Does Price Transparency Legislation Allow the Uninsured to Shop for Care?

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BACKGROUND: The majority of states have enacted price transparency laws to allow patients to shop for care and to prevent price discrimination of the uninsured. In California, hospitals must provide a price estimate to a requesting uninsured patient and cannot bill for an amount greater than the reimbursement the hospital would receive from a government payer.

OBJECTIVE: To assess the response rate of California hospitals to a patient price request and to compare the price estimates received to Medicare reimbursement.

DESIGN: We sent letters to California acute-care hospitals from a fictional uninsured patient requesting an estimate for one of three common elective procedures: a laparoscopic cholecystectomy, a hysterectomy, or routine screening colonoscopy.

PARTICIPANTS: Three hundred and fifty-three hospitals in California.

MEASUREMENTS: Hospital response rates, difference between price estimates received, and Medicare reimbursement for equivalent procedures.

RESULTS: Only 28% (98/353) of hospitals responded and their response varied in content. Of the 98 responses, 15 (15%) did not provide a quote and instead asked for more information such as the billing code, 55 (56%) provided a price estimate for hospital services only, 10 (10%) included both physician and hospital services, and 18 (18%) did not specify what was covered. The median discounted price estimate was higher than Medicare reimbursement rates for all procedures: hysterectomy (\$17,403 vs. \$5,569; $p < 0.001$), cholecystectomy (\$14,014 vs. \$7,196; $p < 0.001$) and colonoscopy (\$2,017 vs. \$216; $p < 0.001$).

CONCLUSIONS: Current California legislation fails to meet its objective of enabling uninsured patients to compare prices for hospital-based health care services.

KEY WORDS: transparency; uninsured; shopping; legislation; out-of-pocket costs; hospital costs.

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INTRODUCTION

Price transparency refers to a situation in which buyers have knowledge of the price of a good or service before making decisions about a transaction. For healthcare services, prices are usually opaque. Patients typically have no knowledge of the expected costs of their care or what others pay for those services¹. Many policymakers hope that increasing price transparency will allow patients to identify low-cost providers and thereby compel providers to lower prices which will also reduce price variation².

Lack of price transparency is particularly problematic for the uninsured. Although the uninsured usually have lower incomes than the insured, hospitals in the United States typically charge uninsured patients more than the hospital receives in reimbursement from private insurers and Medicare^{3,4}. This price discrimination has been the impetus for several patient class-action lawsuits⁵. Ideally, an uninsured patient would be able to identify lower cost providers and thereby avoid price discrimination. Improving price transparency may also benefit insured consumers who are responsible for a large portion of medical expenses, especially those in high-deductible health plans⁶.

At least 30 states have passed various forms of hospital price transparency legislation⁷. Some states require hospitals to publicly report their *charges* to government payers for a designated list of conditions or procedures. California has taken another approach advocated by some experts¹. Starting in January 2006, AB 1045 requires hospitals to “provide [an uninsured person] with a written estimate of the amount the hospital will require the person to pay for the healthcare services, procedures, and supplies . . . based upon an average length of stay and services provided for the person’s diagnosis.” In addition to a written estimate, hospitals must include information on charity care eligibility and contact telephone numbers⁸. Another California law, AB 774, limits the price estimate for patients earning below 350% of the federal poverty line. For these patients, the estimate may not exceed the payment the hospital would receive for equivalent services from Medicare, Medicaid, or any other government-sponsored health program⁹.

To our knowledge, no peer-reviewed study has assessed the effectiveness of a price transparency law. To assess California’s legislation, we sent a letter to California acute-care hospitals from a fictional uninsured patient requesting a price estimate of an

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elective procedure and analyzed the content of the hospitals' responses. We also compared the estimates we received to Medicare reimbursement for the equivalent procedure.

METHODS

Hospital Study Population

We obtained a list of all 518 licensed California hospitals from the California Office of Statewide Health Planning and Development (OSHPD). From this list we excluded psychiatric facilities and facilities for the developmentally disabled ($n=61$), skilled nursing facilities, rehabilitation hospitals, hospices, and long-term ventilator hospitals ($n=24$), chemical dependency recovery hospitals ($n=7$), children's hospitals ($n=12$), cancer hospitals ($n=2$), an orthopedic and spine hospital ($n=1$), Kaiser hospitals ($n=33$), a closed hospital ($n=1$), a hospital that served only the motion picture industry ($n=1$), and hospitals that were sent pilot letters ($n=5$). In response to our letter, 18 hospitals stated they did not perform the requested procedure, leaving us with a final sample of 353 hospitals.

Letter Request

We randomized the hospitals to receive one of three written patient requests for an estimate for a common elective procedure: a laparoscopic cholecystectomy for recurrent gallstones; an open hysterectomy for a large fibroid; or a routine screening colonoscopy (Supplementary Appendix includes sample letter). The letters stated that the procedure was recommended by the patient's physician, that the patient had no other medical conditions, took no medications, was uninsured and ineligible for Medicaid, and was willing to travel to receive the procedure. The letters did not report the patient's income and family size as we felt this was unrealistic to be included in such a letter. Instead, we tried imply that the patient's income was low. The letter stated, "I have looked into public insurance at my local social services office but I don't qualify for Medi-Cal. So, I am shopping around to see what I can afford." All letters referenced the California "Payer's Bill of Rights" and were addressed to the Billing Department of the respective hospital. The letters were mailed from a California address during one week in November 2007.

The study was approved by the University of Pittsburgh Institutional Review Board.

Hospital Characteristics

We obtained data on hospital characteristics from OSHPD and the California Department of Health Care Services. We coded government hospitals to include those owned by cities, counties, or health care districts.

Outcome Variables

Outcomes of interest were response rate, timeliness of response, request for more information, price estimate, inclusion of a discount and inclusion of the required charity care information.

For each hospital providing an estimate, we recorded two prices: 1) full hospital price and 2) discounted hospital price. For hospitals providing a price range, we used the middle of the range as we felt this would be the natural number to focus upon from a patient's perspective. The discounted hospital price represented

the full hospital price minus any discounts offered. We combined multiple discounts. If a hospital did not specify whether its price was discounted, we used the estimate for both the full and lowest hospital price. If the estimate was itemized and included a physician fee, we subtracted the physician fee.

Estimates of Medicare Reimbursement

We compared the price estimates to Medicare reimbursement for the three procedures because nearly two-thirds (63%) of hospitals report Medicare reimbursement as the basis for setting their AB774 rates. As part of its price transparency initiative,¹⁰ Medicare has released the 25th to 75th percentile range for hospital facility reimbursements for each state. We estimated the median California Medicare reimbursement was the midpoint of this range for laparoscopic cholecystectomy (diagnosis related group (DRG) 494) or hysterectomy (DRG 359). Using the Resource-Based Relative Value Scale formula for facility-only payment (not including physician fees) based on published relative value units for diagnostic colonoscopy (Healthcare Common Procedure Coding System (HCPCS) 45378), screening colonoscopy for not high risk patients (HCPCS G0121) and the nine different Geographic Practice Cost Index multipliers for California, we calculated median Medicare reimbursement in California for outpatient colonoscopy.

Statistical Analyses

Because of small cell sizes in some tables, Fisher's test was used to determine statistically significant differences in outcome variables by hospital characteristic. With hospital characteristics with three levels (e.g. bed size <100 , $100-299$, ≥ 300) we report an overall p-value across the three levels for the Fisher's exact test. When statistically significant, cell percentages can be used to interpret which differences are practically meaningful. We used the Wilcoxon-Signed Ranks test to determine if the median of full and discounted price estimates for each procedure differed from the Medicare reimbursement for the procedure. We chose not to report any price comparisons by hospital characteristics. The overall low response rate meant that frequently there were few hospitals in a given category (e.g., only five teaching hospitals.) All analyses were performed using SAS statistical software, version 9.2 (SAS Institute Inc, Cary, North Carolina) and we report 2-tailed P values.

RESULTS

Response Rate of Hospitals

We received responses from 28% of the 353 acute-care hospitals in our sample. Among the respondents, 41% provided the charity care information required by law (Table 1) and 64% post-marked their response letter within 2 weeks of our request letter being sent.

Neither teaching status, nor bed size, nor Disproportionate Share Hospital (DSH) status were related to likelihood of a hospital to respond to the request. Ownership of hospitals was related to response rate with non-profit hospitals and government hospitals more likely to respond to the request for a price than investor-owned hospitals (32%, 34% vs. 16%, $p=0.004$) (Table 2). Non-profit hospitals were also more likely than both investor-owned

Table 1. Response Rate and Content of Responses to Letter of Request

	All procedures n (%)	Cholecystectomy n (%)	Hysterectomy n (%)	Colonoscopy n (%)	p-value*
Number of hospitals	353	120	109	124	
Any response	98 (28)	33 (28)	27 (25)	38 (31)	0.61
<i>Among responses</i>					
Provided price estimate ^a	83 (85)	29 (88)	22 (81)	32 (84)	0.83
Provided charity care information	40 (41)	11 (33)	11 (41)	18 (47)	0.48

*Fisher's exact test of differential response rate across three procedures

^a15 hospitals requested more information and did not provide a price estimate

and government hospitals (55%, 12%, 24% respectively, $p < 0.001$) to include charity-care information (Table 2).

Services Included in Price Estimates

Of the 98 letters from responding hospitals, 15 (15%) letters asked the patient for more information before the hospital could provide a price estimate. Hospitals most frequently requested (9 hospitals) that the patient provide the specific CPT (Current Procedure Terminology) code relevant for the procedure requested. Among the 83 (85%) hospitals that provided a price quote, none requested the patient's income or stated that if the patient's income was below a particular threshold they would be charged less.

The services included in the price estimates varied. The majority (55 of 83) included only hospital costs, 10 hospitals included both hospital costs and physician fees, and 18 hospitals did not specify what services were covered by their estimate. Among the 10 hospitals that included physician fees, 3 included the surgeon's fee, and the others provided some combination of the anesthesiologist's and pathologist's fee.

Price Estimates

For each of the three procedures, estimated prices provided by responding hospitals varied widely: hysterectomy (median \$19,750, range \$3,500–\$65,300); cholecystectomy (median

\$13,000, range \$2,700–\$36,000); and colonoscopy (median \$2,500, range \$350–\$5,805) (Table 3).

A discounted price estimate was offered by 50 hospitals (51% of responding hospitals), and the discount ranged from 10–75%. Discounts were based on uninsured status, cash payment, prompt payment, or payment in full at the time of service. One hospital stated it would match a lower price.

Including discounts, the median lowest hospital price for hysterectomy, cholecystectomy and colonoscopy was \$15,950, \$10,400 and \$1,748, respectively which represent 19%, 20% and 30% discounts overall (Table 3).

Comparison to Medicare Reimbursement

The median lowest hospital price estimate we received exceeded median Medicare reimbursement rates in California for hysterectomy (\$15,950 vs. \$5,569, $p = 0.009$), cholecystectomy (\$10,400 vs. \$7,198, $p = 0.004$), and colonoscopy (\$1,748 vs. \$216, $p < 0.0001$) (Table 3). Across all three procedures, 75% of the price estimates exceeded the median Medicare reimbursement rate.

DISCUSSION

The state of California enacted price transparency legislation requiring hospitals to provide requesting uninsured patients

Table 2. Response Rate, Timing of Response, and Provision of Charity Care by Hospital Characteristics

	All hospitals	Ownership				Teaching status		
		Non-profit	Investor	Government		Teaching	Non-teaching	
	n (%)	n (%)			p-value*	N (%)		p-value*
Number of hospitals	353	185	107	61		28	325	
Any response	98 (28)	60 (32)	17 (16)	21 (34)	0.004	7 (25)	91 (28)	0.83
<i>Among respondents</i>								
Provided price estimate	83 (85)	50 (83)	15 (88)	18 (86)	1.00	5 (71)	78 (86)	0.29
Response received less than 2 weeks	61 (62)	35 (58)	12 (71)	13 (62)	0.67	2 (29)	58 (64)	0.11
Referenced charity care program	40 (41)	33 (55)	2 (12)	5 (24)	<0.001	3 (43)	37 (41)	1.00
		Bed Size				DSH status^a		
		100–299	> = 300	p-value*	DSH n (%)	Non-DSH	p-value*	
Number of hospitals	96	167	90		112	241		
Any response	29 (30)	43 (26)	26 (29)	0.71	28 (25)	70 (29)	0.45	
<i>Among respondents</i>								
Provided price estimate	25 (86)	17 (40)	20 (77)	0.46	24 (86)	59 (84)	1.00	
Response received less than 2 weeks	20 (69)	26 (60)	14 (54)	0.50	17 (61)	43 (61)	1.00	
Referenced charity care program	12 (41)	17 (40)	11 (42)	1.00	12 (43)	28 (40)	0.82	

Hospital characteristics obtained from California Office of Statewide Health Planning and Development and California Department of Health Care Services.

*Fisher's exact test of differential response rate across hospital characteristic

^aDSH stands for Disproportionate Share Hospital

Table 3. Comparison of Price Estimates and Medicare Reimbursement

	Medicare reimbursement ^a	Full hospital price estimates			Lowest hospital price estimates		
	Median (\$)	Median (\$)	Range (\$)	p-value ^b	Median (\$)	Range (\$)	p-value ^b
Procedure (number of hospitals providing price quote)							
Hysterectomy (n=29)	5,569	19,750	3,500–65,300	0.009	15,950	3,500–65,300	0.009
Cholecystectomy (n=22)	7,198	13,000	2,700–36,000	0.0001	10,400	2,025–36,000	0.004
Colonoscopy (n=32)	215	2,530	350–5,805	<0.0001	1,748	350–5,805	<0.0001

^aMedicare reimbursement data obtained from the Centers for Medicare and Medicaid Services

^bUsing Wilcoxon-signed ranks test to see if the sample median is significantly different from the Medicare reimbursement for the procedure

with information on prices for hospital services and charity care. In our study, we found that only 28% of California hospitals responded to such a request from a hypothetical uninsured patient. The few estimates we received did not allow us to make an “apples to apples” comparison as only some hospitals included specified physician fees. Less than half of responding hospitals included charity care policy information as required by law. Moreover, despite legislation that limits the amount hospitals can charge a poor, uninsured patient, the price estimates offered averaged twice what Medicare reimburses for the procedure. Our findings raise serious questions about the effectiveness of these laws to allow uninsured patients to shop for care and protect them from price discrimination.

Fundamental Limitations of Hospital Price Transparency Legislation

Our study also underscores some fundamental limitations of this type of price transparency legislation. First, shopping for care is limited to elective procedures. Second, health care costs are often difficult to predict. Based on a simple letter, or even a patient visit, it would be difficult for hospitals to prospectively estimate the price for a procedure. The law does not state what information a patient is required to provide. Our letters indicated that the patient was healthy and took no medications, but this would be rare. This uncertainty likely explains why many hospitals only provided an “estimate” or a price range. From the consumer’s vantage, the hospital ideally would provide patients with a single price, and it would honor this price to allow patients to compare hospitals and budget accordingly.

Third, there was marked heterogeneity in what care was covered by the price estimate. Some estimates explicitly included physician fees, some did not, and sometimes it was unclear. This heterogeneity reflects the division of hospital and physician reimbursement. From the consumer’s perspective this division is artificial because to shop effectively the consumer needs the total cost of care. Indeed, the true total cost to the patient would also include pre-procedure and post-procedure care. Proposals to bundle inpatient hospital, physician payments, and post-discharge care would make it easier for patients to shop for care.

Does Price Transparency Prevent Price Gouging?

Proponents hope that transparency will protect the uninsured from paying more than health plans¹¹. California law limits the price that hospitals can charge to patients who live below 350% of the poverty line. Yet, consistent with prior work,⁴ we found that the price estimates received were, on average, twice the median Medicare reimbursement for the same procedures.

Because the letter of request did not include the patient’s income, hospitals were technically compliant. But in light of the spirit of the law and how we framed our letter, it is notable that few hospitals quoted a price lower than Medicare. None of the hospitals requested the patient’s income or stated that if the patient’s income was below a particular threshold he or she would be charged less.

We hypothesize the majority of hospitals based their price estimate on what they charge third-party payers, not what they receive from those payers in reimbursement. But healthcare “charges” often bear no relation to the actual cost of a good or service¹².

Finally, it is unclear whether hospitals have any incentive to compete on price to attract uninsured patients. Some hospitals may prefer to avoid uninsured patients. We found that investor-owned hospitals were less likely to respond to the request and to provide charity-care information. This differential response may signal that transparent price disclosure to the uninsured is a losing financial proposition.

Improvements to the Law

Despite the fundamental limitations discussed above, the variation in estimates suggests that the uninsured could save money by shopping under a more comprehensive price transparency law. Though addressing some barriers requires larger policy interventions, there are several short-term steps that can be taken to improve legislation. As California has already done, each hospital could publicly list a contact person who would handle requests for price estimates.

To aid the hospital in providing an estimate, a standard patient information form could be developed. This would also protect the patient by precluding hospitals from requesting information not readily available to the patient such as a CPT code, as was done by several hospitals in our study. Further, the state could standardize which services (e.g. physician, pre-procedure) need to be included in an estimate.

In California there are currently no financial penalties for non-compliance. The low response rate might be because many hospital representatives are simply unaware of the law. If hospital non-compliance were adequately monitored and penalized, the laws might be more effective.

What is the Optimal Approach to Price Transparency?

A larger question is whether the type of price transparency legislation enacted by California is the best policy lever to increase competition and prevent price discrimination. The primary approach taken by California, and advocated by some experts,¹

is to have the uninsured patient shop for care by requesting a price estimate. Another strategy is to mandate that hospitals charge the uninsured the Medicare reimbursement for equivalent care plus some percentage set legislatively¹¹. California's cap on the price estimate is a variation of this strategy. A third approach would be a publicly available list of hospital prices (not charges) for the entire hospitalization for common procedures. Such lists could include what the hospital will charge the uninsured or the hospital's Medicare reimbursement. Consistent with this policy, California enacted another law requiring hospitals to list their *charges* for the common inpatient hospitalizations and outpatient procedures. If it included *actual prices or reimbursement*, it might be easier for patients to quickly compare prices. Nonetheless the law does not include all procedures. Also, it has been suggested that this type of legislation could have the unintended consequence of increasing prices for the poor¹. A last approach would be to eliminate differential pricing and mandate hospitals charge the same price to all patients and make these prices publicly available¹².

Limitations to the Research

This study has several important limitations. The law does not specify a timeframe in which the hospital is required to respond. We assumed that two months was a reasonable period for a "shopping consumer" to wait for an estimate. Further, the letters were addressed to "Whom it May Concern" and sent to the "Billing Department" of each hospital. Therefore, some letters may not have been directed to the appropriate hospital representative. If this were the case, however, one would expect larger hospitals to respond less frequently or more slowly than smaller hospitals. In fact, there was no difference in response rate or time by bed size. It is also not clear to whom an uninsured person should address such a request; the billing department seems as reasonable a choice as any other.

Though our findings were consistent across the three procedures, it is unknown whether our experience is applicable to other types of hospital care or to other states with similar legislation¹³. When we calculated Medicare reimbursement, we did not account for indirect medical education or DSH status, though it is unlikely that these would explain the large differences we observed between prices quoted and Medicare reimbursement. DSH hospital status was not related to likelihood to respond to the request for an estimate (Table 2). Our letters were mailed from the San Francisco Bay Area and the response rate among hospitals in this area was higher than the rest of the state (42% vs. 25%). Although our letter stated, "Although I don't currently live near your hospital, I am willing to travel to save some money," it is possible that hospital representatives were more responsive to a local address or this difference could be driven by some other difference among Bay Area hospitals. Lastly, we do not know if any hospital representatives had suspicions that the letter was part of a research study. Whether this would have made them more or less likely to respond is unknown.

CONCLUSION

Our study highlights many of the barriers to price shopping that limit uninsured patients from being able to effectively compare prices under California's price transparency legislation. These barriers include low hospital response rates, non-comparable price estimates, and price estimates that exceed typical Medicare

reimbursement. We do not believe that under the current legislation an uninsured patient can effectively shop for care.

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APPENDIX A. EXAMPLE TEXT OF REQUEST LETTER

To Whom It May Concern:

I am writing to learn how much it would cost to have a hysterectomy at your hospital. I have been having vaginal bleeding for many months and my gynecologist has recommended that I have an open hysterectomy for a large fibroid. Otherwise, I am healthy and I don't take any medications. Unfortunately, I am uninsured and my current employer doesn't offer health insurance coverage. I have looked into public insurance at my local social services office but I don't qualify for Medi-Cal. So, I am shopping around to see what I can afford. I was told that under the California law called the "Payer's Bill of Rights" a hospital must provide a written estimate of the amount the person will be required to pay for care.

Though it is not urgent, I hope to make a decision on which hospital to go to in about a month. Please send a quote from your hospital and any other information I would need to the following address: [Address omitted]. Although I don't currently live near your hospital, I am willing to travel in order to save some money. Thank you in advance for your help.

Sincerely,

[Patient Name]

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