicaid	0.701 (0.006)	0.635 (0.003)	-0.076 (0.006)	
Private Insurance	0.796 (0.003)	0.836 (0.001)	-0.040 (0.006)	
			-0.116 (0.006)	DD
<p>Predicted marginals and bootstrapped standard errors from probit regression also controlling for payer, fee ratio, interaction between Medicaid and fee ratio, age group, gender, race, MSA, county characteristics, and state and year effects.</p>				DD Relative to Medicaid at High Fee
				16.5%

The Effect of Medicaid Physician Fees on Site of Visit

	P(Y) if Medicaid=1 & Fee Ratio = 1	DD	SE of DD
Physician Office	0.701	-0.116	(0.006)
ED	0.186	0.009	(0.003)
OPD	0.114	0.093	(0.003)

Logit regressions predicting site of care were estimated controlling for payer (Medicaid and self pay dummies), fee ratio, an interaction between Medicaid and fee ratio, age group, gender, race, MSA status, county doctors per capita, and state and year effects. The table uses the estimated coefficients from these logit models to calculate predicted site of visit for Medicaid patients in a state with a fee ratio of 1, and the the difference-in-difference (DD), defined as the predicted difference in site of care for individuals on Medicaid minus the difference for the privately insured as the Medicaid fee ratio is decreased from 1 to 0.64. The standard error (SE) of the DD was estimated using the bootstrap method. The sample consists of 309,559 patient visits from the NAMCS/NHAMCS 1993/94, 1998/99, and 2003/04.

**Probability that a Visit Takes Place in a Physician Office (Compared to ED or OPD)
By Diagnosis
NAMCS and NHAMCS**

	P(Y) if Medicaid=1 & Fee Ratio = 0.64	DD		
All Diagnoses	0.625	0.117	(0.006)	18.7%
Diabetes mellitus [250]	0.513	0.200	(0.038)	39.0%
General medical examination [V70]	0.744	0.170	(0.036)	22.8%
Essential hypertension [401]	0.589	0.206	(0.044)	35.0%
Complications of pregnancy, childbirth and the puerperium [630-677]	0.476	0.266	(0.063)	55.9%
Asthma [493]	0.631	0.105	(0.032)	16.6%
Chronic sinusitis [473]	0.671	0.138	(0.048)	20.6%
Otitis media and eustachian tube disorders [381-382]	0.593	0.086	(0.031)	14.5%
Urinary tract infection, site not specified [599.0]	0.554	0.185	(0.067)	33.4%
Migraine [346]	0.519	0.205	(0.075)	39.5%
Noninfectious enteritis and colitis [555-558]	0.514	0.181	(0.075)	35.2%
Routine infant or child health check [V20.2]	0.605	0.068	(0.030)	11.2%
Chest pain [786.5]	0.218	0.160	(0.075)	73.4%
Normal pregnancy [V22]	0.591	0.052	(0.025)	8.8%
Headache [784.0]	0.452	0.147	(0.071)	32.5%
Potential health hazards related to personal and family history [V10-V19]	0.582	0.124	(0.065)	21.3%
Unspecified viral and chlamydial infections [079.9]	0.421	0.115	(0.062)	27.3%

Predicted marginals and bootstrapped standard errors (in parentheses) from logit regression controlling for uninsured as a payment category, age group, gender, race, county doctors per capita, and state and year effects. The data source is NAMCS/NHAMCS 1993/94, 1998/99, and 2003/04.

**Probability that a Visit Takes Place in a Physician Office (Compared to ED or OPD)
By Diagnosis
NAMCS and NHAMCS**

	P(Y) if Medicaid=1 & Fee Ratio = 0.64	DD	
All Diagnoses	0.625	0.117	(0.006)
Major depressive disorder [296.2 - 296.3]	0.698	0.002	(0.038)
Open wound of head [870-873]	0.205	-0.009	(0.058)
Pneumonia [480-486]	0.358	0.036	(0.097)
Open wound of hand and fingers [882-883]	0.265	0.051	(0.132)
Cellulitis and abscess [681-682]	0.439	0.042	(0.095)
Lumbago [724.2]	0.379	0.033	(0.074)
Chronic and unspecified bronchitis [490-491]	0.648	0.035	(0.052)
Pyrexia of unknown origin [780.6]	0.168	0.059	(0.079)
Contusions with intact skin surfaces [920-924]	0.252	0.054	(0.066)
Acute pharyngitis [462]	0.617	0.040	(0.036)
Abdominal pain [789.0]	0.409	0.092	(0.081)
Fracture of lower limb [820-829]	0.506	0.129	(0.097)
Other acute respiratory infectionsm [460, 464-465]	0.688	0.037	(0.026)
Sprains and strains of ankle [845.0]	0.327	0.144	(0.094)
Sprains and strains of neck [847.0]	0.416	-0.233	(0.132)

Predicted marginals and bootstrapped standard errors (in parentheses) from logit regression controlling for uninsured as a payment category, age group, gender, race, county doctors per capita, and state and year effects. The data source is NAMCS/NHAMCS 1993/94, 1998/99, and 2003/04.

Research Data Center

<http://www.cdc.gov/rdc/>

The screenshot shows the CDC Research Data Center homepage in a Windows Internet Explorer browser. The browser's address bar displays the URL <http://www.cdc.gov/rdc/>. The page header includes the CDC logo and the text "Centers for Disease Control and Prevention" and "Your Online Source for Credible Health Information". A search bar is located in the top right corner. Below the header, there is a navigation menu with links for "A-Z Index" and letters from A to Z. The main content area is titled "Research Data Center" and features a sidebar on the left with a "RDC Home" menu containing links such as "What's New", "Types of Data", "Access Modes", "Proposal Process", "Confidentiality", "Approved Projects", "RDC Fees", "Publication", "Reference Materials", "RDC Forms", "RDC Listserv", "Directions and Hotels", "RDC Staff", and "FAQs". The main content area is titled "NCHS Research Data Center (RDC)" and contains the following text:

[NCHS Home](#)

NCHS Research Data Center (RDC)

The National Center for Health Statistics (NCHS) developed the Research Data Centers (RDC) to allow researchers access to restricted data.

The RDC is responsible for protecting the confidentiality of survey respondents, study subjects, or institutions from which data were collected. In order to do this, we request all researchers submit a research proposal outlining the need for this more sensitive data. The proposal provides a framework for us to identify potential disclosure risk. Once approved, we work with you to create a data file specific to your research question. We cannot send you the dataset, but we offer several modes of access.

People interested in using the RDC are typically, university trained researchers who are comfortable using SAS or a similar statistical package to analyze standard datasets. Past researchers have been epidemiologists, economists, demographers and health scientists.

If this is your first time using the RDC we have provided step-by-step instructions to guide you along the process.

On the right side of the page, there is a "National Center for Health Statistics" logo, a "Text size" selector (S, M, L, XL), and links for "Email page", "Print page", and "Bookmark and share". Below these links is a "RESEARCH DATA CENTER" logo with the tagline "Confidential and Secure Access". At the bottom right, there is a "Contact Us" section with the following information:

Contact Us:

- National Center for Health Statistics
3311 Toledo Rd, Suite 4113
Hyattsville, MD 20782
- 1 (301) 458-4375
- rdca@cdc.gov

The browser's status bar at the bottom shows "Trusted sites" and "100%" zoom level. The Windows taskbar at the very bottom displays the start button and several open applications.

Policy Implications

- As part of the Patient Protection and Affordable Care Act (PPACA), Medicaid payments for primary care services provided by primary care doctors (family medicine, general internal medicine or pediatrics) will increase to 100% of the Medicare payment rates for 2013 and 2014.
- The analyses presented today suggest that this change may increase the number of physician visits among Medicaid patients and shift site of care away from hospitals and toward physician offices. But many questions remain:
 - What will be the effect of the fact that the intended increase in Medicaid physician fees is temporary?
 - What will be the effect of increases in Medicaid eligibility? Will there be capacity issues?



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