

4-11-2024

Dear
BPAC & DHS

My comments on the proposal
of 3-13-24 to increase Medicaid rates
include 130 pages.

Many of those are references.

Please include ALL of that
material as my comments.

If you need a scanned pdf
version, I can supply that also.

Thank you,

B. Morse

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April 11, 2024

Bureau of Program and Policy Coordination
Division of Medical Programs
Department of Healthcare and Family Services
State of Illinois
201 South Grand Ave East
Springfield, IL 62763-0001

Re: **UNREASONABLE BY ANY MEASURE:** Comments on the March 13 public notice on proposed increases in Medicaid fees

To whom it may concern,

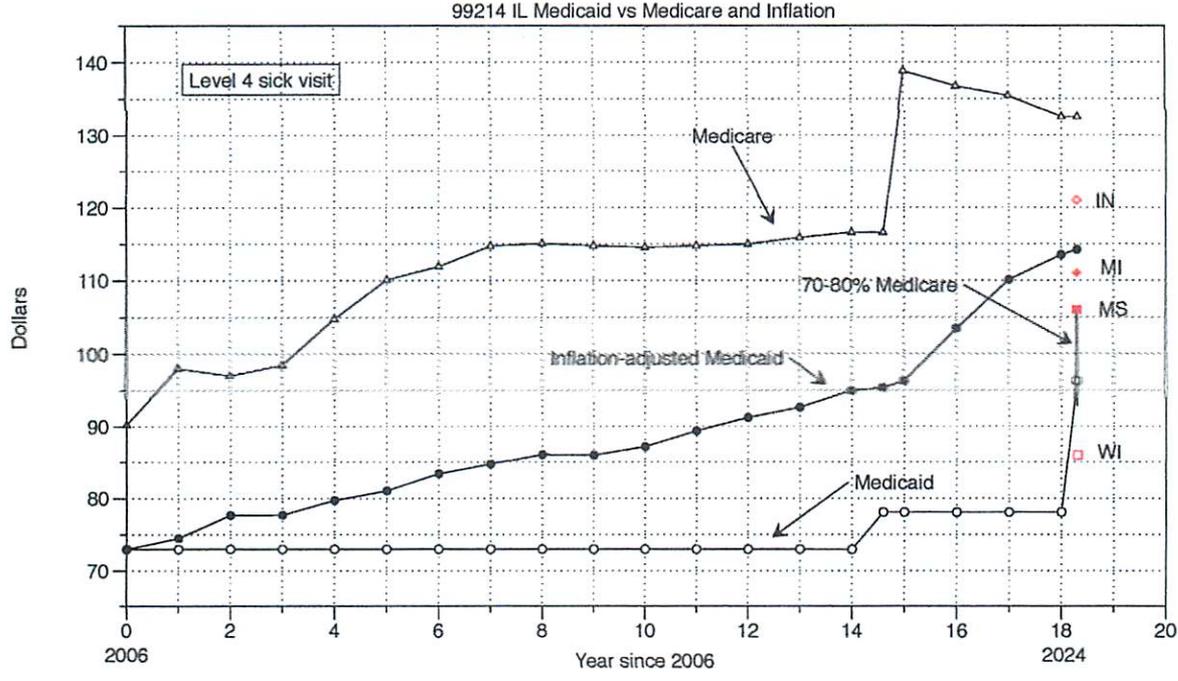
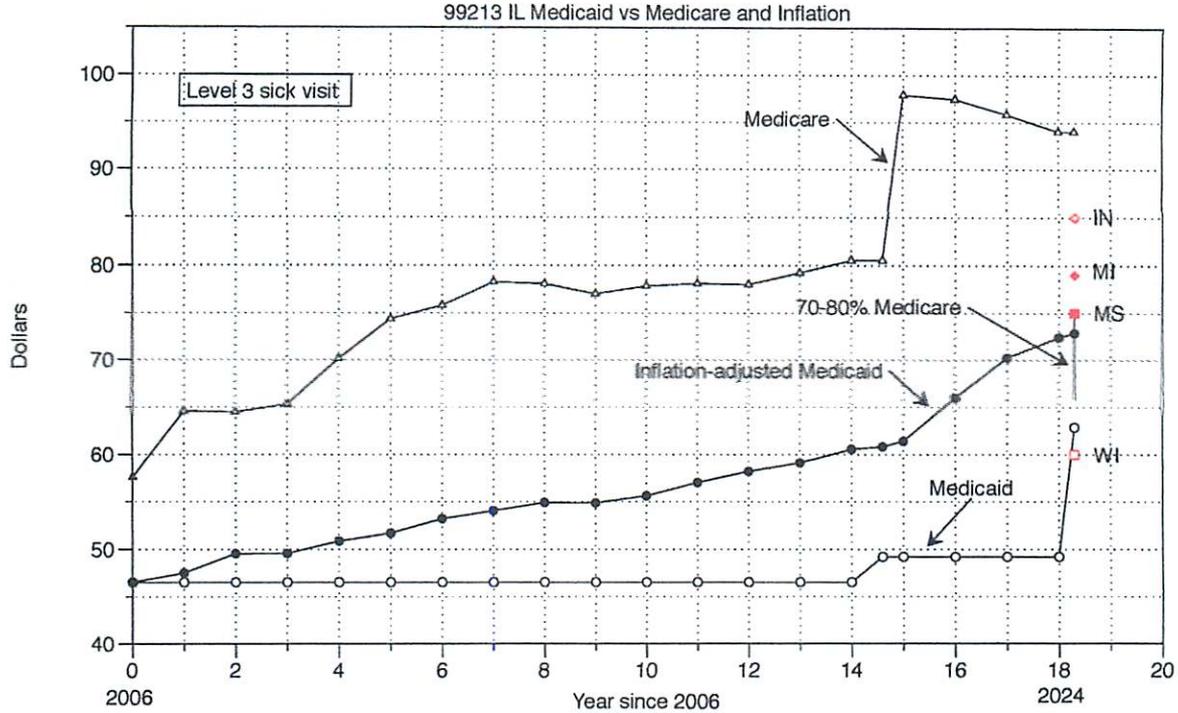
How does one determine the value of a particular service?

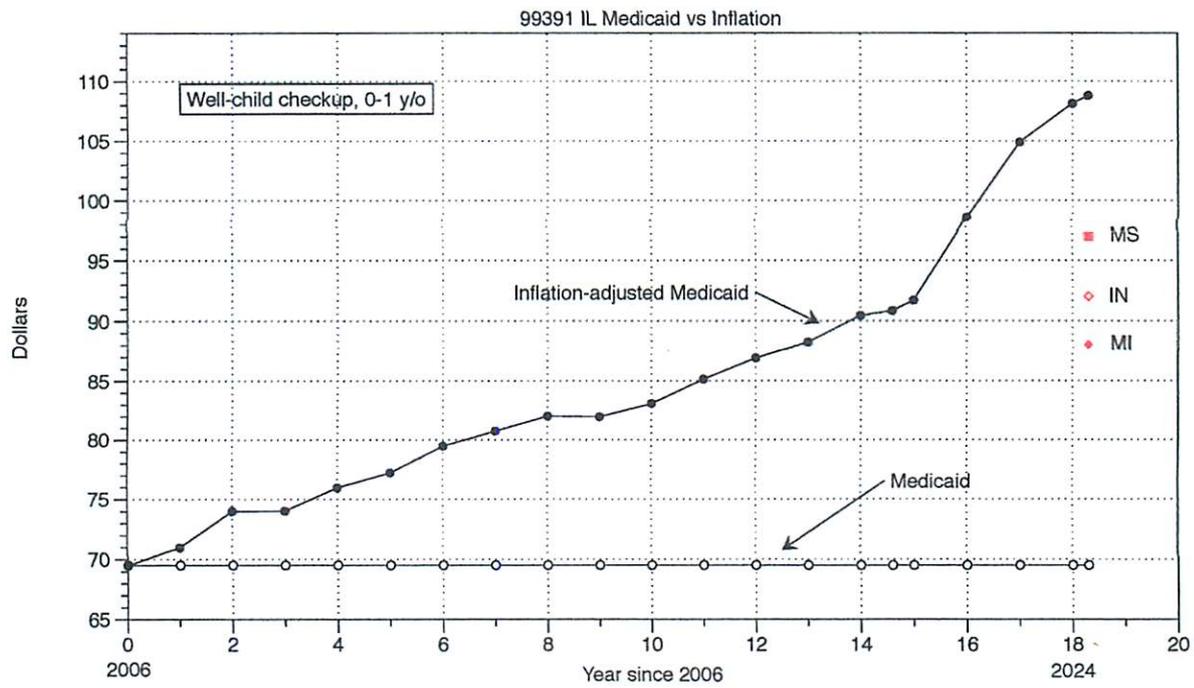
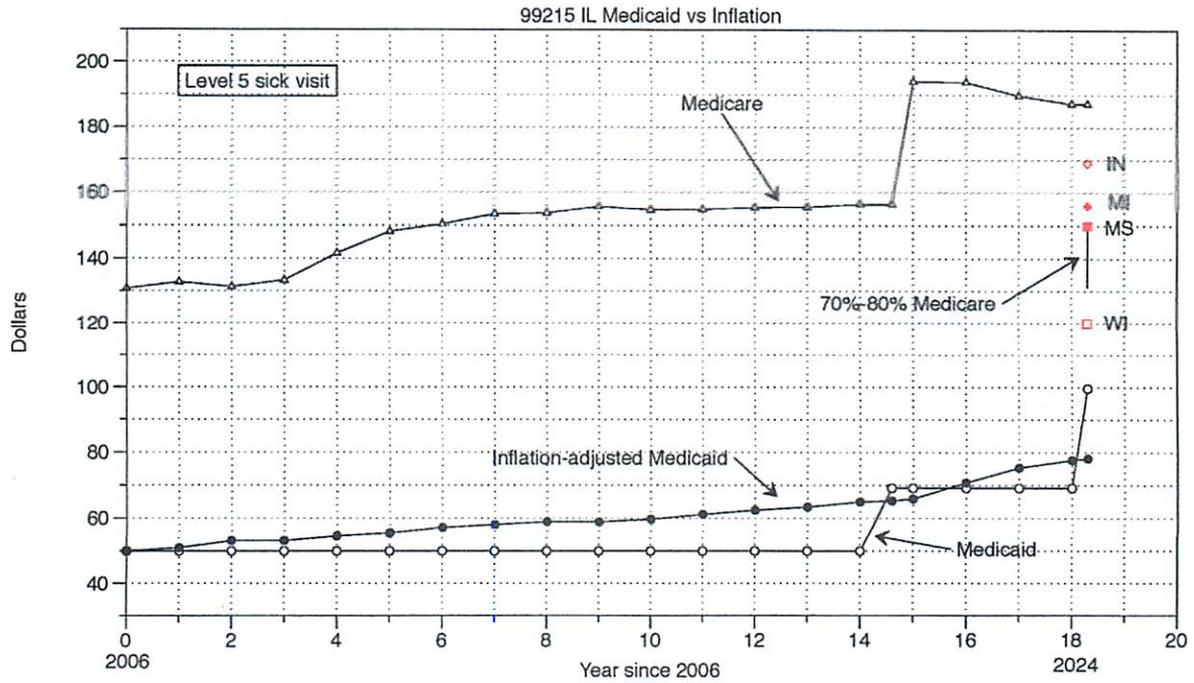
In particular, how does one determine the reasonableness of any proposal by the state of Illinois to rectify the situation of chronically-abysmal low payments to physicians for care of Medicaid patients?

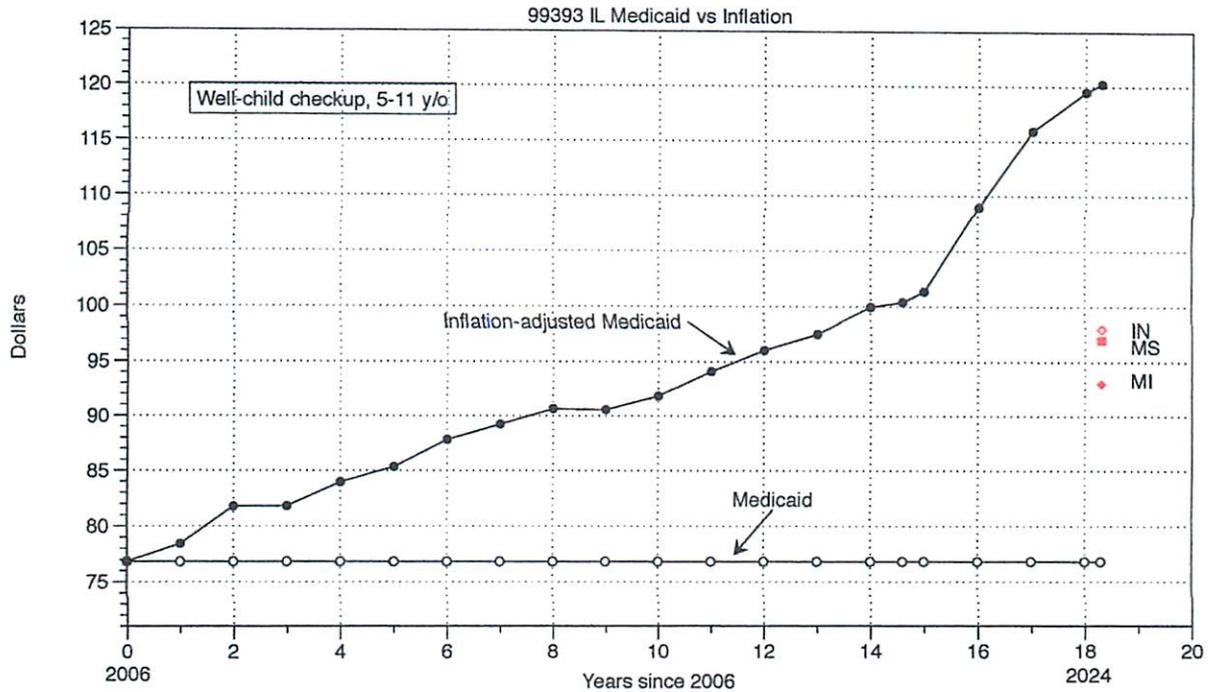
Some sensible thoughts might be: 1) compare Illinois Medicaid rates to Medicare rates, another government-funded program that pays doctors to care for patients in all fifty states; or 2) compare them to the rates paid by other states, especially neighboring ones; or 3) compare them to rates that were last considered appropriate by an Illinois court (which was in 2006, upon settlement of a 1992 lawsuit against the state for breaching provisions of the federal Medicaid Act), after adjusting for the effects of 18 years of inflation; or 4) examine the estimated financial impact of the proposal upon the existing Medicaid expenditures (ie., how much does the proposal change the state's expenses for the program?).

By each of these common-sense comparisons, the current proposal is not reasonable. The first three above-listed comparisons can best be examined by graphs. I have prepared graphs for five of the most commonly-used procedure codes in primary-care pediatrics (99213-99215, sick visits, and 99391, infant well-child-care, and 99393, 5-11 y/o well-child care) covering the period from the Memisovski consent-decree implementation (Jan 2006) through today. For each year since 2006, these graphs show: the actual fees paid to primary-care physicians (including the Maternal & Child Health add-ons agreed to in the decree); what the fees would have been if inflation were taken into account (using the Consumer Price Index from the US Bureau of Labor Statistics); the corresponding fees paid by Medicare (Medicare rates vary by region and by site of service [private office or hospital/ facility]; those used here are for

offices [non-facility] in downstate Illinois; rates for Chicago are even higher); and (for 2024 only) fees paid by the four neighboring states of Indiana, Michigan, Wisconsin, and Missouri. Note that the last point on the Medicaid curve (3/2024) is the proposed fee and that the vertical bar represents 70-80% of the Medicare rate.







A picture is worth a thousand words. These graphs tell a clear and sordid tale of chronically-abysmal Medicaid physician payments. These pictures are of immorally-low past payments and unreasonably low current proposals, exceptionally so for 99215, and for well-child care (99391 & 99393 above).

If one examines the last common-sense comparison, the proposal looks even worse. Per the State Comptroller's website, Illinois' Medicaid expenditures for 2023 were ~ 35 billion dollars (of which, approximately half is reimbursed by the federal government). Per the public notice of the 3/13/2024 current proposal, the expected annual increase as a consequence of the proposal to raise practitioner rates is ~ 121 million dollars. This increase (121 million/35 billion) would cause a mere 1/3 of one percent change in the overall Medicaid budget!!! No increase in rates for fifteen years, a mere 6.5% boost three years ago (vs 56.5% inflation), no change whatsoever for checkups in nearly two decades, Medicaid to Medicare ratios for primary care that place us 48th out of 50 states (see table below), and the state's offer to rectify this horrific situation would only manage to increase overall Medicaid spending from the equivalent of 299 to 300 dollars!!!

2019 Medicaid-to-Medicare Fee Index by State for Primary Care

State	Index	Rank	State	Index	Rank	State	Index	Rank	State	Index	Rank
AK	1.10	1	VT	0.89	14	IA	0.71	26	WV	0.58	38
MT	1.07	2	CO	0.84	15	MA	0.71	26	MO	0.57	40
DE	1.06	3	AL	0.81	16	SD	0.71	26	OH	0.57	40
ND	1.00	4	DC	0.80	17	VA	0.70	30	NH	0.55	42
SC	0.99	5	NC	0.78	18	USA	0.67		HI	0.53	43
ID	0.97	6	MN	0.77	19	LA	0.66	31	NJ	0.51	44
NV	0.95	7	CA	0.76	20	KY	0.65	32	FL	0.49	45
MD	0.94	8	UT	0.76	20	AR	0.64	33	WI	0.47	46
MS	0.94	8	CT	0.75	22	ME	0.63	34	PA	0.46	47
OK	0.94	8	IN	0.74	23	WA	0.63	34	IL	0.44	48
NM	0.91	11	AZ	0.73	24	MI	0.62	36	NY	0.43	49
NE	0.90	12	OR	0.73	24	KS	0.61	37	RI	0.32	50
WY	0.90	12	GA	0.71	26	TX	0.58	38			

SOURCE: <https://www.kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index>. Other IL ratings: overall, 45; OB, 28; other, 33

Illinois must do better. It is unethical to push down children on Medicaid, many of whom come from families in the lower socioeconomic groups of society and are at significant risk of poorer outcomes in health as a result, into a lower tier of the healthcare system by paying woefully-inadequate fees for their care.

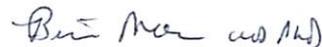
Additionally, it is unlawful, being against the federal Medicaid act (42 U. S. C. § 1396(a)(30)(A)), which provides that a state medical plan for assistance must “(3)(A) - provide such methods...and to assure that payments are consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers (emphasis added) so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area...” As Judge Lefkow wrote in her August 23, 2004 opinion (Memisovski v Maram, 92 C 1982), the goal and the obligation of the state in providing medical care for children with Medicaid is not a two-tiered system: “Moreover, the court also takes issue with the inclusion of these so-called “safety net” providers in the equal access analysis. The inquiry is, after all, of *equal* (emphasis in original) access and not simply of access. The plaintiffs are entitled to the same level of medical care as is provided to children covered under private insurance. That must include mainstream medical care.” And the Judge also clearly states the obvious: “The starting point for the issue of equal access must be the rates Illinois Medicaid pays to medical providers for providing services to Medicaid patients. Rates and equal access simply cannot be divorced (emphasis added).”

The remainder of my detailed comments on the current proposal follow this short letter (including my original comment on the 12/4/2023 initial proposal, all six published articles that I have referenced therein and the 8/23/2004 opinion in *Memisovski v Maram*, and an updated table [updated to reflect the small 6.5% rate increase in 99213 & 99214 that was instituted in 7/2020. of which I was unaware]), but I will reprint my proposal on how to rectify the broken Illinois Medicaid physician fee schedule here.

I suggest that the state raises the rates for the major procedure codes affecting primary and specialty care (for pediatrics, these would be 99213-99215 and 99391-99394; 99215 was previously excluded from the consent-decree rate increase, but this must be corrected if we are to attempt to achieve any cost savings by avoiding some unnecessary emergency room visits) to either the same levels as they were after the consent decree was in place, after adjusting for the 56.5% increase in inflation since 2006, or to 80% of the 2023 Medicare rate for physicians (non-facility; although Chicago rates are greater than the rest of Illinois, I would not argue with the state's preference to use downstate Medicare rates). In addition, I urge the state to commit to some regular increase in the rates (as one or two changes in nearly two decades is simply not acceptable), such as by tying the rates to either inflation or to a constant percentage of Medicare rates (my suggestion of 80% is only marginally greater than the state's original proposed range of 72-80%).

It is high time to right the wrongs in the Medicaid system. Illinois is a state full of honest and good people who know what is right in our society and what is wrong. Let's make our healthcare system for the most vulnerable amongst us, children from poorer families, something of which we can be proud. Societies are judged by how they treat their most vulnerable members. We can, we must, we will do better.

Sincerely,



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January 3, 2024

(via e-mail to HFS.BPPC@illinois.gov)

Bureau of Program and Policy Coordination
Division of Medical Programs
Department of Healthcare and Family Services
State of Illinois
201 South Grand Ave East
Springfield, IL 62763-0001

Re: Comments on the December 4, 2023 public notice on proposed increases in Medicaid fees

To whom it may concern,

My name is Brian Morse. I am a pediatrician in private solo practice in the city of Chicago. I opened this practice with a partner on August 26, 2002, two years after graduating from the University of Illinois at Chicago, where I had completed medical and graduate degrees, as well as residency. I am writing today to comment on the December 4, 2023 public notice from the Illinois Department of Healthcare and Family Services (IDHFS) titled "Proposed changes in methods and standards for establishing medical assistance payment rates."

First, I appreciate that the state is proposing a rate increase. This is long overdue, as the last one that affected pediatricians¹ occurred in January of 2006 as a consequence of a 2005 consent decree between the state of Illinois and the mother of a child with Medicaid, who had sued IDHFS in 1992 for inadequate care (*Memisovski v Maram*; ruling in favor of plaintiff, August 23, 2004; 92 C 1982). Second, as this is the only rate increase for children's doctors in nearly two decades, it ought to be done right. This is the reason for my comments.

There are two issues to address: fairness to doctors (and other providers of medical care) and fairness to the children we serve. They both matter, but the latter matters more. Medical professionals who care for children don't choose their profession to make money, they choose it to make a difference.

In terms of fairness to doctors (for clarity, I will write "doctor" or "physician" or "pediatrician," but I mean my statements to encompass all people who provide healthcare to children), the issue is

straightforward: it is patently unjust to pay doctors the same fee for almost two decades! Inflation has increased 55% since 2006²; Medicare rates have gone up even more.³ Thus, while providing the same good care, I make 36% less today than I did in 2006. I know that this argument for fairness in Medicaid payments to physicians, though true, falls on deaf ears (when I complained to my state senator a few years back, she replied that she had tried many times to get rates increased, but that the signed physician contracts kept “flying by.”). Essentially, doctors who see Medicaid will have advantage taken of them, because they permit it by their commitment to doing the right thing and taking Medicaid. Though this may be our personal ethos, the state’s ongoing disregard for fairness to doctors is shameful. Yes, my colleagues and I have seen and will continue to see Medicaid patients until our offices are nearly broke, but that time is nigh.

In terms of fairness to the children, our patients, Illinois Medicaid has fallen short for decades. When Judge Lefkowitz found in her August 23, 2004 opinion (92 C 1982) that the state had failed to uphold parts of the federal Medicaid Act, a major fault was the lack of adequate access to medical care. To quote one of the Judge’s decisions on the case (92 C 1982; November 29, 2007): “On August 23, 2004, this court entered a memorandum opinion and order finding that the defendants, including the Illinois Department of Healthcare and Family Services (“HFS”) (collectively, “defendants” or “the State”), were in violation of their obligations under the federal Medicaid Act. This finding was based in part on the State’s ongoing failure to ensure that plaintiffs (a class of children in Cook County eligible for Medicaid coverage) were provided pediatric care and services to the extent that such care and services were available to the general population.” The federal act on Medicaid adequacy states (42 U. S. C. § 1396(a)(30)(A)) that a state medical plan for assistance must “(3)(A) - provide such methods...and to assure that payments are consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers (emphasis added) so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area...”

When the Judge issued her findings and when the state consented to raise some physician fees (see attached document⁴), the approximate reimbursement to physicians for the most-commonly-billed code, 99213, was only ~55% of Medicare. Low fees, such as these, were considered by Judge Lefkowitz to be a major obstacle to fulfilling the statutory requirement for “equal access to care,” writing that (in 92 C 1982, August 23, 2004) “The starting point for the issue of equal access must be rates Illinois Medicaid pays to medical providers for providing services to Medicaid patients. Rates and equal access simply cannot be divorced.” The rates today, 18 years after they were last raised, are as low now as they were then (see attached table⁵; 99213 is now 53% of Medicare [downstate Illinois, non-facility Medicare rates used], rates are worse if Chicago rates are used instead). It is illogical to assume that the problem of inadequate care (a violation of the “equal access” provision) for Medicaid children no longer exists today when the major driver, poor reimbursement for medical care, is as much an issue now as it was in 2006.

Furthermore, research spanning three to four decades finds Medicaid reimbursements have a substantial impact upon access to medical care. This is true whether one examines the type of care (primary vs specialty), as well as the site of care (private offices vs hospital- or clinic-based). In Cohen and Cunningham’s 1995 study,⁶ “Medicaid Physician Fee Levels and Children’s Access to Care,” it is stated (referencing eight articles published between 1978 and 1990): “Research on Medicaid physician payment policies has shown that payment levels are a primary determinant of office-based doctors’ participation in the Medicaid program: The lower the Medicaid payments are relative to private or Medicare fees, the less office-based doctors participate in the program.” In 2011, Bisgaier and Rhodes, writing in The New England Journal of Medicine,⁷ reach the same conclusion (referencing four articles between 1999 and 2007): “It is well established that reimbursement levels influence providers’ decisions about whether to accept public insurance.”

Research consistently shows that access to both primary care doctors and specialists are decreased when Medicaid reimbursements are low. "Fees are significantly associated with the probability of having an office-based doctor as a usual source of care..." (Cohen and Cunningham, 1995⁶) "The findings presented below...are consistent with a model in which the overall quantity of services and access to services is primarily determined by the generosity of provider payments." (White, 2012⁸). Interestingly (and of significant import for states trying to both improve healthcare for Medicaid children and control costs), Cohen and Cunningham also find⁶ that "Average total expenditures for ambulatory physician visits generally decreased as the generosity of Medicaid reimbursement increased...One explanation for this may be the place where Medicaid children usually receive their medical care. Services provided in hospital emergency rooms and outpatient clinics are typically much more costly than similar services provided in doctors' offices...Furthermore, use of the hospital as a usual source of care is likely to engender costs beyond those attributable to higher emergency room fees, because emergency room patients are more likely to be admitted to the hospital than are patients who are seen in a physician's office."

Studies consistently find that Medicaid patients have decreased access to doctors (primary and specialty) and longer wait times for appointments. The aforementioned NEJM article (Bisgaier and Rhodes, 2011⁷) finds that when attempting to obtain appointments in Cook County, Illinois in eight different types of pediatric specialist offices, Medicaid recipients (vs those with private insurance) were six times less likely to be given appointments and had wait times for those appointments that were twice as long. Interestingly, this study was supported by the state of Illinois as a result of the *Memisovski v Maram* court-ordered consent decree. It was likely also the last such study (based on my review of the titles of all articles listed in PubMed that cited it.). Other research reach the similar conclusions: (Sharma et al, 2017⁹) "We found that states with high Medicaid fees had higher probabilities of appointment offers and shorter wait times for Medicaid patients..."; (Medford-Davis et al, 2017¹⁰) "Appointment success rate was 83.1% for privately insured, 81.4% for uninsured, and 14.0% for Medicaid callers."; and (Hsiang et al, 2019¹¹) "Overall, 34 audit studies were identified, which demonstrated that Medicaid insurance is associated with a 1.6-fold lower likelihood in successfully scheduling a primary care appointment and a 3.3-fold lower likelihood in successfully scheduling a specialty appointment when compared with private insurance." Clearly, the problem of "equal access to care" for Medicaid patients still exists.

As Judge Lefkow wrote in her August 3, 2004 opinion, the goal and the obligation of the state in providing medical care for children with Medicaid is not a two-tiered system: "Moreover, the court also takes issue with the inclusion of these so-called "safety net" providers in the equal access analysis. The inquiry is, after all, of *equal* (emphasis in original) access and not simply of access. The plaintiffs are entitled to the same level of medical care as is provided to children covered under private insurance. That must include mainstream medical care."

As the above demonstrates clearly, Medicaid patients in Illinois deserve, must have (by the terms of the Medicaid Act), and do not receive adequate care ("equal access"). How can we make sure that the current proposal by the state to raise physician rates for the first time in 18 years is the best attempt to achieve this (or, at least, come close)? I suggest that the state raises the rates for the major procedure codes affecting primary and specialty care (for pediatrics, these would be 99213-99215 and 99391-99394; 99215 was previously excluded from the consent-decree rate increase, but this must be corrected if we are to attempt to achieve any cost savings by avoiding some unnecessary emergency room visits) to either the same levels as they were after the consent decree was in place, after adjusting for the 55% increase in inflation since 2006, or to 80% of the 2023 Medicare rate for physicians (non-facility; although Chicago rates are greater than the rest of Illinois, I would not argue with the state's preference to use downstate

Medicare rates). In addition, I urge the state to commit to some regular increase in the rates (as one change in nearly two decades is simply not acceptable), such as by tying the rates to either inflation or to a constant percentage of Medicare rates (my suggestion of 80% is only marginally greater than the state's proposed range of 72-80%). I have created a detailed table of the most-relevant rates and attached it here.

From my 20+ years of experience in private practice pediatrics (and always accepting Medicaid, generally at 20-30% of my patient population), I have a plethora of additional ideas on how we could advance the two objectives of improving the health of the Medicaid (and other) children for whom we care and saving money for the state (to be shared at another time). These objectives are not necessarily mutually exclusive.

Thank you very much. I hope that we can work together on our shared goals to improve the health of the Medicaid-covered children of Illinois.

Sincerely,



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¹ excluding a recent increase in one fee only, vaccine administration, which had been unchanged at \$6.40 since 2006

² using US Bureau of Labor Statistics Consumer Price Index Inflation Calculator (accessed at https://www.bls.gov/data/inflation_calculator.htm)

³ as example, comparing the three main sick visit codes (99213-99125), the increases from 2006 to 2023 for non-facility rates in the "rest of Illinois" region (0095299 locality) are: 78% [\$49.55 to \$87.96], 60% [\$77.99 to \$124.61], and 64% [\$114.32 to \$174.96]). These can be accessed at <https://www.cms.gov/medicare/physician-fee-schedule/search>.

⁴ "Remedies announced in Memisovski Medicaid Suit;" copy enclosed here

⁵ "ILDPA Fee Schedule Comparison, 1/3/24" (this is my own table with data gathered from various sources; see notes at bottom of table for more information)

⁶ Cohen, JW, and Cunningham, PJ. Medicaid Physician Fee Levels and Children's Access to Care. *Health Affairs* 1995;14(1):255-262

⁷ Bisgaier J, and Rhodes, KV. Auditing Access to Specialty Care for Children with Public Insurance. *N Engl J Med* 2011;364:2324-33

⁸ White, C. A Comparison of Two Approaches to Increasing Access to Care: Expanding Coverage versus Increasing Physician Fees. *Health Services Research* 2012;47(3):963-982

⁹ Sharma, R, Tinkler, S, Mitra, A, Pal, S, Susu-Mago, R, and Stano, M. State Medicaid fees and access to primary care physicians. *Health Economics* 2018;27:629-636

¹⁰ Medford-Davis, LN, Lin, F, Greenstein, A, and Rhodes, KV. "I Broke My Ankle": Access to Orthopedic Follow-up Care by Insurance Status. *Acad Emergency Medicine* 2017;24(1):98-105

¹¹ Hsiang, WR, Lukasiwicz, A, Gentry, M, Kim, C-Y, Leslie, MP, Pelker, R, Forman, HP, and Wiznia, DH. Medicaid Patients Have Greater Difficulty Scheduling Health Care Appointments Compared With Private Insurance Patients: A Meta-Analysis. *Inquiry* 2019;56:1-9

REMEDIES ANNOUNCED IN MEMISOVSKI MEDICAID SUIT

Primary Care Providers, Dentists to Receive Rate Increases

Both parties engaged in extensive settlement negotiations in order to avoid the burden, costs, and risks of further litigation. After extensive delays, the resulting Consent Decree was issued on June 27, 2005. The following provides a summary of the changes put forward in the Consent Decree. (Dates of proposed implementation are indicated in parentheses.)

For full information, use the following link:

<http://www.illinoisap.org/medicaidjune2005.htm>

CHANGES TO MEDICAID FOR PRIMARY CARE PROVIDERS

Rate Increases

Illinois Medicaid will increase rates for Maternal and Child Health (MCH)* providers for 12 primary care codes that represent the vast majority of all pediatric visits. Rates will be increased to at least** the following amounts (January 1, 2006):

Code	Service	2005 Rate	New Rate	Dollar (Percent) Increase
<i>Office or Outpatient Services, Established Patient</i>				
99213	Expanded problem-focused history and exam (low complexity)	\$28.35	\$46.56	\$18.21 (64%)
99214	Detailed history and exam (moderate complexity)	\$44.55	\$72.97	\$28.42 (64%)
<i>Preventive Medicine Services, New Patient</i>				
99381	Infant	\$42.45	\$91.90	\$49.45 (116%)
99382	Age 1-4	\$42.45	\$98.65	\$56.20 (132%)
99383	Age 5-11	\$42.45	\$96.60	\$54.15 (128%)
99384	Age 12-17	\$42.45	\$104.96	\$65.21 (147%)
99385	Age 18-39	\$42.45	\$104.96	\$65.21 (147%)
<i>Preventive Medicine Services, Established Patient</i>				
99391	Infant	\$42.45	\$69.52	\$27.07 (64%)
99392	Age 1-4	\$42.45	\$77.87	\$35.42 (83%)
99393	Age 5-11	\$42.45	\$76.84	\$34.39 (81%)
99394	Age 12-17	\$42.45	\$84.62	\$42.17 (99%)
99395	Age 18-39	\$42.45	\$85.65	\$43.20 (102%)

* MCH providers are primary care physicians who have completed a simple application stating they have hospital privileges, provide EPSDT services, maintain 24-hour telephone coverage, and other criteria. The MCH Primary Care Provider Agreement provides additional information.

** Information on exact rate increases will be distributed to enrolled providers by IDHFS.

Furthermore, the cost basis for Federally-Qualified Health Center (FQHC) reimbursement will allow FQHCs to be reimbursed using cost information from the cost report years 2002 and 2003, representing an increase in payments to FQHCs (January 1, 2006).

Bonus Payments

In order to further encourage provider participation while also increasing the number of children who receive all EPSDT services, Medicaid will pay a \$30 bonus to any eligible physician or FQHC for each patient who receives all EPSDT health screenings, with proper billing documentation required (April 1, 2007, based on billing data through December 31, 2006). These bonus payments will be made on an annual basis, and properly-billed services within 31 days after a patient's birthday will be applicable. This includes the following:

Age	Number of Well-child Screens
10 days to 1 year	6
1-2 years	3
2-3 years	1
3-4 years	1
4-5 years	1

The rate increases and bonus payments have the potential to more than double what pediatricians and family physicians are currently paid by Medicaid for well-child care. ICAAP is confident that these rates will enable providers to cover their expenses and open their practices to additional Medicaid patients. Increases in dental rates (below) will similarly help address the shortage of dental care and assist primary care physicians in referring patients for dental care.

Payment Cycles

Medicaid will continue to provide expedited processing of claims for MCH Providers, and the contracted referral service explained below will actively promote the MCH program and corresponding benefits.

Provider Recruitment, Notices, and Billing Information

IDHFS is directed to increase the use of the Internet and e-mail for provider communications (January 1, 2006). IDHFS will also contract with at least one third party to develop and maintain an information, recruitment and referral service. This service will serve many purposes, including recruiting physicians to participate and educating them through various strategies about program changes, billing (including how to bill for multiple specialty services on one day), expedited payments, and securing referrals. This service will also provide assistance to families in locating providers and accessing EPSDT services (July 1, 2007).



Rod R. Blagojevich, Governor
Barry S. Maram, Director

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Telephone: 1-877-782-5565
TTY: (800) 526-5812

December 29, 2005

INFORMATIONAL NOTICE

TO: Physicians and Advanced Practice Nurses

RE: Increases to the Maternal and Child Health (MCH) Add-ons

Effective with dates of service on or after January 1, 2006, the department will increase the reimbursement rate for the MCH add-ons. The following table identifies the procedure code, description, base reimbursement rate and the new MCH add-on amount. Only enrolled MCH providers will be paid the MCH add-on in addition to the base rate.

Procedure Code	Description	Base Rate	MCH Add-on
99213	E/M Office/OH Visit Est Pt	\$28.35	\$18.21
99214	E/M Office/OH Visit Est Pt	\$42.50	\$30.47
99381	Initial Eval Healthy Infant	\$32.15	\$59.75
99382	Initial Eval Healthy Child	\$32.15	\$66.50
99383	Initial Eval Healthy Child	\$32.15	\$64.45
99384	Initial Eval Healthy Adoles	\$32.15	\$72.81
99385	Initial Eval Healthy /18-20 yr	\$32.15	\$72.81
99391	Periodic Re-eval Estab Infant	\$32.15	\$37.37
99392	Periodic Re-eval Healthy Child	\$32.15	\$45.72
99393	Periodic Re-eval Healthy Child	\$32.15	\$44.69
99394	Periodic Re-eval Healthy Adoles	\$32.15	\$52.47
99395	Periodic Re-eval/Mgmt. 18-20 yr	\$32.15	\$53.50

Increased reimbursement rates for selected maternal and child health services are available to physicians and APNs who meet the criteria of, and sign the department's MCH Primary Care Provider Agreement. The MCH Primary Care Provider Agreement can be found on the department's website at: <http://www.hfs.illinois.gov/enrollment/>

Providers wishing to receive e-mail notification, when new provider information is posted by the department, may register at the following HFS Web site:

<http://www.hfs.illinois.gov/provrel>

Electronic claim submission via the Internet is available by registering on the department's Medical Electronic Data Interchange, Internet Electronic Claims (MEDI/IEC) System:
<<http://www.myhfs.illinois.gov/>>.

If you have questions regarding this notice, please contact the Bureau of Comprehensive Health Services at 1-877-782-5565.

Anne Marie Murphy

Anne Marie Murphy, Ph.D.
Administrator
Division of Medical Programs

ILDPA FEE SCHEDULE COMPARISON (1/3/24b), Brian Morse, MD, PhD

CPT code	Base 2006-2023	MCH Add-on*	Total w/ MCH	2023 Medicare^		2023 Medicaid/ Medicare Ratio - Base		2023 Medicaid/ Medicare Ratio - with MCH		Expected 2023# (2006 + inflation)		100% M-care**, per AAP		72% of 2023 Medicare		State Proposal^^		Act % of M-care for Chgo		Act % of M-care for IL-Rest		% of 2006 fee adj for inflation##	
				Chgo	IL-Rest	Chgo	IL-Rest	Chgo	IL-Rest	Base	+ MCH	Chgo	IL-Rest	Chgo	IL-Rest	Base	+ MCH	Base	+ MCH	Base	+ MCH	Base	+ MCH
99211	12.30	0.68	12.88	24.32	21.99	0.51	0.56	0.53	0.59	19.07	19.99			17.51	15.83	6.96	7.54	0.29	0.31	0.32	0.34	36	38
99212	24.25	1.40	25.65	60.09	54.76	0.40	0.44	0.43	0.47	37.58	39.81			43.26	39.43	25.41	26.81	0.43	0.45	0.46	0.49	68	67
99213	28.35	18.21	46.56	95.85	87.96	0.30	0.32	0.49	0.53	43.94	72.97			69.01	63.33	47.09	85.30	0.49	0.68	0.54	0.74	187	89
99214	42.50	30.47	72.97	135.44	124.61	0.31	0.34	0.54	0.59	68.88	113.26			97.51	89.72	69.47	99.94	0.51	0.74	0.56	0.80	185	88
99215	48.00	1.95	49.95	189.78	174.96	0.25	0.27	0.26	0.29	74.40	77.53			135.64	125.97	101.94	103.89	0.54	0.55	0.58	0.59		
rates above here are for sick visits, those in blue are the most commonly-used ones (as you can see, the 99215 was never increased); those below are check-ups, which generally take about 2 x as long as a 99214; blue are for most common, as these are for established (not new) patients. Check-ups in primary care are almost always these.																							
99381	32.15	59.75	91.90							49.83	142.64	114.94	105.55					0.28	0.80	0.30	0.87		
99382	32.15	66.50	98.65							49.83	153.12	119.96	110.18					0.27	0.82	0.29	0.90		
99383	32.15	64.45	96.60							49.83	149.94	124.23	114.49					0.26	0.78	0.28	0.84		
99384	32.15	72.81	105							49.83	162.91	140.00	129.23					0.23	0.75	0.25	0.81		
99391	32.15	37.37	69.52							49.83	107.90	102.87	94.71					0.31	0.68	0.34	0.73		
99392	32.15	45.72	77.87							49.83	120.86	110.39	101.53					0.29	0.71	0.32	0.77		
99393	32.15	44.69	76.84							49.83	119.27	110.04	101.22					0.29	0.70	0.32	0.76		
99394	32.15	52.47	84.62							49.83	131.34	119.68	110.47					0.27	0.71	0.29	0.77		

Notes: All Medicare rates are non-facility (office-based); * result of 2004 consent decree after lawsuit settlement (Memisovski v Maram); unshaded eff 7/1/02, shaded 1/1/06; MCH is the maternal and child health add-on; ^ 2006 IL-Rest Medicare rates for 99213-5 are \$49.55, \$77.99, & \$114.32; # 2006 rates adjusted for inflation (Per US Gov CPI, 55% inflation from 1/2006 to 11/2023); ** see Pinkwater e-mail on 12/20/23 1126 (corrected in 1/1/24 e-mail); ^^ state "proposal," as best as understood from notice of 12/4/2023 (and from personal discussions with J. Pinkwater, IL chapter of American Academy of Pediatrics; ## taking into account inflation from 1/2006 to 9/2023
 Colours: blue - most commonly-used codes; grey - MCH add-ons eff 1/2006 (last fee increase!!!); pink - total rates incl MCH 2006-current; green - 2006 rates adjusted for inflation (my fair proposal); also must include future cost-of-living or medicare-tied annual increases); orange - state's suggested raise, correctly calculated based on non-facility Medicare rates for 2023; yellow - my understanding of the state proposal, to take effect 1/1/2024; red - % shortfall for state's proposal vs mine (yellow vs green).

Data Watch

Medicaid Physician Fee Levels And Children's Access To Care

by Joel W. Cohen and Peter J. Cunningham

Abstract: This study examines the effects of physician fees on children's use of preventive and illness-related ambulatory physician services under the Medicaid program. Using data from the 1987 National Medical Expenditure Survey (NMES), we examine the effects of Medicaid fee generosity on physician service use and overall ambulatory physician spending. The results indicate that more generous fees are associated with a greater likelihood of having a doctor's office as a usual source of care and a higher number of preventive visits at office-based sites of care. Having a doctor's office as a usual source of care is associated with lower overall ambulatory physician expenditures.

Access to care, particularly for children, has been an important issue for the Medicaid program in recent years. This interest stems from the belief that lack of access leads not only to adverse outcomes but also to inefficient use of medical resources. Although expanding Medicaid eligibility is one method of trying to increase the provision of preventive care to poor and uninsured children, it is not clear that it is sufficient to achieve that objective. Research on Medicaid physician payment policies has shown that payment levels are a primary determinant of office-based doctors' participation in the Medicaid program: The lower the Medicaid payments are relative to private or Medicare fees, the less office-based doctors participate in the program.¹

Medicaid recipients can obtain care, however, in nonoffice settings. Research on use of physician services suggests that lower reimbursement is associated with where physicians are seen, rather than whether or not they are seen at all.² This has implications both for continuity of care, which is likely to be important for receiving preventive services, and the overall cost to the program of providing care, because people would seek care in the hospital, which is more expensive. Research also has shown that Medicaid beneficiaries tend to use hospital-based sites as a usual source of care much more often than other insured persons do.³ To examine these issues, we present descriptive data on the effect of various levels of Medicaid fees on the site of usual source of care, on use of preventive and illness-related

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physician services, and on ambulatory physician expenditures. We then show results from multivariate models that examine the effects of fees and usual source of care on medical care use and spending.

Data sources. The primary source of data for this study is the household component of the 1987 National Medical Expenditure Survey (NMES), conducted by the Agency for Health Care Policy and Research (AHCPR). NMES looks at health status, health insurance, and medical care use and spending for a national probability sample of the U.S. civilian noninstitutionalized population over an entire year.⁴ The sample for this study consisted of 1,333 children under age eighteen who were covered by Medicaid for all of 1987. Information on Medicaid physician fees and policies is from a database of Medicaid and insurance regulations developed specifically for use with NMES.⁵ Fee generosity is calculated as the ratio of the Medicaid fee to the Medicare allowed charge for an office visit.⁶ Data for the market supply and demand variables used in the multivariate analysis were obtained primarily from the area resource file (ARF) and the National Planning Council's census tract-level demographic database.⁷

Study Findings

Most children with Medicaid coverage live in states where the Medicaid reimbursement level is less than that for other payers (Exhibit 1). In fact, more than one-fifth of Medicaid children live in states where the ratio of Medicaid to Medicare fees is less than 50 percent, and only about one-fourth of Medicaid children live in states where the Medicaid reimbursement rate is at least 90 percent that of Medicare.

Fee generosity and site of care. There appears to be a strong association between the relative generosity of Medicaid reimbursement and the place where Medicaid children usually receive their medical care. In general, the higher the fee ratio (indicating more generous Medicaid reimbursement), the more likely children are to use a doctor's office for their usual source of care and the less likely they are to use a hospital-based or other health care facility. In the least generous states (fee ratios less than 50 percent) about 60 percent of Medicaid children used a doctor's office for their usual source of care in 1987, and about 20 percent used hospital-based facilities. This gap begins to widen substantially for children in states where the fee ratio is about 80–89 percent. In the most generous states 80 percent of Medicaid children used a doctor's office in 1987, and only 6 percent used hospital-based facilities.

Fee generosity and use of physician services. Despite the strong association between fee ratios and site of usual source of care, there appears to be only a weak association between fee generosity and use of physician

Exhibit 1
Usual Source Of Care, Use Of Ambulatory Physician Services, And Expenditures
For Ambulatory Physician Services For Children Covered By Medicaid, 1987

	Ratio of Medicaid to Medicare fees					
	All	Less than 50%	50-59%	60-79%	80-89%	90% or more
Population (thousands)	6,850	1,457	951	1,530	1,000	1,912
Percent of total	100.0	21.3	13.9	22.3	14.6	27.9
Usual source of care site						
Physician office	69.6%	59.2%	63.9%	59.6%	87.6%	79.9%
Hospital-based	11.2	19.8	11.7	14.1	2.7	6.0
Other	17.3	18.6	24.4	23.0	9.7	11.6
Physician visit						
Any	72.2%	70.1%	72.7%	74.7%	69.5%	72.9%
Preventive	35.6	38.9	26.9	44.2	29.7	33.9
Illness-related	59.8	54.7	64.9	57.8	59.8	62.8
Average number of physician visits^a						
All types	3.2	3.4	3.3	3.1	3.1	3.3
Preventive office-based	1.7	1.5	1.9	1.5	1.8	2.1
Illness-related office-based	3.0	2.8	3.3	2.9	3.0	3.0
Average physician expenditures^b						
	\$268.0	\$344.5	\$329.7	\$233.1	\$182.3	\$252.0

Source: National Medical Expenditure Survey (NMES), 1987.

^a Conditioned on one or more visits of that type.

^b For those with expenditures greater than zero.

services. The probability of using any ambulatory physician services increased only slightly for children living in the most generous states, compared with children in the least generous states. The probability of an illness-related visit increased somewhat. Although there was considerable fluctuation in the probability of a preventive visit across the various fee ratios, no discernable pattern emerges, and the probability of a preventive visit in the most generous states was slightly less than the probability in the least generous states.

Fee generosity appears to have virtually no meaningful association with the total number of physician visits or the number of illness-related physician visits. Medicaid children who used physician services averaged more than three visits (of all types) across all levels of reimbursement. Similarly, no discernable pattern in the average number of illness-related visits was detected across the fee ratio categories. There does, however, appear to be an association between the level of fees and the average number of preventive visits in doctors' offices in 1987.

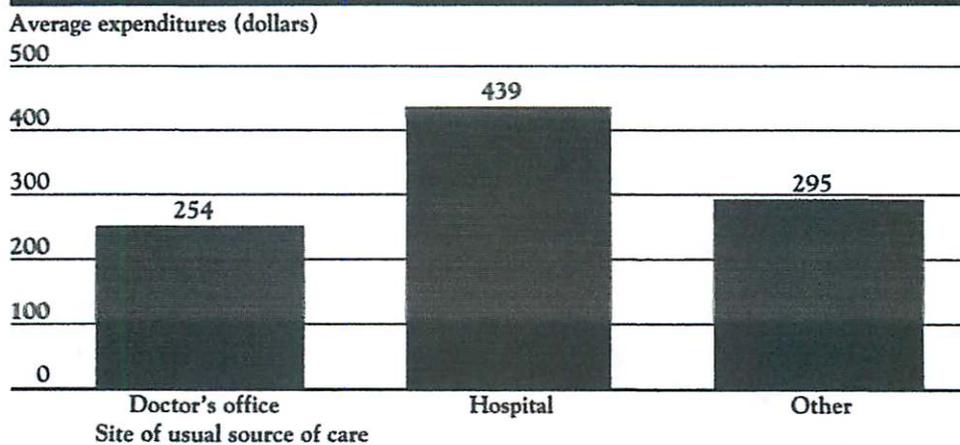
Fee generosity and ambulatory physician spending. Average total expenditures for ambulatory physician visits generally decreased as the

generosity of Medicaid reimbursement increased. Average expenditures for Medicaid children were highest in the least generous states and decreased substantially for children in states where fee ratios were in the 60–79 percent range. Although average spending for children in the most generous states was somewhat higher than in states with fee ratios in the 80–89 percent range, expenditures for children in the most generous states were still only about three-fourths those in the least generous states.

One explanation for this may be the place where Medicaid children usually receive their medical care. Services provided in hospital emergency rooms and outpatient clinics are typically much more costly than similar services provided in doctors' offices.⁸ Average ambulatory physician expenditures for children who had a doctor's office for their usual source of care in 1987 were only about 58 percent those for children who were seen in a hospital-based facility (Exhibit 2). Furthermore, use of the hospital as a usual source of care is likely to engender costs beyond those attributable to higher emergency room fees, because emergency room patients are more likely to be admitted to the hospital than are patients who are seen in a physician's office.⁹

Multivariate analysis. It is possible that the relationship between Medicaid fee generosity and physician use and spending patterns can be explained by other beneficiary characteristics, as well as by other state and local area characteristics. To test whether Medicaid fees affect children's use and spending patterns after controlling for these other factors, we conducted multivariate analyses on the probability of having any physician visits, having preventive and illness-related office and hospital visits, hav-

Exhibit 2
Ambulatory Physician Expenditures For Children With Medicaid Coverage



Source: National Medical Expenditure Survey (NMES), 1987.

ing a usual source of care, and having a doctor's office as the usual source of care (Exhibit 3). We also tested the effect of fee generosity and usual source of care site on total spending for ambulatory physician services.¹⁰

The results indicate that fees are not significantly associated with the probability of having a usual source of care, any ambulatory physician visits in general, or preventive or illness-related physician visits at an office-based site. Moreover, fees are not significantly associated with the probability of visiting a hospital-based doctor for either preventive or illness-related care.

Fees are significantly associated with the probability of having an office-based doctor as a usual source of care and with the number of preventive visits to office-based doctors for children who have at least one such visit. The results suggest that a ten percentage point increase in the Medicaid fee ratio is associated with a 3 percent increase in the probability of having a doctor's office as a usual source of care, and an approximately 5 percent increase in the number of preventive visits received in office-based sites.

We found no significant direct association between Medicaid fee levels and total ambulatory physician expenses, all else being equal. This is true even when usual source of care is not included in the expenditure equation. The results do indicate, however, that having an office-based doctor as the usual source of care is associated with lower total ambulatory physician expenditures. The magnitude of this association was relatively large, which indicates that controlling for other factors, children with a doctor's office as a usual source of care had 33 percent lower total expenses, compared with children whose usual source of care was a hospital emergency room or outpatient department or a clinic.

Exhibit 3
Effect Of Medicaid Fee Generosity On Probability And Level Of Use Of Ambulatory Physician Services, Controlling For Other Factors

Type of use	10 percent increase in fee ratio	
	Probability of use	Number of visits ^a
Any visits	NS ^b	NS
Office-based preventive visits	NS	+5%
Office-based illness-related visits	NS	NS
Hospital-based preventive visits	NS	- ^c
Hospital-based illness-related visits	NS	- ^c
Any usual source of care	NS	- ^c
Doctor's office as usual source of care	+3%	- ^c

Source: Analysis from the National Medical Expenditure Survey (NMES), 1987.

^a Conditioned on one or more visits of that type.

^b No significant association.

^c Not applicable.

Discussion And Policy Implications

The results of this analysis are consistent with previous findings that Medicaid physician fee levels affect site of use more than probability of use or number of visits. Although fees were not associated with whether or not Medicaid-covered children had any physician visits or a usual source of care, they were significantly related to a usual source of care site. Where fee levels were higher, Medicaid-covered children were more likely to have a doctor's office as a usual source of care. Similarly, the findings indicate that higher fee levels are associated with greater numbers of office-based preventive visits for those children who were able to obtain such care. To the extent that greater use of preventive care at noninstitutionalized sites is considered an indication of better-quality care, these findings reinforce the desirability of relatively generous Medicaid fees.

Interestingly, although the descriptive analysis suggests that lower Medicaid fees were associated with higher overall ambulatory physician expenses, this relationship was not confirmed by the multivariate analysis. The difference is likely a function of the fact that market characteristics and fee levels tend to be related. Therefore, the association between fees and expenses is attenuated when market variables are taken into account. Although this implies that there is no significant association between fees and expenses after market characteristics are accounted for, the direction of the relationship was negative, and it simply may be that it is difficult to isolate the impact of fees from that of market variables and thus difficult to find a statistically significant result. Moreover, at a minimum, these results suggest that low-fee states could raise their fees without raising their Medicaid spending or, looked at another way, that keeping fees low is not actually generating savings.

The bivariate relationship between site of usual source of care and total expenses remained after controlling for other factors. Having a doctor's office as a usual source of care was associated with a reduction of about one-third in total expenses. Thus, policies that encourage use of doctors' offices as usual sources of care may have cost-saving potential.

These results have important implications for the Medicaid program. First, they suggest that recently mandated eligibility expansions for children may not accomplish the goals of encouraging preventive care and discouraging use of emergency rooms for routine care if fees are set too low relative to fees for other payers. Although federal law requires states to set fees for pediatric and obstetric services at levels that are sufficient to ensure access for Medicaid beneficiaries, a recent report by the Physician Payment Review Commission (PPRC) concluded that although the gap between Medicaid fees and fees paid by other insurers has narrowed somewhat in

recent years, average Medicaid fees are still less than 75 percent those of Medicare and less than 50 percent those paid by private insurers.¹¹

Perhaps more important, particularly in light of recent state efforts to use Medicaid Section 1115 waivers to cover the uninsured, these results have implications for the use of Medicaid managed care. Under Section 1115 waivers, states can shift to managed care arrangements in an effort to expand coverage without increasing total Medicaid spending. The success of this approach hinges on the ability to provide services under managed care at a lower per capita cost than would be the case with unrestricted choice of providers. Because managed care programs typically assign primary care providers to serve as gatekeepers who direct the provision of services to enrollees, this approach is comparable to having an office-based doctor as a usual source of care. Thus, the results presented here support the view that managed care in Medicaid can lead to lower expenses without reducing the quantity of primary care services that beneficiaries receive.

This paper was presented at the Annual Meeting of the American Public Health Association, San Francisco, California, 25 October 1993. The opinions expressed are solely those of the authors. No official endorsement by the Agency for Health Care Policy and Research or the Department of Health and Human Services is intended or should be inferred.

NOTES

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 5. These data are based on information gathered primarily from the Health Care Financing Administration (HCFA), the Commerce Clearing House Medicare and Medicaid Guides, the National Governors' Association, and, in some cases, directly from states.
 6. This ratio consists of the statewide average Medicaid fee for a brief office exam (CPT4 code 90040) as the numerator and the Medicare average allowed charge in a locality (as defined by Medicare) for the same procedure as the denominator. Although using only one procedure to create the fee ratio is not ideal, the brief office visit fee is often used as an indicator for the program. In addition, because this study focuses on ambulatory physician services, the ratio need not be representative of fees paid for services such as surgical procedures or inpatient hospital or nursing home visits. The study does assume, however, that the brief office visit fee ratio is representative of other types of ambulatory care procedures. The information on Medicare allowed charges used to calculate fee ratios is from HCFA's administrative (BMAD) files.
 7. The area resource file (ARF) contains an extensive array of county-level health-related information derived from such sources as the American Medical Association's Physician Masterfile, the American Hospital Association's Annual Survey of Hospitals, and various data sets compiled by the Census Bureau and HCFA.
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SPECIAL ARTICLE

Auditing Access to Specialty Care for Children with Public Insurance

Joanna Bisgaier, M.S.W., and Karin V. Rhodes, M.D.

 ABSTRACT

BACKGROUND

From the School of Social Policy and Practice (J.B., K.V.R.) and the Division of Emergency Care Policy Research, Department of Emergency Medicine, School of Medicine (K.V.R.) — both at the University of Pennsylvania, Philadelphia. Address reprint requests to Dr. Rhodes at the School of Social Policy and Practice, University of Pennsylvania, 3815 Walnut St., Rm. 201, Philadelphia, PA 19104, or at kvr@sp2.upenn.edu.

Health care reform has expanded eligibility to public insurance without fully addressing concerns about access. We measured children's access to outpatient specialty care to identify disparities in providers' acceptance of Medicaid and the Children's Health Insurance Program (CHIP) versus private insurance.

METHODS

Between January and May 2010, research assistants called a stratified, random sample of clinics representing eight specialties in Cook County, Illinois, which has a high proportion of specialists. Callers posed as mothers of pediatric patients with common health conditions requiring outpatient specialty care. Two calls, separated by 1 month, were placed to each clinic by the same person with the use of a standardized clinical script that differed by insurance status.

RESULTS

We completed 546 paired calls to 273 specialty clinics and found significant disparities in provider acceptance of Medicaid–CHIP versus private insurance across all tested specialties. Overall, 66% of Medicaid–CHIP callers (179 of 273) were denied an appointment as compared with 11% of privately insured callers (29 of 273) (relative risk, 6.2; 95% confidence interval [CI], 4.3 to 8.8; $P < 0.001$). Among 89 clinics that accepted both insurance types, the average wait time for Medicaid–CHIP enrollees was 22 days longer than that for privately insured children (95% CI, 6.8 to 37.5; $P = 0.005$).

CONCLUSIONS

We found a disparity in access to outpatient specialty care between children with public insurance and those with private insurance. Policy interventions that encourage providers to accept patients with public insurance are needed to improve access to care.

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EXPANSIONS OF MEDICAID AND THE CHILDREN'S Health Insurance Program (CHIP) are designed to extend access to high-quality medical care to all U.S. children.¹⁻³ However, evidence suggests that the 37 million children covered by Medicaid-CHIP^{4,5} are less likely to receive specialty care than children covered by commercial insurance.⁶⁻¹³ Children covered by Medicaid-CHIP may face greater barriers to specialist care as a result of fewer resources within their families, including lower levels of income, education, language proficiency, and health literacy.¹⁴ Another possible explanation for disparities is that specialists choose not to accept public insurance.¹⁵ In contrast to patient-related or family-related barriers, which are less malleable to change, provider-related barriers are potentially modifiable through health care policies.¹⁶ To date, research on children's access to specialty care has not adequately distinguished between provider-related barriers and patient-related ones.

Unraveling the contributions of clinical need and patient-related versus provider-related barriers is a vital first step in constructing effective policies that improve children's access to specialty care. Given the association between socioeconomic disadvantage and poor health status, children covered by Medicaid-CHIP may have a greater need for specialty care.¹⁷ However, most studies to date have been unable to directly control for children's clinical need for specialty services.^{6,18} Audit methodology, traditionally used for detecting "real life" discriminatory behavior in housing and labor markets, can be used to assess insurance-related disparities in health care access.¹⁹ Using this approach in a 1994 study, the Medicaid Access Study Group found that adult patients with Medicaid had poor access to outpatient care.²⁰ Subsequent studies in which this approach was used did not sufficiently examine physicians' willingness to provide needed specialty care for publicly insured children.^{7,13,21,22} In light of the pending expansions of public insurance programs, we sought to identify whether—and if so, to what extent—provider acceptance of Medicaid-CHIP coverage is an independent barrier to outpatient specialty care for children in the current health care market, while controlling for patient factors and the clinical urgency of the referral.

METHODS

DATA COLLECTION AND STUDY DESIGN

We designed an audit study in which research assistants posing as mothers made paired calls to the same clinic and attempted to schedule an appointment for a child needing specialty care. The calls were separated by 1 month and varied only by insurance status (private vs. Medicaid-CHIP insurance). Data were gathered by the University of Chicago Survey Laboratory, where trained and supervised graduate students made calls to specialty clinics with the use of a central-computer-assisted telephone interview. (Post-call evaluation forms and the protocol flow chart for audit calls are available in the Supplementary Appendix, available with the full text of this article at NEJM.org.) Our study was conducted in Cook County, Illinois, the second most populous U.S. county (5,194,675 residents),²³ where the ratio of specialists to population is 218 to 100,000; the national median is 32 to 100,000.²⁴ Although Illinois Medicaid has historically provided care through a fee-for-service structure, it began implementing a primary care case-management program in July 2006, which serves approximately 67% of publicly insured children in Cook County.²⁵ The remaining children are served in a fee-for-service structure (16%) or voluntary commercial managed-care organizations (18%). Illinois is among 27 states that implement CHIP and Medicaid as a combined program (i.e., identical program name [All Kids] and reimbursements).²⁶

SAMPLING METHODS

We constructed an exhaustive list of providers, using state-provided physician-licensure data, cross-referenced with lists of physicians submitting specialty claims for children in Cook County and lists of specialists provided by children's hospitals and the American Academy of Pediatrics. The final sample included all specialists for whom there was any evidence that they provided care to children (0 to 18 years of age) residing in Cook County. Because several specialists may practice at the same clinic and some specialists practice at several clinics, we did not sample providers; rather, we sampled clinics, defined by unique (unduplicated) telephone numbers used for scheduling appointments. Random samples

of 40 clinics per health-condition scenario were stratified according to two key variables (provider licensure reporting acceptance vs. nonacceptance of Medicaid-CHIP and urban vs. suburban location) with the use of a computer algorithm. During the study, physicians' licensure data regarding Medicaid-CHIP acceptance were not publicly available.

SPECIALTY CONDITIONS AND PROTOCOL

From January through May 2010, we investigated eight specialties (allergy-immunology, pulmonary diseases, dermatology, endocrinology, neurology, orthopedics, otolaryngology, and psychiatry) in which providers treat seven pediatric specialty health conditions (Table 1). Allergists-immunologists and pulmonary disease specialists were audited together and sampled in proportion to their representation in the population, because both treat persistent, uncontrolled asthma. Clinical scenarios (involving a diagnosis and symptoms in a patient of a specified age) were chosen by pediatric primary care providers (PCPs) and specialist consultants with the use of an iterative review process to identify conditions that affect a large number of children, warrant timely outpatient specialty evaluation and treatment to achieve optimal health outcomes, are urgent situations but not emergencies, and have a known effective treatment. A pilot study of these scripts with standardized responses to possible questions was conducted between November 2009 and January 2010. (Scripts are available in the Supplementary Appendix.)

Every caller reported having a referral from the child's PCP; three scenarios also involved referral by an emergency department. To avoid geographic discrimination, we geocoded all specialty clinics and generated fake patient and PCP addresses that were in the vicinity of (but more than 1.6 km [1 mi] from) each clinic with the use of ArcGIS software (version 9.3). If asked, callers reported an emergency department located in the general area, cross-checked against specialists' hospital affiliations (from licensure data) to avoid the potential for shared electronic medical records.

We obtained dummy Medicaid-CHIP identification numbers from the state that would appear in the online system as "active" and that were

linked to the demographic characteristics (e.g., name, sex, and race or ethnic group) corresponding to each caller's identity. If asked for the PCP's name, callers gave 1 of the top 10 physician surnames from Medicaid-CHIP claims data for fiscal year 2008. For questions that the caller was unable to answer (e.g., Social Security number or private insurance number), standardized "work-arounds" were developed. To control for the racial or ethnic characteristics of a caller's name and voice, all samples were randomly assigned to one of three groups of callers (black, white, or Hispanic) with the use of a computer algorithm. Clinics were deemed "out of scope" if they reported that they did not provide care for the clinical condition or for children of the reported age (before knowing the child's insurance status). Out-of-scope clinics and nonfunctional telephone numbers were replaced with the next randomly selected clinic providing care for the condition. After three calls without reaching a live person, callers left a voice-mail message with their assigned name, telephone number, and insurance type. If voice mail was not returned, callers placed six additional calls, leaving voice-mail messages.

The same caller called the same clinic twice. The order of reported insurance type, the only variable differing between the two calls, was randomly assigned. If asked, there were minor variations in the patient's and caller's names, the patient's address and date of birth, and the PCP's name and address. For private insurance, callers reported Blue Cross Blue Shield coverage because it has the largest market share in Illinois.²⁷ Callers did not volunteer their insurance status, but if an appointment was granted without a request for insurance status, callers confirmed the acceptance of their assigned insurance. All calls were kept as short as possible, and all appointments were canceled at the end of the call. Prepaid cell phones allowed callers to provide telephone numbers, leave voice-mail messages, and receive returned calls. Outcomes were the percentage of callers according to insurance status who successfully scheduled an appointment and the wait time (number of days) between the call and the scheduled appointment date. Descriptive data about medical and insurance-related questions asked were collected.

Table 1. Specialties and Health-Condition Scenarios Included in the Study.*

Specialty Type	Medical Condition	Age	Referral Source	Symptoms
Dermatology	Severe atopic dermatitis	9 mo	PCP	Severe, itchy rash for 7 months on face, legs, and arms; PCP has tried glucocorticoids
Otolaryngology	Obstructive sleep apnea and chronic bilateral otitis media	5 yr	PCP	Snores every night but getting worse, fluid in both ears, frequent infections
Endocrinology	Type 1 diabetes	7 yr	PCP	Tired, constantly thirsty, PCP tested fasting blood sugar (approximately 200 mg/dl)
Neurology	New-onset afebrile seizures	8 yr	PCP and ED	Had a seizure last week, did not have fever, seen in ED
Orthopedics	Forearm fracture through growth plate	12 yr	PCP and ED	Radiograph in ED showed possible fracture, but doctors were not sure
Psychiatry	Acute, severe depression	13 yr	PCP	Withdrawn, depressed, grades have slipped
Allergy-immunology and pulmonary diseases	Persistent, uncontrolled asthma	14 yr	PCP and ED	Takes many medications but still wheezes, uses inhaler daily, seen in ED

* Referral source and symptoms were reported by callers only if asked. Standardized responses to questions were prepared through piloting and iterative review to indicate that the conditions were urgent (but not emergencies), common, and warranted specialty care. ED denotes emergency department, and PCP primary care provider.

STUDY OVERSIGHT

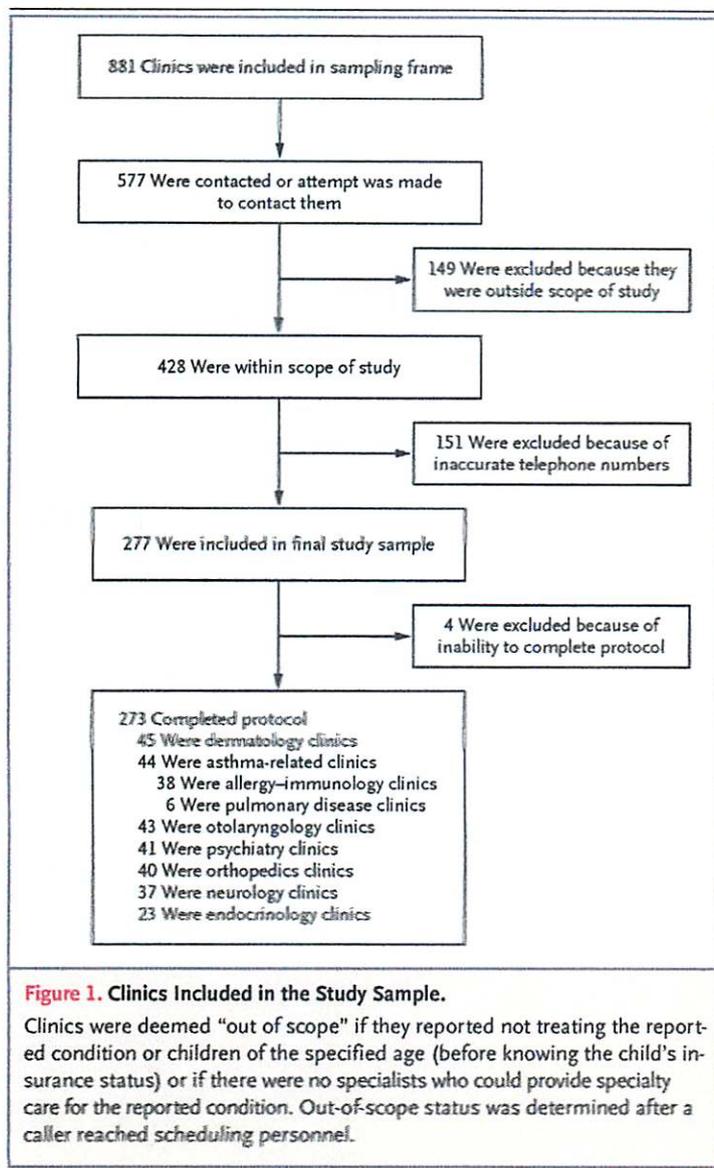
The study was approved, with a waiver of the requirement for informed consent, by institutional review boards at two institutions, with the caveat that debriefing letters be sent to all clinics in the entire sampling frame at the conclusion of the study. The deceptive design was considered necessary to accomplish the primary objective of the study: to identify the existence and extent of any disparities in children's access to specialty care according to insurance status by measuring the real-life behavior of specialty practices contacted for outpatient appointments. The debriefing letters clearly stated that the purpose of the study was to monitor the system rather than individual providers, that individual clinics may or may not have been randomly selected to be studied, and that the identity of those selected will never be disclosed.

STATISTICAL ANALYSIS

For all calls, we calculated the relative risk that children with Medicaid-CHIP coverage, as compared with those who had commercial insurance, would not receive a specialty care appointment. For paired calls, we calculated the log-odds probability of a scheduled appointment, using McNemar's test to assess the symmetry of dis-

cordant pairs (i.e., pairs of calls in which public and private insurance were not treated equally), holding constant all other patient and clinical characteristics. For subanalyses according to specialty type, we anticipated extreme splits on the dependent variable and used exact conditional (fixed-effects) logistic regression, which is a generalization of McNemar's test. Sample-size calculations for McNemar's test before the study were based on previous data from audit studies.²¹ We calculated that a sample of 20 clinics would provide 80% power to detect a 34% difference and that 32 clinics would be needed to detect a 20% difference in the rate of clinics accepting public versus private insurance, at an alpha level of 0.05.

For specialty clinics that scheduled appointments for both insurance types, we calculated the difference between appointment wait times (in number of days) with the use of paired t-tests. We did not test the significance of wait-time disparities by specialty type because of the small number of clinics that scheduled appointments for both insurance types. All tests were two-sided, and P values of less than 0.05 were considered to indicate statistical significance. All statistical analyses were performed with the use of Stata/SE software (version 11.0).



RESULTS

CLINICS

During the 5-month study period, the survey center attempted to contact 577 specialty clinics. As shown in Figure 1, 149 clinics (26%) did not treat patients with the given age or clinical condition, and 151 clinics (26%) were excluded because of nonfunctional telephone numbers. For the 277 clinics in the final sample, callers were unable to complete the study protocol with 4 clinics (1%), which required more medical documentation than we could provide. Two completed calls were made to each of the remaining 273 clinics (546 total calls). Because of the low number of endo-

crinology and neurology clinics with evidence of providers seeing pediatric patients (30 and 66, respectively), we randomly sampled from the broader pool of specialty clinics (68 endocrinology clinics and 99 neurology clinics) in an attempt to identify additional specialists willing to see children.

OUTCOMES

Of the 546 calls to clinics, 297 (54%) involved a request for information about the child’s insurance type before the caller was told whether an appointment could be scheduled. For 153 (52%) of these 297 calls, the type of insurance coverage was the first question asked. Figure 2 shows the proportions of specialty clinics that scheduled appointments for children with public insurance and for those with private insurance, according to type of specialty. As shown in Table 2, 66% (179) of the callers reporting Medicaid–CHIP coverage were denied an appointment for specialty care, as compared with 11% (29) of the callers reporting Blue Cross Blue Shield insurance (relative risk, 6.2; 95% confidence interval [CI], 4.3 to 8.8; $P < 0.001$). When calls to the same clinic were analyzed as matched pairs, there were 5 discordant pairs (2%) in which children with Medicaid–CHIP obtained an appointment but those with private insurance did not, and 155 discordant pairs (57%) in which the clinic accepted privately insured children but not Medicaid–CHIP enrollees (odds ratio for appointment denial with public insurance, 31.0; 95% CI, 13.0 to 96.8). All relative risks (when calculable) and exact conditional logistic-regression analyses showed that, across all tested specialties, children with Medicaid–CHIP were significantly more likely to be denied an appointment than privately insured children. Among 173 clinics with any providers whose license indicated acceptance of Medicaid–CHIP, 43% scheduled Medicaid–CHIP appointments. Of 100 clinics without licensure-reported Medicaid–CHIP acceptance, 19% granted these appointments.

Among the 89 specialty clinics that scheduled appointments for both Medicaid–CHIP enrollees and privately insured children, children with Medicaid–CHIP had greater delays in obtaining needed specialty care (Table 3). On average, children with public insurance waited 42 days for an appointment with a specialist, whereas privately insured children waited 20 days (mean difference, 22.1 days; 95% CI, 6.8 to 37.5; $P = 0.005$).

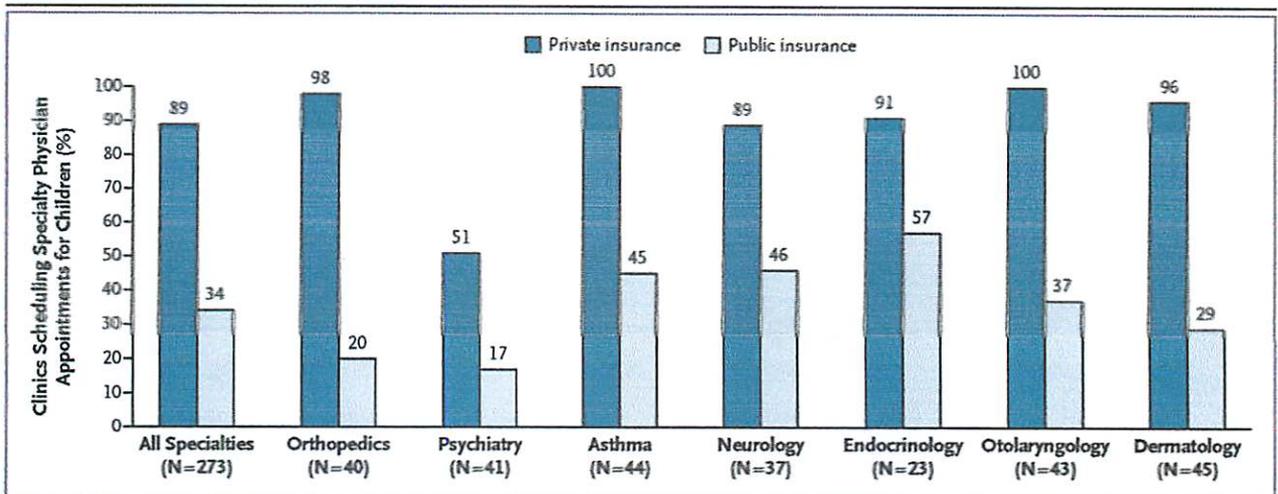


Figure 2. Clinics Scheduling Specialty Care Appointments for Children, According to Type of Insurance.

Public insurance was reported by callers as the Illinois Medicaid–Children's Health Insurance Program (CHIP) umbrella program; private insurance was reported by callers as Blue Cross Blue Shield. Each of the 273 clinics was called twice (for a total of 546 calls) by the same caller, with only insurance coverage varying between the two calls: once reporting Medicaid–CHIP coverage and once reporting private coverage. Calls were made 1 month apart, and the order of the reported insurance status was randomly assigned. Asthma clinics included 38 allergy–immunology clinics and 6 pulmonary disease clinics.

DISCUSSION

With the use of an experimental study design involving simulated requests for specialty care, we measured real-world scheduling behavior in an urban area with a high density of medical specialists.²⁴ The results showed significant disparities in children's access to needed outpatient specialty care, attributable to specialists' reluctance to accept public health insurance. These results held across all audited specialties. Moreover, even when children with Medicaid–CHIP were not denied appointments outright, the appointments were, on average, 22 days later than those obtained for privately insured children with identical health conditions. Notably, even callers claiming to have a privately insured child faced an average wait time of 20 days when urgently requesting an appointment. These findings signal a need to consider refining specialty care delivery processes to more efficiently use the specialist workforce.^{28,29}

Two previous audit studies of pediatric specialty care have shown even lower Medicaid acceptance rates: 4%¹³ and 8%.⁷ However, both studies investigated only one specialty type (orthopedics), and both had weaknesses in their sampling strategies that may have biased their results, including failure to exclude ineligible providers,⁷ sampling at the physician level rather than the clinic level (i.e.,

possibly calling the same clinic multiple times),⁷ and the exclusion of physicians practicing at tertiary pediatric referral centers,¹³ which are key sources of outpatient orthopedic care.³⁰

A recent population-based survey by Kogan et al. showed that parents whose children had Medicaid–CHIP coverage were more likely to report that insurance did not allow their child to see needed providers.³¹ Our results corroborate and add to this important finding by measuring the real-life experience of attempting to schedule an appointment when all other factors besides insurance status (e.g., parental persistence or savvy and the child's clinical symptoms) are held constant. The strength of the current study stems from its ability to isolate the effect of one dimension of access. Our results indicate that increasing the number of providers who accept public insurance will increase access opportunities. Without correcting this dimension, it is unlikely that disparities in access between public and private insurance can be fully eliminated, even if all other barriers to access (e.g., out-of-pocket costs, referral requirement, and need for language proficiency, transportation, and health literacy) could be addressed.^{15,16}

The Affordable Care Act represents an opportunity to remold health care delivery processes in the United States.^{32,33} It is well established that

Table 2. Likelihood of Being Denied a Scheduled Specialty Care Appointment According to Type of Insurance.*

Specialty	Total Clinics Called†	Both Insurance Types Denied	Both Insurance Types Accepted	Public Insurance Denied and Private Insurance Accepted	Public Insurance Accepted and Private Insurance Denied	Odds Ratio for Appointment Denial with Public Insurance (95% CI)‡	Public Insurance Denied	Private Insurance Denied	Relative Risk of Appointment Denial with Public Insurance (95% CI)‡
				<i>number (percent)</i>		<i>percent</i>			
All specialties	273	24 (8.8)	89 (32.6)	155 (56.8)	5 (1.8)	31.0 (13.0–96.8)	65.6	10.6	6.2 (4.3–8.8)
Orthopedics	40	1 (0.4)	8 (2.9)	31 (11.4)	0	44.2 (7.9–∞)§	80.0	2.5	32.0 (4.6–223.0)
Dermatology	45	2 (0.7)	13 (4.8)	30 (11.0)	0	42.8 (7.6–∞)§	71.1	4.4	16.0 (4.1–62.8)
Otolaryngology¶	43	0	16 (5.9)	27 (9.9)	0	38.5 (6.8–∞)§	62.8	0	—
Asthma¶	44	0	20 (7.3)	24 (8.8)	0	34.1 (6.0–∞)§	54.5	0	—
Neurology	37	2 (0.7)	15 (5.5)	18 (6.6)	2 (0.7)	9.0 (2.2–79.9)	54.1	10.8	5.0 (1.9–13.2)
Endocrinology	23	1 (0.4)	12 (4.4)	9 (3.3)	1 (0.4)	9.0 (1.2–394.5)	43.5	8.7	5.0 (1.2–20.4)
Psychiatry	41	18 (6.6)	5 (1.8)	16 (5.9)	2 (0.7)	8.0 (1.9–71.7)	82.9	48.8	1.7 (1.2–2.4)

* Public insurance was reported by callers as the Illinois Medicaid–Children’s Health Insurance Program (CHIP) umbrella program; private insurance was reported by callers as Blue Cross Blue Shield.

† All 273 clinics were called twice (for a total of 546 calls), once reporting Medicaid–CHIP coverage and once reporting private coverage.

‡ $P < 0.05$ for all comparisons. Odds ratios were calculated with the use of McNemar’s test to compare proportions of appointments for paired calls to the same clinic for children with public insurance versus those with private insurance. Relative risks, which were calculated for unpaired calls, are based on the overall appointment rates for children with public insurance versus those with private insurance.

§ Because of an extreme split on the dependent variable for orthopedics, asthma, otolaryngology, and dermatology, exact conditional (fixed-effects) logistic-regression odds ratios are medium unbiased estimates with no upper limit of the 95% confidence interval.

¶ Relative risks could not be calculated because there were no denials of care for children with private insurance.

|| The asthma clinics included 38 allergy–immunology clinics and 6 pulmonary disease clinics.

Table 3. Wait Times for Appointments for Children with Public versus Private Insurance among Clinics Accepting Both Insurance Types.*

Specialty	No. of Clinics Accepting Both Insurance Types†	Wait Time with Public Insurance	Wait Time with Private Insurance	Difference	95% Confidence Interval‡	P Value‡
			<i>number of days</i>			
All specialties	89	42.0±75.1	19.9±34.0	22.1±72.9	6.8–37.5	0.005
Endocrinology	12	103.4±145.4	47.3±68.8	56.1±148.7		
Otolaryngology	16	52.7±82.9	5.8±5.3	46.9±82.8		
Dermatology	13	47.5±46.8	29.5±42.8	18.0±37.1		
Neurology	15	38.8±60.6	23.3±22.2	15.5±63.5		
Asthma§	20	16.2±19.1	11.3±11.7	4.9±19.7		
Psychiatry	5	12.8±15.7	8.4±9.9	4.4±19.9		
Orthopedics	8	8.5±10.4	13.4±14.7	–4.9±16.7		

* Plus–minus values are means ±SD. Public insurance was reported by callers as the Illinois Medicaid–Children's Health Insurance Program (CHIP) umbrella program; private insurance was reported by callers as Blue Cross Blue Shield.

† All 89 clinics were called twice.

‡ We did not calculate 95% confidence intervals or P values according to specialty type because of the small number of clinics for each specialty type that scheduled appointments for both types of insurance.

§ Asthma clinics included 38 allergy–immunology clinics and 6 pulmonary disease clinics. Of the 20 clinics that accepted both types of insurance, 15 were allergy–immunology clinics and 5 were pulmonary disease clinics.

reimbursement levels influence providers' decisions about whether to accept public insurance.^{8,34–36} In Illinois, an office consultation visit for a problem of moderate severity (Healthcare Common Procedure Coding System code 99243) is reimbursed at \$99.86 by Medicaid–CHIP,³⁷ whereas the average reimbursement for the same code by a commercial preferred-provider organization is approximately \$160. Although disparities in insurance-reimbursement rates are important, the literature indicates that additional variables affect physicians' decisions about whether to accept public insurance, such as delays in payment and hassles of payment procedures,^{35,36} personal characteristics of providers (e.g., credentials or experience,^{34,38,39} race or ethnic group,^{34,38–41} and underlying attitudes or prejudices^{39,42}), and structural features of the system in which they provide care (e.g., institutional affiliations,^{34,43,44} location,^{34,38,41} and practice size or type^{22,34,38,44}). Further research on the multiple underlying variables associated with provider behavior in our current system can help with workforce planning and inform innovations in service delivery.

More work is needed to understand the benefits or opportunity costs of potential policy changes. For example, is it better to raise reimbursement rates globally for all specialists or to provide targeted incentives to specialists or medical centers

located in low-resource neighborhoods and committed to serving as safety-net specialty providers? Do we need more specialists or should we reorganize the manner in which we provide specialty care? Such information is fundamental to the formation of integrated delivery systems and the configuration of payment methods that can optimize access and decrease disparities.

Caution is needed in generalizing our results to specialists other than those in the specific specialties and region that were audited in this study. In particular, there is no evidence that pediatric specialists working in inpatient or rural settings are unwilling to accept Medicaid–CHIP. Nonetheless, our experimental design affords high internal validity within the context of understanding specialist behavior relative to our simulated children's insurance status, with adequate controls for clinical urgency and other patient-level factors. Our study only assessed access to specialty care for publicly and privately insured children, and it should be noted that access to specialty care may be different for uninsured children and for publicly insured or uninsured adults.

Our study was powered to measure appointment denials and delays across a number of outpatient specialty types, but it was not powered to identify the effect of specific provider or clinic characteristics associated with appointment de-

nials or delays. In addition, we did not identify the causes of interspecialty variation. Nor did we assess whether acceptance of public insurance varies between specialists who provide cognitive consultations and procedural or surgical specialists, who may be more dependent on their affiliated hospitals to provide technologically advanced diagnostic and surgical resources.²⁹ Finally, although we used the literature and experts in both primary and specialty care to inform the urgency and importance of our clinical scenarios, more work is needed to clarify whether identified disparities are clinically meaningful for children's long-term health and safety.

Overall, we found considerable disparities in access to outpatient pediatric specialty care that were attributable to providers' nonacceptance of public insurance. These findings speak to the imperative for policymakers to identify regulatory mechanisms and incentives that target provider behavior and to explore innovative models of specialty care delivery that have the potential to in-

crease access to specialty expertise.⁴⁵⁻⁴⁷ As we encounter new opportunities for restructuring the U.S. health care delivery system, there is a need for empirical data on policy mechanisms that can minimize disparities in access to care and deliver on health care reform's commitment to the provision of high-quality care for all Americans.

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No potential conflict of interest relevant to this article was reported.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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A Comparison of Two Approaches to Increasing Access to Care: Expanding Coverage versus Increasing Physician Fees

Chapin White

Objective. To compare the effects of a coverage expansion versus a Medicaid physician fee increase on children's utilization of physician services.

Primary Data Source. National Health Interview Survey (1997–2009).

Study Design. We use the Children's Health Insurance Program, enacted in 1997, as a natural experiment, and we performed a panel data regression analysis using the state-year as the unit of observation. Outcomes include physician visits per child per year and the following indicators of access to primary care: whether the child saw a physician, pediatrician, or visited an ER in the last year, and whether the parents reported experiencing a non-cost-related access problem. We analyzed these outcomes among all children, and separately among socioeconomic status (SES) quartiles defined based on family income and parents' education.

Principal Findings. Children's Health Insurance Program had a major impact on the extent and nature of children's insurance coverage. However, it is not associated with any change in the aggregate quantity of physician services, and its associations with indicators of access are mixed. Increases in physician fees are associated with broad-based improvements in indicators of access.

Conclusions. The findings suggest that (1) coverage expansions, even if they substantially reduce patient cost sharing, do not necessarily increase physician utilization, and (2) increasing the generosity of provider payments in public programs can improve access among low-SES children, and, through spillover effects, increase higher-SES children as well.

Key Words. Children's Health Insurance Program, physician utilization, physician fees, coverage expansion, access

The Patient Protection and Affordable Care Act (PPACA) takes several approaches to expanding access to health care. One approach is to expand public coverage by making anyone with income below 138 percent of the

poverty level eligible for Medicaid. A second approach is embodied in the requirement that states increase their Medicaid physician fee schedules, so that they are no lower than Medicare's. The expansion of public coverage, which takes effect in 2014, is far-reaching and permanent. According to the Congressional Budget Office (2010), it will move roughly 15 million individuals onto Medicaid. The increase in fees is a much more limited provision—it applies only to so-called evaluation and management services provided by primary care physicians, and it only applies to services provided in 2013 or 2014.

We use a recent historic example—the establishment of the Children's Health Insurance Program (CHIP)—to measure the effects of a coverage expansion on the utilization of physician services, and we compare those effects with the effects of an increase in Medicaid physician fees. The prevailing view is that expanding eligibility for public coverage will, by reducing patient cost sharing, lead to an increase in the aggregate quantity of medical services provided. This view is embodied in the official estimates of the effects of health reform on national health spending (Office of the Actuary 2009, 2010). The findings presented below are not consistent with that prevailing model, but are consistent with a model in which the overall quantity of services and access to services is primarily determined by the generosity of provider payments.

Previous Literature

The existing literature on the effects of health insurance coverage expansions can be divided into two strands: (1) microlevel analyses that measure the effects specifically among individuals who newly gain coverage, and (2) macrolevel analyses that measure the effects of a coverage expansion on overall utilization patterns, including populations that did not become newly eligible or newly covered. The micro- and macrolevel strands differ in the assumptions that underlie the choice of methodology, and in the interpretation of their results. Microlevel analyses, by definition, assume that a coverage expansion only affects those individuals who become newly covered or newly eligible (i.e., “no spillovers”). Macrolevel analyses, in contrast, allow for two possibilities: (1) that a coverage expansion might have spillover effects on individuals who do not themselves become newly eligible or covered, and (2) that

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the aggregate effect of a coverage expansion depends on whether and how it impacts the supply side of the market. Notably, those two strands tend to arrive at very different conclusions regarding the effects of coverage expansions on utilization.

The seminal microlevel analysis is the RAND Health Insurance Experiment (HIE), a large-scale randomized trial conducted during the late 1970s and early 1980s (Newhouse and the Insurance Experiment Group 1993). The HIE compared individuals assigned to a health insurance plan with no cost sharing (free care), with individuals assigned to plans with cost sharing. Those in the free care plan were more likely to receive some medical services during the year, and they had substantially more medical encounters and higher expenditures. It is crucial to recognize that the HIE is a microlevel analysis—by design, it only tracked utilization patterns among study participants, and it was not designed to detect possible spillover effects on nonstudy participants.

Since the HIE, a vast number of microlevel analyses have used observational data to examine the effects of insurance coverage on utilization. Those studies have generally come to findings consistent with the HIE (Buchmueller et al. 2005). Some of the earlier observational studies consisted of cross-sectional comparisons between individuals with health insurance coverage versus those without. Newacheck et al. (1998), based on a simple cross-sectional bivariate comparison between insured versus uninsured, show that insured children have substantially more physician contacts per year than uninsured children. Long and Marquis (1994) also perform a cross-sectional analysis, but they control to the extent possible for observable differences—that comparison showed that insured children visit the doctor roughly once more per year compared with uninsured children. The more recent studies generally use coverage expansions as natural experiments. For example, Banthin and Selden (2003), using a difference-in-differences (DD) analysis, find that the expansion of eligibility for Medicaid between 1987 and 1996 increased the percentage of children with at least one doctor visit in the last year. Lurie (2009) also uses a DD design and finds that the CHIP expansions between 1996 and 2001 increased the percentage of children with at least one doctor visit. Selden and Hudson (2006), using an instrumental variables design that takes advantage of expansions in eligibility for public programs between 1996 and 2002, report that public coverage substantially increases the likelihood that a child has one or more ambulatory visits.¹

The microlevel analysis that is most closely related to ours is by Currie and Gruber (1996). Their paper, which measures the effects of the 1980s Medicaid expansions on physician utilization and mortality among children,

reports that gaining Medicaid eligibility is associated with a reduction in the share of children who did not see a doctor in the last year (from roughly 20 to 10 percent). They also report that Medicaid eligibility is associated with an increase in the number of doctor visits (roughly one visit per year), but that estimate is imprecisely estimated and is not statistically significant.

The key difference between Currie and Gruber (1996) and our study is that they take a microlevel approach, whereas we take a macrolevel approach. Currie and Gruber simulate Medicaid eligibility and measure its effects at the level of the state-year-age group. Implicitly, this approach assumes that changes in utilization within a given age group have no spillover effects on utilization among children in other age groups. Dafny and Gruber (2005) use essentially the same methodology to measure the effect of Medicaid expansions on children's rate of hospitalization. These microlevel studies are not designed to detect spillovers or supply-side responses, and their results are therefore not appropriate for estimating aggregate utilization effects.

Macrolevel analyses of coverage expansions clearly reject the "no spillovers" assumption. Stewart and Enterline (1961) analyzed the effects on physician utilization of the establishment of the National Health Service (NHS) in England and Wales in the late 1940s (Stewart and Enterline 1961). They compared physician utilization patterns pre- versus post-NHS separately among groups that gained coverage (women, the elderly, and low-income men) and those that already had coverage prior to the NHS (high-income men). Their results show that the NHS substantially increased physician utilization among the groups that gained coverage, and substantially reduced physician utilization among high-income men who generally already had coverage.

Another classic macrolevel analysis is Enterline et al. They analyzed the effects of the establishment in 1970 of Quebec's universal coverage scheme (Enterline 1973). They conducted a pair of household surveys (one preexpansion, one post) focusing on physician utilization patterns. They found that the overall average number of physician visits was precisely unchanged following universal coverage (5.04 per person per year both pre- and post-), but they found strong evidence that the expansion redistributed services across income groups. The lowest-income group, who was most likely to gain coverage, increased their physician visit rate by 18.2 percent, whereas the highest-income group, which generally already had coverage, decreased their physician visit rate by 9.4 percent.

Finkelstein (2007) also examines the macrolevel effects of a major coverage expansion, in this case, the implementation of the U.S. Medicare program for the elderly beginning in 1966 (Finkelstein 2007). She

reports that the establishment of Medicare was associated with an increase in system-wide hospital utilization and hospital spending roughly six times larger than what would be predicted based on the demand-side response to reduced cost sharing reported in the HIE findings. Her analysis suggests that the Medicare-induced increase in spending occurred both among the elderly (the target population) and the nonelderly (a spillover population). The positive spillover effect that Finkelstein observes is likely due to supply-side effects and the fact that, when first introduced, Medicare provided very generous cost-based reimbursements to hospitals, which encouraged hospitals to expand capacity.

Using the results of microlevel analyses to estimate the macrolevel effects of a coverage expansion appears to be an unwarranted oversimplification. The fundamental problem with the microlevel approach is that it assumes that we can identify a control group that is unaffected by the coverage expansion. If spillover effects exist, either due to queuing or to a change in the reimbursement environment, then an unaffected group may not exist. Stewart and Enterline et al.'s results indicate that spillovers can reduce utilization among the previously insured (due to queuing), whereas Finkelstein's results indicate that supply-side spillovers can increase utilization.

There is a more specific concern with using the HIE results to simulate the effects of coverage expansions, as some have done.² The most well-known and widely cited HIE results are those comparing enrollees in different types of indemnity (unmanaged) health insurance plans with varying levels of patient cost sharing. That comparison ignores the utilization effects of managed care techniques such as utilization review, limited provider panels, and gatekeeping. As abundant evidence indicates (including the HMO arm of the HIE experiment itself), managed care can affect utilization and spending to at least the same degree as cost sharing.

A third related strand of literature is on the effects of increasing Medicaid fees on utilization and access. Those studies show fairly consistently that increased payment generosity leads to increased access to services and increased utilization. Previous analyses have examined the effects of Medicaid fees on physician participation (Adams 1994) and the effects of increased global capitation payments on utilization (Shen and Zuckerman 2005). The most recent and carefully done study in this strand is by Decker (2009), who finds that increases in Medicaid physician fees increase the number of physician visits among Medicaid enrollees and lead to a shift in the site of care (toward physician offices and away from hospital outpatient and emergency departments).

What Is CHIP, and What Does It Do?

Children's Health Insurance Program was established as Title XXI of the Social Security Act by the Balanced Budget Act of 1997 (BBA). CHIP and Medicaid are layered programs, in the sense that CHIP eligibility begins at the income level where Medicaid eligibility ends and extends to higher-income levels. In both the Medicaid and CHIP programs, income eligibility cutoffs vary by state. Typical current Medicaid income cutoffs are 100 percent of the federal poverty level (FPL) for older children, and 185 percent of the FPL for younger children. Children up to age 19 may be eligible for the Medicaid and CHIP programs, and CHIP income eligibility cutoffs in 2009 ranged from 155 percent of the of the FPL in North Dakota to 400 percent in New York—typically cutoffs are between 200 and 300 percent of the FPL.

Children's Health Insurance Program is large enough that its effects appear clearly in aggregate coverage statistics. In 2009, roughly 20 percent of children were in families in the CHIP income range—low enough to be CHIP-eligible, but too high to be Medicaid-eligible. In that year, 6.3 percent of children were enrolled in CHIP on a point-in-time basis, and 9.8 percent of children were enrolled in CHIP at some point during the year. According to the U.S. Census Bureau, there has been a decline, beginning in 1998, in the share of children uninsured and, at the same time, an increase in the share of children with public coverage (DeNavas-Walt, Proctor, and Lee 2006; DeNavas-Walt, Proctor, and Smith 2010). The adult population, which was not directly affected by CHIP, experienced very different trends, with rates of uninsurance increasing over that period.

Expansion of the CHIP program has important effects on both the demand and supply sides of the market for physician services. Among children who enroll in CHIP, some would otherwise be uninsured—for those children, the most obvious effect of CHIP is a reduction in patient cost sharing. Other children who enroll in CHIP would otherwise be enrolled in a private plan—they also enjoy a reduction in cost sharing because CHIP, compared with private plans, generally has much lower deductibles, copayments, and coinsurance. From a demand perspective, therefore, we would expect CHIP to increase utilization.

However, enrolling children in CHIP has important supply-side effects that would tend to constrain physician utilization. CHIP plans tend to employ managed care tools, such as gatekeepers and closed panels, much more intensively than private plans.³ CHIP expansions also appear to reduce the average payment rate that physicians receive. For children who enroll in CHIP rather

than a private health plan, the difference in payment rates is substantial. Based on an actuarial model built by Ingenix for the American Academy of Pediatrics, the national average payment rate for a physician office visit was \$81 for a privately insured child versus only \$47 for a child enrolled in a public plan (Medicaid or CHIP) (Ingenix Consulting 2009a, b). (The Ingenix model, unfortunately, does not differentiate between payment rates under Medicaid versus CHIP.) There is also evidence to suggest that physicians' revenue from treating Medicaid and CHIP patients is even lower than the revenue they receive from treating the uninsured even taking into account charity care and uncollected bills (Gruber and Rodriguez 2007).⁴

The effect of CHIP on physician utilization will therefore reflect several factors, including: (1) lower levels of patient cost sharing among enrollees, (2) the expanded use of managed care tools, and (3) a reduction in the average fees that physicians receive. As those factors can work in opposite directions, the net effect of CHIP remains uncertain a priori.

METHODOLOGY AND DATA SOURCES

The goal of our analysis is to measure the macrolevel effects of CHIP expansions and changes in Medicaid fees on aggregate physician utilization, including direct effects among children who newly enrolled in public coverage as well as indirect spillover effects among high socioeconomic status (SES) children who were not eligible and did not enroll. Possible spillover effects could include increased utilization due to expanded provider capacity (as found in Finkelstein's Medicare analysis) or a decrease in utilization due to queuing (as found in Enterline's Canadian and British analyses).

Our approach is to compare trends in utilization and access among children living in states with (1) large CHIP expansions versus small CHIP expansions, and (2) increases versus decreases in Medicaid physician fees. We chose the state-year as our unit of observation and calculated our key predictors and outcomes as state-year averages. We specifically chose not to make comparisons between children enrolled in CHIP versus other children within a state. If there are any spillover effects, this type of within-state comparison will produce misleading results because the group of children outside the CHIP income range will be affected by CHIP as well.

Our data on physician utilization come from the NHIS, which is a large-scale annual household survey conducted jointly by the National Center for Health Statistics and the Bureau of the Census. The NHIS "sample child"

questionnaire includes detailed items on utilization of physician services, hospitals, and emergency rooms. We performed our analysis at the National Center for Health Statistics Research Data Center using non-publicly available files that identified respondents' state of residence. The number of sample children used in each year ranges from 8,518 in 2008 to 13,747 in 1997. In total, we used 150,475 child-year observations to create our state-year files. About 4 percent of the NHIS sample children (6,270 of 156,745) were excluded from the analysis because one or more key data items had missing values.

Our regression analyses include Census division-year fixed effects to allow for region-specific time trends and state-fixed effects to account for idiosyncratic state characteristics. We use the following general linear specification:

$$Y_{s,t} = \alpha_s + \beta_{d,t} + \delta X_{s,t} + \varphi Fee_{s,t} + \gamma Enr_{s,t}^{hat} + \varepsilon_{s,t} \quad (1)$$

where s indexes states, d indexes Census divisions, t indexes years, α_s is a set of state-fixed effects, $\beta_{d,t}$ is a set of division-year fixed effects, $X_{s,t}$ is a limited set of time-variant controls (the natural logarithm of gross state product per capita, and the unemployment rate), $Fee_{s,t}$ is the state's Medicaid physician fee index for primary care services, and $Enr_{s,t}^{hat}$ is an index of the size of each state's CHIP expansion that is equal to the predicted share of the under-19 population enrolled in CHIP. These regressions are referred to as "reduced form" models because they take the predicted value from a first-stage model ($Enr_{s,t}^{hat}$) and enter it directly into the second-stage model. All outcome variables are entered into the regressions in their natural units (e.g., visits per year, or the share of children [0,1]). We calculate robust standard errors to account for clustering at the state level using *Stata's* "cluster()" option (StataCorp, College Station, TX, USA).

The Medicaid fee index reflects fees paid for primary care services and is calculated from a series of reports by Stephen Norton, Stephen Zuckerman, and others at the Urban Institute. It is defined such that a value of 1.00 indicates that Medicaid fees are equal to Medicare fees for the same services. That index, although it is the best available, has several notable limitations: (1) it only reflects fees paid through Medicaid fee-for-service and primary care case management arrangements, which excludes Medicaid HMO plans; and (2) it does not separately report (or, in earlier years, even incorporate) fees paid in CHIP plans; and the underlying data are only gathered roughly every 4 years.⁵

Budgetary surpluses and shortfalls appear to be the main factors prompting states to change their Medicaid fees. Other factors affecting fees include legal challenges by providers and changes in federal policy such as the repeal

of a provision for “adequate payment levels for obstetrical and pediatric services” in late 1997 (Medicaid and CHIP Payment and Access Commission 2011). Therefore, on the whole, it seems reasonable to treat the Medicaid fee as exogenous.

The size of each state’s CHIP expansion was measured using the predicted values from a regression of the actual share of children enrolled in CHIP (from administrative data) on two key features of state CHIP programs: the share of children who were made newly income-eligible for public coverage due to CHIP, and the share of children who were income-eligible for CHIP but subject to a long (6 months or greater) waiting period. The share of children income-eligible for CHIP and the share subject to long waiting periods were both simulated for each state-year by applying that state’s program rules to a fixed national sample of children from the 2004 Survey of Income and Program Participation. (See Appendix SA1.) This generally follows the “simulated instrument” approach used by Currie and Gruber (1996).

One of our analytical goals was to distinguish, to the extent possible, between the direct effects of CHIP among those children who enrolled in CHIP versus the indirect spillover effects among children whose family income was too high to be eligible. With this goal in mind, we divided children into four SES groups (SES quartiles). As a summary measure of SES, we used a child’s predicted likelihood of enrolling in public coverage (Medicaid or CHIP), as a function of their families’ economic and educational characteristics. Children in quartile 1 have the highest family incomes and the most highly educated parents, and are least likely to be enrolled in public coverage, whereas children in quartile 4 have the lowest family incomes and the least well educated parents and are the most likely to be enrolled in public coverage. (See Appendix SA1 for details.)

A much more detailed description of the methodology and data sources is available in Appendix SA1. Appendix SA1 includes descriptive analyses of state CHIP program features, formal mathematical descriptions of the regression models, as well as detailed regression output, including OLS results, 2SLS results, and first-stage regressions.

RESULTS

Table 1 describes the differences between states with small, medium, and large CHIP expansions. States with large expansions tended to have more restrictive Medicaid income eligibility criteria in 1997, they tended to expand income eli-

gibility more through their CHIP programs, and they also tended to be more urban, to have larger Latino populations, and not to be in the Midwest. Those differences underscore the need to include state- and division-year fixed effects. Table 1 also presents the mean number of physician visits per child per year in 1997–1998 (pre-CHIP), and the percent change from 1997–1998 to 2008–2009 (multiple years were pooled to increase stability in these estimates). Based on these simple descriptive statistics, large CHIP expansions do not appear to increase physician utilization—physician utilization decreased relatively more in states with the largest expansions.

Table 2 describes the differences among the children in the SES quartiles. As expected, the quartiles differ dramatically in family income levels, mother's educational achievement, and trends in coverage. Among the children in quartile 1 (the highest SES group), the share enrolled in private coverage was about 95 percent both in 1997–1998 and in 2008–2009, and the share enrolled in public coverage increased by <2 percentage points (from 0.3 to 2.2 percent). Consequently, if we find that CHIP is associated with changes in utilization among children in SES quartile 1, we can interpret those effects mainly as spillover effects. In contrast, in the lower-SES quartiles (3 and 4), enrollment in public coverage increased substantially between 1997–1998 and 2008–2009. In quartile 3, the main coverage shift was from private to public, whereas in quartiles 4, there were major shifts both from private to public coverage and from uninsured to public coverage.

Figure 1 summarizes the estimated effects of CHIP expansions on insurance coverage, using the parameter estimates from the reduced form models described above. The height of each bar is scaled to represent the difference between a large CHIP expansion state (predicted enrollment of 8.3 percent) versus a small CHIP expansion state (predicted enrollment of 4.0 percent, i.e., a difference of 4.3 percentage points). These regression results, consistent with the descriptive statistics in Table 2, indicate that the direct enrollment effects of CHIP were heavily concentrated in quartiles 2 through 4 (i.e., the middle- and lower-income groups). The regression results also suggest that crowdout is roughly 1-for-1 in quartile 2 but is much smaller in quartiles 3 and 4. Among children in quartiles 1 and 2 (the two higher-income groups), the size of their state's CHIP expansion made little difference to whether they were uninsured. Among children in quartiles 3 and 4, in contrast, the larger CHIP expansions are associated with reductions in uninsurance.

Figure 2 summarizes the estimated coefficients on the CHIP expansion variable from a series of reduced form models. In the analyses of physician visits, all of the estimates are close to zero and not statistically significant.

Table 1: A Comparison of States with Small versus Large Children's Health Insurance Program (CHIP) Expansions

<i>Characteristics of State Populations</i>	<i>Small CHIP Expansion</i>	<i>Medium CHIP Expansion</i>	<i>Large CHIP Expansion</i>
Share of children enrolled in CHIP, 2009 (%)	3.8	5.9	8.5
Share of children eligible for Medicaid, 1997 rules (%)	31.1	27.5	27.8
Share of children eligible for Medicaid/CHIP, 2009 rules (%)	46.8	50.2	50.3
CHIP expansion population, 2009 (%)	15.8	22.7	22.5
Share of children in CHIP expansion population and subject to 6+ month waiting period under 2001 rules (%)	2.2	3.8	2.4
Urban (%)	76.2	72.3	86.1
Income per capita (\$2,000, 000s)	29.1	28.7	30.2
In poverty (%)	9.9	10.7	13.1
Education levels among adults			
Less than high school degree (%)	17.0	18.9	22.5
4-Year college degree (%)	24.8	23.2	24.8
Black (%)	10.2	11.3	14.8
Latino (%)	8.4	4.6	21.7
Number of children, 2009 (millions)	26.0	20.6	32.4
List of states	AZ, CO, CT, DC, DE, IA, ID, IL, IN, MI, MN, ND, NH, NM, NV, OR, SC, TN, UT, VA, VT, WA, WI, WY	AK, AL, AR, HI, KS, KY, MA, ME, MO, MT, NC, NE, NJ, OH, OK, PA, RI, SD, WV	CA, FL, GA, LA, MD, MS, NY, TX
Region			
Northeast (%)	5.7	37.3	17.2
South (%)	19.7	31.1	52.2
Midwest (%)	45.8	28.1	0.0
West (%)	28.8	3.5	30.7

Expanding Coverage versus Increasing Physician Fees

continued

Table 1. *Continued*

<i>Characteristics of State Populations</i>	<i>Small CHIP Expansion</i>	<i>Medium CHIP Expansion</i>	<i>Large CHIP Expansion</i>
Physician visits per child per year, 1997–1998	3.35	3.61	3.17
Physician visits per child per year, 2008–2009	3.34	3.62	3.14
Change in physician visits, 1997–1998 versus 2008–2009 (%)	–0.4	0.5	–1.1

Notes. States are assigned to terciles by ranking states by the predicted share of children enrolled in CHIP in 2009 and grouping states, so that roughly equal numbers of children would be included in each tercile. Source is author's calculations. Predicted CHIP enrollment shares are calculated using Medicaid and CHIP income eligibility criteria and CHIP waiting periods (see Appendix SA1). The characteristics of state populations are calculated from 2000 Census data (as reported in the Area Resources File).

Table 2: A Comparison of Children in Different Socioeconomic Status Quartiles

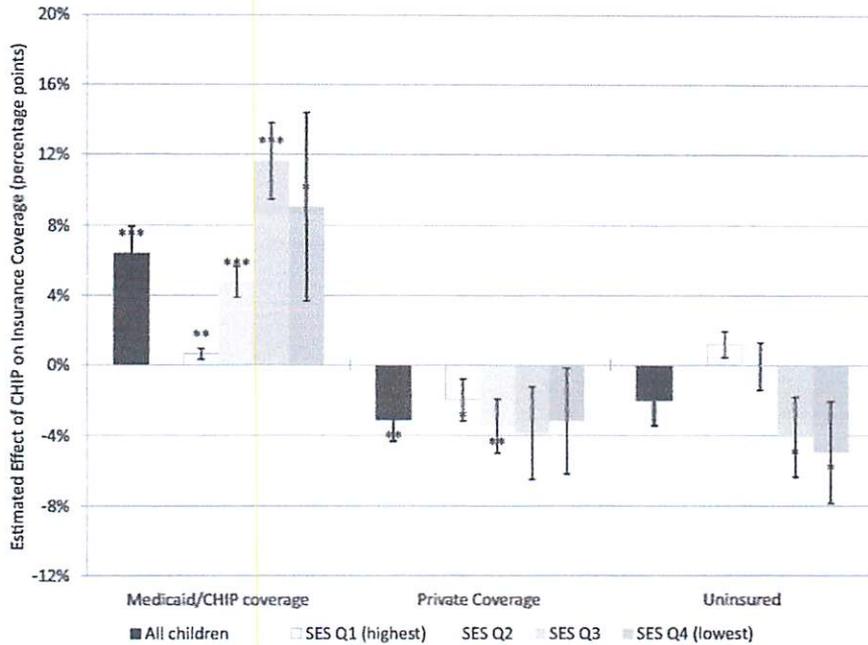
<i>Characteristics of Children</i>	<i>Highest</i>			<i>Lowest</i>
	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>
Family income (%)				
<100% FPL	0.0	0.0	3.7	70.7
100–300% FPL	3.9	43.3	84.4	29.3
300–500% FPL	44.5	40.0	8.9	0.0
≥500% FPL	51.6	16.7	3.0	0.0
Mother's education (%)				
Less than high school degree	0.3	4.8	18.1	38.7
4-Year college degree	64.8	17.6	9.2	2.3
Coverage, 1997–1998 (%)				
Medicaid/CHIP	0.3	1.9	11.7	50.2
Private	95.0	90.0	66.3	24.1
Uninsured	2.5	5.7	18.5	22.2
Coverage, 2008–2009 (%)				
Medicaid/CHIP	2.2	9.0	39.9	73.4
Private	94.0	80.1	41.6	11.0
Uninsured	1.9	7.2	14.5	11.0
Change in coverage, 1997–1998 versus 2008–2009 (percentage points)				
Medicaid/CHIP	1.9	7.1	28.2	23.3
Private	-1.0	-9.9	-24.7	-13.2
Uninsured	-0.5	1.5	-4.0	-11.2
Doctor visits per child per year	3.7	3.4	3.1	3.2
Saw doctor in last year (%)	86.1	80.7	74.7	73.5
Saw pediatrician in last year (%)	57.8	46.6	41.5	40.6
One or more visits to an emergency room in last year (%)	15.9	17.9	21.7	26.9
Experienced access problem due to waiting (%)	6.2	6.9	8.6	11.0

Notes. Children are assigned to a socioeconomic status quartile on the basis of their predicted likelihood of enrolling in Medicaid or Children's Health Insurance Program (CHIP) (see Appendix SA1 for details). Source is author's calculations using the National Health Interview Surveys (1997–2009). The coverage statistics are calculated using the years indicated; all other statistics are calculated using all years.

Unfortunately, the results on doctor visits are not precisely estimated due to the variability in the underlying measure. The only statistically significant results are as follows: in quartile 4, CHIP is associated with a decrease in the share of children visiting the emergency room, and in quartile 2, CHIP is associated with an increase in the share of children whose parents report experiencing a non-cost-related access problem.

Figure 3 summarizes the estimated coefficients on the Medicaid physician fee index. The height of the bars in Figure 3 is scaled to represent the

Figure 1: Estimated Effects on Insurance Coverage of a Large versus Small Children’s Health Insurance Program (CHIP) Expansion (all children and separately by socioeconomic status quartile)

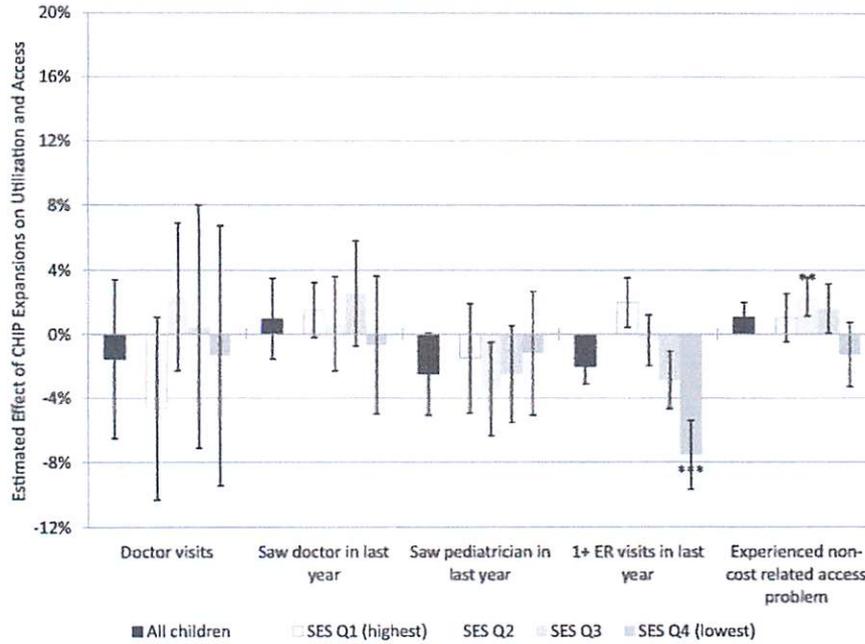


Notes. The bar heights represent the estimated effects of CHIP enrollment under a large versus small expansion (i.e., a difference in enrollment of 4.7 percentage points) estimated using reduced form models. Children are assigned to a socioeconomic status quartile on the basis of their family income and parents’ educational status (see Appendix SA1 for details). The drop bars indicate ± 1 standard error. The results represent enrollment differences in percentage points. * $p < .10$, ** $p < .05$, *** $p < .01$

estimated difference between an increase of 15 percent in the fee index versus a decrease of 15 percent. To give some context, relatively large difference (30 percentage points) is equal to the observed difference between states in the top versus bottom tercile in terms of the change in the fee index between 1998 and 2008. To put that gap in another context, it is somewhat smaller than the temporary increase in Medicaid physician fees for primary care physician services called for in PPACA.

Compared with the size of a state’s CHIP expansion, increasing Medicaid physician fees is more clearly associated with improvements in access,

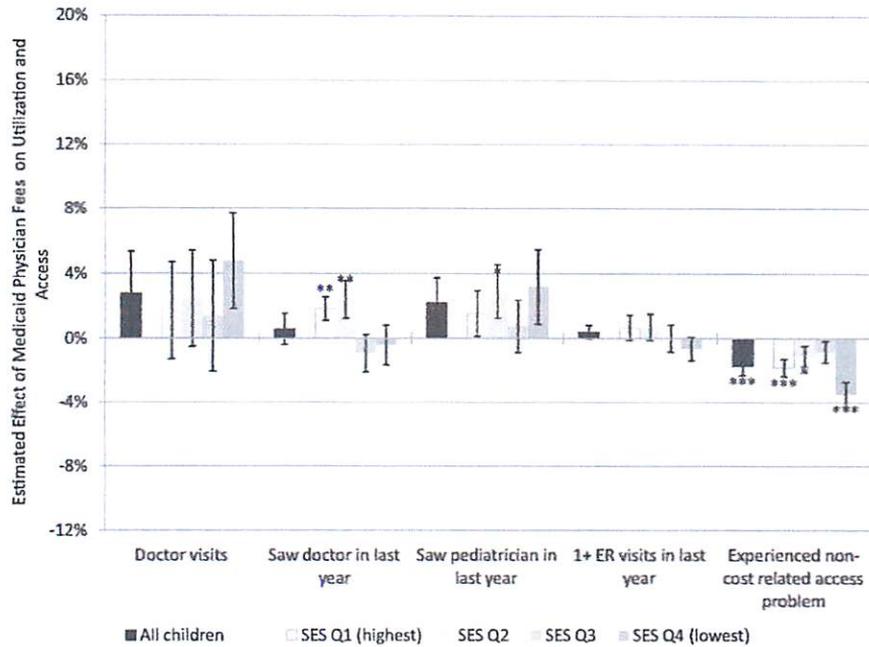
Figure 2: Estimated Effects on Utilization of a Large versus Small Children’s Health Insurance Program (CHIP) Expansion (all children, and separately by socioeconomic status quartile)



Notes. The bar heights represent the estimated effects of CHIP enrollment under a large versus small expansion (i.e., a difference in enrollment of 4.7 percentage points) estimated using reduced form models. Children are assigned to a socioeconomic status quartile on the basis of their family income and parents’ educational status (see Appendix SA1 for details). The drop bars indicate ± 1 standard error. The results represent enrollment differences in percentage points. * $p < .10$, ** $p < .05$, *** $p < .01$

both among low- and high-SES children. Based on the point estimates, increasing Medicaid fees is associated with increases in the number of physician visits per year among children in all SES groups, although none of those estimates is statistically significant. Increasing Medicaid fees is associated with a statistically significant increase in the likelihood that children in SES quartile 2 saw a pediatrician in the last year. Increasing Medicaid fees is also clearly related to a reduction in non-cost-related access problems among both among low- and high-income children.

Figure 3: Estimated Effects on Utilization of an Increase versus Decrease in the Medicaid Physician Primary Care Fee Index (all children, and separately by socioeconomic status quartile)



Notes. The bar heights represent the estimated effects of a large increase (plus 15 percent) versus a large decrease (minus 15 percent) in the Medicaid physician fee index for primary care services (i.e., a difference of 30 percentage points) estimated using reduced form models. Children are assigned to a socioeconomic status quartile on the basis of their family income and parents' educational status (see Appendix SA1 for details). The drop bars indicate ± 1 standard error. The results represent enrollment differences in percentage points. * $p < .10$, ** $p < .05$, *** $p < .01$

CONCLUSIONS

The key conclusions are the following:

1. From the patient's perspective, CHIP reduced the level of cost sharing that low- and middle-income children faced. However, we do not observe a corresponding increase in aggregate physician utilization. This implies that supply-side effects of CHIP—either the use of managed care tools or the relatively low reimbursement rates, or both—may have limited the utilization effect of the coverage expansion.

2. Among low-income children, increasing Medicaid fees appears to improve access to care. Increasing Medicaid fees also appears to have positive spillover effects on physician utilization among higher-income children.

In general, these findings argue strongly against the idea that the effect of expanding coverage on utilization can be deduced simply from the reduction in patient cost sharing. The nature of the coverage—for example, does the coverage consist of a tightly managed product? does the coverage pay providers generously?—appears to be critical.

From a federal budgetary perspective, these results are good news—if we extrapolate from the results in this article, the expansions of public coverage called for in PPACA will not have any effect on aggregate utilization of physician services. From the enrollee's perspective, the results are mixed—the benefits of expanded public coverage may lie primarily in improved financial protection, rather than a sheer increase in services received. These findings also support the idea that public health insurance plans can have spillover effects on children who do not themselves gain coverage, and that those spillover effects can either increase utilization (if the public plan's reimbursement environment is made more generous) or reduce utilization (if coverage is expanded without making reimbursement more generous).

As it is conventionally understood, our policy options are either to expand coverage and increase health spending or to leave coverage gaps and hold the line on spending. That dilemma is false. Coverage expansions by themselves do not necessarily spur increases or decreases in overall utilization—what does appear to matter is the nature of the coverage and the generosity of provider reimbursements in the public program. The policy questions that we should be focusing on are as follows: (1) the degree to which we want the rationing of medical services to occur based on out-of-pocket costs and the ability to pay versus nonprice factors such as queuing, and (2) the degree to which we want our financing of the health care system to be redistributive. Expanding public coverage clearly moves in the direction of redistributive financing. Depending on how we choose to set reimbursement levels in our public programs, expansion coverage may or may not move in the direction of increased utilization and increased system spending.

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NOTES

1. Non-cost-related access problems are summarized using a binary variable that equals 1 if the parent reports that they have delay in getting care for their child in the last 12 months because of any of the following reasons: (1) "You couldn't get through on the telephone," (2) "You couldn't get an appointment for [your child] soon enough," (3) "Once you get there, [your child] has to wait too long to see the doctor," or (4) "The clinic/doctor's office wasn't open when you could get there."
2. The CMS Office of the Actuary (OACT), when producing their official estimates of the effects of health reform, relied in part on a 1993 report by the Congressional Budget Office (http://www.cbo.gov/ftpdocs/105xx/doc10585/1993_11_behavior.pdf). That CBO report draws heavily on the RAND HIE. The OACT analyses are available at https://www.cms.gov/ActuarialStudies/Downloads/HR3200_2009-10-21.pdf and http://www.cms.hhs.gov/ActuarialStudies/Downloads/S_PPACA_2010-01-08.pdf.
3. Based on the author's calculations using the 2009 National Health Interview Survey (NHIS), the share of children whose parents report a gatekeeper arrangement was 47 percent among privately insured children and 78 percent among children enrolled in CHIP. (Gatekeeping was identified by those responding yes to the following NHIS item: "If [you need/he needs/she needs] to go to a different doctor or place for special care, [do you/does he/does she] need approval or a referral? Do not include emergency care.") The share of children whose parents report that they are free to see any doctor who accepts the plan was 48 percent among privately insured children versus 25 percent among children enrolled in CHIP.
4. Gruber and Rodriguez (2007) use a detailed visit-level data on physician billing and payments to compare physician revenues for services provided to uninsured patients with revenues for otherwise identical services provided to insured patients. They report that three quarters of physicians receive lower fees for serving Medicaid patients than for serving the uninsured, and that for almost 60 percent of physicians, the Medicaid fees are less than two-thirds the fees paid by the uninsured. Unfortunately,

that type of comparison is not available specifically for pediatrician services provided to children enrolled in CHIP.

5. We performed two tests to examine whether the Medicaid fee index we use is a fairly broad indicator of physician payment generosity in Medicaid and CHIP plans. First, for the most recent year possible (2008), we compared our Medicaid fee index with a comparable measure of physician fees used by Ingenix in an actuarial model of the cost of children's health coverage. The Ingenix fees include both Medicaid and CHIP plans, and they are based on "a mixture of managed and unmanaged FFS claim experience" (Ingenix Consulting 2009b). We found that the population-weighted correlation between the Ingenix fees and our fee index was very high ($r = 0.8587$). Second, we measured the percent change in the two fee indices using the available years (from 2003 to 2008 for our Medicaid fee index, and from 2002 to 2008 for the Ingenix fee index). The correlation in state-level changes is positive ($r = 0.0880$), although not nearly as strong as the correlation in levels. (Unfortunately, the Ingenix measure of fees is not available for any years prior to the implementation of CHIP, which prevents us from incorporating it directly into our analyses.)

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article:

Appendix SA1: Technical Appendix to "A Comparison of Two Approaches to Increasing Access to Care: Expanding Coverage versus Increasing Physician Fees".

Please note: Wiley-Blackwell is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries (other than missing material) should be directed to the corresponding author for the article.

State Medicaid fees and access to primary care physicians

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Abstract

Medicaid and uninsured patients are disadvantaged in access to care and are disproportionately Black and Hispanic. Using a national audit of primary care physicians, we examine the relationship between state Medicaid fees for primary care services and access for Medicaid, Medicare, uninsured, and privately insured patients who differ by race/ethnicity and sex. We found that states with higher Medicaid fees had higher probabilities of appointment offers and shorter wait times for Medicaid patients, and lower probabilities of appointment offers and longer wait times for uninsured patients. Appointment offers and wait times for Medicare and privately insured patients were unaffected by Medicaid fees. At mean state Medicaid fees, our analysis predicts a 27-percentage-point disadvantage for Medicaid versus Medicare in appointment offers. This decreases to 6 percentage points when Medicaid and Medicare fees are equal, suggesting that permanent fee parity with Medicare could eliminate most of the disparity in appointment offers for Medicaid patients. The predicted decrease in the disparity is smaller for Black and Hispanic patients than for White patients. Our research highlights the importance of considering the effects of policy on nontarget patient groups, and the consequences of seemingly race-neutral policies on racial/ethnic and sex-based disparities.

KEYWORDS

access to primary care, health care disparities, Medicaid, simulated patients, uninsured

1 | INTRODUCTION

Medicaid enrollees and the uninsured are disadvantaged in access to health care (Bach, Pham, Schrag, Tate, & Hargraves, 2004; Agency for Healthcare Research and Quality (AHRQ), 2014; Abdus, Mistry, & Selden, 2015) and are disproportionately Black or Hispanic (The Henry J. Kaiser Family Foundation [KFF], 2016; KFF, 2015). Low Medicaid fees contribute to the many challenges Medicaid patients face (Atherly & Mortensen, 2014; Decker, 2012; Long, 2013; Wilk, 2013; Wilk & Jones, 2014). In 2012, the ratio of Medicaid to Medicare fees for selected primary care services ranged from 33% in Rhode Island to 135% in North Dakota, with a national average of 59% (Zuckerman & Goin, 2012). A temporary increase in Medicaid fees to Medicare levels for 2013–2014 under the Affordable Care Act sought to improve access for Medicaid patients.

This paper adds to the existing literature on the relationship between Medicaid fees and access to care for Medicaid patients by examining data from the only national audit of primary care physicians. We also examine the less-explored relationship between Medicaid fees and access for patients with other insurance types. Additionally, we provide evidence

on two previously unexplored themes: the relationship between state Medicaid fees and wait times and the role of patient race/ethnicity and sex in mediating access to care in conjunction with state Medicaid fees.

2 | CONCEPTUAL FRAMEWORK

We rely on a model of physician participation in state Medicaid programs in which patients with different insurance types yield different marginal revenues and impose different marginal costs on physicians (Sloan, Mitchell, & Cromwell, 1978). We hypothesize that higher Medicaid fees increase marginal revenue from Medicaid patients and may increase physicians' willingness to accept new Medicaid patients. Additionally, higher Medicaid fees may make physicians who are capacity-constrained and/or face increasing marginal costs less willing to accept non-Medicaid patients.

3 | METHODS

Access data were collected in a 2013 audit of primary care physicians' offices. The study design has been described previously (Sharma, Mitra, & Stano, 2015; Tinkler, Sharma, Pal, Susu-Mago, & Stano, 2017) and is summarized here. Trained research assistants (RAs) called physicians' offices on behalf of a purported aunt or uncle to request information regarding the earliest available appointment for a new patient physical exam. This methodology permitted RAs to represent patients from demographic groups different from their own and provide only general insurance and health information. Simulated patients differed by race/ethnicity, sex, and insurance type. We selected three names each for Black, White, and Hispanic men and women based on the literature regarding racially and ethnically distinctive names (Bertrand & Mullainathan, 2004; Lavender, 1988; Word & Perkins, 1996) and assigned the names to Medicaid, "traditional" Medicare, self-pay (uninsured), and private insurance. The study utilized 72 patient profiles (three female and three male names each for three racial/ethnic groups multiplied by four insurance types). If asked, the RAs said that the relative was generally healthy but "it is time for a checkup." Outcome measures were the probability of an appointment offer (with the requested physician or an alternate provider in the same practice), and the wait-to-appointment.

The call list was a national random sample from the American Medical Association's Physician Masterfile, a comprehensive listing of licensed U.S. physicians, which is frequently used in analyses of the health care system. The sample comprised physicians with primary specialties in family medicine (45%), general practice (4%), general practice medicine (1%), internal medicine (50%), and urgent care (0.2%). The sample was not stratified, but the geographic distribution approximates primary care physician distribution across states. Each of the 72 patient profiles was randomly assigned to 30 physicians to yield a call list of 2,160. Assigning each physician a single profile enables analysis of systemic disparities in access to care while protecting individual physicians and their staff from any perceptions of bias.

We employed a systematic internet search to update missing or inaccurate phone numbers, but could not locate numbers for 272 physicians. We made up to four call attempts to the remaining 1,888 physicians and obtained appointment/availability data for 1,406. Of these, 484 were ineligible because they were not currently providing primary care to the general adult population (specialists, administrators, those in closed-model HMOs, etc.). Physician location was verified prior to assigning physicians to a state. We further excluded 16 physicians from Tennessee because its Medicaid program has no fee-for-service component (Zuckerman & Goin, 2012). The 906 reachable and eligible physicians in this study are demographically similar to active U.S. physicians (mean age = 52 vs. 52, female = 36% vs. 32%, and osteopaths [DOs] = 10% vs. 8%; Young et al., 2014).

Health care audits often prescreen for reachability and eligibility and do not report these numbers (e.g., Polsky et al., 2015; Tsang & Resneck, 2006). This study determined reachability, eligibility, and appointment availability in a single call in order to minimize the burden on physicians' offices. The response rate was 100% of reachable and eligible physicians. This research was approved and overseen by the Institutional Review Board at the corresponding author's institution.

4 | EMPIRICAL ANALYSIS

Calls were made from August to October of 2013. On January 1, 2013, the Affordable Care Act mandated temporary fee parity between Medicaid and Medicare, but the rollout of fee parity was beset with delays and uncertainty, and most states received federal approval to amend their Medicaid plans between June and October (Wilk & Jones, 2014). Furthermore,

physicians may respond slowly, or not at all, to temporary changes in Medicaid fees (Medicaid and Chip Payment and Access Commission, 2015). For these reasons, we use a 2012 state-level primary care Medicaid-to-Medicare fee index (the “fee ratio”) as a measure of Medicaid generosity (Zuckerman & Goin, 2012).

We estimate three logistic regressions examining the relationship between Medicaid fees and appointment offers. To estimate the relationship for Black, White, and Hispanic men and women with different insurance types, the insurance, race/ethnicity, and sex indicators are interacted with state fee ratios. Regression 1 shows the association for patients with different insurance types. Regressions 2 and 3 successively subdivide Medicaid and self-pay patients by race/ethnicity and sex. All three control for the race/ethnicity, sex, and insurance type of simulated patients; the month and weekday of calls; and individual RAs to account for caller characteristics. We estimate the relationship between state Medicaid fees and log-transformed wait-to-appointment (in days) in three linear regressions with the same controls and successive subdivision of explanatory variables used for the analysis of appointment offers. All models use robust standard errors clustered by state.

Sensitivity analyses using physician characteristics (practice size, primary specialty, age >60, sex, whether an MD or DO, and experience <10 years) did not materially affect the results reported here. Likewise, state-level socioeconomic variables (median household income, percent of population in poverty, percent Black, percent Hispanic, physicians, and primary care physicians per thousand of the population) and characteristics of state Medicaid programs (percent in managed care, percent in comprehensive managed care, and early Medicaid expansion) did not affect the results.

5 | RESULTS

Figure 1 shows raw data for the relationship between the probability of appointment offers and the fee ratio. The correlation is positive for Medicaid, negative for self-pay, and appears nonexistent for Medicare and privately insured patients. Table 1 shows logistic estimates of the marginal effects on appointment offers of a 10-percentage-point increase in the fee ratio by patient group. In Regression 1, the marginal effect is positive for Medicaid patients (4%),

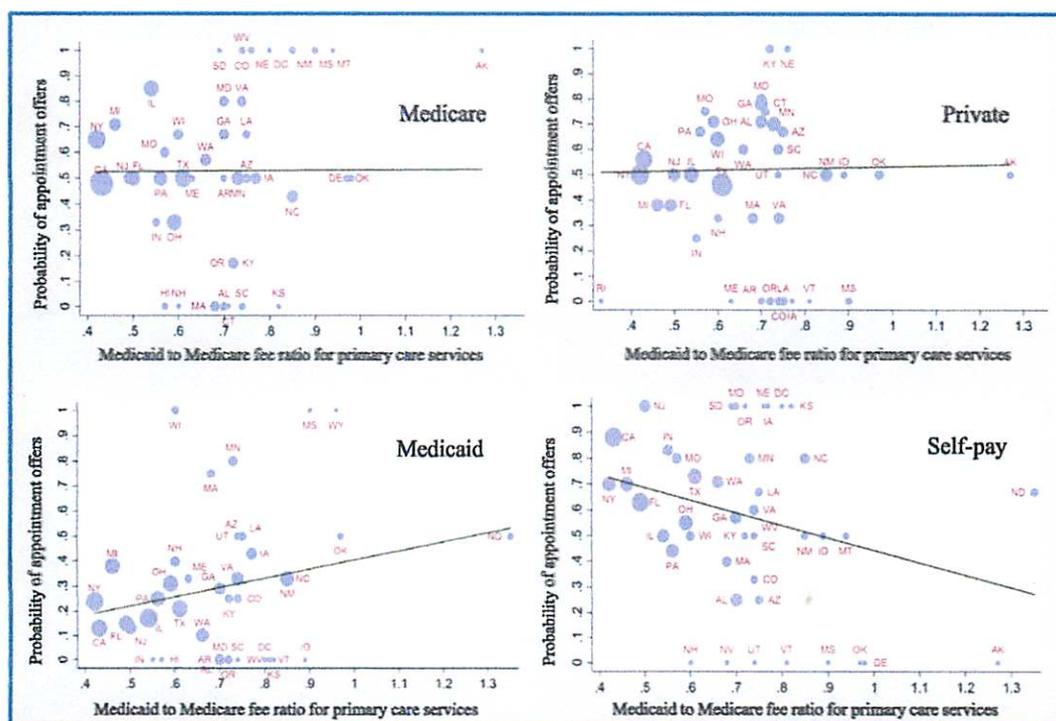


FIGURE 1 Probability of appointment offers and Medicaid generosity. The area of each circle represents the number of observations in the state for each insurance type. Least squares trend lines were computed from raw data for each insurance type. Ratio of Medicaid to Medicare fees for selected primary care services (the “fee ratio”) from Zuckerman and Goin (2012) [Colour figure can be viewed at wileyonlinelibrary.com]

TABLE 1 Logistic estimates of the association between appointment offers and a 10-percentage-point increase in the primary care Medicaid to Medicare fee ratio by patient group

Marginal effects (%)				
Variables (Regressions 1 & 2)	(1)	(2)	Variables (Regression 3)	(3)
Private	0.92 [1.80]	0.79 [1.80]	Private	0.75 [1.79]
Medicare	-0.02 [1.27]	0.07 [1.21]	Medicare	0.11 [1.20]
Medicaid	4.00*** [1.46]			
Self-pay	-5.33** [2.56]			
Medicaid Black		2.98* [1.70]	Medicaid Black male	4.38* [2.59]
Medicaid White		4.95*** [1.58]	Medicaid Black female	2.66 [1.65]
Medicaid Hispanic		2.36 [2.23]	Medicaid White male	5.2*** [1.86]
Self-pay Black		-5.54** [2.59]	Medicaid White female	5.84*** [2.23]
Self-pay White		-4.35 [2.78]	Medicaid Hispanic male	4.03 [2.76]
Self-pay Hispanic		-6.03** [2.45]	Medicaid Hispanic female	1.61 [2.65]
			Self-pay Black male	-5.35* [3.01]
			Self-pay Black female	-5.44*** [2.31]
			Self-pay White male	-3.71 [3.38]
			Self-pay White female	-4.59** [2.31]
			Self-pay Hispanic male	-6.29** [2.47]
			Self-pay Hispanic female	-5.5** [2.54]
<i>N</i>	906	906		906

Note. Robust standard errors clustered by state in brackets. Marginal effects (dy/dx) are average marginals. Additional controls: simulated patients' race/ethnicity, sex, and insurance type, day of the week and month when call completed, and caller fixed effects.

* $p < .1$.

** $p < .05$.

*** $p < .01$.

negative for self-pay patients (-5.33%), and not statistically significant for Medicare or privately insured patients. In Regression 2, the effect is positive for White Medicaid patients (4.95%) and statistically significant at the 1% level. The association is weaker for Black Medicaid patients (2.98%) and statistically significant at the 10% level. Regression 2 also shows negative marginal effects for self-pay Black (-5.54%) and Hispanic (-6.03%) patients. In Regression 3, among Medicaid patients, the changes in appointment offers associated with a higher fee ratio are largest for White men (5.2%) and women (5.84%). Among self-pay patients, only White men were not statistically significantly affected by a higher fee ratio.

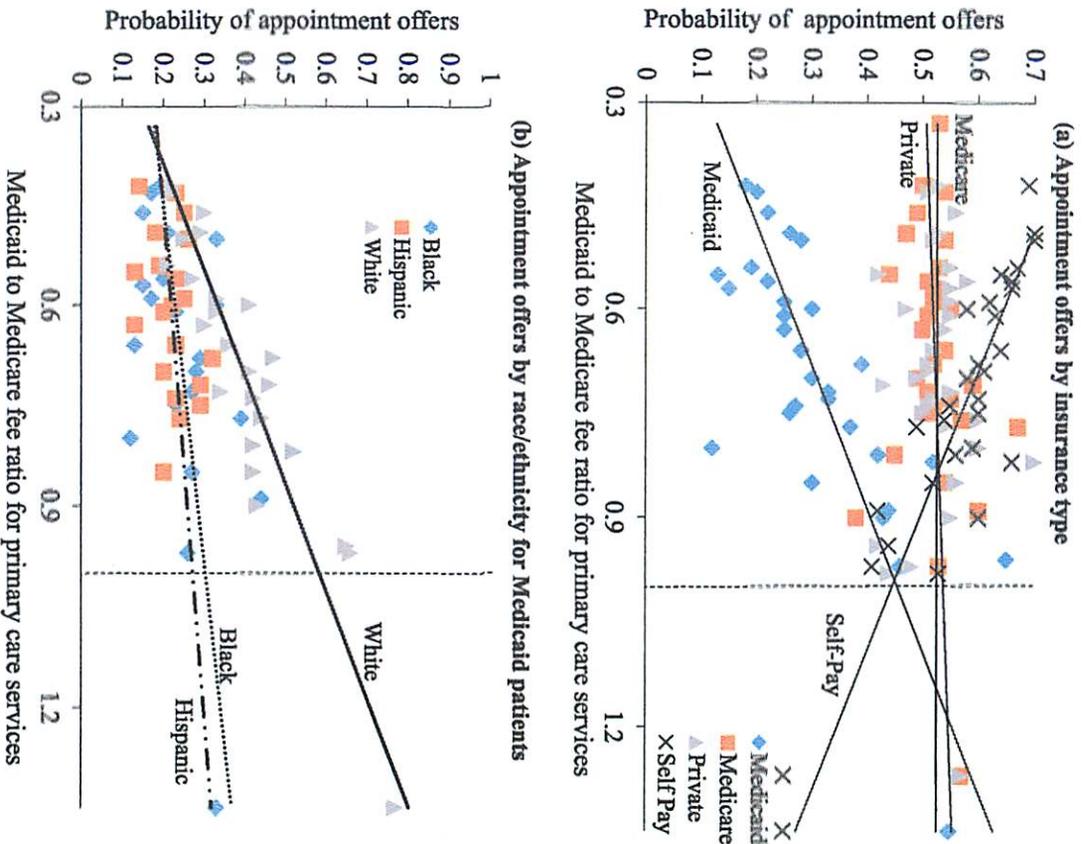
Figure 2 illustrates the association between Medicaid fees and the probability of appointment offers computed from Table 1 (Regression 3) and aggregated by patient group. In Panel A, at the mean national fee ratio of 0.59, our analysis predicts a 27-percentage-point difference in appointment offers for Medicare (51%) compared to Medicaid (24%) patients. The disparity decreases to 6 percentage points (50% vs. 44%) at fee parity. Panel B shows how the association between the fee ratio and appointment offers for Medicaid patients varies by racial/ethnic group.

Table 2 (Regression 1) shows that, per 10-percentage-point-higher fee ratio, waits-to-appointment are lower for Medicaid patients (-8%) and higher for self-pay patients (26.6%). The effect is not statistically significant for privately insured and Medicare patients. Regressions 2 and 3 show differences by race/ethnicity and sex for Medicaid and self-pay patients. For example, Regression 2 shows that a 10-percentage-point increase in the fee ratio is associated with a 49% increase in waits-to-appointment for Black self-pay patients, but the effect is not statistically significant for White and Hispanic self-pay patients.

6 | DISCUSSION

Our finding that appointment offers to Medicaid patients are higher in states with higher Medicaid fees is consistent with previous studies (e.g., Decker, 2012; Polsky et al., 2015). Evidence showing that Medicaid patients are disadvantaged relative to Medicare and privately insured patients even at fee parity is consistent with reports that Medicaid patients face additional barriers to access (Cunningham & O'Malley, 2009; Long, 2013). However, most of the disparity in our analysis

FIGURE 2 Medicaid fees and the probability of appointment offers. Computed from logistic Regression 3 in Table 1 that controls for simulated patients' race/ethnicity, sex, and insurance type, as well as study-related factors (indicator variables for day of the week, month when call was completed, and individual callers) [Colour figure can be viewed at wileyonlinelibrary.com]



can be attributed to low fees because the 27-percentage-point difference in appointment offers between Medicaid and Medicare patients at the national average fee ratio of 59% shrinks to 6 percentage points at fee parity. The finding that appointment offers to self-pay (uninsured) patients are lower in states with higher fee ratios indicates that physicians may regard Medicaid and uninsured patients as substitutes. The evidence regarding the relationship between Medicaid payments and waits-to-appointment is a novel finding. The estimates showing that wait times are lower for Medicaid patients and higher for uninsured patients in states with higher fee ratios reinforce the argument that Medicaid patients, and the uninsured may compete for access. The findings that appointment offers and wait times for Medicare and privately insured patients are unaffected by Medicaid fees suggests that these patients are inframarginal with respect to the range of observed Medicaid payments. Finally, our analysis suggests that the relationships between higher Medicaid fees and appointment offers/waits-to-appointment vary with patient race/ethnicity and sex. The benefits of higher Medicaid fees favor White Medicaid patients with non-White self-pay patients bearing a disproportionate burden of the costs.

This research has several limitations. The data may overstate appointment offers because some health plans have narrow networks, and we regard physicians as willing to accept patients with a particular type of coverage if they accept any plan of that type. However, our finding of similar acceptance rates for new Medicare and privately insured patients is consistent with prior research (e.g., Decker, 2012), suggesting that the relative rates of appointment offers that form the basis of our analysis are not biased. A further limitation is that the race/ethnicity effects we identify could be smaller for patients with less distinctive names or larger if an actual patient with other strong identifying characteristics (e.g., an accent) were to call for an appointment.

TABLE 2 Log-linear regression estimates of the association between wait-to-appointment and a 10-percentage-point increase in the primary care Medicaid to Medicare fee ratio for patients who were offered appointments

Effects (%)				
Variables (Regressions 1 & 2)	(1)	(2)	Variables (Regression 3)	(3)
Private	8.7 [−6.8, 99.3]	8.2 [−6.9, 95.8]	Private	8.5 [−6.8, 98.9]
Medicare	0.8 [−7.8, 42.6]	0.6 [−7.9, 43.2]	Medicare	0.8 [−7.8, 44.4]
Medicaid	−8.0** [−9.6, −1.1]			
Self-pay	26.6** [1.3, 108.4]			
Medicaid Black		−8.6* [−9.8, 0.5]	Medicaid Black male	−9.4** [−9.9, −4.1]
Medicaid White		−8.2** [−9.6, −1.6]	Medicaid Black female	0.7 [−9.1, 86.8]
Medicaid Hispanic		−8.7 [−9.8, −0.2]	Medicaid White male	−7.6* [−9.6, 3.1]
Self-pay Black		49.0** [4.4, 228.0]	Medicaid White female	−8.1* [−9.6, 0.5]
Self-pay White		17.6 [−2.4, 89.8]	Medicaid Hispanic male	−8.6* [−9.8, 1.3]
Self-pay Hispanic		22.5 [−2.3, 126.9]	Medicaid Hispanic female	−7.7 [−9.8, 24.8]
			Self-pay Black male	62.7** [5.5, 332.5]
			Self-pay Black female	33.3* [−1.7, 216.4]
			Self-pay White male	9.6 [−4.3, 57.4]
			Self-pay White female	26.2 [−3.4, 189.1]
			Self-pay Hispanic male	18.3 [−3.9, 120.8]
			Self-pay Hispanic female	26.8 [−3.5, 197.0]
R^2	0.094	0.100		0.118
N	433	433		433

Note. 95% confidence intervals in brackets based on robust standard errors clustered by state. Additional controls: simulated patients' race/ethnicity, sex, and insurance type, day of the week and month when call completed, and caller fixed effects.

* $p < .1$.

** $p < .05$.

*** $p < .01$.

7 | CONCLUSIONS

This research highlights the importance of considering the effects of policy, including the setting of physician fees for Medicaid patients, on nontarget patient groups. That appointment availability is better for Medicaid patients and worse for uninsured patients where Medicaid payments are higher points to a trade-off facing policymakers. Our results have troubling implications for health care equity because uninsured patients, who are disproportionately “near poor,” Black, Hispanic, or recent and undocumented immigrants (KFF, 2013), also face problems accessing care. These trade-offs may worsen in the future due to predicted physician shortages (Association of American Medical Colleges, 2015). At the national level, our results suggest that improvements in Medicaid reimbursements may, paradoxically, increase racial/ethnic disparities in access to care.

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CONFLICT OF INTEREST

The authors have no conflict of interest.

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“I Broke My Ankle”: Access to Orthopedic Follow-up Care by Insurance Status

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ABSTRACT

Objectives: While the Affordable Care Act seeks to reduce emergency department (ED) visits for outpatient-treatable conditions, it remains unclear whether Medicaid patients or the uninsured have adequate access to follow-up care. The goal of this study was to determine the availability of follow-up orthopedic care by insurance status.

Methods: Using simulated patient methodology, all 102 eligible general orthopedic practices in Dallas-Fort Worth, Texas, were contacted twice by a caller requesting follow-up for an ankle fracture diagnosed in a local ED using a standardized script that differed by insurance status. Practices were randomly assigned to paired private and uninsured or Medicaid and uninsured scenarios.

Results: We completed 204 calls: 59 private, 43 Medicaid, and 102 uninsured. Appointment success rate was 83.1% for privately insured (95% confidence interval [CI] = 73.2% to 92.9%), 81.4% for uninsured (95% CI = 73.7% to 89.1%), and 14.0% for Medicaid callers (95% CI = 3.2% to 24.7%). Controlling for paired calls to the same practice, an uninsured caller had 5.7 times higher odds (95% CI = 2.74 to 11.71) of receiving an appointment than a Medicaid caller ($p < 0.001$), but the same odds as a privately insured caller (odds ratio = 1.0, 95% CI = 0.19 to 5.37, $p = 1.0$). Uninsured patients had to bring a median of \$350 (interquartile range = \$250 to \$400) to their appointment to be seen, and only two uninsured patients were able to obtain an appointment for \$100 or less up front. In comparison, typical total payments collected for privately insured patients were \$236 and for Medicaid patients \$128. When asked where else they could go, 49 (48%) uninsured callers and one Medicaid caller (2%) were directed to local public hospital EDs as alternative sources of care. Of the practices that appeared on Medicaid's published list of orthopedic providers accepting new patients, 15 told callers that they did not accept Medicaid, 11 did not treat ankles, nine listed nonworking phone numbers, and only three actually scheduled an appointment for the Medicaid caller.

Conclusions: Less than one in seven Medicaid patients could obtain orthopedic follow-up after an ED visit for a fracture, and prices quoted to the uninsured were 30% higher than typical negotiated rates paid by the privately insured. High up-front costs for uninsured patients and low appointment availability for Medicaid patients may leave these patients with no other option than the ED for necessary care.

The Emergency Medical Treatment and Labor Act (EMTALA) is a federal law that guarantees emergency care to anyone presenting to an emergency department (ED) in the United States that accepts federal funding.¹ For a fracture, the standard for emergency care includes reduction and splinting of the

fracture. After an ED visit for a fracture, orthopedic follow-up care is important to convert splints to casts, determine the need for surgery, and ensure optimal healing to prevent nonunion or other complications.^{2,3}

However, access to nonemergent care in the outpatient setting is limited by financial and insurance

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barriers.^{4,5} In 2012, only 58% of Medicaid patients, compared to 85% of privately insured, were able to schedule a new-patient primary care appointment.⁶ A study in North Carolina found that only 59% of Medicaid patients are able to schedule an appointment with an orthopedist.⁷ Only 19% of Medicaid patients could schedule an orthopedic office evaluation for an ankle replacement across eight states.⁸

Less is known about access to orthopedic care for the uninsured, and Texas has the highest uninsured rate in the nation.^{9–11} A public ED in Texas reported that 20% of their orthopedic patient population is seeking follow-up care after visiting another ED, suggesting possible barriers to orthopedic care access in this area.¹² For the uninsured seeking primary care, the mean price for an appointment is \$160, with only 15% of patients able to obtain an appointment for less than \$75, and only 18% of primary care practices offering delayed payment plans.^{6,13} The price of orthopedic follow-up care for the uninsured is not known.

Goals

The goal of this study was to compare appointment price and availability of ED follow-up orthopedic care for patients with different insurances, focusing on Dallas-Fort Worth as an area with large disparities in socioeconomic and insurance status.

METHODS

Study Design

Trained research assistants posing as new patients who had been diagnosed with an ankle fracture in a local ED and instructed to see an orthopedic surgeon for follow-up care made paired calls to the same orthopedic practices to attempt to schedule an emergency follow-up visit. Two calls, separated by 3–4 weeks, were placed to each practice by the same caller with the use of a standardized script that differed by insurance status. Uninsured callers also asked about price of the visit. Calls were made in February and March 2016. The local institutional review board approved this study including the use of deception with a waiver of consent. The identity of individual physicians and practices is confidential and will not be disclosed.

Population

A comprehensive list of potentially eligible orthopedic practices in the Dallas-Fort Worth metro area of Texas

was compiled from an online public database that extracts physician data from at least two of the following data sets then cross-checks and matches them for accuracy with multiple updates per year: state medical boards, state licensing boards, national provider identification (NPI) numbers, the Centers for Medicare and Medicaid Services, and a private healthcare provider information company.¹⁴ Because several orthopedists may practice at the same clinic, and some may practice at multiple clinics, we sampled unique clinic practice sites rather than unique providers. This search identified 397 practice sites with a unique (unduplicated) address and phone number combination. Orthopedic clinics specializing in spine, oncology, hand or shoulder, hip, and pediatrics that would be out-of-scope for ankle fractures were excluded, leaving 210 practices. Unclear practices were resolved using an Internet search. All included practices with the exception of two were affiliated with a local hospital, although their call rotation at that hospital was unknown. In practices with multiple physicians, callers asked for an appointment with the first-listed physician.

Protocol

The independent variable was the caller's reported insurance type. Callers reported having private insurance, regular Medicaid, or no insurance. Blue Cross Blue Shield was selected as the private insurer because they have the largest market share in the area.¹⁵ Prior to the call period, each caller made two pilot calls with each of the three insurance types to orthopedic practices in a different geographic area to refine the sampling methodology and final call script. Two callers then divided the practice list for calls and the same caller called the same practice twice with a 3- to 4-week gap between calls. The Excel random number generator was used to randomly assign practices to receive an uninsured and a Medicaid call, or an uninsured and a privately insured call, and then again to randomly assign the order of the two calls within each practice.

To avoid geographic, racial, or age discrimination, the callers used generic American names selected from a list of the most common baby names in the late 1980s, a birthdate placing them in their late 20s, Caucasian race if asked, and an address at a moderately priced apartment complex in the vicinity of each practice. If asked which ED they had attended, callers reported an ED in the vicinity of the practice or the hospital reported to be affiliated with the practice.

They requested the next available appointment time. The callers did not volunteer their insurance type but provided it when they were asked or when they confirmed the appointment. All appointments were canceled before the call ended or immediately thereafter. Caller scripts are provided in Data Supplement S1 (available as supporting information in the online version of this paper).

Outcomes

The primary outcomes of interest were appointment availability and appointment price for the uninsured. An appointment was defined as available if the scheduler offered the caller a specific date and time. A secondary outcome was the wait time between the call and the next available appointment for practices that provided an appointment to both callers. Callers who could not obtain an appointment asked where else they could go for care.

Uninsured callers also asked for the total price of the appointment, the amount of money they needed to bring to the appointment in order to be seen, and the availability of any discounts or payment plans. To compare prices charged to the uninsured with prices paid by patients with private insurance, we examined average prices for the Dallas-Fort Worth metro statistical area from a publicly available large multipayer commercial claims database.¹⁶ The data include the amount paid by the insurer plus any copayments or other payments made by the patient.¹⁷ We also compared to Medicaid physician reimbursement rates publicly reported by the Texas Medicaid program based on new office visit CPT codes 99203–99205 for orthopedic surgeons.¹⁸

Analysis

For all calls, we calculated the relative risk that patients with Medicaid or who were uninsured would receive an appointment compared with privately insured patients. Paired McNemar's tests using the orthopedic practice as the unit of analysis assessed whether practices provided equal appointment availability to Medicaid and uninsured or private and uninsured patients. Descriptive statistics on the rate of appointment availability are also presented.

For uninsured calls, we calculated the mean, standard deviation (SD), range, median and interquartile range (IQR) of the price for the appointment and the amount of money uninsured patients needed to bring to the appointment in order to be seen. Descriptive

statistics on the availability of discount payment plans and alternative sources of follow-up care are also presented.

For practices that scheduled appointments for both insurance types, we calculated the difference between median appointment wait times (in number of days) using Wilcoxon matched-pairs signed-rank test. All tests were two-sided, and p values < 0.05 were considered to indicate statistical significance. All statistical analyses were performed with Stata software (version 13.1).

RESULTS

During the calls, an additional 28 of the 210 initially identified practices reported to both callers that ankle fractures were out of the physician's scope of practice. Sixty-eight practices were excluded due to nonworking phone numbers, and six more were excluded because the calls revealed they were duplicates of other practices that had already been called, leaving 102 orthopedic practices included to whom 204 paired calls were successfully completed (Figure 1). All 102 received an uninsured call; 43 (42.2%) received a Medicaid call and 59 (57.8%) received a privately insured call. Appointment success rate was 83.1% for privately insured (95% confidence interval [CI] = 73.2% to 92.9%), 81.4% for uninsured (95% CI 73.7%–89.1%), and 14.0% for Medicaid callers (95% CI = 3.2% to 24.7%; Figure 2). For all calls, the relative risk of being refused an appointment was no different for uninsured and private patients, but was 5.08 (95% CI = 2.85 to 9.04, $p < 0.001$) for Medicaid patients compared to privately insured. Controlling for paired calls to the same practice, an uninsured caller had 5.7 times higher odds (95% CI = 2.74 to 11.71) of receiving an appointment than a Medicaid caller ($p < 0.001$), but the same odds as a privately insured caller (odds ratio = 1.0, 95% CI = 0.19 to 5.37, $p = 1.0$).

Reasons stated for refusing appointments included that a review of the ED records or x-rays and/or receipt of a formal referral was required ($n = 14$), providers were not accepting new patients or had a full schedule ($n = 9$), or more detailed insurance information was required ($n = 3$). One clinic told the uninsured caller that the physician did not treat ankle fractures and another told the uninsured caller that the practice was not accepting new patients, yet both scheduled the privately insured patient with the

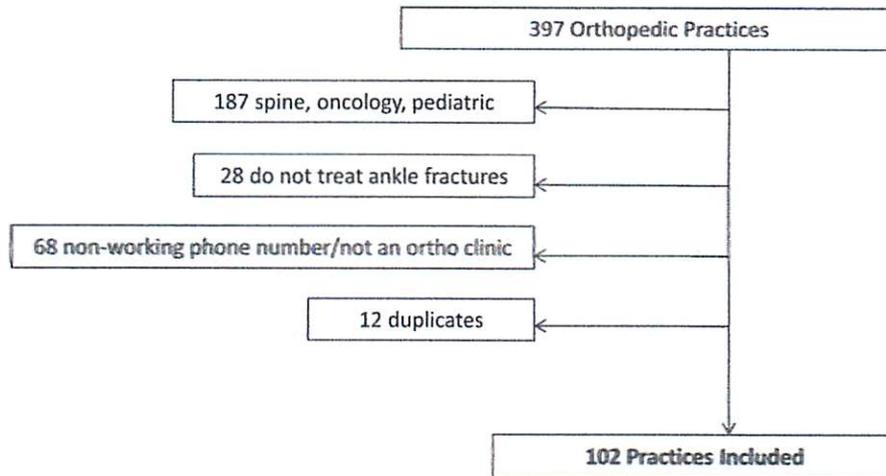


Figure 1. Provider inclusion algorithm.

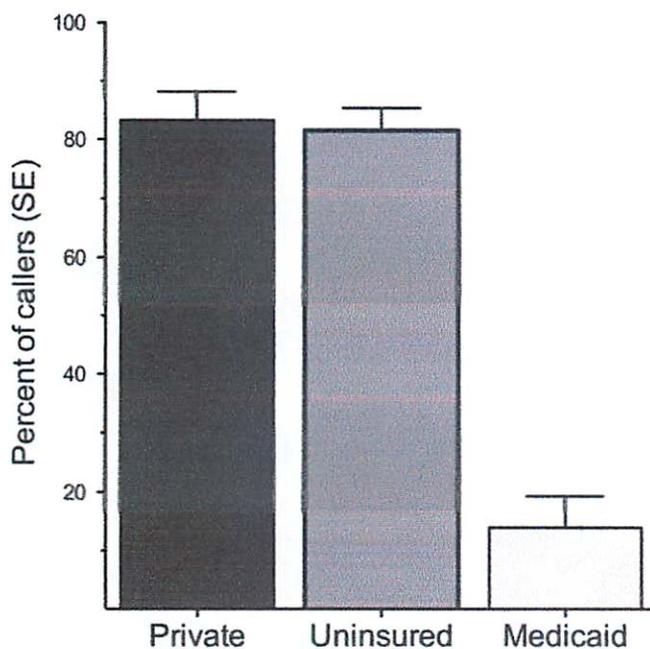


Figure 2. Percent of callers receiving an orthopedic follow-up appointment by insurance. SE = standard error.

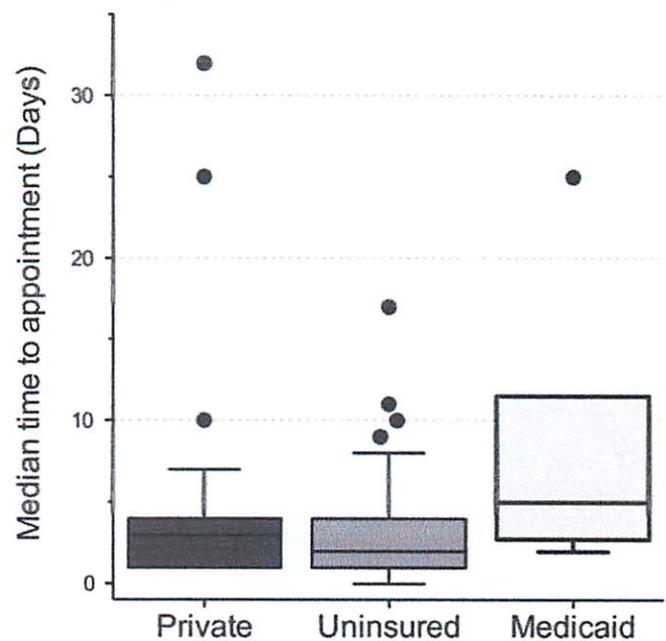


Figure 3. Box and whisker plot of median days to appointment by insurance. * $n = 6$; box shows IQR with median as line, whiskers show maximum and minimum values, and dots show outliers.

physician and both asked for the caller's insurance before stating the reason an appointment could not be made. Medicaid patients were much more likely to be told their insurance was not accepted by the practice (Medicaid $n = 29/43$, 78%; vs. uninsured $n = 5/19$, 26%; and private $n = 2/10$, 20%).

The median wait time for an appointment for those who received an appointment was 3 days for privately insured (IQR = 1–4 days), 2 days for uninsured (IQR = 1–4 days), and 5 days for Medicaid (IQR = 3 to 7; Figure 3). For practices that scheduled appointments for both callers (45 practices for private/uninsured pairs, six practices for Medicaid/uninsured pairs), there was no significant difference

in median wait times between private and uninsured callers (median difference = 0 days, IQR = 1 to 2 days, $p = 0.97$) or between Medicaid and uninsured callers (median difference = 2 days, IQR = 2 to 6 days, $p = 0.08$).

All practices that scheduled appointments for uninsured patients asked them to bring an up-front payment to their appointment. Three practices stated that patients would need to bring a payment, but that they could not estimate the amount of the payment until after the appointment, so price data are not available for these practices. One practice offered free follow-up if the physician was on call at the hospital when the patient made the ED visit. The mean (\pm SD) amount

that uninsured patients were asked to bring to the appointment was \$353.74 (\pm \$174.91; range = \$85 to \$1,375, median = \$350, IQR = \$250 to \$400). Only two patients were able to obtain an appointment for \$100 or less up front. Only 15 (of 61; 24.6%) of practices offered discounts ranging from \$20 to 60%, typically for cash payments, and only five (of 64; 7.8%) offered payment plans. The practice stating that the self-pay price was 60% discounted quoted the up-front cost postdiscount to be \$300. Six (of 82; 7.3%) practices estimated a total price higher than the up-front payment patients were asked to bring to the appointment, but 15 (of 82; 18.3%) asked for an up-front deposit larger than the estimated total price and were told that any unused portion of the payment would be returned after the visit.

In comparison, typical payments received by an orthopedic specialist for a privately insured patient making an office visit in the Dallas-Fort Worth area are \$236, and typical payments for a three-view ankle x-ray are \$36 in the area.¹⁶ This represents all payments received by the orthopedic provider, including copays, deductibles, and insurance payments. Medicaid orthopedic provider reimbursement rates in Texas are \$55.52 to \$101.00 for the office visit and \$26.73 for a three-view ankle x-ray.¹⁸

When asked where else they could go, 49 (48%) uninsured callers were directed to local public hospital systems and the rest were offered no alternative destination. However, there appeared to be some confusion on the part of orthopedic practices as to whether the public hospital would provide follow up orthopedic care for a Medicaid patient, as only one Medicaid caller was directed to the public hospital system. Most Medicaid callers were offered no specific alternative and instead were told to call the number on the back of their Medicaid card. When we referenced the practices we called against Medicaid's published list of orthopedic providers accepting new patients,¹⁹ 15 said they did not accept Medicaid, 11 did not treat ankles, nine listed nonworking phone numbers, and only three actually scheduled an appointment for the Medicaid caller.

DISCUSSION

Ankle fractures require casting and approximately 40% require surgery, making orthopedic follow-up critical for these injuries.²⁰ However, we found that less than one in seven Medicaid patients in the Dallas-Fort

Worth area could obtain a follow-up orthopedic appointment. While uninsured patients were no less likely to receive an orthopedic follow-up appointment than privately insured patients, payments required at the time of the visit were higher than typical payments from privately insured and would likely be prohibitive for most uninsured patients. All practices in the Dallas-Fort Worth area required uninsured patients to bring their payment up front, and it was rare for practices to allow patients to pay less than the total price up front.

Uninsured rates have declined since implementation of the main provisions of the Affordable Care Act in 2014, but over 10% of nonelderly adults remain uninsured nationwide, and nearly half of the remaining uninsured say that cost is a barrier to obtaining insurance.⁹ Inability to obtain follow-up care for less than \$100, which only one practice offered, may limit follow-up of uninsured patients with serious orthopedic injuries, as 54% of the uninsured earn < 200% of the federal poverty level (\$23,760 for an individual), and 85% earn < 400% of the federal poverty level (\$47,520). One-third of the uninsured report delayed healthcare and one-quarter have foregone needed care entirely due to concerns about costs.²¹ In the case of an ankle fracture or other orthopedic injury, delaying or forgoing care could lead to nonunion and long-term disability.³

The mean \$354 price charged to uninsured patients found in our study is 30% higher than the total amount that an orthopedist would receive if providing the same care to a privately insured patient (\$272). Other studies have found that the uninsured pay higher prices for care.^{22,23} However, the higher price quoted in our study might reflect a practice's concern about costs that are either not covered by negotiated rates or not identified by our research team. For example, the cost for a cast may vary by type and was not available in private market data. Importantly, our study also did not include the costs for the 40% of ankle fractures that require surgery. Costs for ankle surgery and follow-up rehabilitation can range from \$11,000 to \$20,000 and unpaid medical debt is the chief reason for bankruptcy in the United States.^{24,25}

Interviews with specialist physicians reveal that economic pressures and direct pressures from their affiliated hospitals motivate their refusal to treat underinsured patients, and the prices charged to these patients up front may represent an attempt to make up the equivalent revenue from care provided to a

privately insured patient.²⁶ Nevertheless, the private market costs are shared by both the patient and the insurer and many insurance payments are significantly delayed from the time of service due to claims processing periods, whereas the uninsured patient must bring the entire cost up front in order to receive care.

Our study found much lower access to orthopedic care for Medicaid patients than previously documented for primary care⁶ and lower than documented for orthopedic care in North Carolina⁷ or an eight-state sample of ankle-specific orthopedic care that included Texas.⁸ This could be due to low Medicaid reimbursement rates in the area which are less than one-third of private rates, as research shows that increasing Medicaid reimbursement increases availability of appointments for Medicaid patients.²⁷ Texas is choosing not to expand Medicaid under the Affordable Care Act, and our study suggests that expansion of Medicaid may not help patients gain access to outpatient orthopedic care in the state, at least not at current Medicaid physician rates.

High up-front costs for uninsured patients and low appointment availability for Medicaid patients may leave these patients with few options for necessary care. Our study found that the only specific alternative option offered to patients was a county-based public hospital. This may explain why one such public hospital in Houston, Texas, reported that 20% of its orthopedic patients had been seen initially at other hospitals' EDs.¹² Interestingly in that study 89% of the patients were uninsured, and Medicaid patients were not differentially affected despite the low availability of follow-up for Medicaid patients found in the current study. This could be because practice staff perceive the public hospital as a site of care for the uninsured, but not for Medicaid patients, which may reflect common community perception.

Prior research on access to orthopedic care for Medicaid patients also found that urban practices and ones closer to academic hospitals were less likely than rural practices to give appointments to Medicaid patients.⁷ This may indicate that the presence of safety net providers such as the county-based public hospitals in Dallas-Fort Worth is viewed by local specialty physicians as relieving them of the burden of caring for the uninsured or underinsured. The EMTALA requires EDs to screen for emergency conditions and stabilize patients but does not obligate an on-call physician to see a patient in follow-up after initial stabilization. Therefore, the difficulty these patients have in

accessing follow-up orthopedic care is not an EMTALA violation and is not addressed by any current laws.

Finally, these findings may also be relevant for patients with high-deductible plans in the private insurance market. High-deductible plans have been increasing in prevalence over the past several years and now make up 34% of the employer-sponsored market and 53% of the Affordable Care Act Marketplace plans.²⁸ Due to the rise in unpaid deductibles, which may account for the entire cost of care, many providers are starting to ask patients with high-deductible plans to pay in full up front for their care as well.²⁹

LIMITATIONS

While we attempted to generate a comprehensive list of all possible orthopedic practices through the use of publically available data sources, it is possible that some practices were missed that may have been more or less willing to see Medicaid or uninsured patients. Some clinics have multiple orthopedic physicians working in the same clinic who may have separate appointment availability or protocols for handling patients with different types of insurance. Indeed, two schedulers volunteered another physician in the same practice who would accept Medicaid. To standardize our approach, all calls were coded for whether or not the assigned physician (first-listed in practices with multiple providers) would schedule the appointment. However, it is possible that this decision resulted in an underestimate of the number of orthopedic practices that were willing to see a Medicaid patient.

This study was conducted in a single city of a single state. Although the Affordable Care Act has significantly decreased uninsured rates across the United States, the number of uninsured remains high in Texas because the state has chosen not to expand Medicaid, excluding most impoverished people from coverage, and the state has a high number of undocumented immigrants who are not eligible for coverage under the Affordable Care Act.^{9,10} In Texas, the majority of indigent and uncompensated care is delivered through county-based services, and most major cities including Dallas-Fort Worth have public hospitals that fulfill this role.¹¹ Dallas-Fort Worth is the largest metropolitan area in Texas with over six million residents.¹⁰ As such our results cannot be generalized to other states or other areas in Texas that do not

have safety net hospitals. However, healthcare costs in Texas are generally near or slightly below national averages.¹⁷ Dallas in particular has the highest costs of any metropolitan area in Texas for knee replacements, which may indicate that its costs for orthopedic care are higher than average.¹⁷ Texas also has the highest uninsured rate in the nation, which may exacerbate access difficulties and health disparities in this state.⁹

CONCLUSIONS

High up-front costs for uninsured patients and low appointment availability for Medicaid patients may leave these patients with few options for necessary care. Uninsured patients were able to obtain follow-up orthopedic care after an ED visit at the same rates as privately insured patients, but were asked to pay an average of \$354 up front prior to care, a cost that may be prohibitive for uninsured patients who are predominantly low income. Only 14% of Medicaid patients could obtain follow-up orthopedic care at all. County hospitals were the only alternative destination for care offered to patients and may serve as Medicaid and uninsured patients' only source of care in areas where they exist. Further research should document access to other types of specialty care for uninsured and Medicaid patients in other areas of the country and compare areas where public safety net hospitals do or do not exist.

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Supporting Information

The following supporting information is available in the online version of this paper:

Data Supplement S1. Secret shopper script.

Medicaid Patients Have Greater Difficulty Scheduling Health Care Appointments Compared With Private Insurance Patients: A Meta-Analysis

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Abstract

Medicaid patients are known to have reduced access to care compared with privately insured patients; however, quantifying this disparity with large controlled studies remains a challenge. This meta-analysis evaluates the disparity in health services accessibility of appointments between Medicaid and privately insured patients through audit studies of health care appointments and schedules. Audit studies evaluating different types of outpatient physician practices were selected. Studies were categorized based on the characteristics of the simulated patient scenario. The relative risk of appointment availability was calculated for all different types of audit scenario characteristics. As a secondary analysis, appointment availability was compared pre- versus post-Medicaid expansion. Overall, 34 audit studies were identified, which demonstrated that Medicaid insurance is associated with a 1.6-fold lower likelihood in successfully scheduling a primary care appointment and a 3.3-fold lower likelihood in successfully scheduling a specialty appointment when compared with private insurance. In this first meta-analysis comparing appointment availability between Medicaid and privately insured patients, we demonstrate Medicaid patients have greater difficulty obtaining appointments compared with privately insured patients across a variety of medical scenarios.

Keywords

appointments and schedules, health services accessibility, Medicaid, insurance, patient protection and affordable care act, healthcare disparities, primary health care, meta-analysis

What do we already know about this topic?

Medicaid patients generally have less access to care compared to patients with other insurances, and they may have more difficulty obtaining health care appointments.

How does your research contribute to the field?

The current literature has had a difficult time quantifying the reduced access to care that Medicaid patients experience in a large controlled study. Numerous small audit studies have been performed to evaluate this disparity, but currently no meta-analysis of these studies exists.

What are your research's implications toward theory, practice, or policy?

We highlight the disparity in appointment accessibility between Medicaid and privately insured patients and hope that it may inform Medicaid reform, particularly in a post-Patient Protection and Affordable Care Act era.

Introduction

Medicaid patients experience increased barriers to care compared with privately insured patients. In a nationwide survey of primary care providers in 2015, only 45% indicated they were willing to accept new Medicaid patients while 94% were willing to accept new privately insured patients.¹ This difference in insurance acceptance is attributed to Medicaid's low reimbursement levels, disadvantaged patient population,

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and high administrative burden compared with other insurance.² This lower rate of Medicaid compared with private insurance acceptance leads to disparities in care due to decreased access to health care services.

Over the years, the term *access* has taken on several definitions and frameworks. One widely accepted model developed by Penchansky and Thomas defines access as the degree of “fit” between the patient and the healthcare system. Integrated into this model are the concepts of affordability (the patient’s ability to pay for his or her care and whether physicians accept his or her insurance) and availability (the adequacy of the supply of medical providers, clinics, and services).³ Over the years, within the framework established by Penchansky and Thomas, the concept of affordability has been quantified by measuring the ease or difficulty associated with a patient obtaining an appointment,⁴ and the extent to which physicians make themselves accessible to patients.⁵

Patient surveys and appointment availability audit studies have been proposed as potential methods of measuring patient access to care. Recently, direct patient surveys⁶⁻⁹ have been used to measure the effectiveness of the Patient Protection and Affordable Care Act (PPACA) in improving patient access to care. However, these phone surveys are typically dependent on self-reported data or investigator-moderated interviews, which are subject to confirmation biases (interviewers are seeking information that supports a preconceived belief).

In contrast, appointment availability audit studies, also known as secret shopper studies, have been shown to be effective in evaluating appointment availability and the ability to receive an appointment by using simulated patients with different insurance plans to call physician offices and attempt to schedule appointments.¹⁰ Because the audit study design directly examines the obstacles patients confront when they attempt to access care and sheds light on the patient experience of obtaining care, it can be used to examine the disparity in access for Medicaid patients relative to privately insured patients. Although many accessibility audit studies have been conducted over the years, a meta-analysis has not been conducted to examine their conclusions in aggregate. Using pooled data from 34 audit studies, this meta-analysis directly evaluates the disparity between patients with private and Medicaid insurance in their ability to schedule a new patient appointment.

Methods

Search Strategy

We performed the systematic review in accordance with the PRISMA statement.¹¹ A librarian and two independent authors conducted searches for relevant articles in Ovid Medline (1946 to January 19, 2017), Ovid Medline (In Process & Other Non-Indexed Citations), and Ovid Embase (1974 to January 19, 2017) on January 20, 2017. The databases were searched using both controlled vocabulary and free-text terms. The Yale MeSH Analyzer (<http://mesh.med.yale.edu>)

was used in the initial stages of strategy formulation to harvest controlled vocabulary and keyword terms from highly relevant known articles. The search strategy for Ovid MEDLINE is documented in the Supplementary Appendix. In addition, we performed a hand search and screened the reference lists of selected papers for further relevant literature.

Study Selection

Figure 1 summarizes the study selection process. Studies were eligible for inclusion if they used an audit study methodology to compare a simulated Medicaid patient’s ability to successfully schedule a physician appointment with that of a simulated privately insured patient. All types of outpatient physician practices ranging from primary care to surgical specialties were included. We excluded any studies performed outside the United States or published before 2001. Studies that were designed as physician surveys or patient interviews were excluded. Studies that examined patient access to care in emergency departments, veteran affairs hospitals, or to dentists were also excluded. Literature from the electronic searches was imported into Covidence, a screening and data extraction tool.¹² Within Covidence, two independent authors inspected the title and abstract of each study. After initial screening, full texts were retrieved and reviewers performed a second round of independent review based on their review of the entire article.

Data Extraction

Two independent authors extracted data from the included studies and any disagreements were resolved by discussion with a third reviewer. Explanatory variables included year data collected, location of physician practices investigated, the type of physician practice investigated, scenario of the patient seeking an appointment, age of the patient, and the type of insurance investigated. We extracted whether the studies were conducted pre- or post-Medicaid expansion and whether the state in which the data were collected had undergone Medicaid expansion at the time of the study.

The outcome variable of interest was the number of successful appointments scheduled based on insurance type. Appointment success was defined as the ability of a patient to schedule an appointment, either within or without a specified time frame (studies ranged from 1 to 2 weeks). Requests for appointments were considered unsuccessful if the practice was not accepting new patients with the caller’s type of insurance or the scheduler did not grant an appointment due to additional practice requirements such as the requirement of a referral or preappointment chart review. Many studies did not differentiate between reasons for why Medicaid was not accepted (ie, whether the provider did not take Medicaid at all or whether the provider was not accepting new patients with Medicaid). Therefore, this outcome measure was not addressed in our analysis. Risk of bias was assessed for each study using the Cochrane Collaboration’s tool (see Supplementary Appendix).

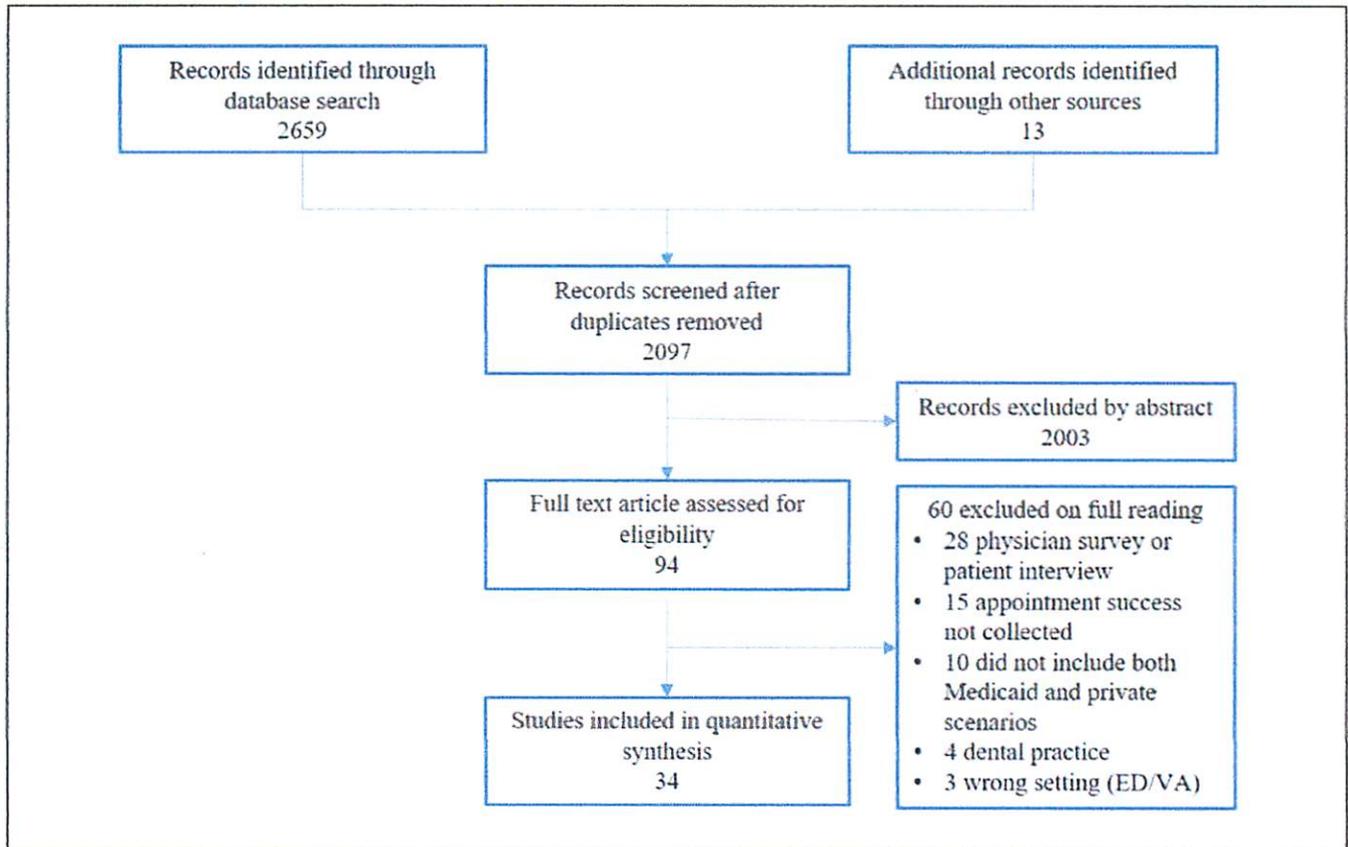


Figure 1. Flow chart of study selection.

Source. Author's selection of studies based on predetermined criteria, 2017.

Note. ED = emergency department; VA = veteran affairs.

Statistical Methods

The meta-analysis was specified to compare access with Medicaid versus private insurance. For studies that included other insurance types, notably Medicare, only the Medicaid and private insurance data were included in the analysis. The most consistently available outcome reported was the binary response to whether an appointment could be scheduled. Some studies reported on appointment availability at various time points from the call (eg, within 1 week, 2 weeks, etc). For these studies, the most permissive time point was included in the analysis.

For each study, relative risk (RR) of appointment availability based on insurance status was calculated using abstracted data. The possibility of publication bias was assessed by visual inspection of a standard funnel plot.¹³ We assumed *a priori* that substantial heterogeneity would exist between studies due to variability in the regions, practices, dates, and scenarios, among other factors, and therefore used a random effects model for meta-analysis. Studies were combined using an inverse variance approach.¹⁴ In cases of studies with no events, a standard fixed continuity correction was used. Heterogeneity between studies was evaluated using I^2 .¹⁵

We conducted 2 analyses. The primary analysis compared access by scenario characteristics, which included type of medical scenario (primary care and specialty scenarios), age of patient in the scenario (adult and pediatric), and timing of the scenario (urgent and nonurgent). For studies involving multiple specialties, data were extracted for each component specialty and treated as separate studies in the subgroup analysis. The secondary analysis split studies based on data collection date before and after the implementation of PPACA's Medicaid expansion. However, the results were not categorized by scenario type due to the limited number of studies for primary care and urgent scenarios that were conducted post-Medicaid expansion. Therefore, the results were pooled to provide a suggestive trend of accessibility pre- versus post-PPACA. Data were analyzed using Stata Statistical Software: Release 13.1 (StataCorp LP).

Results

Study Characteristics

Table S1 in Supplemental Material summarizes the study characteristics of the 34 articles included in this review.¹⁶⁻⁴⁹ In total, the 34 studies represented 21,601 calls to provider

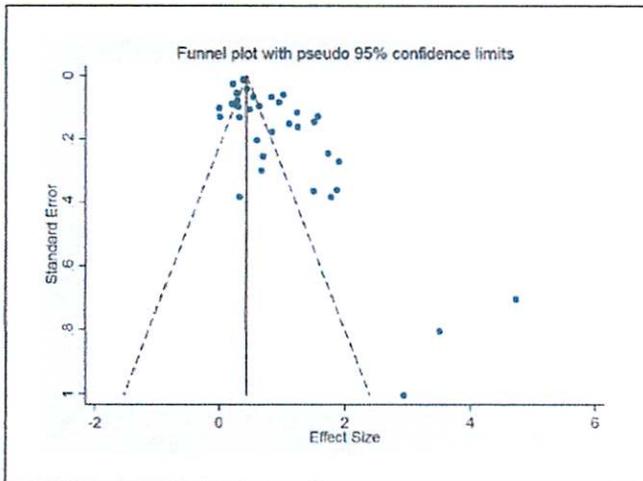


Figure 2. Funnel plot of selected studies.
Source. Author's analysis of 34 audit studies, 2017.

offices requesting an appointment for Medicaid and private insurance scenarios, of which 63% resulted in successful scheduling. Of 11,387 calls with private insurance, 80% of calls successfully led to appointments, while 45% of 10 214 calls with Medicaid resulted in none. The mean number of calls made per study under the private insurance and Medicaid scenario was 335 and 300, respectively (private insurance: median = 116, range = 14-5,385, SD = 906; Medicaid: median = 118, range = 14-4,352, SD = 731).

Risk of Bias

The overall quality assessment of the included studies was reported in Table S2 in Supplemental Material. Due to the nature of the audit study methodology, studies could only meet a maximum of 6 out of the 8 quality assessment domains. All studies were subject to allocation concealment bias and blinding of personnel bias. The observed effect size, presented as odds ratios, is plotted against the standard error in a typical funnel plot (Figure 2). The figure shows an abundance of smaller studies with larger effect size, with a much smaller cluster of studies showing either no or a reversed effect. This pattern is typical of publication bias in which small studies showing no effect are not present in the literature.

Appointment Success by Medical Scenario

The number of successful and unsuccessful calls in each insurance group in each study is displayed in Table S3 in Supplemental Material. Figure 3 shows the RRs and confidence interval (CI) of getting an appointment with private insurance compared with Medicaid for each study. Tables 1 and 2 list the RR and CIs for appointment success based on the characteristics of each audit study's scenario (primary care/pediatric vs specialty care scenario, adult vs pediatric

scenario, urgent vs nonurgent scenarios). These scenarios were grouped regardless of whether they were conducted before or after Medicaid expansion. The RR values compare the risk of a private patient obtaining an appointment with a Medicaid patient. Privately insured patients were more likely to receive an appointment over a patient with Medicaid when seeking specialty care (RR = 3.3, 95% CI = 2.4-4.5). The advantage of private insurance over Medicaid in access to care was least in primary care/general pediatric scenarios (RR = 1.6, 95% CI = 1.4-1.9). Adult private patients had a statistically significant greater advantage in securing appointments over adult Medicaid patients (RR = 2.6, 95% CI = 2.1-3.3), and this advantage was also significant for adult private patients when compared with their pediatric counterparts (RR = 1.8, 95% CI = 1.7-1.9). Appointment availability did not differ for those with urgent versus nonurgent medical scenarios. In a sensitivity analysis with all orthopedics audit studies removed, private patients were still significantly more likely to receive an appointment over a Medicaid patient overall (RR = 1.8, 95% CI = 1.6-2.1).

Appointment Success Pre- and Post-PPACA

Our secondary analysis demonstrates a trend of reduced appointment accessibility for Medicaid patients post-PPACA compared with pre-PPACA. In all studies prior to Medicaid expansion, Medicaid patients had a 2-fold lower likelihood of securing an appointment compared with privately insured patients. In all studies after Medicaid expansion, Medicaid patients had a 3.2-fold lower likelihood of securing an appointment compared with privately insured patients. There was marked heterogeneity between studies, with I^2 of 96%, indicating that the variation in the estimate effect is due to significantly measured difference between studies rather than random error within studies.

Discussion

Appointment availability audit studies aim to define access in terms of a patient's ability to obtain an appointment. Our comprehensive meta-analysis of audit studies examining patient access to care demonstrates that Medicaid patients have reduced access to appointment scheduling compared with their privately insured counterparts. Specifically, Medicaid patients have a more difficult time securing an appointment for specialty care compared with primary care, and appointments for adult patients are more difficult to make than appointments for pediatric patients. The urgency of a clinical scenario did not affect the difference in the reduced baseline accessibility for Medicaid patients.

Our study approached accessibility by examining the disparity in the ability to schedule new patient appointments between patients with private and Medicaid insurance to measure the tangible effects that insurance status

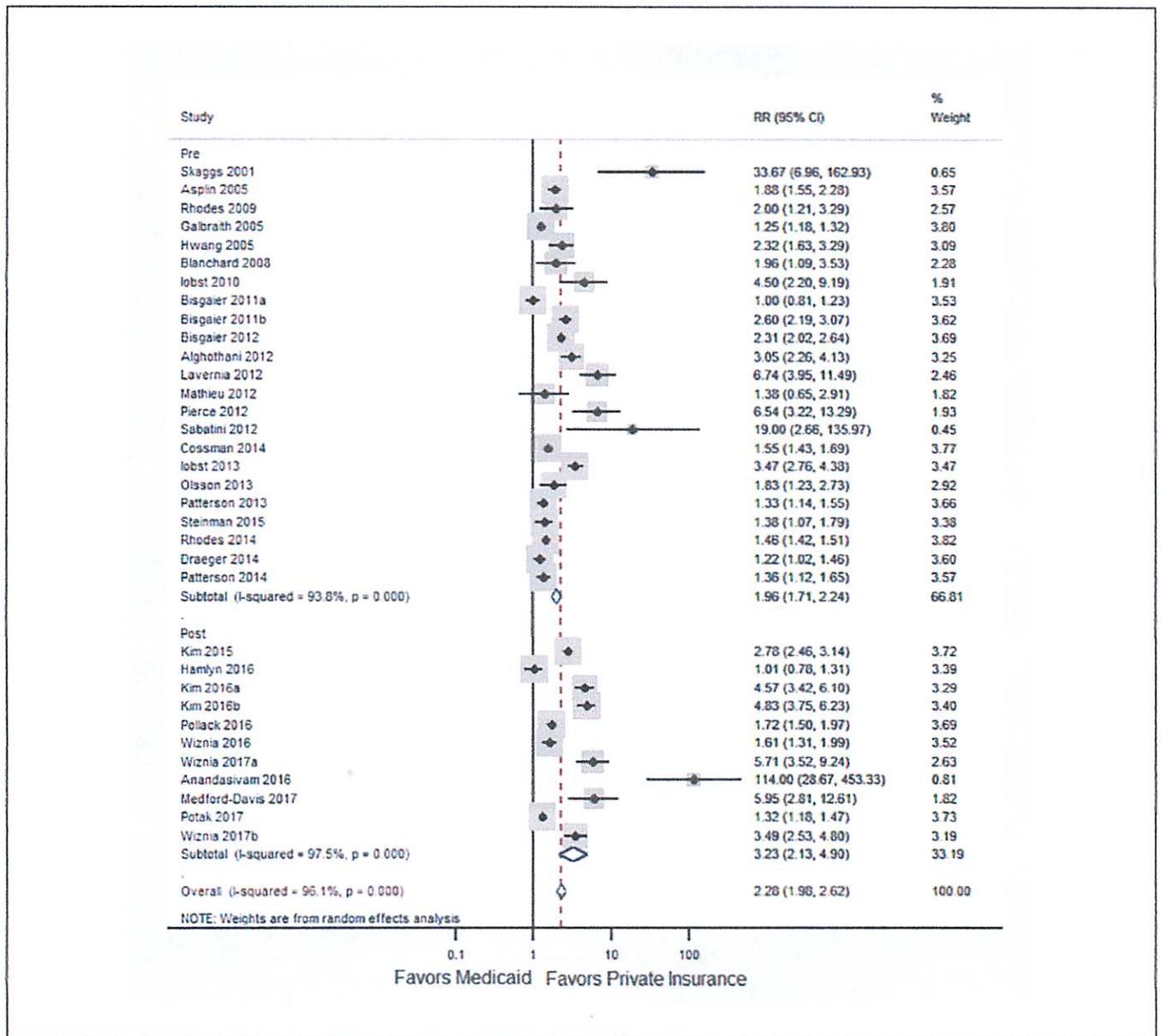


Figure 3. The RR and CI of getting an appointment with private insurance compared with Medicaid.

Source. Author's analysis of 34 audit studies, 2017.

Note. RR = relative risk; CI = confidence interval.

Table 1. RR of Appointment Accessibility Based on the Study Characteristic.

Characteristic	RR	95% CI
Primary care/general pediatric (n = 9)	1.6	1.4-1.9
Specialty (n = 25)	3.3	2.4-4.5
Adult (n = 22)	2.6	2.1-3.3
Pediatric (n = 12)	1.8	1.7-1.9
Urgent (n = 13)	2.4	1.7-3.3
Nonurgent (n = 21)	2.5	2.1-3.1

Note. RR = relative risk of a patient with private insurance receiving an appointment over a patient with Medicaid; CI = confidence interval.

has on appointment accessibility. Appointment availability audit studies serve as a metric to evaluate patient access to care, which can identify and quantify specific obstacles to obtaining an appointment, calculate actual physician participation rates in the treatment of Medicaid patients compared with other patients, and measure the length of time a patient must wait to be seen.^{5,10} Audit studies may portray patient access more accurately than direct patient surveys because the audit study design blinds appointment schedulers, greatly reducing the risk of participant bias.¹⁰ To our knowledge, this study is the first meta-analysis to examine audit studies and quantify access between Medicaid and privately insured patients using appointment accessibility.

Table 2. RR of Appointment Accessibility Pre- and Post-PPACA.

	RR	95% CI
All studies (n = 34)	2.3	2.0-2.6
Pre-PPACA (n = 23)	2.0	1.7-2.2
Post-PPACA (n = 11)	3.2	2.1-4.9

Note. PPACA = Patient Protection and Affordable Care Act; RR = relative risk of a patient with private insurance receiving an appointment over a patient with Medicaid; CI = confidence interval.

Our results demonstrate that Medicaid patients are more likely to be excluded from the practice of their choice and may need to make considerably more effort to secure an appointment given their limited access to certain centers. However, our findings do not necessarily mean that care for Medicaid patients is worse, but Medicaid patients' options are, *de facto*, reduced. Many of the audit studies in our meta-analysis do not identify the reasons physicians may reject Medicaid patients. Seemingly, such reasons could include that the provider is not taking any new patients with Medicaid, the provider does not accept Medicaid insurance, or that the provider is taking new Medicaid patients, but the wait times are untimely or unreasonable.

Some medical specialties, such as orthopedics and psychiatry, have worse patient access than others, such as primary care.⁵⁰ As our meta-analysis includes a high number of orthopedic surgery audit studies, and we were worried that this weighting might bias the results, we conducted a sub-analysis with the orthopedics studies removed. We found that with the orthopedic studies removed, the overall results still remain significant and follow the same direction, but with a reduced magnitude.

Because of the limited number of post-PPACA access studies, we are unable to draw a conclusion comparing appointment success pre- and post-PPACA. Future studies could follow the recently published example by Polsky et al,⁵¹ who performed a comparison of 2 appointment availability audit studies focused on primary care, one conducted before the implementation of Medicaid expansion, and a second after Medicaid expansion based on identical methods from a 2012 to 2013 baseline pre-PPACA study. Such studies should be repeated for a wide breadth of specialty and scenario types highlighted in our meta-analysis.

Recently, an issue brief by Antonisse et al⁶ and a systematic review by Mazurenko et al⁵² examining the effects of Medicaid Expansion on the PPACA concluded that patient access was positively affected. Although our study does not claim to address all measures associated with access as is covered in these 2 reviews, we are reporting on an audit methodology that we believe accurately represents a measure of access when comparing Medicaid patients and privately insured patients. Unfortunately, our meta-analysis does not have an adequate number of post-PPACA Medicaid expansion studies to draw any conclusions.

Using data from the National Health Interview Survey, Miller and Wherry⁵³ recently demonstrated that Medicaid expansion was associated with longer wait times for appointments, indicating that problems regarding accessibility persist. Ultimately, Medicaid patients may have access to care through Federally Qualified Community Health Centers (FQHCs), academic practices, or public/nonprofit safety net hospitals that care for more uninsured and Medicaid patient populations. This hypothesis is supported by a Kaiser Family Foundation report, which demonstrated that nationally, since Medicaid expansion, federally-funded community health centers had seen a greater than 10% increase in their patient caseload, an 11% increase in insured patients, and an 8% increase in total Medicaid patients.⁵⁴ Therefore, although our study demonstrates that Medicaid patients do not have the same access to certain physicians, these patients may very well have good access or even better care when seeking care in FQHCs and academic centers which dominate certain regions.

This study has several limitations beyond those already discussed. Although this meta-analysis included studies sharing the same primary outcome, there are differences in patient scenarios, physician types, and geographic regions. Although the data are from studies representing all states plus the District of Columbia, over one-third of the studies investigated 7 large states (California, Florida, New York, North Carolina, Ohio, Texas, and Massachusetts) that are influential in politics, and thus the data may not be fully reflective of the nation. In addition, there were chronological time periods in which certain specialties of interest and geographic regions were focused on. This meta-analysis cannot isolate the effect of the PPACA from potential confounders, nor can it improve on the quality of the individual studies. For example, the type of patient scenario varies widely from study to study. Our subgroup analysis aimed to minimize this variability by specialty, age, and urgency; however, other changing variables at the state level or time to adoption may affect the observed outcomes. In some geographic regions, there can be good access to care even if many practices do not accept Medicaid, particularly if academic medical centers and/or FQHCs that nearly universally do accept Medicaid are located within the region.⁵⁵ Given that individual studies did not distinguish between FQHCs, academic centers, and private practices, we are unable to fully comment on how practice type affected access to care. At least 10 studies included academic medical centers and academic physicians as part of their sample. No studies stated whether FQHCs were included in the survey. However, given that audit studies are less likely to reach out to FQHCs or academic centers, it is possible that Medicaid access is better than what is portrayed in this meta-analysis because these centers are a critical part of the care delivery for Medicaid patients. The appointment availability audit study design is a real-world

approach to assessing access by minimizing biases associated with surveys and interviews; however, it is a labor-intensive and imperfect process that limits sample sizes. We also could not account for Medicaid reimbursement levels, which vary considerably by state. Some states may have relatively high primary care reimbursements but poor specialty reimbursement or vice versa that may present with unique patient acceptance patterns. Finally, our study design only allows us to examine the effect of Medicaid on accessibility but did not allow us to measure the change in appointment accessibility among the uninsured population, as different studies accepted disparate definitions of uninsured patients, including those who were cash-pay or those without any insurance. These definitions make up two distinct types of patients and could confound our observed results. Future research in insurance access research should examine other insurance types like Medicare or uninsured patients, as well as changes in Medicaid insurance with corresponding changes pre- and post-PPACA.

Conclusion

In the first meta-analysis of appointment availability audit studies, we demonstrate that Medicaid patients have reduced access to appointments compared with their privately insured counterparts. Specifically, Medicaid patients have a more difficult time securing an appointment for specialty care compared with primary care. In addition, appointments for adult Medicaid patients are more difficult to schedule than appointments for pediatric Medicaid patients. Although more patients may have insurance since the implementation of Medicaid expansion, these newly insured Medicaid patients may have a relatively harder time obtaining appointments compared with privately insured patients.

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Supplemental Material

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Memisovski v. Maram

Decided Aug 23, 2004

No. 92 C 1982.

August 23, 2004

MEMORANDUM OPINION AND ORDER

JOAN H. LEFKOW, District Judge

This case is a class action brought on behalf of minor children in Cook County, Illinois who are or will be eligible for the Medical Assistance Program ("Medicaid") established under Title XIX of the Social Security Act. The plaintiffs allege, pursuant to 42 U.S.C. § 1983, that defendants are in violation of the federal Medicaid Act, 42 U.S.C. §§ 1396 *et seq.*, by failing to ensure (1) that all plaintiffs have pediatric care and services to the extent that such care and services are available to the general population and (2) that plaintiffs are provided early and periodic screening, diagnostic, and treatment ("EPSDT") services. For the reasons set forth below, and based on the evidence received at trial, the court finds that the defendants have been and are in violation of the requirements of the federal Medicaid Act. *2

I. Introduction

"Medicaid is a cooperative federal-state program through which the Federal Government provides financial assistance to States so that they may furnish medical care to needy individuals." *Wilder v. Virginia Hosp. Ass'n*, 496 U.S. 498, 502 (1990). State participation in Medicaid is voluntary, but if a state chooses to participate in the program, it must comply with the Medicaid Act and its implementing regulations promulgated by the

Secretary of Health and Human Services. *Id.* at 502. To qualify for federal assistance, a state is required to submit to the Secretary an approved "plan for medical assistance," which must contain "a comprehensive statement describing the nature and scope of the State's Medicaid program." *Id.* (citing 42 U.S.C. § 1396a(a) and 42 C.F.R. § 430.10).

On March 23, 1992, plaintiffs filed this action alleging that defendants were in violation of the federal Medicaid Act. The case was assigned to the Honorable James B. Zagel. On October 8, 1992, Judge Zagel certified the following class: "All children (persons under the age of 18) in Cook County, Illinois, who, on or after July 1, 1990, have been, are, or will be eligible for the Medical Assistance Program ("Medicaid") established under Title XIX of the Social Security Act."¹ The case was stayed for many years thereafter and, on July 2, 1999, reassigned to the Honorable William J. Hibbler. From Judge Hibbler, and pursuant to this court's executive order, the case was reassigned to the undersigned on September 5, 2000.

¹ Judge Zagel also certified a separate class of women in Cook County on Medicaid who "have been, are, or will be pregnant." The claims on behalf of this class of pregnant women were voluntarily dismissed on May 29, 2003.

On November 29, 2000, defendants filed a motion to dismiss what was then the plaintiffs' Third Amended Complaint. The defendants argued both that the *3 Eleventh Amendment barred plaintiffs' requested relief and that plaintiffs could not seek

redress for any violations of the Medicaid Act under § 1983. That motion was denied by memorandum opinion and order dated October 17, 2001. See *Memisovski v. Patla*, No. 92 C 1982, 2001 WL 1249615 (N.D. Ill. Oct. 17, 2001). Defendants' Eleventh Amendment argument was rejected because this action seeks only prospective injunctive relief for violations of the federal Medicaid Act and does not seek compensatory damages. *Id.* at *4-5. Concerning defendants' argument that the plaintiffs could not seek redress for any violations under 42 U.S.C. § 1983, the court cited and applied the three-factor test established by the Supreme Court in *Blessing v. Freestone*, 520 U.S. 329, 340 (1997). Citing cases which had allowed causes of action under § 1983 for violation of the same statutory sections at issue in this case, the court rejected defendants' argument, noting that "[d]efendants have provided no reason why this court should reject the analysis set forth in these cases, which hold that violations of the statutory provisions requiring EPSDT services are redressable through § 1983."²

² The court also noted that defendants had failed even to mention the three-factor test at all in their moving papers. *Id.* at *5.

After denial of defendants' motion to dismiss, the parties conducted extensive discovery for nearly three years. This case was tried to the court during eleven days from May 3, 2004 to May 25, 2004. Based on the evidence received, including the parties' statement of uncontested facts, the exhibits received in evidence and the testimony of the witnesses, the court has weighed the evidence and the credibility of the witnesses and has made findings of fact and conclusions of law, which are discussed in parts III and IV below. First, however, the court considers, in part II below, defendants' argument for judgment on the pleadings. ⁴ **II. Judgment on the Pleadings**³

³ A motion for judgment on the pleadings is properly granted when there are no material issues of fact and the moving

party is entitled to judgment as a matter of law. *Alexander v. City of Chicago*, 994 F.2d 333, 335-36 (7th Cir. 1993).

First in their pre-trial submissions, and again in their post-trial brief, defendants argue that the issue of whether a statute confers enforceable rights under § 1983 has changed since this court's memorandum opinion and order on October 17, 2001. Specifically, defendants contend that the Supreme Court's opinion in *Gonzaga University v. Doe*, 536 U.S. 273 (2002), has changed the legal landscape sufficiently for this court to reconsider whether plaintiffs continue to have rights enforceable under § 1983. Because, however, this court's previous ruling that enforceable rights exist under § 1983 is the law of the case, it will not be reconsidered "unless [the court has] a strong conviction that the earlier ruling was wrong and the party that benefitted from the earlier ruling would not be unduly harmed." *White v. Godinez*, 301 F.3d 796, 804 (7th Cir. 2002).

The first specific statutory section of the federal Medicaid Act that plaintiffs assert provides them enforceable rights is located at 42 U.S.C. § 1396a(a)(30)(A), which states in relevant part as follows:

A State medical plan for assistance must —

* * *

(30)(A) provide such methods and procedures relating to the utilization of, and the payment for, care and services available under the plan . . . as may be necessary to safeguard against unnecessary utilization of such care and services and to assure that payments are consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area; . . .

The other statutory sections at issue relate to the
 5 EPSDT services which are scattered among *5
 several portions of the Medicaid Act, including 42
 U.S.C. § 1396a(a)(10) and (43), § 1396d(a)(xiii)
 (4)(B) and (r) (hereinafter collectively referred to
 as the "EPSDT provisions"). The issue defendants
 raise after trial is whether, under *Gonzaga*, §
 1396a(a)(30)(A) and the EPSDT provisions
 provide enforceable rights under 42 U.S.C. § 1983
 4 to individuals.

4 42 U.S.C. § 1983 provides:

Every person who, under color of
 any statute, ordinance, regulation,
 custom, or usage, of any State or
 Territory or the District of
 Columbia, subjects, or causes to
 be subjected, any citizen of the
 United States or other person
 within the jurisdiction thereof to
 the deprivation of any rights,
 privileges, or immunities secured
 by the Constitution and laws,
 shall be liable to the party injured
 in an action at law, suit in equity,
 or other proper proceeding for
 redress, except that in any action
 brought against a judicial officer
 for an act or omission taken in
 such officer's judicial capacity,
 injunctive relief shall not be
 granted unless a declaratory
 decree was violated or
 declaratory relief was
 unavailable. For the purposes of
 this section, any Act of Congress
 applicable exclusively to the
 District of Columbia shall be
 considered to be a statute of the
 District of Columbia.

There is no question that § 1983 provides a federal
 remedy for violations not only of the United States
 Constitution but also for federal statutes as well.
Maine v. Thiboutot, 448 U.S. 1, 4 (1980). To have
 a cause of action under § 1983 for violation of a
 federal statute, a plaintiff must first establish that

the statute in question gives the plaintiff
 enforceable rights. *Gonzaga University*, 536 U.S.
 at 283 (statute must contain "unambiguously
 conferred right to support a cause of action
 brought under § 1983.").

Because the federal Medicaid Act is a spending
 statute, see *Bruggeman v. Blagojevich*, 324 F.3d
 906, 911 (7th Cir. 2003), Congress must "speak
 with a clear voice" and manifest its
 "unambiguous" intent to confer individual rights
 before federal funding provisions will be read to
 provide a basis for private enforcement. *Gonzaga
 University*, 536 U.S. at 1268 (citing *Pennhurst
 State Sch. Hosp. v. Halderman*, 451 U.S. 1, 17, 28
 n. 21 (1981)). "In legislation enacted pursuant to
 the spending power, the typical remedy for state
 6 noncompliance with federally *6 imposed
 conditions is not a private cause of action for
 noncompliance but rather action by the Federal
 Government to terminate funds to the State." *31
 Foster Children v. Bush*, 329 F.3d 1255, 1268
 (11th Cir. 2003) (citing *Pennhurst*, 451 U.S. at
 28); see also *Bruggeman*, 324 F.3d at 911 (noting
 that different portion of Title XIX of the Social
 Security Act "cannot be interpreted to create a
 private right of action, given the Supreme Court's
 hostility, most recently and emphatically
 expressed in *Gonzaga University v. Doe*, 536 U.S.
 273 (2002), to implying such rights in spending
 statutes.").

In *Blessing*, the Supreme Court set forth three
 factors to determine whether a federal statute can
 be read to confer a right enforceable under § 1983:
 (1) Congress must have intended that the
 provisions in question benefit the plaintiff; (2) the
 plaintiff must demonstrate that the right assertedly
 protected by the statute is not so "vague and
 amorphous" that its enforcement would strain
 judicial competence; and (3) the statute must
 unambiguously impose a binding obligation on the
 States imposed in mandatory, rather than
 precatory, terms. 520 U.S. at 340-41. Following
Blessing, in *Gonzaga* the Court clarified that,
 under the first factor above, a plaintiff may bring

suit under § 1983 as an intended beneficiary of a statute only if the statute itself unambiguously demonstrates congressional intent to confer an individual or personal right on that plaintiff. See 536 U.S. at 283 (rejecting notion that cause of action may be inferred "so long as the plaintiff falls within the general zone of interest that the statute is intended to protect" and noting that it is "rights, not the broader or vaguer 'benefits' or 'interests,' that may be enforced under the authority of [§ 1983].") (emphasis in original).

In *Gonzaga*, the Court dealt with provisions of the Family Educational Rights and Privacy Act of 1974 ("FERPA"), which prohibits the federal funding of educational institutions that have a policy or practice of releasing education records to unauthorized persons. The specific portion of the FERPA addressed by the Court provided:

No funds shall be made available under any applicable program to any educational agency or institution which has a policy or practice of permitting the release of education records (or personally identifiable information contained therein . . .) of students without the written consent of their parents to any individual agency, or organization.

20 U.S.C. § 1232g(b)(1). In concluding that this statutory provision was not enforceable under § 1983, the Court noted that the FERPA's nondisclosure provisions "entirely lack the sort of 'rights creating' language critical to showing the requisite congressional intent to create new rights." 536 U.S. at 287.

As a basis for comparison, the Court examined the FERPA's language in light of other statutes where a private right was found, such as Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d ("No person in the United States shall . . . be subject to discrimination under any program or activity receiving Federal financial assistance. . . .") (emphasis added) and Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681(a) ("No

person in the United States shall, on the basis of sex. . . .") (emphasis added). The Court explained that those statutes are phrased "with an unmistakable focus on the benefitted class." *Gonzaga University*, 536 U.S. at 284 (quoting *Cannon v. University of Chicago*, 441 U.S. 677, 691 (1979)). By contrast, the Court characterized the FERPA's language above ("[n]o funds shall be made available" to any "educational agency or institution" which has a prohibited "policy or practice") as "two steps removed from the interest of individual students and parents and clearly does not confer the sort of 'individual entitlement' that is enforceable under § 1983." *Id.*; see also *Alexander v. Sandoval*, 532 U.S. 275, 294 (2001) ("Statutes that focus on the person regulated rather than the individuals protected create 'no implication of an intent to confer rights on a particular class of persons.'" (quoting *California v. Sierra Club*, 451 U.S. 287, 294 (1981))).

Moreover, the court further noted that the FERPA's nondisclosure provisions "speak only in terms of institutional policy and practice, not individual instances of disclosure." *Gonzaga University*, 536 U.S. at 288 (quoting 20 U.S.C. § 1232g(b)(1)-(2), prohibiting funding of "any educational agency or institution which has a policy or practice of permitting the release of education records.") (alteration in original). The FERPA had an "aggregate" focus under which recipient institutions could avoid termination of funding so long as they "comply substantially" with the Act's requirements. *Id.* at 228; cf. *Blessing*, 520 U.S. at 335 (Title IV-D of Social Security Act failed to support a § 1983 suit because it required only "substantial compliance" with federal regulations).

Finally, the Court noted that its conclusion that the FERPA's nondisclosure provisions failed to confer enforceable rights was "buttressed by the mechanism that Congress chose to provide for enforcing those provisions," including that the FERPA allowed the Secretary of Education to "deal with violations" of the Act and design

review boards for investigating and adjudicating any violations. *Id.* at 289. The Court noted that these administrative review procedures distinguished the FERPA from other statutory sections previously found to confer rights enforceable under § 1983 and supported the Court's conclusion that there was no congressional intent to create individually enforceable private rights under the FERPA. *Id.*

Bearing in mind the factors to be considered in determining whether a statute confers rights enforceable under § 1983 and considering the Supreme Court's analysis in *Gonzaga*, this court will analyze whether rights are enforceable under the sections of the federal Medicaid Act *9 relevant to this action. The court notes, however, that because *Gonzaga* modified the three-part *Blessing* analysis only in regard to the first factor, and since *Blessing* was decided prior to this court's decision that rights are enforceable under the statutory sections at issue (and, indeed, the court cited and applied *Blessing* in its October 17, 2001 memorandum opinion and order), here the only issue that needs to be revisited is the first factor. Thus, the issue under consideration is after *Gonzaga*, do 42 U.S.C. § 1396a(a)(30)(A) and the EPSDT provisions unambiguously confer rights on plaintiffs supporting a cause of action brought under § 1983. As will be explained below, the answer is yes.

A. 42 U.S.C. § 1396a(a)(30)(A)

The statutory section, 42 U.S.C. § 1396a(a)(30)(A), referred to as the "equal access" provision, requires a state plan to enlist sufficient providers so that care is available "at least to the extent that such care and services are available to the general population in the geographic area; . . ." Prior to *Gonzaga*, the Seventh Circuit specifically allowed *providers* of medical care to have a private right of action, pursuant to § 1983, to enforce § 1396a(a)(30)(A). *Methodist Hospitals, Inc. v. Sullivan*, 91 F.3d 1026, 1029 (7th Cir. 1996). The fact that the Seventh Circuit only dealt with providers of

medical care, and not recipients as is the case here, is a distinction of no import. The case on which the Seventh Circuit relied, *Arkansas Medical Soc'y, Inc. v. Reynolds*, 6 F.3d 519 (8th Cir. 1993), specifically allowed suit for both providers and recipients. *Id.* at 526 ("The equal access provision is indisputably intended to benefit the recipients by allowing equivalent access to health care services."); *see also Visiting Nurse Ass'n of N. Shore, Inc. v. Bullen*, 93 F.3d 997, 1004 (1st Cir. 1996) (allowing suit by both providers and recipients under § 1983 to enforce § 1396a(a)(30)(A)). Indeed, cases disagreeing with the conclusion that *10 medical providers were afforded rights to enforce § 1396a(a)(30)(A) noted that it was recipients, and not providers, who should be afforded such rights. *E.g., Pennsylvania Pharmacists Ass'n v. Houstoun*, 283 F.3d 531, 544 (3d Cir. 2002) (en banc) (rejecting providers' right to sue under § 1396a(a)(30)(A) and noting that "recipients have sued to enforce Section 30(A), and the other courts of appeals have uniformly held that recipients may assert such claims under § 1983."); *Evergreen Presbyterian Ministries, Inc. v. Hood*, 235 F.3d 908, 927 (5th Cir. 2000) ("We agree with our sister circuits which have held that recipients are the intended beneficiaries of section 30(A).").

This court has found only two decisions after *Gonzaga* considering whether recipients have a right of action under § 1983 to sue for violation of § 1396a(a)(30)(A). Compare *Sanchez v. Johnson*, 301 F. Supp. 2d 1060 (N.D. Cal. 2004) (reconsidering issue after *Gonzaga* and rejecting that § 1396a(a)(30)(A) provides rights enforceable under § 1983 to recipients) with *Clayworth v. Bonta*, 295 F. Supp. 2d 1110 (E.D. Cal. 2003) (holding that in § 1396a(a)(30)(A) "Congress created rights to quality care and equal access that may be enforced by Medicaid recipients under § 1983.").⁵

⁵ Most courts after *Gonzaga* have stated that providers do not have enforceable rights under § 1396a(a)(30)(A). *See, e.g., Long*

Term Care Pharmacy Alliance v. Ferguson, 362 F.3d 50, 58-59 (1st Cir. 2004); *In re NYAHS Litig.*, ___ F. Supp. 2d ___, 2004 WL 1126348, at *9 (N.D.N.Y. May 20, 2004); *Burlington United Methodist Family Servs., Inc. v. Atkins*, 227 F. Supp. 2d 593, 595-96 (S.D.W.V. 2002). *But see*, *AARM v. Minnesota Comm'r of Human Servs.*, No. 03-2438, 2003 WL 22037719, at *7-8 (D. Minn. Aug. 29, 2003).

The defendants argue that § 1396a(a)(30)(A) does not unambiguously demonstrate congressional intent to confer individual or personal rights on plaintiffs because (1) plaintiffs are not the intended beneficiaries of the statute insofar as the statute pertains only to what a State's Title XIX plan should contain to satisfy federal law; (2) the statute is not phrased in terms of the ¹¹ persons benefitted; and (3) the statute has only an aggregate focus and does not deal with individual rights.

Most of defendants' arguments, however, fail based on another portion of the federal Medicaid Act, 42 U.S.C. § 1320a-2. That statutory section provides:

In an action brought to enforce a provision of this chapter, such provision is not deemed unenforceable because of its inclusion in a section of this chapter requiring a State plan or specifying the required contents of a State plan. This Section is not intended to limit or expand the grounds for determining the availability of private action to enforce State plan requirements other than by overturning any such grounds applied in *Suter v. Artist M.*, 112 S.Ct. 1360 (1992), but not applied in prior Supreme Court decisions respecting such enforceability; provided, however, that this section is not intended to alter the holding in *Suter v. Artist M.* that section 671(a)(15) of this title is not enforceable in a private right of action.

This section was passed in 1994 after the Supreme Court's decision in *Suter v. Artist M.*, 503 U.S. 347 (1992). The Court in *Suter* held that § 671(a)(15) of the Adoption Act was unenforceable by a private person in part because that section merely required states to have a plan that contained a specific provision requiring states to make certain reasonable efforts. *Id.* at 358-59. As the plain language of § 1320a-2 illustrates, it was enacted to overrule *Suter* in part.⁶ *See Messier v. Southbury Training Sch.*, 916 F. Supp. 133, 144 (D. Conn. 1996) ("[T]he fairest reading of Section 1320a-2 is that Congress was concerned only that a court should not eviscerate an otherwise enforceable right merely because it appears in a statute mandating that participating states include a particular provision in their state plans.").^{*12}

⁶ Language identical to that of § 1320a-2 is contained in another statutory section, 42 U.S.C. § 1320a-10. This court is unaware of why this is so and, as one court has theorized, it may in fact be a mistake. *See Clayworth*, 295 F. Supp. 2d at 1120 ("These statutes are identically worded, and the fact that there are two such statutes is probably a mistake.").

Based on § 1320a-2, § 1396a(a)(30)(A) will not be deemed unenforceable simply because it only elaborates on what a state plan must include. Other courts have reached similar conclusions applying this and other portions of the federal Medicaid Act. *See Clayworth*, 295 F. Supp. 2d at 1121 (in private action to enforce § 1396a(a)(30)(A), relying on § 1320a-2 to conclude that "the court will not consider that an individual entitlement is absent simply because the wording of the statute is directed to the required contents of a state plan as opposed to the rights of a beneficiary or provider under a plan."); *see also*, *Rabin v. Wilson-Coker*, 362 F.3d 190, 201 (2d Cir. 2004) (in an action brought under a separate portion of the Medicaid Act, noting that § 1320a-2 "precludes defendant from relying on the plan

requirement language of Section 1386r-6" to support claim that no enforceable rights were present in that statute).

Several other considerations persuade the court that § 1396a(a)(30)(A) confers rights on plaintiffs enforceable pursuant to § 1983. Initially, the requirement of equal access is not phrased in indirect terms "such as requiring a general policy or requiring substantial compliance." *Clayworth*, 295 F. Supp. 2d at 1123. As the *Clayworth* court observed, if the statutory section were phrased indirectly or in more general terms (such as in *Gonzaga* and *Blessing*), "that might suggest that no single beneficiary is entitled to quality care or equal access." *Id.* at 1123. Instead, the requirements of equal access are phrased in mandatory and not precatory language. See *Sabree v. Richman*, 367 F.3d 180, 190 (3d Cir. 2004) (citing *Blessing*, 520 U.S. at 341). States "must" have a plan that affords equal access and there can be no dispute that the access provisions directly benefit recipients, as several circuit courts have found. *Pennsylvania Pharmacists*, 283 F. 3d at 537; *Evergreen Presbyterian Ministries*, 235 F. 3d at 928-29. In addition, dissimilar to the statute in *Gonzaga*, the court has not been presented with

13 anything ^{*13} suggesting that administrative procedures exist through which recipients can seek equal access to health care. Through § 1396a(a)(30)(A), a mandatory obligation was imposed on states and no administrative mechanism was formulated so as to ensure compliance with this obligation. This further weighs in favor of a private right of action to enforce this statutory section under § 1983.⁷

⁷ There is also legislative history supporting a private right of action for recipients to enforce § 1396a(a)(30)(A) under § 1983. In 1997, Congress repealed the Boren Amendment, which required states to pay providers rates that "the State finds, and makes assurances satisfactory to the Secretary, are reasonable and adequate to meet the costs which must be incurred by efficiently and economically operated

facilities in order to provide care and services in conformity with applicable State and Federal law." *Wilder v. Virginia Hosp. Ass'n*, 496 U.S. 498, 503 (1990). In repealing the Boren Amendment, legislative history evinces Congress' intent only to end provider suits. See H.R. Rep. No. 105-149, at 590 (1997) ("It is the Committee's intention that, following enactment of this Act, neither this nor any other provision of [42 U.S.C. § 1396a] will be interpreted as establishing a cause of action for hospitals and nursing facilities relative to the adequacy of the rates they receive."). Conversely, in passing an amendment to § 1396a(a)(30)(A) in 1981, Congress noted that "in instances where the States or the Secretary fail to observe these statutory requirements, the courts would be expected to take appropriate remedial action." H.R. Rep. No. 97-158, at 301 (1981). As several courts have noted, this implies that Congress intended some class of plaintiffs, most likely recipients, to be able to enforce the provisions of § 1396a(a)(30)(A) by private suit under § 1983. *E.g.*, *Pennsylvania Pharmacists*, 283 F.3d at 540-41; *Clayworth*, 295 F. Supp. 2d at 1123.

The court acknowledges that the language of § 1396a(a)(30)(A) is not similar to the typical rights creating language in, for example, Title VI. However, as one court has noted, it is "difficult, if not impossible, as a linguistic matter, to distinguish the import of the relevant Title XIX language — 'A State plan must provide' — from the 'No person shall' language of Titles VI and IX." *Sabree*, 367 F.3d at 190. Indeed, as another court has observed, since the structure of § 1396a(a) lists the general requirements that a state plan must meet, that structure "largely prevented Congress from using the sort of 'no person shall' language cited by the *Gonzaga* Court." *Clayworth*, 295 F. Supp. 2d at 1122. That would, perhaps, be why Congress enacted § 1320a-2, to ensure that

direction to include certain provisions in a state plan does not preclude a private action enforceable under § 1983. *14

Finally, the court finds further support for the conclusion that § 1396a(a)(30)(A) provides enforceable rights to plaintiffs in cases where the Supreme Court has already found such enforceable rights. In *Wilder*, the Court considered whether the now repealed Boren Amendment conferred enforceable rights on medical providers. The specific portion of the Boren Amendment provided that

a State plan for medical assistance must —

* * *

provide . . . for payment . . . of the hospital services, nursing facility services and services in an intermediate care facility for the mentally retarded provided under the plan through the use of rates . . . which the State finds, and makes assurances satisfactory to the Secretary, are reasonable and adequate to meet the costs which must be incurred by efficiently and economically operated facilities in order to provide care and services in conformity with applicable State and Federal law, regulations and quality and safety standards, and to assure that individuals eligible for medical assistance have reasonable access . . . to inpatient hospital services of adequate quality.

Wilder, 496 U.S. at 2514 (citing 42 U.S.C. § 1396a(a)(13)(A) (1982 ed. Supp. V)) (emphasis in original.)

The *Wilder* Court concluded that this statutory provision did confer enforceable rights on medical providers because (1) it was cast in mandatory rather than precatory terms and (2) the receipt of federal funds was expressly conditioned on compliance with the Amendment. *Id.* at 513. In *Gonzaga*, the Court made clear that it was not overruling *Wilder*; and explained that case by

stating that the Boren Amendment "explicitly conferred specific monetary entitlements upon the plaintiffs." 536 U.S. at 280 (discussing *Wilder* and noting that "Congress left no doubt of its intent for private enforcement, we said, because the provision required States to pay an 'objective' monetary entitlement to individual health care providers, with no sufficient administrative means of enforcing the requirements against States that failed to comply."). *15

In light of *Wilder*, which other courts have noted is still good law, *see Sabree*, 367 F.3d at 192, § 1396a(a)(30)(A) must provide a private right of action enforceable under § 1983. The structure and language of the two statutes are nearly identical, and each focuses on mandatory obligations a state plan must meet. *See Sabree*, 367 F.3d at 192 ("Our confidence in this conclusion rests securely on the fact that the Court has refrained from overruling *Wright* [v. *Roanoke Redevelopment Housing Auth.*, 479 U.S. 418 (1987)]⁸ and *Wilder*, which upheld the exercise of individual rights under statutes that contain similar (or, in the case of *Wilder*, identical) provisions to 42 U.S.C. § 1396."). If a private right of action was allowed in *Wilder*, there is no principled basis to say that a private right of action is unavailable in this case.⁹

⁸ *Wright* dealt with a rent ceiling provision imposed under the Brooke Amendment to the Housing Act of 1937. The Court concluded that a private right of action under § 1983 was available because the provision unambiguously conferred "a mandatory [benefit] focusing on the individual family and its income." 479 U.S. at 430. The statute at issue provided "[a] family shall pay as rent for a dwelling unit assisted under this chapter . . . the highest of the following amounts. . . ." 42 U.S.C. § 1437a.

⁹ In *Sanchez v. Johnson*, the court stated that under § 1396a(a)(30)(A) there is no "specific monetary entitlement conferred upon Medicaid recipients. . . ." 301 F.

Supp. 2d at 1064. Thus, the court concluded that "there is no rights-creating language in § 30(A) bestowing an enforceable right upon Plaintiffs." *Id.* There is no doubt that there is no objective "monetary entitlement" in § 1396a(a)(30) (A), but this court finds that distinction irrelevant. What § 1396a(a)(30)(A) does provide is an objective entitlement to access, that being equal access to quality medical care.

Thus, for all of the above reasons, the court concludes that § 1396a(a)(30)(A) does confer individual rights on plaintiffs which are enforceable pursuant to 42 U.S.C. § 1983.

B. EPSDT Provisions

As noted above, the EPSDT provisions are located in several different portions of the federal Medicaid Act. Under 42 U.S.C. § 1396a(a)(10), a state Medicaid plan "must" provide for "making *medical assistance* available, including at least the care and services listed in . . . section 1396(a) of this title." (Emphasis added.) Section 1396d(a) defines the term "medical assistance" ¹⁶ to include "early and periodic screening, diagnostic, and treatment services (as defined in subsection (r) of this section) for individuals who are eligible under the plan and are under the age of 21. . . ." 42 U.S.C. § 1396d(a)(xiii)(4)(B). The EPSDT services are defined in § 1396d(r)(1)-(4) and include, among other things, screening, vision, dental and hearing services. Moreover, under § 1396a(a)(43), a state Medicaid plan "must" also provide for

(A) informing all persons in the State who are under the age of 21 and who have been determined to be eligible for medical assistance . . . of the availability of early and periodic screening, diagnostic, and treatment services as described in section 1396d(r) of this title and the need for age-appropriate immunizations against vaccine-preventable diseases,

(B) providing or arranging for the provision of such screening services in all cases where they are requested,

(C) arranging for (directly or through referral to appropriate agencies, organizations, or individuals) corrective treatment the need for which is disclosed by such child health screening services, and

(D) reporting to the Secretary . . . the following information relating to early and periodic screening, diagnostic, and treatment services provided under the plan during each fiscal year:

(i) the number of children provided child health screening services,

(ii) the number of children referred for corrective treatment (the need for which is disclosed by such child screening services),

(iii) the number of children receiving dental services, and

(iv) the State's results in attaining the participation goals set for the State under section 1396d(r) of this title.

Prior to *Gonzaga*, the Seventh Circuit had allowed suit under § 1983 to enforce certain EPSDT provisions. See *Miller by Miller v. Whitburn*, 10 F.3d 1315, 1319-20 (7th Cir. 1993); *Bond v. Stanton*, 655 F.2d 766 (7th Cir. 1981); see also, *Pediatric Specialty Care, Inc. v. Arkansas Dep't of Human Servs.*, 293 F.3d 472, 479 (8th Cir. 2002); *Westside Mothers v. Haveman*, 289 F.3d 852, 862-63 (6th Cir. 2002). One other circuit court has disagreed at least in part. See *Frazar v. Gilbert*, 300 F.3d 530, 545 (5th Cir. 2002) *rev'd on other grounds sub nom Frew v. Hawkins*, ___ U.S. ___, 124 S.Ct. 899 (2004) (although noting that relief ¹⁷ under § 1983 for a ¹⁷ violation of EPSDT provisions "may be available," holding "that plaintiffs cannot sue under § 1983 to require a

plan to meet statewide or systemwide participation or performance measures, because, under *Blessing*, state compliance with such standards is not an individualized right actionable under § 1983." In the October 17, 2001 memorandum opinion and order, this court cited several other cases which had allowed suit under § 1983 to enforce the EPSDT provisions. See *Danjour B. v. New York*, No. 00 CIV 2044 (JGK), 2001 WL 830674, at *8 (S.D.N.Y. July 23, 2001); *Salazar v. District of Columbia*, 954 F. Supp. 278, 324 n. 92 (D.D.C. 1996); *Wellington v. District of Columbia*, 851 F. Supp. 1, 6 (D.D.C. 1994); *New York Coalition to End Lead Poisoning v. Giuliani*, 720 N.Y.S. 2d 298, 301 (N.Y.Sup.Ct. 2000).

After *Gonzaga*, the court has found only a few cases addressing this issue, and most have stated that the EPSDT provisions are enforceable by private right of action under § 1983. See *Kenny A. ex rel. Winn v. Perdue*, 218 F.R.D. 277, 293-94 (N.D. Ga. 2003); *Collins v. Hamilton*, 231 F. Supp. 2d 840, 846-47 (S.D. Ind. 2002);¹⁰ *S.D. v. Hood*, No. Civ. A 02-2164, 2002 WL 31741240, at *4-6 (E.D. La. Dec. 5, 2002).

¹⁰ The Seventh Circuit affirmed the *Collins* decision at 349 F.3d 371 (7th Cir. 2003). There is no discussion as to whether the EPSDT provisions afford enforceable rights under § 1983. This court is unable to conclude that the Seventh Circuit's silence on the subject can be construed as precedent.

Defendants argue that, after *Gonzaga*, these EPSDT provisions cannot afford rights enforceable under § 1983 for many of the same reasons they claimed above. First, defendants state that these provisions only concern the requirements of a state's Medicaid plan and, moreover, only describe the elements that must be included in a Title XIX state plan. This argument fails based on the court's discussion of § 1320a-2. That statutory section would apply with equal force to the EPSDT provisions and, accordingly,

¹⁸ that the EPSDT provisions speak ¹⁸ only in terms

of what a plan must include and do not focus on the person benefitted does not render these EPSDT provisions unenforceable by private action.

Defendants also argue that the EPSDT provisions do not confer any specific monetary or other entitlement on the plaintiffs. True, there is no monetary entitlement at issue in these provisions, but that is irrelevant. The court disagrees with defendants' characterization that no entitlements are otherwise presented in these provisions. First, the EPSDT provisions themselves defined in § 1396d(r) are considered "medical assistance" and, therefore, "must be provided" in a state's plan. Moreover, § 1396a(a)(43) provides several specific entitlements that plaintiffs "must" be provided, including (1) that they are informed of the availability of periodic screening, diagnostic, and treatment services and the need for age-appropriate immunizations against vaccine preventable diseases, (2) that they are provided arrangement of screening services in all cases where they have been requested, and (3) that they are provided arrangement for corrective treatment when disclosed by a child health screen. Notice once again the language in all of these EPSDT provisions is mandatory and not precatory. Moreover, similar to above, the court has not been presented with any administrative mechanisms to enforce these specific EPSDT entitlements afforded on plaintiffs. Rights are provided under these provisions, and no avenue is presented to vindicate these rights. Finally, similar to the argument above, the language contained in the EPSDT provisions is nearly identical to that of *Wilder* and no reason exists to distinguish this case so long as *Wilder* remains good law.

Defendants, in response, suggest that this court should rely on the Fifth Circuit's decision in *Frazar*. The court in *Frazar* interpreted the EPSDT provisions and, while seemingly acknowledging that individuals could in some circumstances vindicate rights provided under the

¹⁹ ¹⁹ EPSDT requirements, see 300 F.3d at 544,

noted that no actionable individual rights were afforded by a state's "failure to meet . . . a participation goal or other systemwide performance standard" under the EPSDT requirements. *Id.* at 545. The *Frazar* court noted that the district court lacked "the power to impose systemwide standards under § 1983, since such standards do not give rise to individual rights." This conclusion conflicts with the holdings of cases cited by this court in its October 17, 2001 memorandum opinion and order. *See, e.g., Dajour B.*, 2001 WL 830674, at *9-10; *see also, Pediatric Specialty Care, Inc.*, 293 F.3d at 479 (holding that EPSDT provisions imposed a binding obligation on states "to create a state plan that includes the provision of EPSDT services" and that this requirement was not "so ambiguous or amorphous that its enforcement strains judicial competence."). Insofar as *Frazar* was decided before *Gonzaga*, and as a result *Gonzaga* did not influence the *Frazar* decision, the court simply sees no reason to find *Frazar* more persuasive than the cases previously relied on. Furthermore, *Frazar* would also appear in conflict with precedent binding on this court which has allowed actions seeking modification of state Medicaid plans that do not sufficiently implement EPSDT provisions. *Bond*, 655 F.2d at 768-69. Defendants' argument on this ground, therefore, must be rejected.

Thus, for the reasons stated above, the court concludes that the EPSDT provisions also confer individual rights on plaintiffs which may be enforced pursuant to 42 U.S.C. § 1983.

III. Findings of Fact

A. Background

1. The plaintiff class consists of all children (persons under the age of 18) in Cook County, Illinois, who, on or after July 1, 1990, have been, are, or will be eligible for the Medical Assistance Program ("Medicaid") established under Title XIX of the Social Security Act.

2. A state participating in the Medicaid program is required to satisfy the Secretary of the United States Department of Health and Human Services that it complies with the requirements of federal law. The United States Department of Health and Human Services reimburses a participating state by matching the state's expenditures on the covered services provided through the program. The agreement between the United States Department of Health and Human Services and the participating state is evidenced in the State Plan for Title XIX. (Ellinger Trial Tr. at 776:11-777:17, 778:1-24.)

3. Illinois participates in the Medicaid program and has filed a Title XIX State Plan with the Secretary of the United States Department of Health and Human Services. (Def. Ex. 86.)

4. There are approximately 800,000 children on Medicaid in Illinois, and approximately 600,000 of those children are in Cook County. (Joint Ex. 1 at 280683.)

5. The Illinois Department of Public Aid ("IDPA") is the single state agency responsible for the administration of the Medicaid program in Illinois. (Admitted, Defendants' Response to Plaintiffs' Proposed Findings of Fact and Conclusions of Law ("DRFFCL"); Ellinger Trial Tr. at 804:11-805:6; Powers Dep. Tr. at 9:17-10:5.)

6. Defendant Barry S. Maram is sued in his official capacity as the Director of IDPA. (Admitted, DRFFCL.)

7. IDPA has delegated to the Illinois Department of Human Services ("IDHS") the responsibility for carrying out some personal interactions with children and their families under the Medicaid program. IDHS administers local offices throughout the state where applicants can apply for Medicaid, and IDHS local office staff are the primary personal contact with Medicaid applicants and recipients. IDHS local offices

determine whether applicants are eligible for the Medicaid program. (Lopez Dep. Tr. at 13:18-14:15; 15:13-21.)

7. Defendant Carol L. Adams is sued in her official capacity as the Secretary of IDHS. (Admitted, DRFFCL.)

B. Equal Access

8. IDPA sets the qualifications for medical providers to participate in the Medicaid program and sets reimbursement rates for providers of pediatric services. (Defendants' Response to Plaintiffs' Proposed Statement of Contested and Uncontested Facts ("DRPUF") ¶ 19; A. Kane 6/06/02 Dep. Tr. at 27:17-29:15.)

9. Medicaid reimbursement rates are determined primarily by the amount of funds allocated to IDPA by the Illinois Bureau of the Budget (the "available pie"). IDPA does not consider or study the effect of rate increases or decreases on provider participation nor does it compare Medicaid rates to Medicare or private insurance rates. (Powers Dep. Tr. at 69:21-78:13; Werner Dep. Tr. at 111:1-11, 133:21-142:21, 143:2-20, 144:10-146:20 161:20-162:20, 196:9-13; Luttrell Dep. Tr. at 50:2-9; Kane 6/06/02 Dep. Tr. at 69:1-19, 162:7-17, 162:23-163:2, 163:7-22, 164:4-7, 231:3-20, 232:6-11, 232:18-233:18, 244:3-9.)

10. IDPA decreased rates by 3% in 2002 solely because of a budget downturn. (Powers Dep. Tr. at 182:14-16, 182:18-185:5; Kane 6/06/02 Dep. Tr. at 225:4-13, 225:21-22.)

11. If IDPA were to be allocated more funds from the Bureau of the Budget, IDPA represents that it would increase provider reimbursement rates.
22 (Kane 6/06/02 Dep. Tr. at 69:1-19.) *22

12. The costs of medical practice are generally 20% more expensive in Cook County than in downstate Illinois, yet the Medicaid reimbursement rates in Cook County are the same as the rates elsewhere in the state. (Flint Trial Tr. at 699:1-25, 749:23-750:4.)

13. IDPA creates a schedule of reimbursement rates for each service that physicians regularly provide to plaintiffs. (Powers Dep. Tr. at 69:21-78:13; Def. Ex. 102.) IDPA creates that schedule without taking into account any of the factors that could result in a willingness by doctors to provide an appropriate level of care to the plaintiffs. (Werner Dep. Tr. at 111:1-11, 133:21-142:21, 144:10-146:20, 161:20-162:20, 196:9-13; Kane 6/06/02 Dep. Tr. at 125:2-5, 125:12-15, 125:17-126:21, 127:25-128:4, 128:8-10, 128:12-22, 173:13-174:6, 174:10-175:4, 175:14-176:9, 190:8-11, 191:2-3, 191:5-19, 200:3-7, 200:19-20, 204:19-205:4, 231:3-20, 232:6-11, 232:18-233:18, 244:3-9, 244:14-21; Powers Dep. Tr. at 69:21-78:19; Luttrell Dep. Tr. at 50:2-9.)

14. Dr. Samuel Flint ("Dr. Flint"), plaintiffs' expert, compared Illinois' Medicaid reimbursement rates for pediatric physician services in Cook County to (a) Medicare rates for the same region and (b) private insurance reimbursement rates for the same region. Dr. Flint concluded that Medicaid reimbursement rates are, on average, approximately half of the Medicare reimbursement rates for the same service, delivered in the same location, by the same provider. (Flint Trial Tr. at 707:3-25; Pl. Ex. 105 at Bates No. MO3 000739.)

15. Dr. Flint has been a consultant in the fields of health policy, health economics and child health care. He received his Ph.D. from the University of Chicago. (Admitted, DRFFCL, DRPUF ¶ 485;
23 Flint Trial Tr. at 676:20-682:11.) *23

16. Medicare rates for services, including services provided to children, are compiled by a federal agency, the Centers for Medicare and Medicaid Services ("CMS"), in collaboration with the American Medical Association, based on the cost of providing the service. These rates are then modified to take into account regional differences in costs. Medicare rates are set to allow a physician to recover overhead costs and a modest profit. (Flint Trial Tr. at 695:9-699:25; Krug Trial

Tr. at 299:18-305:23.) Health care economic analysts and other government agencies generally use Medicare reimbursement rates as a benchmark in considering the adequacy of Medicaid reimbursement rates. (*Id.*; Flint Trial Tr. at 713:17-25; Pl. Ex. 105 at Bates No. MO3 000735-MO3 000736.)

17. The most commonly billed service in the Illinois Medicaid program is the "Established Patient Office Visit; Moderate Complexity." The maximum Medicaid reimbursement rate received for this service in 2002 was \$29.85 (this includes an add-on rate which was paid to only 37% of the providers who billed for this service). The Medicare reimbursement rate for this same service was \$54.16. Thus, Medicaid paid, at most, only 55% of the rate that Medicare paid for the same service. The rate Illinois paid to 63% of billing physicians was even lower because those physicians did not receive the "add-on." (Pl. Ex. 105 at Bates No. MO3 000738-MO3 000739.)

18. Medicaid reimbursement rates are also, on average, significantly lower than private insurance reimbursement rates for the same pediatric service in Cook County.¹¹ (Flint Trial Tr. at *24 708:1-710:25; Pl. Ex. 105 at MO3 000739.)

¹¹ Defendants object to Dr. Flint's methodology in using only two Cook County pediatric populations with a combined caseload of 14,000 patients as representative of the prevailing Cook County private insurance market rates. Although Dr. Flint himself conceded that such an analysis was "unscientific by accepted rigorous research standards," he stated that it was the best available evidence under the circumstances, and his conclusion is supported by extensive evidence in the record. Several doctors testified that in their experience, Medicaid reimbursement rates are significantly lower than private reimbursement rates for the same pediatric services in Cook County. (Lelyveld Trial Tr. at 331:8-25; Green Trial Tr. at 530:4-11, 530:19-534:3; Krug Trial

Tr. at 302:10-18; Rosenberg Trial Tr. at 76:8-12; Jurado Trial Tr. at 426:14-20, 427:6-13; Newman Trial Tr. at 669:12-671:7; Abelson Trial Tr. at 636:1-19.) Moreover, an analysis the IDPA performed of private market rates in Springfield also supports the conclusion that Medicaid reimbursement rates are significantly lower than private insurance reimbursement rates. (Pl. Ex. 41 at 273321.)

19. Dr. Flint also analyzed a physician's cost to practice in Cook County and concluded that the Medicaid rates do not even cover a physician's cost of overhead, much less provide any remuneration to the physician. (Flint Trial Tr. at 714:1-716:9; Pl. Ex. 105 at Bates No. MO3 000740-MO3 000741.) Dr. Flint's opinion was confirmed by numerous physician witnesses at trial. (Abelson Trial Tr. at 636:1-19; Green Trial Tr. at 530:19-534:3; Krug Trial Tr. at 272:21-273:25, 274:23-276:10; Lelyveld Trial Tr. at 331:8-332:11, 333:9-334:3; Rosenberg Trial Tr. at 76:13-23; Jurado Trial Tr. at 428:13-429:5, 430:5-11.)

20. Dr. Flint concluded that, based on his analyses, insufficient access for Medicaid beneficiaries should be expected in Cook County. (Pl. Ex. 105 at MO3 00743.)

21. Medicaid also has a lengthy payment cycle. (Rosenberg Trial Tr. at 78:12-17; Krug Trial Tr. at 274:2-18 ("Medicaid is now not only our worst payer in terms of percent reimbursement, they are also the slowest to pay us."); Jurado Trial Tr. at 430:14-17 ("Well, usually for a private insurance, [the payment cycle is] about a few weeks to a month. For Medicaid cycle, it could be anywhere from two months to six months. It depends on the year."); Werner Dep. Tr. at 159:12-23; S. Saunders Dep. Tr. at 183:19-187:16.)

22. Physicians billing Medicaid must also deal with so-called "Medicaid hassles," which Dr. Flint described as annoyances serious enough to
 25 influence a physician's decision to *25 participate in Medicaid or limit participation in Medicaid.

(Flint Trial Tr. at 720:1-7.) Dr. Flint described these hassles as "claims processing, how quickly claims are paid, retroactive claim denials, how often claims are denied, Medicaid rule complexity, eligibility determination, all of the costs and the extent of the completion of the form, et cetera." (Flint Trial Tr. at 720:8-12.) Examples brought out by physicians testifying at trial included (1) Illinois Medicaid using a different form than other issuers which physicians had to submit in a specific format (Rosenberg Trial Tr. at 78:18-79:4); (2) a higher rate of rejection as compared to third-party payers (*id*); and (3) Medicaid only paying for one service per day, regardless of whether a Medicaid recipient receives and/or requires several different services at one time. (Krug. Trial Tr. at 276:11-278:20; Newman Trial Tr. at 666:13-669:10.)

23. A pediatrician practice relying solely on Medicaid beneficiaries maximum reimbursements could not survive since Medicaid pays nearly 10% less than the median practice costs. (Flint Trial Tr. at 714:1-716:9; Pl. Ex. 105, at Bates No. MO3 000740-MO3 000741; Pl. Ex. 56; Pl. Ex. 57; Pl. Ex. 59; Rosenberg Trial Trans. at 79:9-25; Green Trial Tr. at 539:5-14.)

24. Physician professional societies regularly complain to the IDPA regarding the low Medicaid reimbursement rates and physician participation. (D. Saunders 11/26/02 Dep. Tr. at 235:7-236:10, 241:6-15; Powers Dep. Tr. at 165:20-167:17; S. Saunders Dep. Tr. at 170:23-172:19, 173:9-174:7; Rosenberg Trial Tr. at 80:1-85:22, 93:5-94:20; Lelyveld Trial Tr. at 345:8-347:24; Krug Trial Tr. at 278:22-280:12; Pl. Ex. 46; Pl. Ex. 59; Pl. Ex. 94.)

25. The primary issue for the provider constituency of the Illinois Chapter of the American Academy of Pediatrics ("ICAAP") is increasing provider participation in the Medicaid program through increases in pediatric reimbursement rates. A coalition of pediatricians and ²⁶ child advocacy groups is advocating with

the State to increase reimbursement rates to pediatricians in order to increase the numbers of physicians participating in the Medicaid program. (Pl. Ex. 46; Rosenberg Trial Tr. at 95:21-96:4; Green Trial Tr. at 544:22-546:4; S. Saunders Dep. Tr. at 170:23-172:19, 173:9-174:7, 175:1-21, 179:14-180:12, 183:19-187:16; Lelyveld Trial Tr. at 345:8-347:24.)

26. ICAAP was unable to recruit its own membership to participate more fully in the Medicaid program during the contract period in which IDPA paid ICAAP to try and recruit more providers to participate in Medicaid. (Lelyveld Trial Tr. at 346:24-347:24.)

27. Pediatric departments that practice at major hospitals in Cook County have large Medicaid patient populations and are sustaining significant losses each year due to low Medicaid reimbursement rates. (Pl. Ex. 55; Pl. Ex. 56; Pl. Ex. 57, Pl. Ex. 59; Abelson Trial Tr. at 636:1-19, 637:1-9, 639:5-14; Green Trial Tr. at 538:13-539:14; Lelyveld Trial Tr. at 327:5-15, 330:10-331:4, 331:8-332:11, 33:9-334:3; Jurado Trial Tr. at 430:21-431:7; Krug Trial Tr. at 271:4-19, 271:20-272:5, 272:21-273:25, 295:15-20, 308:11-14.)

28. As part of his analysis, Dr. Flint also looked into the effect that low reimbursement rates have on a physician's willingness to provide care to Medicaid patients, including a comparison of the physician's willingness to provide care to privately insured children. (Flint Trial Tr. at 716:10-723:21.) Dr. Flint has been actively studying this issue for 25 years, and to prepare his report he canvassed a wealth of literature on this topic. (*Id.*; Pl. Ex. 105 at Bates No. MO3 000741-MO3 000743.)

29. The major studies on physician reimbursement rates have concluded that physician reimbursements are the predominant factor in the decision to participate in the Medicaid program ²⁷ at all, to participate in a limited fashion, or to participate fully. When Medicaid rates are too low,

physicians will opt to treat non-Medicaid children first or exclusively. Pediatricians also limit their Medicaid practices because of an unpredictable Medicaid payment system and Medicaid payment delays. (Flint Trial Tr. at 719:4-23, 721:15-722:1; Pl.Ex. 105 at Bates No. MO3 000741-MO3 000743.)

30. Pediatric practices throughout Cook County have closed to new Medicaid patients due to economic problems caused by a high Medicaid pediatric population and low Medicaid reimbursement rates and slow Medicaid payment systems. (Flint Trial Tr. at 721:15-723:5; Lelyveld Trial Tr. at 337:19-338:4, 342:14-344:22; Pl. Ex. 52; Abelson Trial Tr. at 639:19-642:1; 644:5-18; Jurado Trial Tr. at 432:17-434:23, 435:18-20, 436:19-22; Newman Trial Tr. at 660:16-662:13; S. Saunders Dep. Tr. at 183:19-187:16; Krug Trial Tr. at 291:12-295:9, 306:19-307:10.)

31. Pediatric patients throughout Cook County who are on Medicaid are more likely to be seen at a federally qualified health clinic ("FQHC") or a resident clinic rather than by a private pediatrician due to a limited number of private physicians who accept Medicaid. (Krug Trial Tr. at 293:12-295:9, 306:19-307:10; Lelyveld Trial Tr. at 337:19-338:4, 344:15-22; Jurado Trial Tr. at 438:8-439:2; D. Saunders 7/29/03 Dep. Tr. at 143:15-146:17.)

32. Medical care provided by a private pediatrician is superior to the care provided by a clinic or emergency room because a private physician can provide consistency and a medical home for a child. (Rosenberg Trial Tr. at 98:15-100:5.)

33. FQHC's are created and located to serve a neighborhood or population that the federal government has determined is medically underserved. (Ellinger Trial Tr. at 844:12-845:25.) In such cases, FQHCs are located to serve areas in which there are an insufficient *28 number of other doctors to provide care to Medicaid-enrolled children in that area. (*Id.*; Ellinger Dep. Tr. at 54:9-55:23.)

34. FQHCs are reimbursed based on a flat encounter rate, meaning that they receive reimbursement for every visit on a given day by an eligible and enrolled individual, whether the individual simply sees a doctor or receives more care. (Werner Trial Tr. at 1059:6-13.) The encounter rates are set by federal statute based on reasonable costs. (Werner Trial Tr. at 1059:6-1060:6.)

35. The University of Chicago hospitals' pediatric department had a clinic on the south side of Chicago. The clinic's mission was, in part, to provide care to the poor. Previously, the clinic made an economic decision to close its practice to Medicaid patients and to open new practices in areas that do not have large Medicaid patient populations due to the low reimbursement rates for Medicaid. Only recently has the clinic begun seeing Medicaid patients again. (Abelson Trial Tr. at 640:21-641:12, 642:15-643:8; Lelyveld Trial Tr. at 342:14-344:4; Pl. Ex. 52.) The clinic was reopened because University of Chicago hospitals agreed to absorb the losses incurred in operating the clinic since it serves as a training site for residency programs. (Abelson Trial Tr. at 640:21-641:12.)

36. Children's Memorial Hospital has plans to expand its pediatric specialty care clinics in suburban areas that have a low percentage of Medicaid recipients. It cannot afford to expand care in areas with a high population of Medicaid patients due to the low reimbursement rates for Medicaid. (Green Trial Tr. at 539:21-541:18.)

37. Dentists limit the number of Medicaid patients they will see because their practices would fail financially if they accepted all Medicaid patients who presented themselves for *29 treatment due to the Medicaid reimbursement rates. (Jurado Trial Tr. at 426:14-427:18, 428:17-429:5, 430:5-17, 430:21-431:7, 431:17-21, 432:17-434:23, 435:2-20; Pl. Ex. 59; Pl. Ex. 89; Pl. Ex. 91; Pl. Ex. 94.)

38. A pediatric dentist is a dentist that has spent two or three years in a residency program treating children only. Pediatric dentists treat children using behavior management techniques through non-pharmacologic and pharmacologic methods. (Jurado Trial Tr. at 416:3-418:25.)

39. There are virtually no pediatric dentists in Cook County who accept Medicaid reimbursement. Dentists have difficulty referring children with Medicaid to a pediatric dentist in Chicago because virtually all of the pediatric dentists in Cook County do not accept Medicaid patients. (Jurado Trial Tr. at 436:8-18, 437:5-439:2, 451:22-452:11.)

40. Children on Medicaid are less likely to see a pediatric dentist than children with private insurance due to the limited number of pediatric dentists who accept Medicaid reimbursement. (Jurado Trial Tr. at 436:19-22, 440:8-14, 452:9-453:14.)

41. Children who receive primary care in clinic settings ordinarily must wait long periods of time for an appointment and, for a walk-in emergency, must wait in line often for hours or return on a different day. The crowded nature of clinics operates as a disincentive to seeking routine and timely well-child care. Children served by private-pay pediatric practices ordinarily receive much prompter appointments and access to care for emergencies without undue waiting. (Krug Trial Tr. at 292:6-293:11; Abelson Trial Tr. at 641:13-642:1; Lelyveld Trial Tr. at 337:19-338:4, 341:24-342:10, 344:15-345:7; Jurado Trial Tr. at 435:2-20, 436:10-22.) *30

42. Parents of young children from time to time need to speak with their pediatrician at night and on weekends. Twenty-four hour emergency call capabilities are an important component of a pediatrician's service, and it can frequently provide needed information and avoid unnecessary trips to the emergency room. (Rosenberg Trial Tr. at 53:19-54:1, 96:10-97:9,

99:14-100:5; D. Saunders 7/29/03 Dep. Tr. at 27:24-29:2; Lelyveld Trial Tr. at 338:5-19, 338:25-339:23.)

43. Children on Medicaid rarely get vision and hearing screens from physicians who provide EPSDT services. (Pl. Ex. 119 at M03 000217-M03 000220; Pl. Ex. 18-20; Pl. Ex. 73-88; Branch Trial Tr. at 493:13-18; Hannum Trial Tr. at 373:13-19.)

44. Board certification of a physician is considered a marker of quality, training and level of competence. (Rosenberg Trial Tr. at 41:21-42:16.) Plaintiffs are more likely to be treated by a doctor who is not a board certified pediatrician due to the limited number of private board certified pediatricians who accept Medicaid. (*Id.* at 101:17-102:18.)

45. A physician must "enroll" in the Medicaid program to receive reimbursement from IDPA. (Luttrell Dep. Trans at 32-7-33:12.) In order to enroll, a provider need not make any commitment to see a certain number of children. (Werner Dep. Tr. at 58:14-59:11; Luttrell Dep. Tr. at 31:14-20, 32:7-33:12.)

46. Of enrolled doctors in Cook County who billed for treating children between July 1, 1998 and December 31, 2001, 63% did not provide a single EPSDT screening examination to any recipient during that same period and approximately 6% of enrolled doctors provided only one well-child examination during that same period of time. (Pl. Ex. 118 at Bates No. MO3 000728-30; Darling Trial Tr. at 165:24-168:21.)

31 *31

47. Most doctors in Cook County will either not see children on Medicaid or significantly limit the number of children on Medicaid that they will accept as patients. (Krug Trial Tr. at 289:24-291:11, 293:12-295:9, 306:19-307:10, 313:24-314:15; Lelyveld Trial Tr. at 337:12-338:4, 342:14-344:14; Pl. Ex. 52; Rosenberg Trial Tr. at

67:15-68:18; Green Trial Tr. at 539:15-540:21; Jurado Trial Tr. at 438:8-439:2; Newman Trial Tr. at 660:16-662:13.)

48. Many providers will refer or "dump" Medicaid patients on the few hospitals and physicians who will accept Medicaid patients. (Abelson Trial Tr. at 634:24-635:24; Newman Trial Tr. at 664:24-665:25; Krug Trial Tr. 289:24-291:11.)

49. Doctors who practice in Cook County have difficulty finding a pediatrician or specialist who will accept referrals of Medicaid patients. Many pediatricians and specialists in Cook County limit their practice by not accepting Medicaid patients or accepting only a limited number of Medicaid patients. By contrast, it is much easier to refer patients with other forms of health insurance. (Krug Trial Tr. at 291:12-293:11, 293:12-295:9, 306:19-307:10; Lelyveld Trial Tr. at 341:24-345:7, Pl. Ex. 52; Rosenberg Trial Tr. at 70:12-20, 71:24-73:7; Jurado Trial Tr. at 438:8-439:2; Newman Trial Tr. at 663:8-665:25.)

50. A substantial number of children on Medicaid have had adverse health outcomes because they have not been able to see a pediatrician regularly due to their difficulty in finding a pediatrician. In addition, waiting times in specialty treatment clinics for the plaintiffs are long and oftentimes put patients in danger. (Krug Trial Tr. at 284:23-287:9, 288:3-25; Lelyveld Trial Tr. at 338:25-341:7, 344:15-345:7; Rosenberg Trial Tr. at 71:24-72:20; Jurado Trial Tr. at 435:2-436:7.) *32

51. A higher percentage of patients who are on Medicaid do not have a regular pediatrician. A much lower percentage of patients with other forms of insurance do not have a regular pediatrician. (Krug Trial Tr. at 284:23-285:17, 287:16-288:2, 289:1-23, 306:2-307:10; Lelyveld Trial Tr. at 338:20-24, 341:16-23, 347:25-348:12; Rosenberg Trial Tr. at 73:3-7.)

52. The numbers of pediatric patients on Medicaid coming to emergency rooms to receive treatment for primary care issues because they cannot find a

primary care physician to treat them has been increasing significantly due to a lack of pediatricians who accept Medicaid. (Krug Trial Tr. at 284:23-287:9; Lelyveld Trial Tr. at 327:5-15.)

53. Medicaid recipients have difficulty locating quality pediatric primary and specialty care providers and pediatric dentists for their children. IDPA and IDHS do not provide assistance to Medicaid recipients in locating quality pediatric primary and specialty care providers and pediatric dentists, scheduling medical appointments, or in arranging for transportation to health care providers. Medicaid recipients may have to travel great distances to find a dentist or pediatric provider willing to accept Medicaid, if they can find one at all. Children on Medicaid frequently seek care at emergency rooms because they cannot find a pediatrician willing to accept Medicaid. Medicaid recipients often must wait several hours to see a provider at a clinic willing to accept Medicaid. (Branch Trial Tr. at 491:9-495:20; Hannum Trial Tr. at 371:4-374:9, 377:8-380:8, 380:20-381:14, 383:2-14; Craft Trial Tr. at 484:12-488:8; Mauk Trial Tr. at 225:2-243:8, 244:8-24; Rosenberg Trial Tr. at 69:22-70:22, 102:12-18; Rodriguez Trial Tr. at 397:22-398:22; Lopez Dep. Tr. at 18:22-26:18, 34:1-35:19, 75:19-79:12, 79:18-86:5.) *33

54. Medicaid recipients must often engage in extensive efforts to locate dentists and pediatric primary and specialty care providers willing to accept Medicaid, including seeking referrals from state agencies or local charities, calling physicians listed in the phone book, and paying for care out of their own pockets. Medicaid recipients are often referred by the IDPA's hotline to doctors who are unwilling to accept new Medicaid patients. (Branch Trial Tr. at 495:9-20; Craft Trial Tr. at 484:12-488:8; Mauk Trial Tr. at 242:20-243:8; Bassler Trial Tr. at 355:22-360:1; Rodriguez Trial Tr. at 394:1-397:21; Hannum Trial Tr. at 366:23-371:3; Ellinger Dep. Tr. at 118:18-22, 119:6-120:10.)

55. Several Medicaid recipients testified at trial about problems they have had with Medicaid, including:

a. Yesinia Rodriguez testified that upon enrollment in the Medicaid program, she was not given any information about locating a doctor, was never given a provider directory, and when she asked her own IDHS caseworker for assistance in locating a doctor, her caseworker said that she does not give referrals. (Rodriguez Trial Tr. at 393:21-394:15.) Rodriguez also called the IDPA-administered hotline for a physician referral. She was given the names of approximately ten different doctors who all practiced more than 30 miles away. Not one accepted Medicaid. (Rodriguez Trial Tr. at 394:16-395:15.) Rodriguez called the hotline back, and was given an additional 20 referrals. Once again, not one of the doctors accepted Medicaid. (Rodriguez Trial Tr. at 395:16-396:11.)

b. Elissa Bassler called the IDPA-administered hotline for a physician referral. She was given the names of eight doctors, none of whom would accept Medicaid. (Bassler Trial Tr. at 356:5-357:6.) *34

c. Benita Branch testified that the one doctor she could find to treat her children on Medicaid would not take appointments. If her children needed medical care, she would have to go in, take a number and wait to be seen—often one to two hours. (Branch Trial Tr. at 493:19-494:19.)

d. Sara Mauk testified that one of the doctors her daughter saw made Medicaid patients wait for an examination until the doctor had finished examining patients with private insurance. (Mauk Trial Tr. at 226:11-227:2.) Mauk also testified that her children could only be seen on certain days of the week because those were designated as "Medicaid days" at the doctors' offices. (*Id.* at 227:11-24.)

e. Bassler testified that she has a son, who is covered under private insurance, and she also serves as guardian for an 11-year-old-girl who is

covered under Medicaid. When attempting to take the 11-year-old to the doctor for a throat culture, Bassler called the IDPA's KidCare hotline and was given the names of eight doctors in her area who took Medicaid. When Bassler called these doctors, all of them said that they did not take Medicaid. Bassler also testified that for the 11-year-old's counseling, none of the counseling agencies would take Medicaid and she pays the sliding fee scale out of pocket. By contrast, she has had no problems arranging care for her son. She even recently switched to a new doctor which was one of the doctors that was on the list given to her by the IDPA hotline that would not take Medicaid. (Bassler Trial Tr. at 356:18-360:2.)

f. Mauk testified that she has two adopted children, who are covered under Medicaid, and one biological son who is covered under private insurance. When asked to compare her obtaining medical care for her adopted children as opposed to her biological child, Mauk noted *35 that for her adopted children there "was a lot of delays and I had to be extremely persistent on even getting a timely visit with a doctor and getting an appropriate doctor. And it was always a three-to-six month wait before getting any type of service or evaluation." (Mauk Trial Tr. at 242:25-243:1-5.) For her biological son, Mauk stated that "it was just, you know, a week or ten days and I had the referral or the evaluation or the service." (*Id.* at 243:6-8.)

g. Hannum has one biological daughter who is covered under private insurance and three adopted children covered through Medicaid. For her biological daughter, Hannum stated that she never had any problem finding health care because "[w]hatever doctor I took her to, they took the insurance she had." (Hannum Trial Tr. at 366:21-22.) By contrast, for her adopted children, the same doctor who she took her biological daughter to would not see her adopted children on Medicaid. (*Id.* at 366:23-367:14.)

h. Parents of Medicaid recipients have in some instances had to resort to paying for medical care out of pocket in order to get specialty care for their children. (Mauk Trial Tr. at 229:17-236:9, 239:25-241:6; Bassler Trial Tr. at 358:21-359:15; Hannum Trial Tr. at 378:2-10, 379:18-380:8, 380:20-382:9, 383:2-14.)

56. IDPA staff admit that if reimbursement rates were increased, more providers would participate in the Medicaid program. (Powers Dep. Tr. at 69:21-78:13; D. Saunders 11/26/02 Dep. Tr. at 235:7-236:10; Kane 6/06/02 Dep. Tr. at 69:19, 125:17-126:21, 149:22-150:20, 217:5-218:8; Parker Dep. Tr. at 201:5-202:4, 204:7-12; Werner Dep. Tr. at 133:21-142:21, 153:15-154:14, 155:14-156:14.)

57. IDPA staff have also admitted that IDPA reimbursement rates are low and not very attractive and that they are lower than the usual and customary charges of physicians. (Ellinger ³⁶ Trial Tr. at 835:23-836:3.)

58. IDPA staff further admit that the length of the IDPA payment cycle affects physicians' willingness to participate in the Medicaid program. (D. Saunders 11/26/02 Dep. Tr. at 235:7-236:10; Werner Dep. Tr. at 159:12-23, 160:18-24; Kane 6/06/02 Dep. Tr. at 206:16-207:3; Parker Dep. Tr. at 204:7-12.)

59. When IDPA has increased rates for office-based medical services, there has been a corresponding increase in the number of office-based services billed by providers. (Kane 6/06/02 Dep. Tr. at 125:17-126:21, 139:14-140:16, 149:22-150:20.)

60. Both Dr. Steven Krug, head of the emergency room at Children's Memorial Hospital, and Dr. Steven Lelyveld, from the University of Chicago hospitals' pediatric emergency room, testified that Medicaid-insured children do not have access to primary care equal to that of privately-insured patients. (Krug Trial Tr. at 306:19-307:10; Lelyveld Trial Tr. at 347:25-348:12.) Dr. Krug

testified that the access of Medicaid-enrolled children is "vastly diminished" and "not remotely close" compared with that of privately-insured children. (Krug Trial Tr. at 307:1-2.)

C. EPSDT Provisions

61. EPSDT is an acronym that means early and periodic screening, diagnostic and treatment program. (D. Saunders Trial Tr. at 866:23-867:1.)

62. EPSDT screenings, which are commonly referred to as "well-child" checkups, include the following components, as listed in [42 U.S.C. § 1396d\(r\)\(1\)\(B\)](#): comprehensive health and developmental history, including assessment of both physical and mental development; comprehensive unclothed physical exams; appropriate immunizations according to age and ³⁷ health history; laboratory tests, including lead toxicity screenings; health education, including anticipatory guidance, vision and hearing screenings; and dental screenings. (D. Saunders Trial Tr. at 867:21-868:2.)

63. Under the EPSDT program, Illinois has adopted a periodicity schedule (or a schedule of periodic examinations, tests and services) that calls for seven appointments for health screening services in the first year of life, four appointments in the second year of life, and a decreasing number of annual appointments as a child becomes older. The periodicity schedule also calls for annual vision, hearing and dental screens, and two blood lead screens (at 12 and 24 months of age).

64. Appendix 9 to the IDPA's Handbook for Providers of Healthy Kids Services sets forth the periodicity schedule. It is largely based on the American Academy of Pediatrics' guidelines, but also allows for the recommendations or guidelines of other professional organizations which may vary slightly from the American Academy of Pediatrics' recommendations. (D. Saunders Trial Tr. at 872:13-16; Def. Ex. 4 at App. 9.)

65. The panoply of EPSDT services for children on Medicaid in Illinois and the system used to inform them of those services is generally called the "Healthy Kids Program." (Ellinger Trial Tr. at 801:18-803:3, D. Saunders 5/02/02 Dep. Tr. at 15:20-21, 23:4-15, 27:2-22; Pl. Ex. 127.)

66. IDPA has developed the policies for the Healthy Kids Program. The program is supposed to deliver scheduled preventive health care and early diagnosis and treatment for the plaintiffs. (Ellinger Trial Tr. at 797:6-10, 799:22-25; Pl. Ex. 127; Pl. Ex. 140; D. Saunders 5/02/02 Dep. Tr. at 31:8-33:15.) *38

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67. Timely screening for general medical, vision, hearing and dental conditions and providing immunizations are critical parts of a child's health care plan. The importance and cost-effectiveness of primary and preventive health care are well-documented by the medical community. Preventive health care, early treatment of acute illnesses, and amelioration of chronic illnesses early in life may prevent more costly and personally challenging health problems later. For example, a child who is not screened for hearing loss at an early opportunity is at significant risk for speech and language deficiencies. Similarly, a child who does not receive early blood tests to detect lead poisoning is at risk for inpatient hospitalization, invasive chelation treatment, and subsequent developmental delays or permanent harm. (Rosenberg Trial Tr. at 49:12-53:6; Green Trial Tr. at 543:5-24; Krug Trial Tr. at 283:9-287:9; 305:24-306:9; Jurado Trial Tr. 408:1-415:22.)

68. Children on Medicaid should have a regular source of care, a "medical home" which is accessible and where they will receive additional well-child visits on a timely basis because the pediatrician will encourage them to receive well-child care and instruct them to do so. (Green Trial Tr. at 542:25-543:17, 543:21-24.)

69. If children receive one well-child visit at a medical home, it is more likely that they will receive additional well-child visits on a timely basis because the pediatrician will encourage them to receive well-child care and instruct them to do so. (Green Trial Tr. at 542:25-543:17, 543:21-24.)

70. It is a pediatrician's responsibility to guide parents as to when they should bring their children to the doctor for well-child visits and pediatricians are the experts in providing this guidance to parents. (Green Trial Tr. 557:11-21.) *39

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71. The only records IDPA maintains on the level of care provided to the individual plaintiffs is claims data from providers. In other words, IDPA keeps a child's health history by recording those medical services for which a provider has billed IDPA and IDPA has reimbursed the billing provider. (Rosenberg Trial Tr. at 62:5-63:13; Ryan 7/11/02 Dep. Tr. at 223:24-224:14, 226:4-228:3, 228:17-229:9.) Each reimbursed physician service is called an "encounter." This data is maintained in the IDPA's Medicaid Management Information System ("MMIS"), which contains information on all services and associated payments, as well as information pertaining to the providers and recipients of each service. (Powers Dep. Tr. at 97:12-98:15.)

72. Another computer system, called Cornerstone, collates information about certain tests and immunizations provided to the plaintiffs. The Cornerstone system purports to compile data from IDPA's MMIS as well as the Cook County Department of Health, the City of Chicago Department of Health, and not-for-profit community health agencies. (D. Saunders 7/29/03 Dep. Tr. at 108:10-24; Wrincik Dep. Tr. at 24:6-25:7, 42:6-43:11, 45:14-18, 64:8-17.) Because the Cornerstone system compiles disparate information from so many different organizations, and performs little quality assurance of that data, the information in Cornerstone is not considered reliable. (Darling Trial Tr. at 185:18-188:15; Wrincik Dep. Tr. 26:16-22, 89:3-21.)

73. MMIS and Cornerstone include data from WIC (Women, Infant and Children) clinics (D. Saunders Trial Tr. at 966:14-967:5); Family Case Management (*Id.* at 968:15-969:9); FQHCs (*Id.* at 1125:5-16); Managed Care Organizations ("MCOs") (*Id.* at 1124:13-1125:4); and school-based clinics. (*Id.* at 1226:9-19.) *40

74. The plaintiffs retained Dr. Thomas Darling ("Dr. Darling") to analyze the MMIS encounter data to determine the level of well-child services, blood lead screens, vision screens and hearing screens that have been provided to the plaintiffs for the period of July 1, 1998 through December 31, 2001 (the "Data Period"). Dr. Darling also analyzed the Cornerstone data as well as the MMIS data for this same period to determine the level of immunizations provided to the plaintiffs. In performing his analyses, Dr. Darling looked at children in Cook County who were both continuously eligible and non-continuously eligible for Medicaid so long as those children were eligible within the age ranges specified in each analysis even if they had a break in eligibility. (Darling Trial Tr. at 129:11-130:12, 131:24-135:18, 171:4-172:14, 169:12-171:3, Pl. Ex. 118, Pl. Ex. 119.)

75. Dr. Darling received his Ph.D. in 1994 from the Rockefeller College of Public Affairs and Policy, State University of New York at Albany. He is on the faculty of The School of Public Affairs at the University of Baltimore in Baltimore, Maryland. Dr. Darling has extensive professional and academic experience in conducting sophisticated analyses of large amounts of data, including working with a variety of state agencies on developing outcome-based performance measures regarding the provision of social services to children. (Darling Trial Tr. at 123:4-129:8, 130:21-131:23, Pl. Ex. 117.)

76. Dr. Darling put all of the MMIS and Cornerstone encounter data into a computerized database using the Microsoft Access computer program. In creating the computerized database,

Dr. Darling made adjustments to the database to eliminate data concerning services provided on or after January 1, 2002. In completing both his Expert Report and his Supplemental Report, Dr. Darling did not look at encounter data for the period of January 1, 2002 through August 2002

41 *41 because it was incomplete and, therefore, the results would have been unfairly skewed against the defendants. In his Expert Report, Dr. Darling also adjusted the database to eliminate data for children who were not continuously eligible for Medicaid from July 1, 1998 through December 31, 2001. In so doing, Dr. Darling retained data from 89.7% of the children who were eligible for Medicaid at some point during the data period of July 1, 1998 through December 31, 2001. (Pl. Ex. 119 at Bates No. MO3 000715.) In his Supplemental Report, Dr. Darling reran the analyses of this Expert Report and included the children who were not continuously eligible for Medicaid during the data period of July 1, 1998 through December 31, 2001. Adding in the non-continuously Medicaid-eligible children with continuously Medicaid-eligible children changed the results less than two percentage points. (Darling Trial Tr. at 135:20-142:15, 142:16-155:20, 171:4-180:6, Pl. Ex. 118 at Bates No. MO3 000710-MO3 000716, Pl. Ex. 119 at Bates No. MO3 000205-MO3 000206.)

77. Dr. Darling then analyzed the services provided to the plaintiffs during the Data Period across a broad set of defined age ranges corresponding to the age categories in the EPSDT periodicity schedule to determine the level of service the plaintiffs should have received. For example, the Illinois periodicity schedule states that an infant after leaving the hospital at birth should receive well-child exams at two weeks, one month, two months, four months, six months and nine months. (Pl. Ex. 127, App. 10, at Bates No. 269295.) Dr. Darling analyzed the number of well-child examinations that were received by each child who was between the ages of ten days and eleven months of age during the Data Period to

capture these exams. The plaintiffs assumed that all Medicaid-eligible children born in a hospital in Cook County received one EPSDT well-child service before leaving the hospital after birth.

42 Thus, Dr. Darling began this *42 age category at ten days of age in order to factor out any services received in the hospital as part of the birth and postpartum services and he ended at eleven months of age to allow a window of two months to catch the sixth and last scheduled well-child examination (i.e., the exam that should be done at nine months). (Darling Trial Tr. at 142:16-149:4, 171:25-174:6; Pl. Ex. 118, at Bates No. MO3 000716-MO3 000717; Pl. Ex. 119 at Bates No. MO3 000206-MO3 000208.)

78. Dr. Darling performed similar analyses of children in the following age groups: children who were 11 to 23 months of age (to capture the exams that should be given at 12 months, 15 months and 18 months); children who were 23 to 35 months of age (to capture exams that should be given at age two); children who were 35 to 47 months of age (to capture the exams that should be given at age three); children who were 47 to 59 months of age (to capture the exams that should be given at age four); and children who were 59 to 71 months of age (to capture the exams that should be given at age five) during the Data Period. (Darling Trial Tr. at 149:13-155:20, 171:4-14, 174:19-175:20; Pl. Ex. 118 at Bates No. MO3 000718-MO3 000722; Pl. Ex. 119 at Bates No. MO3 000208-MO3 000215.)

79. Dr. Darling also analyzed the number of children who received blood lead screenings, vision screenings, hearing screenings, Haemophilus B (HIB) immunizations, Polio (1PV) immunizations, Diphtheria and Tetanus (DtaP) immunizations, and Measles, Mumps and Rubella (MMR) immunizations. Dr. Darling further analyzed some key age specific services among the full set of required EPSDT services. For example, Dr. Darling analyzed the number of children who received the appropriate number of blood-lead level screens between the ages of 11

and 37 months, and also the number of children who received HIB immunizations between 10 days and 11 months of age. (Darling Trial Tr. at 155:21-165:23, 176:17-190:2; Pl. Ex. 118, at *43
43 M03 000723-M03 000728; Pl. Ex. 119, at M03 000216-M03 000230.)

80. Dr. Darling's analyses show that a majority of Medicaid-enrolled children in Cook County did not receive sufficient medically necessary preventive health care as specified under the Illinois periodicity schedule, and a significant number — one-third or higher — did not receive any preventive health care at all. (Pl. Ex. 118, Pl. Ex. 119.)

81. In performing his analysis of the number of children that received appropriate well-child examinations, Dr. Darling looked at two categories of examinations. The first category consists of examinations in which doctors are required to provide all components of an EPSDT screening (Dr. Darling described these services as "Health Moms Healthy Kids" examinations or "HMHK examinations" because these services satisfy the requirements of the EPSDT program, which is sometimes referred to as "Healthy Moms Healthy Kids" program). The second category includes those services that IDPA counts as "well-child" examinations when responding to CMS-Form 416,¹² which includes HMHK examinations as well as other services such as prenatal examinations for pregnant teenagers and exams that last five minutes. (Darling Tr. Transp. at 142:18-144:16; Pl. Ex. 118; Pl. Ex. 119.) This category includes examinations that do not satisfy the requirements of an EPSDT screen, although IDPA has characterized them as meeting the EPSDT screen requirements. (Rosenberg Trial Tr. at 63:5-64:19; Pl. Ex. 72 at Bates No. 278369-278370, Line 6.) Dr. Darling referred to these as "IDPA well-child examinations." Dr. Darling also examined a set of examinations broader than well-child examinations. This third category includes "sick kid" visits. Dr. Darling referred to this category of visits as "any child exams." Thus,

44 "HMHK examinations" are a subset of "IDPA well-child examinations" which in *44 turn are a subset of "any child examinations." (Darling Trial Tr. at 143:20-22, 144:2-4; Pl. Ex. 118; Pl. Ex. 119.)

¹² This form will be described *infra*.

82. Dr. Darling omitted from his analysis services provided in the first ten days of life. His analysis assumed that virtually every baby born in Illinois receives a well-child checkup before being discharged from the hospital. Including those visits in the analysis would not provide an accurate picture of the number of children who receive preventive health care after they leave the hospital postpartum. (Darling Trial Tr. at 144:20-145:15; Pl. Ex. 118; Pl. Ex. 119.)

83. Based on Dr. Darling's analysis, looking at both continuously Medicaid-eligible and non-continuously Medicaid-eligible children, of the Medicaid-eligible children who should have received six screening examinations during this time period, 60.6% received two screening examinations or less, with 43% not receiving a single screening examination. Only 8.25% received the proper level of services. (Darling Trial Tr. at 146:8-149:4, 172:15-174:18; Pl. Ex. 118; Pl. Ex. 119, at Bates No. MO3 000207.)

84. Cornerstone data measures the number of well-child exams received by children enrolled in the IDHS Family Case Management Program. The Cornerstone report shows that 45.3% of children in Cook County had no well-child visits in the first year of life, 16.4% had only one well-child visit, 10.9% had two well-child visits, and only 27.3% had three or more well-child visits. (S. Saunders Trial Tr. at 1219:16-1221:16; Def. Ex. 70 at Bates No. 283340.)

85. According to the Illinois periodicity schedule, children between the ages of 11 months and 23 months should receive three screening examinations: at 12 months, 15 months and 18 months. (Rosenberg Trial Tr. at 60:16-21; Pl. Ex.

45 127, § HK-203.11 at Bates *45 No. 269187.) Based on Dr. Darling's analysis, of the Medicaid-eligible children who should have received three screening examinations during this time period, 65.3% received one screening examination or less, with 49.7% not receiving a single screening examination. (Darling Trial Tr. at 149:11-152:10, 174:19-175:20; Pl. Ex. 118, Table 2 at Bates No. MO3 000718; Pl. Ex. 119, Table S2b at Bates no. MO3 000209.)

86. According to the Illinois periodicity schedule, children between the ages of 23 months and 35 months should receive one screening examination at 24 months. (Pl. Ex. 127, § HK-203.11 at Bates No. 269187.) Based on Dr. Darling's analysis, of the Medicaid-eligible children who should have received one screening examination during this time period, 64.0% received none. (Darling Trial Tr. at 152:11-153:10, 174:19-175:20; Pl. Ex. 118 Table 3 at Bates No. MO3 000719; Pl. Ex. 119 Table S3b at Bates No. MO3 000210.)

87. According to the Illinois periodicity schedule, children between the ages of 35 months and 47 months should receive one screening examination at 36 months. (Pl. Ex. 127, § HK-203.11 at Bates No. 269187.) Based on Dr. Darling's analysis, of the Medicaid-eligible children who should have received one screening examination during this time period, 64.2% received none. (Darling Trial Tr. at 153:11-154:7, 174:19-175:20; Pl. Ex. 119 Table 4 at Bates No. MO3 000720; Pl. Ex. 119 Table S4b at Bates No. MO3 000212.)

88. According to the Illinois periodicity schedule, children between the ages of 47 months and 59 months should receive one screening examination at 48 months. (Pl. Ex. 127, § HK-203.11 at 269187.) Based on Dr. Darling's analysis, of the Medicaid-eligible children who should have received one screening examination during this time period, 59.8% received none. (Darling Trial Tr. at 154:8-25, 174:19-175:20; Pl. Ex. 118 Table 46 5 at Bates No. MO3 000721; Pl. *46 Ex. 119 Table S5b at Bates No. MO3 00213.)

89. According to the Illinois periodicity schedule, children between the ages of 59 months and 71 months should receive one screening examination at 60 months. (Pl. Ex. 127, § HK-203.11 at Bates No. 269187.) Based on Dr. Darling's analysis, of the Medicaid-eligible children who should have received one screening examination during this time period, 54.9% received none. (Darling Trial Tr. at 155:1-20, 174:19-175:20; Pl. Ex. 119 Table 6 at Bates No. MO3 000722; Pl. Ex. 119 Table S6b at Bates No. MO3 000215.)

90. In assessing immunization rates, Dr. Darling utilized all data made available — MMIS data and Cornerstone data. (Darling Trial Tr. at 180:7-183:25; Pl. Ex. 119 at Bates No. MO3 000225-MO3 000227.) Dr. Darling analyzed the Cornerstone data even though he had concerns about its reliability. (Darling Trial Tr. at 185:18-188:15.)

91. According to the Illinois periodicity schedule, children between the ages of 10 days and 11 months should receive three Haemophilus B (HIB) immunizations: at 2 months, 4 months and at 6 months. (Rosenberg Trial Tr. at 61:22-24; Pl. Ex. 27, App. 10 at Bates No. 269295.) Based on Dr. Darling's analysis, 48% of Medicaid-eligible children in Cook County did not receive even one HIB immunization between the ages of 10 days and 11 months. Another 9.6% received only one HIB immunization and 15.2% received only 2 HIB immunizations. Only 27.2% of all Medicaid-eligible children between 10 days and 11 months received the requisite three HIB immunizations. (Darling Trial Tr. at 184:1-185:17; Pl. Ex. 119 at Bates No. MO3 000227-MO3 000229.)

92. According to the Illinois periodicity schedule, children between the ages of 10 days and 5.5 months should receive two polio (IPV) immunizations: at 2 months and at 4 months. (Pl. Ex. 127, App. 10, at 269295.) Based on Dr. Darling's analysis, the MMIS and Cornerstone data combined show that 52.3% of Medicaid-eligible children in Cook County did not receive

even one IPV immunization between the ages of 10 days and 5.5 months of age. Another 15.5% of Medicaid-eligible children in Cook County received only one IPV immunization in the same time period. (Darling Trial Tr. at 188:16-189:7, Pl. Ex. 119 at Bates No. MO3 000228.)

93. According to the Illinois periodicity schedule, children between the ages of 10 days and 11 months should receive three diphtheria and tetanus (DtaP) immunizations: at 2 months, at 4 months and at 6 months. (Pl. Ex. 127, App. 10, at Bates No. 269295.) Based on Dr. Darling's analysis, the MMIS and Cornerstone data combined show that 46.6% of Medicaid-eligible children in Cook County did not receive even one DtaP immunization between the age of 10 days and 11 months of age. Another 20.1% of Medicaid-eligible children in Cook County received only one or two DtaP immunizations in the same time period. (Darling Trial Tr. at 188:16-23; 189:8-13; Pl. Ex. 119 at Bates No. MO3 000229.)

94. According to the Illinois periodicity schedule, children should receive one Measles, Mumps and Rubella (MMR) immunization, which is due between 12 and 18 months of age. (Pl. Ex. 127, App. 10, at Bates No. 269295.) Based on Dr. Darling's analysis, the combined MMIS and Cornerstone data show that 56.6% of Medicaid-eligible children in Cook County did not receive even one MMR immunization between the ages of 11 and 25 months of age. (Darling Trial Tr. at 188:16-23, 189:14-17; Pl. Ex. 119 at Bates No. MO3 000229-MO3 000230.)

95. Dr. Darling's analysis shows that despite the fact that Medicaid-eligible children should receive a blood-lead screening at 12 and 24 months, 77.9% of Medicaid-eligible children in Cook County between the ages of 11 months and 23 months did not receive a blood lead ⁴⁸ screening test. Finally, 60.5% of children in Cook County between the ages of 11 and 37 months did not receive a blood lead screening test. (Darling Trial Tr. at 154:20-158:4, 175:21-176:21; Pl. Ex. 119,

⁴⁷ Ex. 127, App. 10, at 269295.)

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Table S7a, b, c, at Bates No. MO3 000216-MO3 000217; Pl. Ex. 127, § HK-203.31 at Bates No. 269192-269193.)

96. Beginning at age three, an objective vision screening, using a standard method, is recommended annually for children between the ages of 3 through 6, and at 8, 10, 12, 15, and 18 years of age, according to the recommendations of the American Academy of Pediatrics ("AAP"). Thus, according to IDPA's Handbook of Providers of Healthy Kids services, children should receive one of their vision examinations at 36 months and another at 48 months. (Pl. Ex. 127, § HK-203.61, Bates No. 269201.) However, the State's data show, for example, that of the Medicaid-eligible children between the ages of 35 months and 47 months who should have received a vision examination during this time period, 97.3% did not receive one. (Darling Trial Tr. at 158:2-159:21, 176:22-177:3; Pl. Ex. 119, Table S8a, Bates No. MO3 000218.) Of Medicaid-eligible children in Cook County between the ages of 47 and 59 months, 95.2% did not receive a vision examination during this time period. (Pl. Ex. 119, Table S8b, Bates No. MO3 000218.) Similarly, of Medicaid-eligible children in Cook County between the ages of 35 and 59 months, 94.2% did not receive a vision screening during this time period. (Pl. Ex. 119, Table S8c, Bates No. MO3 000219.)

97. Objective hearing screening, using a standard testing method, is recommended annually for children between the ages of 4 and 6, and at 8, 10, 15 and 18 years of age, according to the AAP's recommendations. Thus, children should receive one of their hearing examinations at 48 months. (Pl. Ex. 127, § HK-203.62, Bates No. 269295.) Of
 49 the Medicaid-eligible children *49 between the ages of 47 months and 59 months who should have received a hearing examination during the time period, 93.6% did not receive one. (Darling Trial Tr. at 159:22-161:2, 177:4-178:25; Pl. Ex. 119, Table S9b, Bates No. MO3 000220.)

98. Dr. Darling's analyses are credible and reliable. His reports are incorporated herein as findings of fact by this court. (Pl. Ex. 118; Pl. Ex. 119.)

99. A standard measure of appropriate immunizations for 19-35 month old children is a vaccination series termed 4-3-1-3 (4 doses DTP, 3 doses polio, 1 dose measles, mumps and rubella and 3 doses HIB.) The 4-3-1-3 series should be completed by 18 months of age. (Rosenberg Trial Tr. at 61:6-21; S. Saunders Trial Tr. at 1157:10-1159:7.)

100. Cornerstone immunization data from August 2003 for Cook County children enrolled in Medicaid shows that less than 40% of these children had completed the 4-3-1-3 vaccination series by 36 months of age. (Joint Ex. 9; D. Saunders 7/29/03 Dep. Tr. at 106:18-108:24.)

101. Pursuant to 42 U.S.C. § 1396(r), IDPA is required to prepare a form known as CMS-416 to report the level of care that children on Medicaid receive. IDPA submits this form annually to CMS. (D. Saunders Trial Tr. at 977:8-23, 981:20-982:18; Pl. Ex. 72.)

102. The CMS-416 shows the number of EPSDT encounters for certain age groups, which include (i) birth to attainment of age one; (ii) age one to attainment of age three; (iii) age three to attainment of age six; (iv) age six to attainment of age 10; (v) age 10 to attainment of age 15; (vi) age 15 to attainment of age 18; and (vii) ages 19 and
 50 20. (Pl. Ex. 72, Bates No. 278368, Line 2a.) *50

103. The EPSDT encounters that are measured by IDPA as part of its CMS-416 reporting are (i) the total number of initial and periodic screening services received by children, adjusted by the proportion of the year for which they are Medicaid eligible; (ii) the number of unique children receiving at least one well-child examination; (iii) the number of unique children receiving blood-lead screenings; (iv) the number of children receiving preventive dental care; (v) the number of

unique children receiving vision screenings; and (vi) the number of unique children receiving hearing screenings. (Pl. Ex. 72, Bates No. 278369-278371, Line 6-6I; Bates No. 278371-278372, Line 9-9I; Bates No. 278374, Lines 14-14F; Bates No. 278373, Line 12b; Bates No. 278375, Line 17; and Bates No. 278375, Line 15; D. Saunders 7/29/03 Dep. Tr. at 244:9-245:12, 247:10-18.)

104. IDPA has prepared instructions on how its staff should compile data to complete the CMS-416 form. Evidence was presented that the IDPA skews the reported data to make it appear as though IDPA's performance is better than it actually is, as set forth below:

a. Under the CMS-416 methodology, IDPA calculates a "screening ratio" for several different age groups: birth to attainment of age 1; ages 1-2; ages 3-5; ages 6-10; ages 11-14; ages 15-18; and ages 19-20. The "screening ratio" is calculated by dividing the total number of well-child screens received by children on Medicaid by the "expected" number of well-child screens. The "expected" number of well-child screens, for purposes of the CMS-416 screening ratio, is the product of (a) the total number of children eligible for EPSDT services, multiplied by (b) the number of well-child screens expected to be received by a child in each age group, multiplied by (c) the average period of eligibility for those children eligible for EPSDT services. This "screening ratio" methodology leads to misleading results because it allows IDPA to count more screens for each child than is indicated by the periodicity schedule, so long as the total number of screens for each child is less than the total number of screens required for the entire period of time in which the child is counted, e.g., a child who is 5 is counted in the 3-5 year-old category and IDPA will count up to three well-child exams per year per child because the Illinois periodicity schedule provides that a child receive 3 well-child exams in the three-year period of ages 3-5. Under the examples posed to defendants' witness Debbie Saunders, she conceded that if the 3-5 year-old

group had two children who are continuously eligible for Medicaid throughout a reporting year, and one child received two exams and the other child received no exams in the reporting year, the methodology used by IDPA would show a screening ratio of 100%. (D. Saunders Trial Tr. at 1093:8-1099:4.)

b. IDPA determines a child's age for purposes of deciding which age group to count that child in for purposes of the CMS-416 by looking at his age on September 30, the last day of the federal fiscal year for which IDPA is completing the CMS-416 report. (D. Saunders Trial Tr. at 1101:4-10; Pl. Ex. 72 at Bates No. 278367.) This also overstates IDPA's EPSDT performance. Under the examples posed to Debbie Saunders, she conceded that because the methodology IDPA uses to complete the CMS-416 forms looks at the child's age on September 30, it understates the number of well-child exams that child is expected to receive. For example, a child born on August 1 would be two months old through 13 months old during the fiscal year. IDPA methodology would find that such a child who only received two well-child exams while aged 2 months to 14 months had received 100% of the expected well-child exams because the child is one year old on September 30. The 416 methodology provides that a 1-year-old child should receive two well-child screens. (Pl. Ex. 72 at Bates Nos. 278368-278369, Lines 2a, 2b *52 and 2c.) That child, however, should receive five well-child exams at 2 months, 4 months, 6 months, 9 months and 12 months. (D. Saunders Trial Tr. at 1101:20-1114:21.)

c. Similarly, the CMS-416 methodology that IDPA uses adjusts the number of well-child exams required by a child who is eligible for Medicaid for less than one full year, and this also leads to results that overstate IDPA's EPSDT performance. Under an example posed to Debbie Saunders, she conceded that when a child is born on January 1 of a year and is eligible for Medicaid for 8 months, IDPA will only look for 4 exams because the child is eligible for only two-thirds of a year and the

number of well-child exams is adjusted to show two-thirds of six. (D. Saunders Trial Tr. at 1114:22-1117:14.) However, in such a scenario, the child should receive well-child screens at birth, at two weeks, one month, two months, four months and six months, for a total of six well-child exams pursuant to the Illinois periodicity schedule. (Pl. Ex. 127, § HK-203.11, Bates No. 269187.) Here, a child who received four well-child screens would be considered to have received 100% of required well-child exams even though he did not receive the number set forth on the Illinois periodicity schedule. (D. Saunders Trial Tr. at 1114:22-1117:15.)

105. IDPA also overcounts the number of screening examinations for Medicaid-eligible children. It counts many types of doctor visits that do not and cannot comply with the EPSDT well-child screening criteria, including prenatal visits and brief visits with a nurse lasting only a few minutes. (D. Saunders Trial Tr. at 1119:7-1120:13; Pl. Ex. 72 at Bates No. 298369-278370, Rosenberg Trial Tr. 63:14-64:19.)

106. Although the CMS-416 data that IDPA reports to CMS are statewide, IDPA also breaks out the underlying data for Cook County and for 53 MCOs operating in Cook County. (S. *53 Saunders Trial Tr. at 1031:17-1034:18.)

107. Even based on Illinois' own CMS-416 Reports (which, as stated above, are overstated), for federal fiscal years 2002, 2001 and 2000, one-third of children in Cook County enrolled in Medicaid did not receive any well-child screening services that are necessary to discover conditions that need corrective treatment. (Pl. Ex. 73, Bates No. 280684, Line 10; Pl. Ex. 74, Bates No. 276725, Line 10; Pl. Ex. 75, Bates No. 276718, Line 10.)

108. Pursuant to data used in completing CMS-416 Reports for federal fiscal years 2000-2002:

a. Over one-half of Medicaid-enrolled children ages 1-5 in Cook County did not receive blood lead screenings. (Pl. Ex. 73, Bates Nos. 280683 and Bates No. 280686 show that 59,340 children out of 193,665 children in the 1-5 age range received blood lead screenings in federal fiscal year 2002; Pl. Ex. 74, Bates Nos. 276724, Line 1 (for age groups 1-2 and 3-5 shows 189,662 children eligible for EPSDT) and 276729, Line 14.1 (for age groups 1-2 and 3-5 shows 52,558 received lead blood screens); Pl. Ex. 75, Bates No. 276717, Line 1 (for age groups 1-2 and 3-5 shows 179,113 children eligible for EPSDT) and 276722, Line 14.1 (for age groups 1-2 and 3-5 shows 44,115 children received blood lead screens));

b. Approximately 90% of Medicaid-enrolled children in Cook County did not receive a vision screening. (Pl. Ex. 73, Bates Nos. 280683, Line 1 (total of 595,007 children eligible for EPSDT services), and 280687, Line 16A (total of 139,412 unique children receiving vision screens); Pl. Ex. 74, Bates Nos. 276724, Line 1 (total of 580,538 children eligible for EPSDT services), and 276730, Line 16A (total of 75,940 unique children receiving vision screens); Pl. Ex. 75, Bates No. 276717, Line 1 (total of 549,761 children eligible for EPSDT services), and *54 276723, Line 16A (total of 41,987 unique children receiving vision screens));

c. Approximately 80% of Medicaid-enrolled children in Cook County did not receive a hearing screening. (Pl. Ex. 73, Bates Nos. 280683, Line 1 (total of 595,007 children eligible for EPSDT services), and 280687, Line 15A (total of 122,936 unique children receiving hearing screens); Pl. Ex. 74, Bates Nos. 276724, Line 1 (total of 580,538 children eligible for EPSDT services), and 276730, Line 15A (total of 77,590 unique children receiving hearing screens); Pl. Ex. 75, Bates No. 276717, Line 1 (total of 549,761 children eligible for EPSDT services), and 276723, Line 15A (total of 30,618 unique children receiving hearing screens)); and

d. Approximately 75% of Medicaid-enrolled children in Cook County did not receive a dental screening. (Pl. Ex. 73, Bates Nos. 280683, Line 1 (total of 595,007 children eligible for EPSDT services), and 280685, Line 12B (total of 146,172 unique children receiving dental screens); Pl. Ex. 74, Bates Nos. 276724, Line 1 (total of 580,538 children eligible for EPSDT services), and 276728, Line 12B (total of 160,714 unique children receiving dental screens); and Pl. Ex. 75, Bates No. 276717, Line 1 (total of 549,761 children eligible for EPSDT services), and 276721, Line 12B (total of 146,162 unique children receiving dental screens)).

109. Five MCOs cover Medicaid-enrolled children in Cook County: Amerigroup Illinois, Inc.; Family Health Network; Harmony Health Plan of Illinois, Inc.; Humana Health Plan, Inc.; and United Healthcare of Illinois, Inc. Fewer than 20% of the plaintiffs receive care from MCOs. (D. Saunders Trial Tr. at 923:4-15; Kane 12/03/02 Dep. Tr. at 256:2-8.)

110. MCOs are paid by IDPA on a capitated basis — a per member, per month fee for an enrollee based on age and sex. (D. Saunders Trial Tr. at 936:2-22; Werner Trial Tr. at 1057:9-1058:3.) Some MCOs contract to pay their physicians on a
 55 capitated basis and those physicians *55 are not required to submit a claim form detailing services provided to receive payment from the MCO. (Goldsmith Trial Tr. at 507:4-508:14.)

111. Each of the five MCO contracts with the State provides that the MCO shall ensure that all of the children enrolled receive all EPSDT services and, at a minimum, that 80% of all children enrolled received EPSDT services. (Joint Ex. 20.) The State of Illinois is entitled to sanction MCOs for contractual noncompliance. The State has never enforced any provision of the five MCO contracts through available sanctions. (D. Saunders Trial Tr. at 1121:3-1122:5; D. Saunders 5/2/02 Dep. Tr. at 121:16-122:3; D. Saunders 11/26/02 Dep. Tr. at 304:13-305:4, 323:2-18,

320:14-322:24, 323:2-18; Ryan 11/26/02 Dep. Tr. at 373:24-373:23, 374:6-8, 374:14-16, 449:12-451:1, 462:6-9, 472:1-14, 473:20-474:2, 476:14-477:4, 478:22-480:2, 480:19-23; Parker Dep. Tr. at 83:20-22, 169:17-170:23; Carter Dep. Tr. at 66:5-17, 99:20-101:2; Joint Ex. 3-Joint Ex. 7.)

112. MCOs are required by contract to report all services provided to Medicaid recipients as if it were a fee for service (encounter data) to the IDPA. (D. Saunders Trial Tr. at 899:1-3.)

113. Encounter data reported to the IDPA from MCOs must meet the same edits as a fee for service claim, and IDPA rejects much of the MCO encounter data for failing to meet the edits of the claims processing system. (D. Saunders Trial Tr. at 898:15-899:18.)

114. If encounter data from MCOs for an individual is rejected, it is not included in the paid claims file for that individual. (D. Saunders Trial Tr. at 949:18-950:4.)

115. Based on the CMS-416 "participant ratios" for MCOs, the rates for receiving EPSDT services for MCO participants is no better than the rates for receiving care outside of MCOs. Using the CMS-416 methodology, IDPA calculates the "participant ratio." The *56 numerator in the "participant ratio" is an unduplicated count of those children who received at least one well-child screening during the year covered by the 416 data. The denominator in the ratio is the product of three factors: (a) the number of total Medicaid-eligible children who should receive at least one well-child screening, multiplied by (b) the number of well-child screenings expected to be received by an individual in each age group in one year, multiplied by (c) the average period that each child in the age group was eligible for Medicaid during the year. In federal fiscal year 2002, (a) United Health Care of Illinois had a "participant ratio" for all age groups of .219 (Pl. Ex. 73, Bates No. 280689, Line 10); (b) Amerigroup Illinois had a "participant ratio" for all age groups of .418 (Pl. Ex. 73, Bates No. 280694, Line 10); (c) Family

Health Network had a "participant ratio" for all age groups of .550 (Pl. Ex. 73, Bates No. 280699, Line 10); (d) Humana Health Plan, Inc. had a "participant ratio" for all age groups of .226 (Pl. Ex. 73, Bates No. 280704, Line 10); and Harmony Health Plan of Illinois had a "participant ratio" for all age groups of .389 (Pl. Ex. 73, Bates No. 280709, Line 10.)

116. Annually, many of the MCOs prepare reports under the aegis of the National Committee on Quality Assurance ("NCQA"), the MCO credentialing organization. These are commonly known as HEDIS reports. (Ryan 11/26/02 Dep. Tr. at 359:17-360:4, 374:6-8, 374:14-16; 464:21-466:6; D. Saunders 7/29/03 Dep. Tr. at 88:6-21, 94:7-10; 94:20-95:5.)

117. On October 2, 2002, Nelly Ryan, IDPA Division of Medical Programs, wrote the five MCOs that provide services to Medicaid enrolled children in Cook County and outlined each MCO's malperformance in providing well-child exams (based on data used to prepare the CMS-416) and immunizations (based on Cornerstone data) to MCO-enrolled Medicaid-eligible children. Ryan indicated to each of the five MCOs that "from an analysis of the administrative ⁵⁷ data set and from the [MCO's] reports of HEDIS measurements and analysis of focused studies, [the MCO] is not yet achieving the participation goals set forth in the MCO contract at Article 5.13 Required Minimum Standards of Care." (Joint Ex. 8; Pl. Ex. 8, Pl. Ex. 12; Pl. Ex. 14; Pl. Ex. 16; Ryan 11/26/02 Dep. Tr. at 372:24-373:23; 374:6-8, 374:14-16, 449:12-451:1, 462:6-9, 472:1-472:14, 473:20-474:2, 476:14-477:4, 478:22-480:2, 480:9-23.)

118. Cornerstone immunization data from August 2003 for each MCO covering children on Medicaid in Cook County show that 60-70% of children enrolled in those MCOs have not completed the 4-3-1-3 vaccination series by 36 months of age. (Joint Ex. 10, Bates Nos. 285242-285244 (Humana Health Plan — only 29.32% of

children in the plan had completed 4-3-1-3 shot series by 36 months of age), Bates Nos. 285245-285247 (Americaid Community Choice — only 29.05% of children in the plan had completed 4-3-1-3 shot series by 36 months of age), Bates No. 285248-285250 (Family Health Network — only 37.08% of children in the plan had completed 4-3-1-3 shot series by 36 months of age), Bates Nos. 285251-285253 (Harmony Health Plan — 33.32% of children in the plan had completed 4-3-1-3 shot series by 36 months of age), and Bates Nos. 285254-285256 (United Healthcare — 27.08% of children in the plan had completed 4-3-1-3 shot series by 36 months of age).

119. Based on data used to prepare the CMS-416 for federal fiscal year 2002, Medicaid-enrolled children in United Healthcare MCO had the following results:

a. Only 22% of children received a well-child screen. (Pl. Ex. 73, Bates No. 280689, Line 10 ("Participation Ratio");

b. Only 28% of children ages 3-20 received a dental screen; of 19,998 Medicaid-eligible children ages 3-20 in United Healthcare (Pl. Ex. 73 Bates No. 280688, Line 1 (total of children in ⁵⁸ age groups 3-5, 6-9, 10-14, 15-18, and 19-20)), only 5,536 children received preventive dental services. (*Id.* at Bates No. 280690, Line 12B total of children in age groups 3-5, 6-9, 10-14, 15-18, and 19-20);

c. Only 29% of children ages 1-5 received a blood lead screen; of 5,777 Medicaid-eligible children ages 0-5 in United Healthcare (Pl. Ex. 73 Bates No. 280688, Line 1 (total of children in age groups zero, 1-2, and 3-5)), only 1,166 children received blood lead screenings. (*Id.* at Bates No. 280691, Line 14A (total of children in age groups zero, 1-2, and 3-5));

d. Only 34% of children ages 3-20 received a hearing screen; of 19,998 Medicaid-eligible children ages 3-20 in United Healthcare (Pl. Ex. 73 Bates No. 280688, Line 1 (total of children in

age groups 3-5, 6-9, 10-14, 15-18, and 19-20)), only 6,766 children received hearing screens. (*Id.* at Bates No. 280692, Line 15A (total of children in age groups 3-5, 6-9, 10-14, 15-18, and 19-20)); and

e. Only 40% of children ages 3-20 received a vision screen; of 19,998 Medicaid-eligible children ages 3-20 in United Healthcare (Pl. Ex. 73, Bates No. 280688, Line 1 (total of children in age groups 3-5, 6-9, 10-14, 15-18, and 19-20)), only 8,070 children received hearing screens. (*Id.* at Bates No. 280692, Line 16A (total of children in age groups 3-5, 6-9, 10-14, 15-18, and 19-20)).

120. No MCO that has ever contracted with IDPA to provide services to the Medicaid population in Cook County has met the EPSDT requirements in the MCO Contracts. (D. Saunders Trial Trans. at 1007:25-1008:8; Ryan 11/26/02 Dep. Tr. at 372:24-373:23, 374:6-8, 374:14-16, 449:12-451:1, 462:6-9, 472:1-472:14, 473:20-474:2, 476:14-477:4, 478:22-480:2, *59 480:19-23; D. Saunders 5/2/02 Dep. Tr. at 121:16-122:3; D. Saunders 11/26/02 Dep. Tr. at 309:12-18, 325:2-6, 325:13-17, 334:1-5, 334:11-15, 344:10-345:21; Carter Dep. Tr., 99:20-101:2.)

121. The State uses two documents to describe its Healthy Kids (EPSDT) program to families enrolling in Medicaid. The first is a four-page form, and is called "Healthy Kids: Good Health for Children and Teens" (IDPA Form 1123). (Joint Ex. 23; Lopez Dep. Tr. at 18:22-26:18, 34:1-35:19, 41:11-42:1, 46:7-48:10.) The second document is the KidCare Member Handbook, which is 89 pages long and explains (1) benefits, coverage and responsibilities such as co-pays; (2) premiums; (3) the periodicity schedule for examinations and immunizations; and (4) grievance and appeal forms. (Joint Ex. 11; Carter Dep. Tr. at 139:5-146:4; Longo Dep. Tr. at 91:15-93:14, 93:15-96:4, 96:11-97:21.)

122. Children and their families can apply for Medicaid coverage and be enrolled in three different ways. The documents describing the

Healthy Kids Program that plaintiffs receive vary depending on which method they happen to choose. The three application methods are (1) applying for Medicaid benefits through a local IDHS office, either in person or by mail; (2) mailing a KidCare application to the IDPA KidCare central processing unit; or (3) completing a KidCare application with a KidCare application agent who then sends the KidCare application to the IDPA KidCare central processing unit. (Lopez Dep. Tr. at 13:18-14:15, 15:13-21, 18:22-26:18, 34:1-35:19, 41:11-42:1, 46:7-48:10; Ryan 7/11/02 Dep. Tr. at 45:1-46:10, 46:23-47:2, 50:8-51:5; Longo Dep. Tr. at 43:2-46:22, 49:15-52:21, 93:15-96:4.) IDPA uses KidCare application agents to assist applicants for KidCare in applying for coverage (but not in providing assistance in finding care). *60

123. Children who apply for Medicaid through the local IDHS office are supposed to be informed by local IDHS staff about the Healthy Kids Program when they apply and be given the four-page Form 1123 entitled Healthy Kids: Good Health for Children and Teens. (Lopez Dep. Tr. at 18:22-26:18, 41:11-42:1; Pl. Ex. 140.) The State does not provide the KidCare Member Handbook to any of the children and their families who apply at local IDHS offices. (Longo Dep. Tr. at 62:14-24, 63:1-17; Lopez Dep. Tr. at 41:11-42:1; Carter Dep. Tr. at 136:20-24.) Moreover, neither IDHS nor IDPA track or otherwise monitor whether these children and their families are actually told about the Healthy Kids program or receive Form 1123. (B. Lopez Dep. Tr., 69:19-71:15; N. Ryan 7/11/02 Dep. Tr., 184:22-186:14; K. Carter Dep. Tr., 149:2-21.) There are (a) no policies or procedures in place to govern how such oral notice is to be given, including content and manner; (b) no training manuals relating to advising recipients as to the Healthy Kids program; and (c) no accountability systems to assure that IDHS caseworkers actually give oral notice of EPSDT services/availability. (Lopez Dep. Tr. at 40:11-

41:4, 69:19-71:15; Ryan 7/11/02 Dep. Tr. at 184:22-186:14; Carter Dep. Tr. at 129:14-23, 139:5-146:4; Rodriguez Trial Tr. at 394:1-15.)

124. Children who apply for KidCare through the IDPA KidCare central processing unit are provided with a copy of the KidCare Member Handbook, but not a copy of Form 1123. The staff at the IDPA KidCare central processing unit do not have any duty to call persons they enroll in the Medicaid program to orally explain the EPSDT program. In fact, IDPA has no written policy on how it orally informs children and families of the EPSDT program or the benefits of preventive health care when they are applying for Medicaid through the mail. (Longo Dep. Tr. at 43:2-46:22, 49:15-52:21, 62:14-24, 63:1-17, 91:15-93:14, 93:15-96:14, 96:11-97:21, 98:7-99:15, *61 105:13-19; Joint Ex. 11.)

125. KidCare application agents are neither instructed nor required to inform applicants about the specifics of the Healthy Kids program. (Longo Dep. Tr. at 48:18-21, 96:11-97:21, 98:7-99:15; Joint Ex. 11; Joint Ex. 21.) Thus, there is no reason to believe that children and their families who apply for KidCare through KidCare application agents uniformly receive any appropriate oral information about the EPSDT program or the benefits of preventive health care.

126. IDPA Form 1802 is a one-page document sent by the IDHS Central Office annually to all children enrolled in Medicaid to inform them about the EPSDT program. (Admitted, DRFFCL, DRPUF ¶ 257; Joint Ex. 18; Joint Ex. 19.)

127. IDPA Form 2286 is sent to children prior to the due date of each periodic examination, as set by the EPSDT periodicity schedule for well-child exams. (Admitted, DRFFCL.) The notice only mentions well-child examinations, not blood lead screens or immunizations. (Pl. Ex. 37; Def. Ex. 76.) The form advises that plaintiffs "may" be due for an exam. (Admitted, DRFFCL; Pl. Ex. 37.)

128. There are no other forms that IDPA or IDHS use to disseminate information to children and families applying for Medicaid about the EPSDT services or the Healthy Kids program. (Carter Dep. Tr. at 139:5-146:4; Longo Dep. Tr. at 96:11-97:21; Lopez Dep. Tr. at 41:11-42:1.)

129. Many Medicaid recipients receive no EPSDT notices at all. (Hannum Trial Tr. at 365:21-23; Craft Trial Tr. at 484:2-11; Mauk Trial Tr. at 218:9-19.)

130. IDPA has not and does not survey or study whether recipients receive automated periodicity notices or whether these notices are an effective way of notifying parents to take their *62 children to medical providers. (D. Saunders Trial Tr. at 885:16-24; Carter Dep. Tr. at 139:5-146:4, 146:18-148:5, 149:2-21, 151:8-14; Ellinger Dep. Tr. at 84:21-85:7.)

131. IDPA does not evaluate the effectiveness of its notices or brochures as to particular recipients based on those recipients' individual Medicaid usage and history. (Admitted, DRPUF ¶ 274; Carter Dep. Tr. at 151:8-14.)

132. IDPA develops its written EPSDT notices — Forms 1123, 1802, and 2286-in-house. (Admitted, DRPUF ¶ 266; Carter Dep. Tr. at 139:5-146:4; Wyatt Dep. Tr. at 128:6-130:20; Joint Ex. 23; Joint Ex. 18; Pl. Ex. 37.) IDPA does not field test these forms with focus groups or other Medicaid recipient audiences. (Carter Dep. Tr. at 156:14-17.) IDPA also does not use outside linguists in developing or evaluating these materials to ensure that they are readable by persons with limited education, nor does IDPA use cultural experts to develop or evaluate them for people who are illiterate, have limited English proficiency, or limited American cultural literacy. (Wyatt Dep. Tr. at 128:6-130:20; Ellinger Dep. Tr. at 77:16-79:24; 80:1-14.)

133. IDPA has not studied the most effective mix of oral and written material for informing recipients about EPSDT. (Ellinger 7/17/03 Dep.

Tr. at 85:18-86:2; Carter Dep. Tr. at 166:19-170:9.)

134. The plaintiffs retained Dr. Timothy Shanahan to analyze the EPSDT notices for readability and understandability by their target audience of Medicaid families in Cook County. (Pl. Ex. 102 (Shanahan Expert Report).) Dr. Shanahan received his Ph.D. in education at the University of Delaware. He is a professor at the University of Illinois at Chicago and director of the UIC Center for Literacy. He has served on and is chairing national panels on literacy and reading, has published 150 articles on these subjects, and has won several awards, including an ⁶³ award from the International Reading Association for research on document readability. He has substantial knowledge of the literacy of low-income populations in Cook County, the design of documents intended to provide health information to low-income populations in Cook County, and the analysis of documents intended to provide health information to low-income populations in Cook County. Virtually all of his work on designing or analyzing documents has involved target audiences of low-income people in Cook County. (Shanahan Trial Tr. at 559:6-566:4, 570:16-571:18.)

135. Dr. Shanahan opined that the readability of documents used for public health purposes should have difficulty levels of approximately grades four to six. (Shanahan Trial Tr. at 577:5-20, 598:9-16, 602:5-11; Pl. Ex. 102, Bates No. MO3 000176.) He further opined that the State's written methods for informing families about EPSDT services are ineffective because they are too difficult to read for many parents and children. According to Dr. Shanahan, parts of IDPA Form 1123, used to inform families who are enrolling in Medicaid about the Healthy Kids program, are geared to grade seven.¹³ (Shanahan Trial Tr. at 590:12-592:25; Pl. Ex. 102, Bates Nos. MO3 000170-MO3 000172.) Dr. Shanahan also stated that the child screening examination and immunization forms included in IDPA Form 1123 are difficult to

read. The IDPA Form 2286, a letter sent to parents informing them that their child is due for a checkup, is geared to an eighth-grade reading level and is too difficult to read for many families enrolled in Medicaid.¹⁴ (Shanahan Trial Tr. at 581:1-589:9; Pl. Ex. 102, MO3 000175.) Finally, Dr. Shanahan stated that ⁶⁴ the 89-page manual is even more complex. (Shanahan Trial Tr. at 569:16-570:15.)

¹³ Dr. Shanahan analyzed three of the four pages of Form 1123 (he did not analyze the cover page). The pages he looked at are: 244004 (same as Joint Ex. 23, Bates No. 27742), 244005 (same as Joint Ex. 23, Bates No. 27743) and 244006 (same as Joint Ex. 23, Bates No. 27744.)

¹⁴ Pl. Ex. 37, Bates No. 269358 and Def. Ex. 76, Bates No. 27745, are the same notice with different type fonts. Dr. Shanahan analyzed Pl. Ex. 37.

136. If health information is especially long, such as 80 pages, or more difficult than the reading competency among the target population, then the best and only way to communicate the information is to combine an oral presentation with the written material. (Shanahan Trial Tr. at 569:16-570:15.)

137. For health-related informational materials targeted to low income populations, the fourth to sixth grade level will successfully communicate to the largest segment of the target population. The higher the grade level, the more challenging the document is for increasingly larger numbers of people. (Shanahan Trial Tr. at 577:5-20, 598:9-16, 602:5-11; Pl. Ex. 102, Bates No. MO3 000176.)

138. In Cook County, any document written at the eighth grade level would present a significant challenge to at least 200,000 people over the age of 25 according to the U.S. census. (Shanahan Trial Tr. at 585:13-24, 587:5-588:12; Pl. Ex. 102, Bates No. MO3 000176.)

139. The IDPA Form 2286, which is the letter sent to parents informing them that their child is due for a checkup, is geared to the eighth grade level and is "much too hard . . . [and has] formatting problems . . . that would make it even harder." As such, it "would miss a significant portion of, say, the low income population in Chicago." (Shanahan Trial Tr. at 588:14-589:9, 589:12-590:10; Pl. Ex. 102, Bates Nos. MO3 000175-MO3 000176.)

140. As to all of the documents Dr. Shanahan analyzed, he summarized, "My testimony is that these documents are difficult. And if this is the primary way of putting this information out, a significant portion of the population won't understand them." (Shanahan Trial Tr. at 608:4-6; 65 Pl. Ex. 102, Bates No. MO3 000176.) *65

141. The court finds Dr. Shanahan's testimony and report to be reliable and credible.

142. IDPA and IDHS do not have written policies regarding how to inform applicants or recipients who are blind or deaf about EPSDT, and it has no materials or people to effectively provide the necessary information to these recipients. (Lopez Dep. Tr. at 40:11-41:4.)

143. IDPA and IDHS do not have EPSDT notices in any languages other than English or Spanish. (Admitted, DRFFCL, DRPUF ¶ 278.)

144. IDPA and IDHS do not have any written policies regarding how to inform applicants who do not speak English or Spanish about EPSDT. (Lopez Dep. Tr. at 40:11-41:4.) The State does not translate IDPA Forms 1123, 1802, and 2286 into any languages other than English and Spanish. (Admitted, DRPUF ¶ 278.) IDPA and IDHS have not presented any evidence of any other methods for publicizing the EPSDT program to non-English and non-Spanish speaking populations.

145. IDPA has in the past recognized that in order to get recipients' attention with respect to health care issues, "you have to have multiple methods multiple times." (Longo Dep. Tr. at 106:1-108:17;

D. Saunders 7/29/03 Dep. Tr. at 39:23-40:20.) Accordingly, when IDPA has attempted to increase the number of children *enrolled* in the KidCare program, it has used various methods including (i) public service announcements on television and radio; (ii) public presentations at fairs and festivals; (iii) public presentations at community meetings; (iv) grants to community groups to assist in promoting KidCare to hard-to-reach groups or targeted groups such as families in certain ethnic groups, families in rural areas, and families who do not speak English; (v) radio, television, newspaper, and community advocacy directed to African-American families; (vi) radio, television, newspaper, and community advocacy directed at Hispanic and *66 Spanish-speaking families; (vii) sponsorship of events such as the Ringling Brothers Barnum and Bailey Circus; (viii) general advertising radio, newspaper, and bus billboards in the Chicago area; (ix) mass transit advertising; and (x) distribution of KidCare-branded objects such as bookmarks, tattoos, stickers, coloring books, crayons, balloons, pins, and hand fans at fairs. (Admitted in part, DRPUF ¶¶ 230, 231; DUF ¶ 93; Longo Dep. Tr. at 106:1-108:17; D. Saunders 7/29/03 Dep. Tr. at 39:23-40:20.)

146. However, in providing information about EPSDT to those already enrolled in Medicaid, IDPA has not used *any* of these methods. (Carter Dep. Tr. at 166:19-170:9; Ellinger Dep. Tr. at 85:18-86:2.)

147. The State has not issued guidance or instructions to non-primary care medical providers (such as emergency room doctors, hospitals, and specialists) about informing emergency room, acute care or specialty patients about EPSDT services. (Carter Dep. Tr. at 166:19-170:9.)

148. The State does not provide financial incentives for successful referrals of children receiving Medicaid to EPSDT providers. (Admitted, DRFFCL, DRPUF ¶ 304.)

149. Neither IDPA nor IDHS has widely disseminated information regarding the availability of EPSDT and the benefits of preventive health care by outreach activities such as (i) the development of cooperation agreements with local school districts, public health agencies, clinics, hospitals and other health care providers, including developmental disability and mental health providers, or with charities, to notify the constituents of EPSDT; (ii) using the media for public service announcements and advertisements of EPSDT; or (iii) developing posters advertising EPSDT for display in hospital and clinic waiting rooms. (Carter Dep. Tr. at *67 166:19-170:9; Ellinger Dep. Tr. at 85:18-86:2; S. Saunders Dep. Tr. at 238:16-241:4; Lopez Dep. Tr. at 87:13-20.)

150. IDPA provides a general hotline to field all calls from recipients or applicants who may have questions of any kind. (Admitted, DUF ¶ 97.)

151. The hotline manual used to guide the staff who answer hotline calls is over 1,000 pages and contains information on various aspects of the Medicaid program for adults as well as children. (Admitted, DRFFCL, DRPUF ¶ 314.) There was no evidence that hotline operators are trained in any appropriate way to provide this broad range of information. Moreover, the hotline is often understaffed and as a result has had a call abandonment rate as high as 25%. (Carter Dep. Tr. at 162:11-165:4.)

152. For Medicaid recipients who request assistance in finding a doctor, the hotline provides names of doctors "participating" in Medicaid in the caller's zip code. However, IDPA includes in its hotline referral database every doctor who has billed Medicaid for a service even once within the prior 18 months. (Admitted, DRFFCL; Carter Dep. Tr. at 162:11-165:4; Parker Dep. Tr. at 187:15-24.) IDPA does not determine, at the time it gives out the name of a specific doctor, whether that doctor is then taking new Medicaid patients. (*Id.*)

153. Doral Dental Services of Illinois, the administrator of IDPA's dental program, maintains a provider database of dental providers enrolled in the Medicaid program in Cook County. Doral also provides a general hotline for recipients.

154. Doral's network provider database includes dental providers who have not billed Medicaid for a single service within the preceding 30 months. Throughout that 30-month period, that provider's referral status remains as whatever that provider last designated as their referral *68 status and there is no notation of any inactivity made in Doral's network provider database. (Wiertzema Trial Tr. at 462:12-464:14.)

155. IDPA does not attempt to maintain information regarding the willingness or availability of doctors listed in the hotline database to accept Medicaid patients (Admitted, DRPUF ¶ 324; Luttrell Dep. Tr. at 32:7-33:12; Parker Dep. Tr. at 187:15-24; Carter Dep. Tr. at 162:11-165:4), although more than 60% of the doctors in Cook County who had treated children from July 1, 1998 through December 31, 2001 had not provided a single preventive care service to a Medicaid child. (Pl. Ex. 118, Bates Nos. MO3 000728-MO3 000730; Darling Trial Tr. at 165:24-168:21.)

156. IDPA does not attempt to maintain information regarding the number of Medicaid patients a given provider in the hotline database will accept. (Admitted, DRFFCL, DRPUF ¶ 325; D. Saunders 5/2/02 Dep. Tr. at 195:12-17.) IDPA does not request information from enrolled providers on their availability to accept Medicaid patients. (*Id.*) Physicians will stay on the IDPA hotline referral list as an active provider even if their practice is closed to new Medicaid patients, and even if the practice has turned down Medicaid patients in the past; IDPA does not attempt to keep track of this information. (Luttrell Dep. Tr. at 32:7-33:12; Parker Dep. Tr. at 187:15-24; Carter Dep. Tr. at 162:11-165:4.)

157. IDPA leaves it to the recipient to call individual physicians from the referral list to determine if that physician is accepting Medicaid patients. IDPA does no follow-up to determine whether a recipient who has been given a physician referral through the hotline was able to see that physician or any physician. (Admitted, DRFFCL; Luttrell Dep. Tr. at 32:7-33:12; Carter Dep. Tr. at 162:11-165:4, 166:19-170:9.) In fact, 69 parents of children on Medicaid call many *69 doctors referred by the hotline and are rejected for treatment because the doctor will not accept Medicaid reimbursement. (Rodriguez Trial Tr. at 394:16-396:11; Mauk Trial Tr. at 356:6-367:14; 358:9-13; 359:16-360:1.)

158. In providing referrals, the hotline staff does not have information about, and does not consider, quality of care issues, such as waiting times for appointments, board certification of physicians, or availability of office hours of physicians. (Admitted, DRFFCL; Parker Dep. Tr. at 208:19-22.)

159. IDHS local office staff is instructed by IDPA policy that they have responsibility for providing assistance to clients in finding physicians and dentists and in scheduling doctor or dentist appointments for children enrolled in Medicaid. (Pl. Ex. 140; D. Saunders 5/2/02 Dep. Tr. at 61:7-62:4.) But IDHS local offices do not have access to any computer database containing names of available physicians to make referrals to children on Medicaid; and IDHS local office staff does not receive training on how to make referrals for children on Medicaid to available physicians. (B. Lopez Dep. Tr. at 16:2-17, 18:22-26:18, 40:11-41:4, 75:19-79:12, 79:18-86:5.) Local offices initially refer clients to the local clinics (the so-called "safety net"), and some of the staff might then look at a written physician list if the person cannot be seen at the clinic. (*Id.*) The doctor list is compiled solely based on the fact that in the past a provider has billed Medicaid for at least one service. (Admitted in part, DRPUF ¶ 344; D. Saunders 5/2/02 Dep. Tr. at 61:7-62:4.) Some

IDHS caseworkers are unaware that local offices even have referral books with doctor lists and do not know what to do when asked by recipients for help finding a doctor. (Rodriguez Trial Tr. at 394:9-15.) *70

160. IDHS local office staff do not have any information regarding the availability of doctors enrolled in the Medicaid program to accept a new Medicaid patient. Local IDHS office staff do not have any information on the specialties nor the board certification status of doctors enrolled in the Medicaid program. (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12; Rodriguez Trial Tr. at 394:9-15.)

161. IDHS local office supervisors do not check to ensure that IDHS local office caseworkers offer assistance in locating providers, and local IDHS office staff do not keep records of any referrals to physicians that they have made for children on Medicaid. (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12.)

162. IDHS local offices do not provide the IDPA KidCare Hotline number to clients seeking information about physicians. (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12.)

163. IDHS local office staff do not have a procedure in place for updating the information on physician referrals contained in the physician binders in the local offices. (Lopez Dep. Tr. at 75:19-79:12.)

164. IDHS local office staff do not call or otherwise communicate with physicians prior to making a referral for a recipient and they do not check with a Medicaid recipient after making a referral to a physician to ensure that the client was able to see that doctor. (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12.)

165. IDHS local office staff do not keep records on how many or which clients call back after being referred to a physician for another referral. 71 (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12.) *71

166. IDHS local office staff also do not have a system for assisting recipients in scheduling appointments with doctors. (Lopez Dep. Tr., 18:22-26:18, 79:18-86:5.)

167. The State neither attempts to identify those Medicaid-enrolled children outside of MCOs who have not received mandated EPSDT services, nor follows up with them to ensure that they do. (Parker Dep. Tr. at 154:2-156:20; Ryan 7/11/02 Dep. Tr. at 266:21-267:5; Luttrell Dep. Tr. at 57:21-58:5; Ellinger Dep. Tr. at 106:14-20.)

168. The State provides case management services to some children through the IDHS Family Case Management program. (Admitted, DRFFCL; admitted in part, DRPUF ¶ 379.) This case management program has limited eligibility and limited enrollment (under 30,000 children were enrolled in May 2003). (DRPUF ¶ 383; Joint Ex. 15; S. Saunders Trial Trans. at 1223:25-1225:22.) The State once operated a case management system in which physicians were paid to manage Medicaid children's care. However, the State discontinued the program although it was popular with doctors who "support[ed] the notion of families staying with them. . . ." (Ellinger Trial Trans., 809:21-810:19.)

169. IDHS also administers a nutrition program — the Women, Infant, and Children program — that encourages immunizations. (Admitted, DRFFCL, DRPUF ¶ 286.) This program also has a limited enrollment. (Admitted, DRPUF ¶¶ 389, 290; Joint Ex. 15; S. Saunders Trial Tr. at 1223:25-1225:22.)

170. The State also administers a few other programs that State witnesses admitted either serve very small percentages of children or provide very limited services such as the Early Intervention Program which refers approximately 12,000 children statewide primarily to non-physician providers and provides no well-child care (S. Saunders Trial Tr. at *72 1225:23-1226:9); school-based health centers which do not serve children younger than pre-adolescence (*Id.* at

1226:10-15); and Healthy Families and Parents Too Soon which serve less than 4,000 children statewide. (*Id.* at 1226:20-25.)

171. These limited case management programs have had some success in increasing the number of children receiving some EPSDT services. (Joint Ex. 14; Joint Ex. 17.)

172. The State performs no investigation and has no policies directed to whether individual children are actually receiving appropriate care. For example:

a. The State has not evaluated the level or quality of health education being provided by EPSDT providers, including the need for making EPSDT visits. (Admitted, DRFFCL, DRPUF ¶¶ 397, 398.)

b. The State has not evaluated whether EPSDT providers appropriately schedule return EPSDT visits for recipients. (Admitted, DRFFCL, DRPUF ¶ 399.)

c. The State has not studied or evaluated whether geographic, demographic, or ethnographic factors amongst the plaintiffs influence EPSDT usage. (Admitted in part, as to ethnographic factors only, DRFFCL; admitted in part, DRPUF ¶ 402; Ellinger Dep. Tr. at 107:12-108:7.)

d. The State does not follow up to determine why no EPSDT services have been billed as to certain recipients. (Longo Dep. Tr. at 98:7-99:15; A. Kane 6/6/02 Dep. Tr. at 148:3-7, 153:22-154:21, 157:18-158:14.)

e. The State does not engage in outreach efforts to increase the level of EPSDT services received by the great majority of the plaintiffs (Parker Dep. Tr. at 154:2-156:20; Carter Dep. Tr. at 166:19-170:9; Lopez Dep. Tr. at 87:13-20, 88:2-89:20, 91:3-9.)

73 *73

f. The State does not conduct "chart reviews" to assure that all EPSDT services are being provided to the Children. (Admitted, DRFFCL, DRPUF ¶ 409.)

g. If an invoice from a provider shows that the child did not receive a full EPSDT screen, the State takes no action to determine whether the child is receiving appropriate EPSDT services. (Parker Dep. Tr. at 154:2-156:20.)

h. The State does not require that providers submit any EPSDT reports or other information on the care provided to children; instead, the State relies solely on the invoices for services. (Powers Dep. Tr. at 97:12-98:15.)

i. The State brought forth no evidence that it conducts in-person checks of providers to determine whether they supply the full complement of EPSDT services, nor did the State present any evidence that it checks whether a provider has received appropriate training to deliver the full complement of EPSDT services.

j. The State does not evaluate the quality of EPSDT services provided, or whether providers carry out all EPSDT components. (A. Kane 6/6/02 Dep. Tr. at 149:12-16, 149:22-150:20, 151:8-11, 151:15-18; Werner Dep. Tr., 173:3-8.)

k. The State does not require caseworkers at or after intake eligibility interviews at local offices to inquire whether families and children have regular doctors and to identify possible doctors for families and children who do not have a doctor. (Lopez Dep. Tr. at 18:22-26:18, 75:19-79:12.)

l. The State does not collect survey or other data that would allow the quality of EPSDT services to be evaluated. (A. Kane 6/6/02 Dep. Tr. at 149:12-16, 149:22-150:20, 151:8-11, 151:15-18; Parker Dep. Tr. at 208:19-22.)^{*74}

m. The State does not pay incentives for providers whose patients receive the full schedule of EPSDT services. (Admitted, DRFFCL, DRPUF ¶ 423; A. Kane 6/6/02 Dep. Tr. at 200:3-7, 200:19-20.)

n. The State does not evaluate whether acute care services received by children receiving Medicaid are related to inadequate receipt of EPSDT

services. (A. Kane 6/6/02 Dep. Tr. at 148:3-7, 153:22-154:21, 157:18-158:14; Longo Dep. Tr. at 98:7-99:15.)

o. The State does not evaluate the distribution of information regarding transportation assistance for EPSDT, or its provision of transportation assistance to the plaintiffs, and has not evaluated transportation as a factor in whether recipients will or will not receive EPSDT services. (Lopez Dep. Tr. at 79:18-86:5.)

p. The State fails to assist with scheduling appointments and does not keep records of requests for scheduling or transportation assistance for EPSDT services. (Lopez Dep. Tr. at 18:22-26:18, 79:18-86:5.)

q. The State does not have any quality assurance programs in place so that Medicaid policies such as EPSDT are carried out by other State agencies serving children on Medicaid such as DCFS. The IDPA only reviews other agencies if it hears complaints. (Powers Dep. Tr. at 175:6-176:7.)

173. Children in Cook County must receive prior approval from Dyntek (an IDPA transportation subcontractor) before they can receive any transportation assistance. Dyntek staff make all decisions as to what type of assistance will be provided such as whether a child's medical condition precludes medical transportation by bus. (Pl. Ex. 62; Pl. Ex. 63.)^{*75}

174. Dyntek does not sufficiently subcontract with Medicaid providers to serve the plaintiffs and thus requests for transportation from hospitals are routinely delayed or are not usable due to tardy or absent transportation providers. (Lopez Dep. Tr. at 79:18-86:5.)

IV. Conclusions of Law¹⁵

¹⁵ Citations to the Findings of Facts are abbreviated as "FOF."

A. Equal Access

As noted above, 42 U.S.C. § 1396a(a)(30)(A) requires that a state Medicaid plan enlist sufficient providers such that care is available "at least to the extent that such care and services are available to the general population in the geographic area. . . ." Plaintiffs' argument that the defendants have violated this "equal access" provision has three components: (1) the law requires that Medicaid reimbursement rates paid to health care providers be sufficient to provide Medicaid recipients access to health care equal to that of the generally insured population; (2) the arbitrary and capricious manner in which the defendants set reimbursement rates has resulted in rates that are far too low to result in equal access to care; and (3) plaintiffs endure obstacles to finding care not faced by privately insured patients and, as a result, the health problems they experience are both more acute and more preventable.

Prior to trial the court ruled that in determining whether equal access to medical care exists, the relevant population for purposes of this comparison is the insured population and does not include the uninsured. *Arkansas Medical Soc'y, Inc.*, 6 F.3d at 527 ("To suggest that Congress appropriated vast sums of money and enacted a huge bureaucratic structure to ensure that recipients of the federal Medicaid program have equivalent access to medical services as their uninsured neighbors (i.e. close to none) is ridiculous."); H.R. Rep. No. 1010-247, 101st Cong., 1st Sess. 390 (1989) reprinted in 1989 U.S.C.C.A.N. 2060, 2116 ("compare the access of beneficiaries to the access of other individuals in the same geographic area with *public or private coverage*. . .") (emphasis added).

In determining whether equal access to medical services exists, at least one court has looked at a variety of factors including (1) the level of reimbursement to participating physicians in the market and the costs of providing such services; (2) the level of physician participation in the Medicaid program; (3) whether there are reports that recipients are having difficulty obtaining care;

(4) whether the rate at which Medicaid recipients utilize healthcare services is lower than the rates at which the generally insured population uses those services; and (5) whether defendants have admitted that reimbursement rates are inadequate. See *Clark v. Kizer*, 758 F. Supp. 572, 576 (E.D. Cal. 1990) *aff'd in relevant part sub nom, Clark v. Coye*, 967 F.2d 585 (9th Cir. 1992). As will be seen, while these factors are not addressed *seriatim*, nearly all are incorporated into the analysis below.

The starting point for the issue of equal access must be the rates Illinois Medicaid pays to medical providers for providing services to Medicaid patients. Rates and equal access simply cannot be divorced. The Seventh Circuit contemplated as much in *Methodist Hospitals* when it noted that states "may behave like other buyers of goods and services in the marketplace: They may say what they are willing to pay and see whether this brings forth an adequate supply. If not, the state may (and under § 1396a(a)(30), must) raise the price until the market clears." 91 F.3d at 1030. The court in *Methodist Hospitals* made clear that for a state to satisfy the "equal access" provision its rates need only "produce a *result*, not . . . employ any particular methodology for getting there." 91 F.3d at 1030 (emphasis in original). Thus, looking only at the end result of ⁷⁷ equal access, the court does not consider whether rates are set in an arbitrary and capricious manner. The relevant inquiry, as *Methodist Hospitals* suggests, is whether the rate paid by the IDPA is sufficient to enlist enough providers so that plaintiffs have equal access to medical services.¹⁶ The evidence plaintiffs brought forth in this case, which takes a number of forms, conclusively establishes that the rates paid by the Illinois Medicaid program are insufficient to entice medical providers to provide services to Medicaid patients. These rate payments, along with other considerations discussed below, show that the Medicaid recipients do not have "equal access" to medical services.

16 The case on which plaintiffs rely for the argument that arbitrary and capricious rate setting violates the equal access provision is *Rite Aid of Penn. v. Houstoun*, 171 F.3d 842, 852 (3d Cir. 1999). That case expressed disagreement with the Seventh Circuit's approach in *Methodist Hospitals* allowing states to behave like other buyers of goods in setting their market rates. The Third Circuit noted that "[w]e decline to adopt that approach because ordinarily, at least, a state may not act arbitrarily and capriciously, although other actors in the market may do so if they choose." *Id.* at 852. Needless to say, *Methodist Hospitals* is the precedent binding on this court, and that case makes clear that the only relevant inquiry is the result and not the methodology for getting there. 91 F.3d at 1030.

The court begins with the expert report and testimony of Dr. Flint. Dr. Flint surveyed the literature published in the medical field and opined that rates paid for providing services to Medicaid-enrolled patients is the factor that most influences a physician's decision whether, and to what extent, to treat Medicaid patients. (FOF ¶¶ 28-29.) Moreover, he researched the amount paid under Medicaid and compared it to rates paid under Medicare and private insurance in Cook County. (FOF ¶¶ 15-20.) Dr. Flint's analysis showed that Medicaid's reimbursement rates are far below those of other payers in the market. (*Id.*) Indeed, his analysis showed that Medicaid, at most, paid 55% of the rate that Medicare paid for the same service. (*Id.*) If Medicaid paid only 55% of the Medicare rate, the Medicaid rate was even a lower percentage of the rates paid by private insurance, which the testimony showed was greater than the rate paid by Medicare. (*Id.*)⁷⁸

As part of his analysis Dr. Flint also analyzed a physician's cost of overhead, meaning the cost of operating a practice before there is any compensation for the physicians in the practice. (FOF ¶ 19.) Dr. Flint's analysis noted that current

Medicaid rates would not even cover a physician's cost of overhead. (*Id.*) Dr. Flint's testimony and his report were persuasive evidence that the rates Illinois Medicaid pays simply do not entice medical providers to participate in Medicaid and, therefore, fails to afford plaintiffs equal access to medical care. If rates are the most important factor in determining whether and to what extent to see Medicaid patients, and if Medicaid pays significantly lower than other payer types, then it follows, as Dr. Flint testified, that insufficient access for Medicaid recipients "should be expected" in Cook County. (FOF ¶ 20.) Dr. Flint's conclusions were not rebutted. The State's expert, Todd Menenberg, did not consider Dr. Flint's analysis and did not present a competing analysis of a doctor's costs to practice or the level of reimbursement rates compared to other payers in Cook County.¹⁷

¹⁷ The court, in a pretrial ruling *in limine*, barred Mr. Menenberg from opining on the level of reimbursement rates at trial for three reasons. First, in his expert report Mr. Menenberg considered the uninsured in his opinion on equal access. As noted above, the appropriate measure of equal access is based on the insured population in the geographic area. Second, Mr. Menenberg only compared Illinois' Medicaid rates to rates set by a selected group of other states. Doctors in Illinois, however, would not consider Medicaid rates set by these other states in considering whether to serve children covered by Medicaid in Cook County. They would, instead, look to what other payers in Cook County are paying. Mr. Menenberg's report also provided no analysis confirming that these other states were, in fact, providing equal access to Medicaid recipients as required under federal law. Finally, while Mr. Menenberg took issue with any comparison between Medicaid rates and Medicare rates, he admitted that he was unaware of how Medicare rates are set. The evidence at trial established that Medicare rates are, in fact,

highly relevant in setting rates of all kind, and any opinion to the contrary is based on a misunderstanding of how rates for medical services are established. (FOF ¶ 16.)

Dr. Flint's analysis in his report and his trial testimony were persuasively supported by extensive trial testimony from numerous medical providers. This included testimony from Drs. Rosenberg, Krug, Lelyveld, Jurado, Green, Abelson and Newman. Combined, these doctors serve all portions of Cook County. The doctors each confirmed Dr. Flint's opinions that ⁷⁹ reimbursement rates for pediatric care (1) are insufficient to cover overhead costs; (2) result in significant losses for doctors and hospital pediatric departments and clinics with a significant volume of Medicaid patients; and (3) render providers unable to meet the demands of the Medicaid populations they serve. (FOF ¶¶ 19-24, 27, 30-31, 37, 39.)

The doctors' testimony did not relate solely to rates, and numerous other portions of their testimony is persuasive in establishing that plaintiffs do not have equal access to medical care. Testimony showed that Medicaid-enrolled children face conditions such as longer waiting times for care (FOF ¶¶ 41, 50, 53), a more limited population of providers willing to provide care (FOF ¶¶ 47-49), and multiple trips to the doctor for services which could be addressed in one visit. (FOF ¶ 22.) All in all, the doctors painted a picture of Medicaid-enrolled patients being afforded a significantly lesser degree of access to care than that enjoyed by privately-insured children.

Two doctors, Dr. Krug, head of the emergency room at Children's Memorial Hospital, and Dr. Lelyveld, from the University of Chicago hospitals' pediatric emergency room, each testified that Medicaid-insured children do not have access to primary care equal to that of privately-insured patients. (FOF ¶ 60.) Dr. Krug testified that the

access of Medicaid-enrolled children is "vastly diminished" and "not remotely close" to that of privately-insured children. (*Id.*)

Drs. Krug and Lelyveld also testified that Medicaid-enrolled pediatric patients are more likely to have no primary care provider than privately-insured patients. (FOF ¶ 51.) Several of the physicians testified that doctors will either not see Medicaid-insured children at all or will significantly limit the number of Medicaid-enrolled children they will accept. (FOF ¶ 47.) All of the physicians testified that when they attempt to refer patients for pediatric specialty care, it is ⁸⁰ far more difficult to find a doctor willing to accept a referral for a Medicaid-enrolled child than it is for a privately-insured child. (FOF ¶ 49.)

There was also testimony by the physicians that the health problems of children on Medicaid are of a different degree than children with private insurance and are indicative of a population without access to a medical home where they can receive anticipatory guidance, preventive care and early diagnosis. (FOF ¶¶ 32, 50-53.) Dr. Krug testified that Medicaid patients in the emergency room frequently come in with conditions that privately-insured patients do not typically have and which reflect a lack of primary care, including untreated bone fractures or advanced asthmatic conditions. (FOF ¶ 50.) In addition to asthma, Dr. Lelyveld also included gastroenteritis, flu and diabetes as other conditions frequently presented with more aggravated or serious symptoms by Medicaid-enrolled children as a result of lack of primary care. (*Id.*) Indeed, many of the physicians testified that Medicaid children frequently use the emergency room as a source of primary care because they simply have nowhere else to go. (FOF ¶ 52.)

The physicians testifying at trial also brought forth persuasive evidence concerning non-rate factors that would influence a doctor's decision to open his or her practice to Medicaid patients. Dr. Flint noted that these non-rate factors have been dubbed

as Medicaid "hassles" in medical literature. (FOF ¶ 22.) Some of these so-called Medicaid hassles are, perhaps, predictable. For example, each physician testified that Medicaid has a very long payment cycle, which was identified as an important factor in determining whether to participate in the Medicaid program. (FOF ¶ 21.) Moreover, many physicians testified that IDPA would arbitrarily reject Medicaid claims and had instituted billing policies and developed forms that served as a disincentive for provider participation. (FOF ¶ 22.) Other Medicaid hassles discussed at trial *81 ranged from the bizarre to the irrational. Dr. Krug testified that Medicaid had "disenrolled" him from its provider database for no reason, despite the fact that he provides care to thousands of Medicaid-enrolled children every year. (*Id.*) Several other doctors testified that the IDPA refused to pay providers for more than one service per day, regardless of the number of services that a child needs or receives. (*Id.*) As explained in an example by Dr. Krug, "You know, a kid falls off the monkey bar and hits his head, and, you know, that is a concern. He has also lacerated his knee. That needs to be done as well. We can and should bill for both of those services, but we'll only get paid [by Medicaid] for one of them." (Krug. Trial Tr. at 276:19-25.) Defendants have asserted no conceivable medical reason for such a policy, and no argument was or can be made that a similar restriction was encountered by physicians when they seek Medicare or private insurance payments. These hassles provide evidence supporting that a physician would simply choose not to see Medicaid patients rather than deal with the hassles.

The testimony of these doctors was not rebutted and is highly persuasive in establishing the level of access provided to Medicaid recipients. Defendants, in response to this testimony, argue that it only establishes that medical professionals want higher reimbursement rates from the IDPA. To the extent that this argument suggests that the witnesses were biased and, therefore, that the

court should place little weight on their testimony, such argument is rejected. The court observed the testimony of these doctors and did not notice even a hint of bias. Each doctor was a highly trained medical professional who had dedicated his life to the provision of medical services to children. Their testimony made abundantly clear that their interest was in the health and well-being of children. *82

The testimony of the medical providers, along with Dr. Flint's expert report and trial testimony, was corroborated by evidence presented by certain Medicaid recipients. Six Medicaid recipients testified at trial as to their actual experiences attempting to find primary care doctors or specialists who accepted Medicaid for their children. None of these witnesses were able to access medical care in a manner equal to that of the generally-insured population. (FOF ¶¶ 53-55.) Several of the witnesses were in the unique position of being able to compare their experiences in finding doctors to treat their children covered under Medicaid with their experiences finding doctors to treat their children covered under private insurance. (FOF ¶ 55(e), (f) (g).) As these witnesses testified, obtaining medical services for their children covered under private insurance was not a difficult task, while attempting to obtain care for their children covered under Medicaid was a much more difficult and frustrating process. (*Id.*) These witnesses also testified in detail that State programs designed to provide assistance for finding doctors were unhelpful and they were not able to locate doctors on their own. (FOF ¶¶ 53, 54, 55(a) (b).)

Once again, the defendants have not effectively rebutted any of the above evidence. As plaintiffs point out, the defendants have no knowledge regarding the state of access for Medicaid-enrolled children in Cook County and have never tried to learn what the level of access might be. Employees of the IDPA freely admit that rates are low and not very attractive and are set without

regard to the effect such rate-setting will have on access, even though they acknowledge that an increase in rates would increase the number of providers who would participate in the Medicaid program. (FOF ¶¶ 10, 56, 57, 59.) At trial there was evidence presented of the raw number of providers who are "enrolled" in Medicaid, but the court agrees with plaintiffs that this does not ⁸³ establish equal access. All a provider needs to do to become enrolled is to fill out a form. (FOF ¶ 45.) There is no obligation to treat even a single Medicaid patient and the provider would remain enrolled so long as he or she billed Medicaid once for a service over an 18-month period. (FOF ¶ 152.) These very same doctors that may have enrolled in Medicaid may be unwilling to accept new Medicaid patients or may have stopped seeing Medicaid patients entirely within the last 18 months.

Contrary to this analysis of raw numbers of providers enrolled in Medicaid, plaintiffs presented an analysis by Dr. Darling which attempted to analyze how many doctors provide a service (specifically well-child examinations) to Medicaid-enrolled children in Cook County. Dr. Darling first looked at all doctors who billed at least one service of any kind for a Medicaid-enrolled child during the three and one-half year period from July 31, 1998 to December 31, 2001. (FOF ¶¶ 74, 76.) He determined that 10,494 doctors billed IDPA for at least one service provided to a Medicaid-enrolled child in Cook County between the ages of 10 days and 18 years, and 7,131 doctors billed IDPA for a service provided to a child between the ages of 10 days and 7 years. (FOF ¶ 46.) Dr. Darling's analysis also showed that over a 3½ year period more than half of these doctors never provided even a single well-child examination and that the vast majority of well-child services are billed by only a very small minority of the doctor community. (*Id.*) As this analysis suggests, only a small subset of doctors provide significant levels of well-child services to

plaintiffs and reliance on the enrolled doctors as an indicator of access to care creates an overstated picture.

While the court will address below in the EPSDT portion of this opinion Mr. Menenberg's disagreements with Dr. Darling's methodology, for purposes here Mr. Menenberg ⁸⁴ did not undercut Dr. Darling's analysis. In fact, Mr. Menenberg's analysis supports Dr. Darling's conclusions in this regard. Dr. Darling analyzed mainstream providers of medical care while Mr. Menenberg also included "safety net" care providers such as FQHCs and public health clinics. Under Mr. Menenberg's analysis there were 11,767 providers who had provided a well-child examination in the relevant time period using the broader IDPA definition of a well-child exam (only 4,266 provided an HMK exam). (Def. Ex. 1 at 19-22.) According to Mr. Menenberg, based on this number of providers, each provider would have to serve "approximately 87 children" which, in his estimation, gives plaintiffs sufficient access to medical care. But Mr. Menenberg also showed that more than half of all these providers serving Medicaid-enrolled children in Cook County have served 10 or fewer unique Medicaid-enrolled children. (*Id.*) This confirms exactly what Dr. Darling stated, that most services are being provided by a small subset of providers. Certainly each provider as Mr. Menenberg defined that term was not seeing 87 children.

Moreover, the court also takes issue with the inclusion of these so-called "safety net" providers in the equal access analysis. The inquiry is, after all, of *equal* access and not simply of access. The plaintiffs are entitled to the same level of medical care as is provided to children covered under private insurance. That must include mainstream medical care. Evidence at trial established that children need a medical "home" where they can be provided regular and ongoing services. (FOF ¶¶ 32, 68.) Also, in certain instances parents of children need access to their physician on nights or weekends. (FOF ¶ 42.) Such services simply

cannot be provided by these safety net providers. Indeed, the evidence further showed that these FQHCs and public health clinics have long lines which, in some instances, may place patients in danger. (FOF ¶¶ 41, 50, *85 53.) That, according to several doctors, often results in patients coming to the emergency room seeking treatment for primary care. (FOF ¶¶ 52-53.) Since the plaintiffs are entitled to access equal to that of children with private insurance, the appropriate measure must be that of mainstream medical care that privately insured children are likely to receive.

Wherefore, based on the entire record, the court finds that the plaintiffs have met their burden of establishing that the defendants have violated their rights by failing to provide them with equal access to medical services. Plaintiffs simply do not have access to medical services which is equal to that of privately insured children.

B. EPSDT Provisions

The plaintiffs' claims under the EPSDT provisions take two parts. First, they allege that the defendants have failed to make "effective" efforts to inform them about the EPSDT program. Their second theory is that the defendants have failed to connect children to EPSDT services and have failed to establish a Medicaid program designed to provide all such services to all Medicaid-enrolled children on a timely basis.

1. Effective efforts to inform

Under 42 U.S.C. § 1396a(a)(43)(A), a state Medicaid plan must provide for the informing of all persons under the age of 21 who are eligible for Medicaid of the availability of the EPSDT services described in 42 U.S.C. § 1396d(r) and of the need for age-appropriate immunizations against vaccine-preventable diseases. The defendants must provide for a combination of written and oral methods and must "effectively" inform all EPSDT eligible individuals (or their families) about the EPSDT program. 42 C.F.R. § 441.56. *86

Once again, the plaintiffs' proof in support of their argument that they have not been informed of the availability of EPSDT services and immunizations takes several different forms. The court begins with the testimony of the IDPA employees, who described many of the IDPA's procedures and practices with regard to informing Medicaid recipients of EPSDT services.

Initially, these employees documented the different ways a child can be enrolled in Medicaid and the different notices and information provided under each method of enrollment. For example, the first method under which a child may enroll in the Medicaid program is to apply through their local IDHS office. (FOF ¶ 122.) At this time the recipients are supposed to be informed orally by local IDHS staff about the Healthy Kids Program (which, as noted above, is the Illinois EPSDT program, *see* FOF ¶ 65) and are to be given IDPA Form 1123, entitled Healthy Kids: Good Health for Children and Teens. (FOF ¶ 123.) These recipients who apply at local IDHS offices are not provided the 89 page KidCare Handbook. (FOF ¶¶ 122-23.) Neither the IDPA nor the IDHS have (1) any policies or procedures in place to govern how oral notice is to be given to these recipients, including the content and manner of such notice; (2) any training manuals relating to advising recipients as to the Healthy Kids program; and (3) any accountability system to assure that IDHS caseworkers actually give oral notice of EPSDT services. (FOF ¶ 123.)

A second method for enrollment in the Medicaid program is by mailing a KidCare application to the IDPA KidCare central processing unit. (FOF ¶ 122.) A recipient who chooses this method for enrollment will be provided a copy of the 89 page KidCare Handbook but not IDPA Form 1123. (FOF ¶ 124.) Moreover, staff at the IDPA KidCare central processing unit do not have any duty to call persons they enroll in the Medicaid program to orally explain the *87 EPSDT program. (*Id.*) IDPA has no written policy on how it orally

informs children and their families of the EPSDT program or the benefits of preventive health when they are applying through the mail. (*Id.*)

Finally, a recipient may be enrolled in the Medicaid program by completing a KidCare application with a KidCare application agent who then sends the KidCare application to the IDPA KidCare central processing unit. (FOF ¶ 122.) KidCare application agents are neither instructed nor required to inform applicants about the specifics of the Healthy Kids program. (FOF ¶ 125.) There was no evidence presented that children and their families who apply for KidCare through KidCare application agents uniformly receive any appropriate oral information about the EPSDT program or the benefits of preventive health.

Also related to the issue of EPSDT notices are IDPA Forms 1802 and 2286. Form 1802 is a one-page document sent by the IDHS Central Office annually to all children enrolled in Medicaid to inform them about the EPSDT program. (FOF ¶ 126.) Form 2286 is sent to children prior to the due date of each periodic examination as set by the EPSDT periodicity schedule for well-child examinations. (FOF ¶ 127.) This notice only mentions well-child exams and not blood lead screens or immunizations. (*Id.*) It advises plaintiffs that they "may" be due for an exam. (*Id.*) Neither IDPA nor IDHS disseminate information about the Healthy Kids program to children and families applying for Medicaid using any other forms. (FOF ¶ 128.) Many Medicaid recipients never receive any of these EPSDT notices at all. (FOF ¶ 129.) IDPA has not surveyed and does not study whether recipients receive automated notices or whether these notices are an effective way of notifying parents to take their children to medical providers. (FOF ¶ 130.) IDPA develops all of its written EPSDT notices in-house and does not field test ⁸⁸ these forms with focus groups or other Medicaid recipient audiences. (FOF ¶ 132.) IDPA also does not use outside linguists* in developing or evaluating these

materials and has not studied what the most effective mix of oral and written material for informing recipients about EPSDT services would consist of.¹⁸ (FOF ¶¶ 132-33.)

¹⁸ On a related note, plaintiffs also offered evidence concerning the methods the defendants used to provide assistance to Medicaid recipients. As this evidence shows, these methods were ineffective. The parents of Medicaid enrolled children testified that the physician referral hotline administered by IDPA gave out referrals to physicians who were not even accepting Medicaid patients. (FOF ¶ 55(a), (b) (e).) Employees of IDPA testified that they do not investigate the capacity of physicians on the referral list to accept new patients nor do they confirm whether the physicians are even still participating in the Medicaid program. (FOF ¶¶ 152, 155-164.) The local offices administered by the IDHS, which serve as the primary personal contact that Medicaid recipients have with the state agencies, are staffed with caseworkers who offer no assistance in referring recipients to doctors. (FOF ¶¶ 159-60.)

Plaintiffs supplemented this testimony from the IDPA employees with testimony and an expert report from Dr. Timothy Shanahan. Dr. Shanahan was retained to analyze the EPSDT notices sent by IDPA for readability and understandability by their target audiences in Cook County. Dr. Shanahan opined that the readability of documents used for public health purposes should have difficulty levels of approximately grade four to six. (FOF ¶ 135.) His opinion was that the IDPA's written methods for informing families about EPSDT services are ineffective because they are too difficult to read for many parents and children. (FOF ¶¶ 135-140.) He summarized by noting, "My testimony is that these documents are difficult. And if this is the only way of putting this information out, a significant portion of the population won't understand them." (FOF ¶ 140.) Dr. Shanahan noted that when documents are

especially long, or when more difficult than the reading competency among the target population, the best and only way to communicate the information is to combine oral presentations with
 89 the written material. (FOF ¶ 136.) *89

Finally, plaintiffs also argue that the results of the EPSDT program, which will be discussed more fully below, illustrate that defendants have not effectively informed them of the EPSDT services. If, plaintiffs argue, the defendants were effectively notifying them of the availability of EPSDT services, then the level of services should have been much higher than it actually turned out to be.

Weighing all of the above evidence, the court finds that plaintiffs have supplied sufficient proof showing that the defendants have not effectively informed them of the availability of EPSDT services. As the evidence showed, IDPA provided differing forms of information depending on the manner in which a recipient applied for benefits, with no apparent reason for the differences. Even when IDPA has a policy of providing oral notice to recipients, there is no practice for ensuring that such notice is effectively given and no training to suggest what effective oral notice entails. The written EPSDT notices provided by IDPA only mention well-child examinations and omit notice of lead-blood screens or immunizations. Furthermore, as the evidence at trial showed, these notices are often not received (indeed, there was no testimony from any recipient that they had in fact received such EPSDT notices) and IDPA has never bothered studying whether these notices reach their intended audience or whether they effectively convey information about the availability of EPSDT services.

Moreover, the court finds the Expert Report and testimony of Dr. Shanahan persuasive. While defendants take issue with many of his opinions, the central premise of his testimony and report is clear. Public health documents such as those provided by defendants are often difficult documents from a readability and

understandability standpoint. Informing families of EPSDT services solely on the basis of the documents provided by IDPA would be ineffective and would *90 miss a significant portion of the target population. Thus, to effectively inform Medicaid recipients such written materials need to be supplemented by oral presentations. It is difficult for IDPA to refute this contention insofar as it has recognized as much in other scenarios. IDPA employees have stated that to attract recipients' attention "you have to have multiple methods multiple times." (FOF ¶ 145.) Moreover, when IDPA attempted to increase the number of children *enrolled* in the KidCare program, IDPA used a wide variety of methods such as public service announcements, public presentations at fairs and festivals, public presentations at community meetings, grants to community groups, radio, television, newspaper and community advocacy directed to African-American and Hispanic families, sponsorship of events such as a circus and general advertising through radio, newspaper, bus billboards, mass transit advertising and distribution of bookmarks, coloring books, crayons and other items at fairs. (*Id.*)

None of these methods have ever been used to inform recipients of the availability of EPSDT services. Instead, the IDPA provides different information depending on how one applies. Only under one method of application is oral guidance even supposed to be given, but no one can say how often it is given or whether it is at all. IDPA's method for informing recipients that services are due is simply to mail out notices, the readability of which has never been determined. IDPA further has no idea whether these notices reach the recipients or, if they do, whether they are even considered. This, simply put, is not effective notice of the availability of EPSDT provisions. As will be seen below, the ineffectiveness of this notice shows up in the number of EPSDT services that plaintiffs actually receive. *91 2. *EPSDT services*

The Medicaid Act requires states to provide Medicaid-enrolled children with certain medical services, including well-child examinations and immunizations, known as EPSDT services. *See* 42 U.S.C. § 1396d(r). In addition, the Medicaid Act further requires that states provide any follow-up or corrective services that may be necessary based on the results of any EPSDT screenings. *See* 42 U.S.C. § 1396a(a)(43)(C). These EPSDT requirements differ from merely providing "access" to services; the Medicaid statute places affirmative obligations on states to assure that these services are actually provided to children on Medicaid in a timely and effective manner. *See, e.g., Stanton v. Bond*, 504 F.2d 1246, 1250 (7th Cir. 1974) ("The mandatory obligation upon each participating state to aggressively notify, seek out and screen persons under 21 in order to detect health problems and to pursue those problems with the needed treatment is made unambiguously clear by the 1967 act and by the interpretative regulations and guidelines."). Significantly, plaintiffs do not suggest that the inquiry is whether or not some children receive EPSDT services. Certainly some do, and it would be unrealistic to hold the IDPA liable for not providing EPSDT services to every single child. Instead, plaintiffs' theory is that the IDPA has not established a Medicaid program designed to provide all EPSDT services to all Medicaid-enrolled children on a timely basis. Based on the evidence received at trial, the court agrees.

The Medicaid Act requires states to adopt a "periodicity schedule" for screening services that "meets reasonable standards of medical and dental practice" and sets forth the stages at which recipients should receive such services. *See* 42 U.S.C. § 1396d(r)(1)-(4); 42 C.F.R. § 441.58. IDPA has adopted a periodicity schedule based on the recommendations of the ^{*92} American Academy of Pediatrics that incorporates the nationally recognized schedule for immunizations, and calls for seven appointments for well-child screenings in the first year of life, with a

decreasing number of annual appointments as the child becomes older. *See* 89 Ill. Admin. Code § 140.488.

Nearly everyone involved in this case on the defendants' side has declared, practically in unison, that the periodicity schedule is but a "recommendation." No witness for the defendants explained in great detail what this means. The court understands defendants to be suggesting that because, in their mind, the periodicity schedule is only a so-called "recommendation," it is acceptable if plaintiffs are not afforded all of these services. There is no basis for such a belief. While the American Academy of Pediatrics may have recommended a certain schedule for well-child screenings and immunizations, federal law requires states to adopt a periodicity schedule that meets reasonable standards of medical and dental practice. *See* 42 U.S.C. § 1396d(r)(1)-(4). In conformance with federal law, the State of Illinois adopted the recommendations of the American Academy of Pediatrics for the number and timing of well-child examinations. This periodicity schedule, therefore, is a required component of Illinois' EPSDT program. Any suggestion that it serves as a "recommendation" or that children need not be provided all such services is simply baseless.

States are required under the Medicaid Act to maintain data on EPSDT services provided to Medicaid-enrolled children. *See* 42 U.S.C. § 1396a(a)(43)(D). The primary source of data the State of Illinois uses to measure the EPSDT services provided to children is the "paid claims" data maintained within IDPA's MMIS database. Regarding immunizations, IDPA also maintains a separate data system known as Cornerstone, which ⁹³ attempts to capture immunization services ^{*93} provided through various public health agencies. MMIS and Cornerstone are the defendants' best-available resources for determining the medical services provided to the Medicaid-enrolled children and are used by the defendants (1) for their own internal analyses of the care provided;

(2) for analyzing the performance of contractors such as MCOs; and (3) for reporting requirements to the federal government.

The data contained in these databases was analyzed by Dr. Darling in both his original Expert Report and Supplemental Report.¹⁹ He adjusted the data he was given to limit his analyses to services provided during the period of July 1, 1998 to December 31, 2001 (the "Data Period"). (Pl. Ex. 118 at 4-6.) Exclusions made within the data given to Dr. Darling were explained in his report. For example, to limit the entries to the Data Period he was examining, Dr. Darling deleted eligibility records for recipients (1) who were born after December 31, 2001; (2) who were first eligible for Medicaid after December 31, 2001; and (3) with certain anomalous records where an eligibility date preceded the recipient's date of birth. *Id.* These adjustments reduced the number of unique recipients from 957,710 to 910,451. (*Id.*) Dr. Darling deleted those entries with a date of service after December 31, 2001 and all service records for which no ⁹⁴ matching recipient could be found in the adjusted eligibility data. (*Id.* at 6.)

¹⁹ Discovery in this case can best be described as a difficult process. In August 2002, the defendants provided the plaintiffs the data from MMIS. The defendants represented in their discovery responses that the data consisted of "all encounter data for children involved in this action." (Pl. Ex. 116, Ex. B.) This representation was never amended by the defendants. Dr. Darling performed his analysis based on this data and prepared his original report. That report was tendered to the defendants on March 3, 2003. In June 2003, the defendants tendered Mr. Menenberg's report to the plaintiffs. Mr. Menenberg's report analyzed not only the MMIS data but also additional data from the IDHS Cornerstone database. The Cornerstone data, however, was not provided to the plaintiffs until May 30, 2003, more than 45 days after the defendants provided this data

to Mr. Menenberg, three months after Dr. Darling completed his initial report and about two weeks before the defendants turned over Mr. Menenberg's report. Indeed, as one of his critiques of Dr. Darling's analysis, Mr. Menenberg asserted that Dr. Darling's analysis was flawed because it did not take into account the Cornerstone data, which neither Dr. Darling nor the plaintiffs had even been provided. Plaintiffs were granted leave by Magistrate Judge Martin Ashman to supplement Dr. Darling's analysis to account for this Cornerstone data and to address other criticisms made by Mr. Menenberg. Both Dr. Darling's original Expert Report and his Supplemental Report were accepted into evidence at trial.

In his initial report, Dr. Darling also adjusted the data to limit his analyses to services provided to recipients who were continuously Medicaid-eligible during the time periods he analyzed. (*Id.* at 6-8.) Dr. Darling explained that he did this for two reasons. First, he stated that the State had more limited opportunities to provide services to non-continuously eligible children and, second, because these recipients could have received unrecorded services while not covered under Medicaid. (*Id.* at 6-8.) This adjustment reduced the number of recipients analyzed from 910,451 to 818,019, a reduction of just under 10%. (*Id.*) In response to Mr. Menenberg's criticism of this continuously-eligible limitation, in his Supplemental Report Dr. Darling later reran his analysis including all 910,451 recipients and his overall results were very similar. (Pl. Ex. 119.)

Significantly, through his analysis Dr. Darling set out to determine the level of services that had been provided to Medicaid-enrolled children in Cook County on a timely basis. Therefore, he established age ranges in order to capture whether or not services were being provided to the plaintiffs in accordance with the Illinois periodicity schedule. For example, according to the periodicity schedule a child should receive 6

screening services after leaving the hospital and prior to one year of age (at 2 weeks, 1 month, 2 months 4 months, 6 months and 9 months). To evaluate the extent to which such services were actually received, Dr. Darling analyzed the services given to children between the ages of 10 days and 11 months.²⁰ Similarly, to evaluate whether children were receiving appropriate screenings services due at 12 months, 15 ⁹⁵ months and 18 months, Dr. Darling analyzed services received by children between 11 and 23 months. Dr. Darling conducted additional analyses of the well-child services provided to Medicaid-enrolled children in Cook County through age five.

²⁰ Dr. Darling explained why his analysis was limited to children between the ages of 10 days and 11 months. This limitation is discussed in FOF ¶¶ 72 and 82.

Based on this methodology, Dr. Darling showed that more than half of the children between 10 days and 11 months, who should have received six screening services, received none. Even under the IDPA's broader definition of a "well-child" examination, which includes a five-minute exam with only a nurse, Dr. Darling showed that approximately 45% of children received no well-child exams during this period. In addition, nearly 60% of children between the ages of 11 and 23 months received zero well-child exams, and over 70% received zero well-child exams between 23 and 35 months and between 25 and 47 months.

In his Supplemental Report, Dr. Darling added the non-continuously eligible recipients. Concerning well-child exams, adding these non-continuously eligible recipients yielded only negligible changes of no more than 2%. (Pl. Ex. 119 at 2-20.) In his Supplemental Report Dr. Darling also re-analyzed immunization data to include information from the Cornerstone database. With this data included, the records showed that with respect to every immunization analyzed, roughly 50% or more of the eligible recipients had not received a timely immunization. (Pl. Ex. 119 at 21-26.)

In addition to the testimony and reports of Dr. Darling, the plaintiffs also looked at Cook County-specific reports prepared by the State showing the number of EPSDT services provided to children. These Cook County-specific reports are prepared in the same manner and with the same data as the statewide CMS-416 reports submitted to the federal government under 42 U.S.C. § 1296a(a) (43)(D). ⁹⁶

The methodology used in creating these reports overstates the actual level of EPSDT services provided. For example, for purposes of the CMS-416 forms IDPA counts many types of doctor visits that do not and cannot comply with EPSDT well-child screening criteria, including short visits where a patient may not even see a doctor. (FOF ¶ 105.) These reports also count well-child exams received by children far in excess of the number of exams required under the Illinois periodicity schedule (FOF ¶ 104(a)), and use a cut-off date of September 30 to establish a child's age, even though this makes it seem as though a child has received all of his or her screens when he or she may have received less than half of them. (FOF ¶ 104(b) (c).)

Even though overstated, the Cook County specific reports show that the level of EPSDT services provided to children are inadequate. These forms show that for the years 2000 through 2002, approximately one-third of Medicaid-enrolled children in Cook County did not receive any well-child screening services and 75% did not receive a dental screening. (FOF ¶¶ 107-08.) Based on this data, IDPA notified the MCOs providing services to children in Cook County that each was failing to meet the participation requirements set forth in their contractual "minimum standard of care." (FOF ¶¶ 109, 117.)

In response to this evidence, the defendants (1) attempt to impugn the very data they tendered in discovery and which they submit to the federal government and (2) rely on Mr. Menenberg's critiques of Dr. Darling's methodology.

Concerning argument (1), according to defendants, the "paid claims" used in MMIS and Cornerstone databases underreport the number of services provided to the plaintiffs. Because the data are underreported, defendants submit that Dr. Darling's analyses must be flawed. For example, defendants argue (a) that encounter data may not be submitted by physicians to particular MCOs and, therefore, may not be submitted to ⁹⁷ the IDPA; (b) that large numbers of MCO encounter data may be rejected by the IDPA because the encounter data does not meet the edits of the claims processing system; (c) that because FQHCs billings are based on an encounter rate, which includes all services provided to a child for that day, and because the services on the encounter line are often limited to one service, the FQHCs do not provide an accurate measure of the services a child received during a visit; and (d) that other providers in IDPA's provider network provide services to Medicaid eligible children but may or may not bill for these services or may or may not list all services provided in a particular encounter.

These arguments are unpersuasive. Initially, most are based only on speculation. No witness with direct personal knowledge testified as to the operation of the entities the defendants claim provide services to Medicaid-enrolled children but do not bill or otherwise report such data to IDPA. In fact, much of the evidence showed that the types of entities defendants discuss do bill the IDPA for services they provided and were, therefore, analyzed by Dr. Darling. Exhibit 12 to Mr. Menenberg's report sets forth a list, derived from the State's MMIS data of providers that provided EPSDT services, that includes FQHCs, encounter rate clinics, health departments and school based/linked health clinics.

Moreover, with regard to FQHCs, no witness verified or even testified that FQHC's might perform two or more well-child services but only provide the procedure code for one. Testimony showed that FQHCs bill for each encounter according to a CPT-code, and there is no evidence

to support the speculation that if the FQHC was providing a well-child examination, it would not identify the appropriate CPT-code for that encounter. ⁹⁸

As for the MCOs, which serve less than 20% of the plaintiffs, defendants argue that because doctors are normally paid on a capitated basis, they would have no incentive to record each service they provided to the plaintiffs. No evidence was presented on how to estimate or quantify such a purported understatement, and the defendants acknowledged that their contracts with the MCOs require that MCOs bill for every encounter. (FOF ¶ 112.) Moreover, only a portion of the doctors enrolled in MCOs are paid on a capitated basis. (FOF ¶ 110.) Thus, in essence, the defendants argue that only some fraction of those doctors fail to bill appropriately. This evidence is simply unpersuasive.

With regard to public health clinics and school-based clinics, once again no witness testified concerning the billing practices at such clinics or whether underbilling of services would exist. Instead, Mr. Menenberg's report shows that public health clinics and school-based clinics do bill IDPA for services provided and their billing information is in the MMIS data.

Finally, and more fundamentally, Dr. Darling's analysis provides the opportunity to examine the actual level of the shortfall in the number of services that should have been provided to the plaintiffs and whether, realistically, those services could have been provided without anyone billing the IDPA. As will be seen, to support the defendants' argument, there would have to be more free services provided than services actually billed.

Dr. Darling's Table 1 in his March 3, 2003 report shows of 112,512 children who should have received 6 well-child screening services, 58,794 received zero and 10,508 received one. Comparing the number of services that were provided to these children with the number of services that would

99 have been billed had all 112,512 children in this age group received all 6 scheduled screenings shows that during the period of July 1, 1998 through December 31, 2001, *99 only approximately 170,000 out of a total of over 675,000 scheduled EPSDT services were received by children from 10 days to 11 months of age. This represents a shortfall of over 500,000 services.

Applying this analysis to the continuously Medicaid-eligible children through age 5 that Dr. Darling analyzed, IDPA records reflect approximately 330,000 services were given out of a total of more than 1.2 million services that should have been given. Thus, children under 5 received almost 900,000 fewer well-child examinations than called for by the Illinois periodicity schedule.

For the defendants to argue that the number of services listed above are provided somewhere by someone who does not bill the IDPA is sheer fantasy. There was absolutely no evidence brought forth corroborating such a theory and, quite simply, it strains the imagination to believe that this many services are provided for free by some provider the IDPA cannot even name. As defendants point out, even if the MMIS and Cornerstone data were underreported to a significant degree, the level of services provided to the plaintiffs is inadequate. The court finds defendants' arguments attacking their very own data which, once again, is submitted to the federal government as required by federal law, to be completely unpersuasive.

Defendants' reliance on Mr. Menenberg's critiques of Dr. Darling's methodology fares no better. Mr. Menenberg lodged a variety of attacks on the methodology of Dr. Darling, but all ultimately fail. First and foremost, Dr. Darling and Mr. Menenberg took two separate approaches, and Mr. Menenberg's analysis, as it relates to the provision of EPSDT services, is unhelpful. While Dr. Darling examined the medical services provided to

the plaintiffs within certain age groups to assess whether EPSDT services have been provided on a 100 timely basis, Mr. *100 Menenberg measured all services provided to the plaintiffs to measure whether children have access (not equal access) to services.²¹ This did not address nor undercut Dr. Darling's analysis in any way. Mr. Menenberg himself conceded that he was not comparing his analysis to the Illinois periodicity schedule and that Dr. Darling's analysis "might" be helpful in that regard. (Menenberg Trial Tr. at 1306:3-9.)

²¹ Even assuming that Mr. Menenberg's analysis had relevance to the EPSDT provisions, which it does not, plaintiffs persuasively point out that Mr. Menenberg's results overstate the level of access to services. For example, Mr. Menenberg included every visit to a doctor, such as well-child visits, sick child visits and trips to the emergency room or to a "safety net" clinic for an acute condition. This is not relevant toward the question of whether children are able to obtain regular well-child care. Mr. Menenberg also excluded all children that became eligible for Medicaid prior to July 1, 1998, even though he admitted he had all of the encounter information for these children within the Data Period. As plaintiffs point out, under Mr. Menenberg's analysis the defendants' position in this case would be better if the average number of visits to doctors were as high as possible. By excluding children eligible before July 1, 1998, Mr. Menenberg's analysis by its nature includes every child that should have received seven exams during the Data Period and excludes virtually all of the children who should have received one. Thus, nearly all of the children that would increase the number of examinations were included in Mr. Menenberg's analysis while he eliminated those that would lower the number of exams.

Mr. Menenberg also attacked Dr. Darling's report and testimony in several other respects (many of which were introduced for the first time at trial). For example, Mr. Menenberg argued that Dr. Darling's methodology was flawed because Dr. Darling only addressed those children who were entirely within the studied age ranges during the Data Period.²² Mr. Menenberg argued that because of this exclusion Dr. Darling did not consider anywhere between 660,000 and 742,000 services provided to the children.

²² Plaintiffs presented the following example of Dr. Darling's exclusion. A child born March 1, 1998 would be excluded from Dr. Darling's analysis because that child was not both 10 days and 11 months old during the Data Period. Instead, the child would have been 4 months old at the start of the Data Period.

Mr. Menenberg's critique, however, once again focused on looking at the total number of services provided. As plaintiffs have repeatedly pointed out, Dr. Darling's analyses examined something separate, that being the percentages of children ¹⁰¹ who were receiving timely EPSDT ^{*101} services in accordance with the periodicity schedule. If Dr. Darling were to have included these partial year increments, his analysis would have been inaccurate for showing the total number of services that were provided according to the Illinois periodicity schedule.²³ Mr. Menenberg and Dr. Darling took separate approaches and Mr. Menenberg's criticisms never fully account for what exactly Dr. Darling was attempting to show. As such, the court finds these criticisms unpersuasive.

²³ If Dr. Darling had included these children in his analysis, the most services that a child born on March 1, 1998 could have received would have been three, even if the child had received all six scheduled services on a timely basis. Including such children would have understated the percentage of children receiving proper numbers of timely EPSDT services.

Based on the entire record, the court finds that the plaintiffs have shown that they are not being provided EPSDT services under the defendants' State Plan and that the defendants are in violation of federal law. The IDPA has not established a Medicaid program designed to provide all EPSDT services to all Medicaid-enrolled children on a timely basis.

CONCLUSION

For all of the reasons set forth above, the court declares that the defendants' policies and practices have violated and are violating the rights of the plaintiffs under [42 U.S.C. § 1396a\(a\)\(30\)\(A\)](#) and the EPSDT provisions. This case will be called for status on September 14, 2004 at 9:30 a.m. to discuss further proceedings relating to an appropriate injunction to remedy the defendants' violations. Furthermore, the plaintiffs are awarded ¹⁰² their ^{*102} costs and reasonable attorneys' fees, the amount of which to be determined upon entry of final judgment in accordance with Local Rule 54.3. It is so ordered.

¹ *1

ILDPA FEE SCHEDULE COMPARISON (3/20/24a), Brian Morse, MD, PhD

CPT code	Base 2006-2023	Base 7/2020-2023	MCH Add-on*	Total w/ MCH	2024 Medicare^		2024 Medicaid/Medicare Ratio - Base		2024 Medicaid/Medicare Ratio - with MCH		Expected 2024# (2006 + inflation)		100% M-care**, per AAP		70% of 2024 Medicare		State Proposal^^		Act % of M-care for Chgo		Act % of M-care for IL-Rest		% of 2006 fee adj for inflation##	
					Chgo	IL-Rest	Chgo	IL-Rest	Chgo	IL-Rest	Base	+ MCH	Chgo	IL-Rest	Chgo	IL-Rest	Base	+ MCH	Base	+ MCH	Base	+ MCH	Base	+ MCH
99211	12.30	5,547	0.58	12.88	23.68	21.58	0.52	0.57	0.54	0.60	19.25	20.16			16.58	15.10	5.91	6.49	0.25	0.30	0.27	0.30	31	32
99212	24.25	19,852	1.40	25.65	58.53	53.71	0.41	0.45	0.44	0.48	37.95	40.14			30.97	37.60	24.00	25.40	0.41	0.43	0.45	0.47	63	63
99213	28.35	31.81	18.21	49.22	94.03	86.81	0.33	0.36	0.52	0.67	44.37	72.87			65.82	60.77	44.67	62.88	0.48	0.67	0.51	0.72	101	86
99214	42.50	47.52	30.47	78.09	132.52	122.7	0.36	0.39	0.59	0.64	66.51	114.20			92.76	85.86	65.79	96.26	0.50	0.73	0.54	0.78	89	84
99215	48.00	67,22	1.95	69.17	187.26	173.3	0.36	0.39	0.37	0.40	75.12	78.17			131.08	121.31	97.69	99.64	0.52	0.63	0.56	0.57		
rates above here are for sick visits, those in blue are the most commonly-used ones (as you can see, the 99215 was never increased); those below are check-ups, which generally take about 2 x as long as a 99214; blue are for most common, as these are for established (not new) patients. Check-ups in primary care are almost always these.																								
99381	32.15		59.75	91.90							50.31	143.82	114.94	105.55					0.28	0.80	0.30	0.87		
99382	32.15		66.50	98.65							50.31	154.39	119.96	110.18					0.27	0.82	0.29	0.90		
99383	32.15		64.45	96.60							50.31	151.18	124.23	114.49					0.26	0.78	0.28	0.84		
99384	32.15		72.81	105							50.31	164.33	140.00	129.23					0.23	0.75	0.25	0.81		
99391	32.15		37.37	69.52							50.31	108.80	102.87	94.71					0.31	0.68	0.34	0.73		
99392	32.15		45.72	77.87							50.31	121.87	110.39	101.53					0.29	0.71	0.32	0.77		
99393	32.15		44.69	76.84							50.31	120.25	110.04	101.22					0.29	0.70	0.32	0.76		
99394	32.15		52.47	84.62							50.31	132.43	119.68	110.47					0.27	0.71	0.29	0.77		

Notes: All Medicare rates are non-facility (office-based); * result of 2004 consent decree after lawsuit settlement (Memisovski v Maram); unshaded eff 7/1/02, shaded 1/1/06; MCH is the maternal and child health add-on; ^ 2006 IL-Rest Medicare rates for 99213-5 are \$49.55, \$77.99, & \$114.32; # 2006 rates adjusted for inflation (Per US Gov CPI, 56.5% inflation from 1/2006 to 2/2024); ** see Pinkwater e-mail on 12/20/23 1126 (corrected in 1/1/24 e-mail); ^^ state "proposal," as best as understood from notice of 12/4/2023 (and from personal discussions with J. Pinkwater, IL chapter of American Academy of Pediatrics; ## taking into account inflation from 1/2006 to 9/2023
 Colours: blue - most commonly-used codes; grey - MCH add-ons eff 1/2006 (last fee increase!!!); pink - total rates incl MCH 2006-current; green - 2006 rates adjusted for inflation (my fair proposal); also must include future cost-of-living or medicare-tied annual increases); orange - state's suggested raise, correctly calculated based on non-facility Medicare rates for 2023; yellow - my understanding of the state proposal, to take effect 1/1/2024; red - % shortfall for state's proposal vs mine (yellow vs green).

From: [Napoleon.Knight](#)
To: [HFS.BPPC](#)
Subject: [External] Proposed changes
Date: Friday, March 29, 2024 9:10:09 AM
Attachments: [image001.png](#)

Greetings,

I would like to recognize that the information below is a big step in the right direction, to help healthcare organizations in Illinois continue to provide the important care and services that patients need. Healthcare providers and organizations are under ever increasing burdens which I am sure you are aware of. Increasing cost of pharmaceuticals, medical and genetic therapies, labor issues, cybersecurity costs, technology management costs, malpractice expense, shrinking numbers of some providers, leading to ever increasing staffing and recruiting costs.

Add on the ever increasing challenge we have in being paid for services by some MCO's, which have "denial management" as part of their business plan and you have a structure in the state which will continue to be challenged, and will lead to the continued failure of hospitals across the state which we have seen already.

We compete for talent from across the entire United States of America, and in order for Illinois to continue to serve our citizens, these issues and others must continue to be evaluated, dealt with and overcome. If high quality of care is the bar, all issues that prevent us from recruiting the best talent to the state, which involve all of the issues above and below must continue to be addressed.

- The Department is proposing updating rates for provider types whose reimbursement rates are established by the Practitioner Fee Schedule.
- Practitioner rates would be adjusted from generally reimbursing at 60% of Medicare to 70% of Medicare, with a reimbursement ceiling set at 100% of Medicare for all services. The exceptions would be behavioral health and non-cesarian obstetrical services.
- Reimbursement rates for mammography procedure codes (77065, 77066, 77067) would be set at 80% of the Medicare rate.

Napoleon Knight MD, MBA

Executive Vice President, Chief Medical Officer

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[REDACTED]

From: Michael Nudell <mn@AllureHCS.com>
Sent: Friday, March 15, 2024 12:44 PM
To: HFS.BPPC <HFS.BPPC@Illinois.gov>; Bengel, George <George.Bengel@illinois.gov>; Rivera, Erica <Erica.Rivera@illinois.gov>; Carnes-Peter, Nikki <Nikki.Carnes-Peter@Illinois.gov>
Cc: Zev Shusterman <zshusterman@AllureHCS.com>; Jeremy Edelson <jedelson@lanermuchin.com>; Joseph Meyers <jmeyers@BELLWOODNURSINGCENTER.COM>
Subject: [External] Clarification Needed

We need clarification here. Are there 2 types of employee classes that are supposed to get wage increases?

- 1) A \$2.50 per hour wage increase for all direct support personnel and all other frontline personnel who are not subject to the Bureau of Labor Statistics' average wage increases, who work in residential and community day services settings, with at least \$1.25 of those funds to be provided as a direct increase to all aide base wages, with the remaining \$1.25 to be used flexibly for base wage increases to the rate methodology for aides.

2) An increase sufficient to provide wages for all residential non-executive direct care staff, excluding aides, at the federal Department of Labor, Bureau of Labor Statistics' average wage.

If so how do we calculate who is supposed to get increases and how much they are supposed to get in order to be in compliance with the following guidance?

ICF Services:

Notwithstanding the provisions set forth in Section 153.100, facilities licensed by the Department of Public Health under the ID/DD Community Care Act (210 ILCS 47) or MC/DD Act (210 ILCS 46) will receive an increase to their facility rate upon receipt of federal approval of the SPA:

- Effective January 1, 2024, subject to federal approval of the State Plan Amendment, facilities will receive an increase to their reimbursement rates sufficient to provide a \$2.50 per hour wage increase for ICF Aides, with at least 50% (\$1.25/hour) of those funds to be provided for a \$1.25/hour direct increase to all ICF Aide wages, with the remaining 50% (\$1.25/hour) to be used flexibly for wage increases to ICF Aides and other frontline staff not covered by the federal DOL BLS average wage increases.
- Effective January 1, 2024, subject to federal approval of the SPA, facilities will receive an increase to their reimbursement rates sufficient to provide wage increases for non-executive direct care staff, excluding ICF Aides, to the federal DOL BLS average hourly wage based on the same or similar occupation title.
- Pursuant to House Bill 4647/Public Act 102-0944, DDD created a process whereby ICF/IID provider agencies are required to certify they are passing the wage increases on to their direct care staff as mandated by DDD. DDD will issue guidance with the wage attestation forms in the Spring. DDD has the discretion to require other ICF/IID programs/providers, including MC/DD facilities, receiving the DSP wage increases to complete the wage attestation forms.

Best Regards,
Michael Nudell
President
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I apologize if my email is inadvertently abrupt. This is really not intentional but rather a sincere desire to be simultaneously responsive and effective to an immense volume of emails I receive while trying to respond from a tiny phone. Please forgive me and If necessary, I can and would be delighted to clarify any ambiguities.

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