

HEALTH POLICY

Price Transparency in Primary Care: Can Patients Learn About Costs When Scheduling an Appointment?

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BACKGROUND: Cost-sharing in health insurance plans creates incentives for patients to shop for lower prices, but it is unknown what price information patients can obtain when scheduling office visits.

OBJECTIVE: To determine whether new patients can obtain price information for a primary care visit and identify variation across insurance types, offices, and geographic areas.

DESIGN: Simulated patient methodology in which trained interviewers posed as non-elderly adults seeking new patient primary care appointments. Caller insurance type (employer-sponsored insurance [ESI], Marketplace, or uninsured) and plan were experimentally manipulated. Callers who were offered a visit asked for price information. Unadjusted means and regression-adjusted differences by insurance, office types, and geography were calculated.

PARTICIPANTS: Calls to a representative sample of primary care offices in ten states in 2014: Arkansas, Georgia, Iowa, Illinois, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, and Texas ($N = 7865$).

MAIN MEASURES: Callers recorded whether they were able to obtain a price. If not, they recorded whether they were referred to other sources for price information.

KEY RESULTS: Overall, 61.8% of callers with ESI were able to obtain a price, versus 89.2% of uninsured and 47.3% of Marketplace callers ($P < 0.001$ for differences). Price information was also more readily available in small offices and in counties with high uninsured rates. Among callers not receiving a price, 72.1% of callers with ESI were referred to other sources (billing office or insurance company), versus 25.8% of uninsured and 50.9% of Marketplace callers ($P < 0.001$). A small fraction of insured callers were told their visit would be free. If not free, mean visit prices ranged from \$157 for uninsured to \$165 for ESI ($P < 0.05$). Prices were significantly lower at federally qualified health centers (FQHCs), smaller offices, and in counties with high uninsured and low-income rates.

CONCLUSIONS: Price information is often unavailable for privately insured patients seeking primary care visits at the time a visit is scheduled.

KEY WORDS: price transparency; audit; Affordable Care Act; insurance; primary care.

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INTRODUCTION

Health care “price transparency”—the ability of patients to obtain accurate price information before making health care decisions—is a growing policy focus.^{1,2} Hospitals in several states are now required to disclose prices to patients prior to providing care.³ Wide price variation and limited transparency for hospital services have been well-documented.^{4–6} By comparison, less attention has been focused on price transparency in outpatient settings, including primary care. A recent survey finds that most patients are interested in obtaining price information before receiving medical services, and over one-third who received primary care sought information before the visit.⁶

The ability to obtain prices before getting care, long important to the uninsured, is of growing importance to the privately insured, as rising deductibles have increased their out-of-pocket spending. The share of adults with private insurance that included a deductible rose from 60% in 2003 to 75% in 2014.⁷ Physician offices typically negotiate separate rates with different plans, making it challenging to provide specific rates for visits to insured patients who have not met their deductibles. Price information may be even more difficult to obtain for patients with plans purchased in the Marketplaces under the Affordable Care Act (ACA), because physicians’ offices are less familiar with these plans. Widespread confusion regarding Marketplace networks and rates was reported after implementation of the 2014 ACA insurance expansions.⁸

This study examines the availability of price information for patients seeking primary care visits in the summer of 2014, using data from an ongoing study of primary care appointment availability before and after the ACA’s major insurance expansions. We use a simulated patient (“audit”) methodology in which callers represent individuals with different insurance types. In 2012, the audit study asked about prices only for

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callers portraying uninsured individuals. Price information was available for 88% of uninsured patients who were offered appointments, and the average primary care visit cost \$160.⁹ We hypothesized that similar patterns might continue for the uninsured in 2014, but that patients with private insurance would be less able to obtain price information than the uninsured, and challenges would be greatest for individuals with Marketplace coverage due to the relative newness of these plans. We further anticipated that price information might be more available in settings where patients were more cost-conscious, such as areas with more low-income individuals, and in smaller offices where office staff do both scheduling and billing. Alternatively, larger offices might be better equipped to provide detailed price information. We expected average prices to be similar across insurance groups, since the prior study showed that prices for the uninsured were similar to rates paid in those markets by private insurers.⁹ At the same time, differences in provider reimbursement across insurance plans are dependent on negotiated discounts and so may vary from the regular fee schedule. Finally, we expected that prices would vary somewhat by office and geographic characteristics.

To our knowledge, this is the first experimental study to compare access to price information for primary care services between privately insured and uninsured patients.

METHODS

Data Collection

Data were collected using interviewers who posed as patients seeking new patient primary care visits in ten states (Arkansas, Georgia, Illinois, Iowa, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, and Texas) between May and June 2014.^{10,11} Interviewers underwent extensive training with audit scripts. The 13 callers were female and male non-elderly adults of various ages. Primary care offices, defined as having at least one primary care physician treating adults, were selected at random within insurance type proportionate to the size of the county population with that insurance type from a representative sample frame of eligible offices. A description and validation of the sample frame, which includes federally qualified health centers (FQHCs) but not urgent care clinics, is described elsewhere.^{10,12} Only offices accepting the assigned insurance type and plan were called with that scenario.

Insurance types evaluated for the current study were employer-sponsored insurance (ESI), Marketplace insurance, and the uninsured. Calls were randomized to insurance type, and within type, to plans with a common regional carrier (e.g., Blue Cross). Plans were also assigned to a clinical scenario: checkup or evaluation for suspected hypertension (typically billed as a new evaluation and management visit). Callers did not volunteer their insurance type or plan until asked but, if not asked prior to receiving an appointment, confirmed that their insurance was accepted by the office. Callers with Marketplace plans indicated that the plan had been purchased on

either the HealthCare.gov website or relevant state exchanges (e.g., the Health Connector in Massachusetts). In 2014, 85.7% of callers with the employer-sponsored insurance scenario, 82.4% of uninsured callers, and 74.3% of Marketplace callers were able to schedule appointments.¹³

Callers who were offered an appointment ($N=7865$) asked follow-up questions related to cost. Employer-sponsored or Marketplace callers informed the scheduler they had not yet met their annual deductible and therefore wanted to know the “basic visit” price. Uninsured callers asked the same price questions.

Measures

We examined four outcomes: for all callers, (1) whether the caller was able to get any (versus no) price information; for callers unable to obtain a price, (2) whether the caller was referred to another source for this information, such as the office’s billing department or the caller’s insurance company (callers did not follow up with these sources); for callers able to obtain a price, (3) whether the visit would be free and, if not free, (4) the price. We report the exact price or the mean of the upper and lower bounds if given a range. Findings were not sensitive to excluding the top 1% of prices ($> \$500$) and price ranges ($> \360). Sample sizes for each variable differed based on the subset being analyzed (a flow diagram is provided in Online Appendix Figure 1).

For multivariable analysis, we included caller-level covariates: sex, age category (age ≤ 35 or > 35), insurance type, and clinical scenario; office-level covariates: FQHC status, number of physicians practicing, and family medicine versus internal medicine specialty; county-level covariates for the office location: low, medium, or high county-level adult uninsured rate ($< 13\%$, $13\text{--}25.5\%$, $> 25.5\%$, respectively) and low, medium, or high county-level median income ($< \$45,000$ per household, $\$45,000\text{--}\$60,000$, or $> \$60,000$, respectively), and state fixed effects. The data sources for primary care office characteristics were the SK&A¹² physician directory and the Uniform Data System.¹⁴ The County Health Rankings tool was used for county-level measures.¹⁵ Office-level covariates could not be linked to 6% of calls. We used regression-based imputation to fill in missing values on these covariates (results were not sensitive to excluding cases with missing values). Analyses were conducted using Stata version 13 software.¹⁶

Analysis

We calculated variable means stratified by insurance type. For each outcome, we estimated a regression model with the covariates described above. For binary outcomes, we estimated probit models; results were not sensitive to choice of logit versus probit. For price regressions, we fit the data to a gamma generalized linear model with a log link. To present estimates in either percentage points or dollars, we calculated predicted margins for each covariate and bootstrapped standard errors.

To account for differential sampling probabilities, we applied weights to all analyses in order to make calls proportional to county-level populations by insurance status. After weighting, our sample is representative of primary care offices in counties where individuals with each insurance type reside.

RESULTS

Characteristics of Callers and Offices

By design, about half the callers in each insurance type were randomized to the hypertension versus the checkup scenario (Table 1); about half were also women and <35 years of age. Family medicine physicians were contacted by 61.2% of employer plan callers. Just under half of all offices had one physician (45.9%), followed by 2–3 physicians (30.4%), and four or more physicians (23.7%). Means were similar across insurance types. Unless otherwise noted, all reported differences are statistically significant at the $p < 0.05$ level.

Because separate samples were drawn for each insurance type proportional to populations in those counties with that coverage type, ESI callers were more likely to call offices in high-income counties and less likely to call offices in counties with high uninsured rates.

Ability to Obtain Price Information

The ability to obtain price information varied across insurance types. The unadjusted share of callers able to obtain a price was 89.2% for the uninsured, 61.8% for ESI, and 47.3% for Marketplace (Table 2). Among 3396 callers who did not receive a price, the unadjusted share of those referred to some other source of information was 25.8% for the uninsured, 72.1% for ESI, and 50.9% for Marketplace.

Insurance type differences were very similar to unadjusted differences after adjusting for office- and area-level

covariates (Table 3). Women were 8 percentage points more likely to obtain a price. FQHCs were 18.2 percentage points less likely to provide prices. In sub-analyses (not shown), we found that the availability of price information at FQHCs did not vary significantly between the insured and uninsured. Solo practitioners were 7.6 percentage points more likely, and offices with 2–3 physicians were 4.5 percentage points more likely, to provide a price than offices with four or more physicians. Compared to Texas, callers were significantly less likely to obtain price information in Massachusetts (–17.8 percentage points), New Jersey (–7.8 points), and Pennsylvania (–7.6 percentage points).

In a regression examining predictors of receiving a billing office or insurance company referral (Table 4) among those not offered an appointment, we found differences by insurance type similar to those identified in unadjusted analysis (Table 2). Female callers were 27.3 percentage points less likely to receive a referral. Others less likely to receive referrals were individuals ≤ 35 years of age, callers with the hypertension scenario, and callers to offices in lower-income counties.

Variation in Prices

Among 4469 callers able to obtain a price, virtually no uninsured callers (0.1%) were told their visit would be free, compared to 18.3% of ESI callers and 12% of Marketplace callers. Adjusted differences by insurance were similar (Table 5). Compared to callers with the checkup scenario, women (–3.9 percentage points) and those with the hypertension scenario (–5.9 percentage points) were less likely to be told that their visit would be free. Callers to offices in low-income communities were also 6 percentage points less likely than those in moderate-income communities to be told their visit would be free, and callers in Massachusetts were 8.1 percentage points more likely.

Table 1 Covariate Means

	Employer plan	Uninsured	Marketplace
Demographics			
Female	51.7%	53.2%	48.1% †
Age ≤ 35 years	46.1%	45.1%	49.2% *
Clinical scenario			
Hypertension scenario	50.2%	47.8%	51.7%
Office characteristics			
Federally qualified health center	5.0%	6.2%	5.5%
Family medicine (vs. internal medicine)	61.2%	60.8%	61.7%
Number of physicians in office			
Solo practitioner	45.9%	45.0%	47.5%
2–3 physicians	30.4%	30.6%	29.0%
4 or more physicians	23.7%	24.4%	23.5%
Characteristics of office's county			
Low income (median income < \$45,000)	21.0%	23.4%	22.2%
High income (median income > \$60,000)	30.2%	27.3% †	28.6%
Low uninsured rate (<13% of adults)	25.6%	21.7% *	26.7%
High uninsured rate (>25.5% of adults)	23.9%	27.3% ‡	23.9% ‡

Pairwise *t*-test with mean for employer plan group * $P < 0.05$, † $P < 0.01$, ‡ $P < 0.001$

Source: Authors' analysis of primary data from the ten-state primary care audit study linked to 2014 data from SK&A and the 2014 County Health Rankings

Table 2 Study Outcomes Stratified by Insurance Type

	Employer plan	Uninsured	Marketplace
All calls (N)	2292	994	4579
Offered a price? (% , N)	61.8% (1420)	89.2% (886) ‡	47.3% (2163) ‡
If not offered a price			
Referred to other sources? (N, %)	72.1% (626)	25.8% (28) ‡	50.9% (1231) ‡
If offered a price			
Told visit would be free? (N, %)	18.3% (257)	0.1% (1) ‡	12.0% (254) ‡
Mean price, if not free? (N, \$)	\$165 (1163)	\$157 (885) *	\$161 (1909)
Standard deviation of price	\$84	\$85	\$92

Pairwise *t*-test with mean for employer plan group **P* < 0.05, †*P* < 0.01, ‡*P* < 0.001

The average (non-free) price quoted was \$165 for ESI, \$157 for uninsured, and \$161 for Marketplace, with standard deviations of \$84, \$85, and \$92, respectively (Table 2). Regression-adjusted prices are shown in Table 5. Women were quoted prices \$18 lower on average. Callers with the hypertension scenario received a price that was an average of \$9 lower. Across caller groups, prices at FQHCs were \$57 lower on average. In a sensitivity analysis, the lower price at FQHCs applied mainly to uninsured callers. Prices were lower from family physicians (\$14) compared to internists. Solo physicians and offices with 2–3 physicians charged less (\$28 and \$14, respectively) than offices with ≥4 physicians. Prices were also lower in low-income counties and counties with high uninsured rates. Compared to Texas, mean prices were more than \$30 higher in Massachusetts, Montana, and Oregon.

DISCUSSION

In 2014, price information at the time a visit was scheduled was able to be obtained more often by uninsured (89%) than individuals with Marketplace (47%) or ESI (62%). Providing prices to the insured may be more difficult for schedulers because offices do not typically have a single standard rate that applies to all plans, but rather negotiated rates for different plans. Lack of rate information may have contributed to lower price availability for Marketplace enrollees than those with ESI, because Marketplace plans were newer and more unfamiliar in 2014.¹⁷ Offices may have also been less willing to work with Marketplace enrollees due to perceived hassle. Future research will examine whether these trends changed as offices gained more exposure to Marketplace plans. Prices were also more difficult to obtain in calls to FQHCs than to other settings.

Table 3 Correlates of Being Able to Obtain a Price

	Able to obtain a price (N = 7865)	
	Estimate	95% CI
Caller characteristics		
Uninsured (ref = employer)	0.270 ‡	(0.240, 0.300)
Marketplace (ref = employer)	−0.146 ‡	(−0.172, −0.119)
Female (ref = male)	0.080 ‡	(0.060, 0.100)
Age <35 (ref = age > 35)	0.012	(−0.009, 0.034)
Hypertension (ref = checkup)	−0.018	(−0.038, 0.002)
Office characteristics		
FQHC	−0.182 ‡	(−0.231, −0.134)
Family physician (ref = internal medicine)	0.027 *	(0.003, 0.051)
Solo practitioner (ref = 4+ physicians)	0.076 ‡	(0.047, 0.105)
2–3 practitioners (ref = 4+ physicians)	0.044 *	(0.010, 0.078)
County characteristics		
Uninsured rate > 25.5% (ref = 13–25.5%)	0.036	(−0.003, 0.074)
Uninsured rate < 13% (ref = 13–25.5%)	0.020	(−0.022, 0.062)
Median income > \$60 k (ref = \$45–\$60 k)	−0.006	(−0.036, 0.024)
Median income < \$45 k (ref = \$45–\$60 k)	−0.004	(−0.037, 0.029)
State (ref = Texas)		
Arkansas	0.007	(−0.044, 0.057)
Georgia	−0.025	(−0.072, 0.022)
Iowa	−0.045	(−0.096, 0.007)
Illinois	−0.036	(−0.102, 0.031)
Massachusetts	−0.178 ‡	(−0.254, −0.101)
Montana	−0.022	(−0.083, 0.039)
New Jersey	−0.078 †	(−0.135, −0.020)
Oregon	−0.031	(−0.094, 0.032)
Pennsylvania	−0.076 *	(−0.134, −0.018)

**P* < 0.05, †*P* < 0.01, ‡*P* < 0.001. Coefficients represent predicted margins from regression models. Estimates from probit models can be interpreted as percentage point differences. Standard errors are estimated using bootstrapping

Source: Authors' analysis of primary data from the ten-state primary care audit study linked to 2014 data from SK&A and the 2014 County Health Rankings

Table 4 Correlates of Being Referred to Other Sources (Insurance Company or Billing Office) Among Individuals Unable to Obtain Price Information

	Referred to other sources (N=3396)	
	Estimate	95% CI
Caller characteristics		
Uninsured (ref = employer)	-0.414 ‡	(-0.496, -0.333)
Marketplace (ref = employer)	-0.230 ‡	(-0.267, -0.193)
Female (ref = male)	-0.273 ‡	(-0.299, -0.247)
Age < 35 (ref = age > 35)	0.037 †	(0.011, 0.063)
Hypertension (ref = checkup)	-0.041 *	(-0.074, -0.008)
Office characteristics		
FQHC	0.011	(-0.051, 0.074)
Family physician (ref = internal medicine)	-0.029	(-0.067, 0.009)
Solo practitioner (ref = 4+ physicians)	-0.006	(-0.05, 0.037)
2-3 practitioners (ref = 4+ physicians)	0.000	(-0.044, 0.044)
County characteristics		
Uninsured rate > 25.5% (ref = 13-25.5%)	0.010	(-0.038, 0.058)
Uninsured rate < 13% (ref = 13-25.5%)	-0.021	(-0.091, 0.048)
Median income > \$60 k (ref = \$45-\$60 k)	0.035	(-0.007, 0.077)
Median income < \$45 k (ref = \$45-\$60 k)	-0.067 †	(-0.108, -0.025)
State (ref = Texas)		
Arkansas	-0.047	(-0.113, 0.019)
Georgia	0.009	(-0.066, 0.085)
Iowa	0.053	(-0.032, 0.137)
Illinois	0.030	(-0.064, 0.124)
Massachusetts	0.047	(-0.044, 0.138)
Montana	0.069	(-0.025, 0.163)
New Jersey	0.010	(-0.071, 0.091)
Oregon	-0.056	(-0.132, 0.020)
Pennsylvania	0.0460	(-0.035, 0.127)

* $P < 0.05$, † $P < 0.01$, ‡ $P < 0.001$. Coefficients represent predicted margins from regression models. Estimates from probit models can be interpreted as percentage point differences. Standard errors are estimated using bootstrapping

Source: Authors' analysis of primary data from the ten-state primary care audit study linked to 2014 data from SK&A and the 2014 County Health Rankings

Table 5 Correlates of Visit Prices Among Individuals Able to Obtain Price Information

	Told visit would be free (N=4469)		Mean price if not free (N=3957)	
	Estimate	95% CI	Estimate	95% CI
Caller characteristics				
Uninsured (ref = employer)	-0.177 ‡	(-0.195, -0.159)	-11.42 ‡	(-17.73, -5.11)
Marketplace (ref = employer)	-0.056 ‡	(-0.081, -0.031)	-1.66	(-7.28, 3.96)
Female (ref = male)	-0.039 ‡	(-0.057, -0.022)	-18.00 ‡	(-22.85, -13.15)
Age < 35 (ref = age > 35)	-0.022 *	(-0.041, -0.002)	10.75 †	(4.64, 16.85)
Hypertension (ref = checkup)	-0.059 ‡	(-0.079, -0.040)	-8.96 ‡	(-13.82, -4.11)
Office characteristics				
FQHC	0.033	(-0.017, 0.082)	-57.42 ‡	(-71.9, -42.93)
Family physician (ref = internal medicine)	0.019	(-0.003, 0.040)	-13.80 ‡	(-20.30, -7.30)
Solo practitioner (ref = 4+ physicians)	-0.011	(-0.035, 0.012)	-28.28 ‡	(-36.09, -20.46)
2-3 practitioners (ref = 4+ physicians)	0.005	(-0.018, 0.027)	-13.70 ‡	(-21.19, -6.21)
County characteristics				
Uninsured rate > 25.5% (ref = 13-25.5%)	0.018	(-0.012, 0.047)	-7.90 *	(-15.69, -0.11)
Uninsured rate < 13% (ref = 13-25.5%)	-0.019	(-0.055, 0.018)	3.46	(-5.86, 12.77)
Median income > \$60 k (ref = \$45-\$60 k)	0.009	(-0.017, 0.036)	1.68	(-5.01, 8.37)
Median income < \$45 k (ref = \$45-\$60 k)	-0.060 ‡	(-0.091, -0.029)	-10.77 †	(-18.18, -3.37)
State (ref = Texas)				
Arkansas	-0.020	(-0.064, 0.024)	-0.19	(-14.13, 13.76)
Georgia	0.039	(-0.001, 0.079)	9.48	(-5.31, 24.27)
Iowa	0.016	(-0.031, 0.064)	-6.20	(-22.54, 10.14)
Illinois	-0.021	(-0.080, 0.038)	3.88	(-14.30, 22.05)
Massachusetts	0.081 *	(0.019, 0.143)	31.71 †	(9.18, 54.23)
Montana	-0.021	(-0.075, 0.034)	31.53 ‡	(17.43, 45.63)
New Jersey	0.007	(-0.041, 0.055)	-17.01 *	(-31.61, -2.41)
Oregon	0.001	(-0.043, 0.044)	58.20 ‡	(43.9, 72.51)
Pennsylvania	0.033	(-0.026, 0.091)	-13.03	(-29.31, 3.24)

* $P < 0.05$, † $P < 0.01$, ‡ $P < 0.001$. Coefficients represent predicted margins from regression models. Estimates from probit models can be interpreted as percentage point differences and estimates from cost models can be interpreted in dollar units. Standard errors are estimated using bootstrapping

Source: Authors' analysis of primary data from the ten-state primary care audit study linked to 2014 data from SK&A and the 2014 County Health Rankings

Compared to the uninsured, callers with ESI and Marketplace insurance were far more likely to be told to contact a billing office or insurer. While pursuing these sources could ultimately provide price information for a large majority of patients, having to call plans or billing personnel creates a barrier to comparison shopping and may ultimately discourage price-sensitive patients from seeking needed care.

When prices were provided, a small segment of insured patients—more commonly those with ESI than Marketplace insurance—were told that their visits would be free. Since 2010, the ACA has required most insurers to cover specified preventive services without cost-sharing, regardless of whether the patient has met the annual deductible. Patients seeking checkups were more commonly told the visit would be free than those seeking evaluation for hypertension (when not free, prices were lower for the hypertension scenario). Although hypertension screening is a covered preventive benefit under the ACA, the physician consultation for hypertension is not. It is unclear why more callers requesting a checkup were not told that their visit would be free. Nor is it clear why there were differences in this regard between Marketplace and employer-sponsored plans, as both are subject to ACA requirements. Schedulers may have lacked knowledge of the benefit or been uncertain of whether a visit would qualify.

We hypothesized that prices would be similar by insurance status. In fact, the uninsured almost never received free visits, but prices quoted to the uninsured were significantly lower than those offered to callers with employer plans when not zero. FQHCs also offered substantially lower prices to uninsured callers.

We found that female and male callers received very different price information. Women were more likely to obtain price information than men. Women received fewer free visits, but non-free visits were less expensive. It is possible that price information is provided differently to female callers, either because of how insurance coverage benefits apply to women (e.g., well women visits) or due to discriminatory scheduling practices. However, our study was not designed to test the impact of gender across offices. Callers may have also differed in their communication styles. Further research with a paired tester design would be required to experimentally examine gender differences.

FQHCs offered lower-cost visits, especially to the uninsured, but provided prices much less frequently than other offices. The fact that callers did not provide income information likely reduced the ability of FQHCs to provide accurate price information. FQHCs apply sliding-scale fees that require documentation to be provided before a discount can be offered; thus the audit likely represents only the upper range of FQHC prices. Yet actual patients calling FQHCs may not know how to estimate their household income, a complex calculation involving decisions regarding which family members to include, which jobs, and what time frame. According to our findings, some low-income callers seeking appointments at FQHCs may falsely assume that they would not be able to

afford care. Moreover, current guidelines for notifying patients of sliding-fee discount programs at FQHCs focus on website and front desk notices, but do not address providing information to patients seeking price information by phone, as such interactions often take place in face-to-face encounters.¹⁸

We also identified important sources of geographic variation. While county-level income and uninsured rates generally had only modest associations with price information and prices, lower-income areas were less likely to provide price information but more likely to offer slightly lower average prices. The ability to obtain a price was substantially lower in Massachusetts, a state that implemented a comprehensive price transparency law in 2014.³ It is likely that this new law was not fully implemented during this study period; our results can therefore provide a baseline for tracking the law's future impact.

Several limitations should be noted. First, the study was designed to capture only the prices of physician consultations, but patients also receive other services during visits such as laboratory tests or biopsies that may add to out-of-pocket costs and affect affordability if a patient is uninsured or if deductibles have not been met. Second, although the audit mimics a realistic scenario, actual patients may be able to provide additional information to schedulers that could enable them to obtain a price over the phone (e.g., an insurance number in order to query an electronic database, or household income to determine prices under a sliding-scale policy). Third, we cannot confirm that prices quoted to patients in fact match the negotiated rates that are paid by specific insurers in specific markets (e.g., Oregon, where prices were higher). To address this limitation, we compared our results with commercial prices at the level of larger geographic areas to confirm that prices approximated regional norms (Online Appendix Figure 2). The comparison to commercial prices indicates that the quoted prices may be somewhat low; despite asking for the full price of basic visits, it is possible that some audit callers may have been inadvertently quoted copayment amounts rather than the full rate applicable to patients who have not met their deductibles. More broadly, the audit does not mimic the diversity of benefit designs available to real patients (e.g., plans exempting primary care from the deductible). Fourth, the audit is able to capture prices offered to different groups, but may not reflect actual prices paid by patients in safety-net settings. For example, FQHCs account for a larger proportion of visits by the uninsured than their proportion in the audit study.

CONCLUSIONS

Information about health care prices is necessary for individuals to become engaged consumers. Efforts to provide greater price transparency are still evolving, but our results suggest room for improvement. Publicly available databases allowing individuals to obtain prices for procedures in their area could facilitate shopping for care,¹⁹ as could databases maintained by insurers

for their members. Price transparency laws that require providers to disclose the price of care (including out-of-network fees) before a service is provided could increase pressure on providers to be more forthcoming about their prices, but these laws also create new burdens for physician offices. Current state price transparency laws are limited and generally have not applied to outpatient settings.²⁰ Managing tradeoffs among these new tools is an important policy challenge.

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REFERENCES

1. **Sinaiko AD, Rosenthal MB.** Increased price transparency in health care—challenges and potential effects. *N Engl J Med.* 2011;364(10):891–4.
2. **Reinhardt UE.** The disruptive innovation of price transparency in health care. *JAMA.* 2013;310(18):1927–8.
3. **Sinaiko AD, Chien AT, Rosenthal MB.** The role of states in improving price transparency in health care. *JAMA Intern Med.* 2015;175(6):886–7.
4. **Franzini L, White C, Taychakhoonavudh S, Parikh R, Zezza M, Mikhail O.** Variation in inpatient hospital prices and outpatient service quantities drive geographic differences in private spending in Texas. *Health Serv Res.* 2014;49(6):1944–63.
5. **Pate SC, Uhlman MA, Rosenthal JA, Cram P, Erickson BA.** Variations in the open market costs for prostate cancer surgery: a survey of US hospitals. *Urology.* 2014;83(3):626–31.
6. **Schleifer D, Hagelskamp C, Rinehart C.** How Much Will It Cost? How Americans Use Prices in Health Care. New York: Public Agenda; 2015. Available at: <http://www.publicagenda.org/pages/how-much-will-it-cost>. Accessed January 15, 2017.
7. **Collins S, Rasmussen P, Beutel S, Doty M.** The Problem of Underinsurance and How Rising Deductibles Will Make It Worse. Available at: <http://www.commonwealthfund.org/publications/issue-briefs/2015/may/problem-of-underinsurance>. Accessed January 15, 2017.
8. **Leonard K.** Doctors, Hospitals Say “No” to Obamacare Plans. *US News & World Report.* Published November 4, 2015. Available at: <http://www.usnews.com/news/articles/2015/11/04/doctors-hospitals-wont-accept-obamacare-marketplace-plans>. Accessed January 15, 2017.
9. **Saloner B, Polsky D, Kenney GM, Hempstead K, Rhodes KV.** Most uninsured adults could schedule primary care appointments before the ACA, but average price was \$160. *Health Aff (Millwood).* 2015;34(5):773–80.
10. **Rhodes KV, Kenney GM, Friedman AB, et al.** Primary care access for new patients on the eve of health care reform. *JAMA Intern Med.* 2014;174(6):861–9.
11. **Polsky D, Richards M, Bassey S, et al.** Appointment availability after increases in Medicaid payments for primary care. *N Engl J Med.* 2015;372(6):537–45.
12. **SK&A.** Fact Sheet: Healthcare Profiling Data Verified at the Source Daily. Available at: http://www.skainfo.com/research_center-factsheet.pdf. Accessed January 15, 2017.
13. **Bassey S, Rhodes K, Friedman AB.** Changes in access to primary care in the aftermath of insurance expansions: early results. *Acad Emerg Med.* 2015;22:S141.
14. **US Department of Health and Human Services, Health Resources and Services Administration.** Uniform Data System (UDS) Resources. Available at: <http://bphc.hrsa.gov/datareporting/reporting/index.html>. Accessed January 15, 2017.
15. **Robert Wood Johnson Foundation.** County Health Rankings. 2015. Available at: <http://www.countyhealthrankings.org/>. Accessed January 15, 2017.
16. **StataCorp.** *Stata.* College Station: Stata; 2015.
17. **Rosenthal E.** Insured, but not covered. *New York Times.* February 8, 2015. Available at: http://www.nytimes.com/2015/02/08/sunday-review/insured-but-not-covered.html?_r=0. Accessed January 15, 2017.
18. **Health Resources and Services Administration (HRSA).** NHSC Sliding Fee Discount Program Information Package. Washington, DC: HRSA; 2016. Available at: <https://nhsc.hrsa.gov/downloads/discountfeeschedule.pdf>. Accessed January 15, 2017.
19. **FairHealth.** FairHealth: Consumer Engagement Tools. 2015. Available at: <http://www.fairhealth.org/Toolsforconsumers>. Accessed January 15, 2017.
20. **Catalyst for Payment Reform, Health Care Incentives Improvement Institute.** Report Card on State Price Transparency Laws. Berkeley, CA: Catalyst for Payment Reform and Health Care Incentives Improvement Institute; 2015.