

**WHITE PAPER**

# SAVE \$36 BILLION IN U.S. HEALTHCARE SPENDING THROUGH PRICE TRANSPARENCY

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# INTRODUCTION

Healthcare in the United States is a \$2 trillion industry that accounts for 17 percent of the Gross Domestic Product (GDP).<sup>1</sup> Healthcare spending continues to increase at a rate of nearly 10 percent annually. By 2020, experts estimate that it will grow to consume 21 percent of GDP.<sup>2</sup>

Finding ways to better manage healthcare spending is critical to the nation's financial future and its ability to remain competitive. Recent changes to healthcare benefits, including the opportunity for consumers to exercise more choice in selecting providers and treatments, have the potential to help reduce costs. Yet despite the choices available, consumers often lack information vital to making informed decisions about their healthcare.

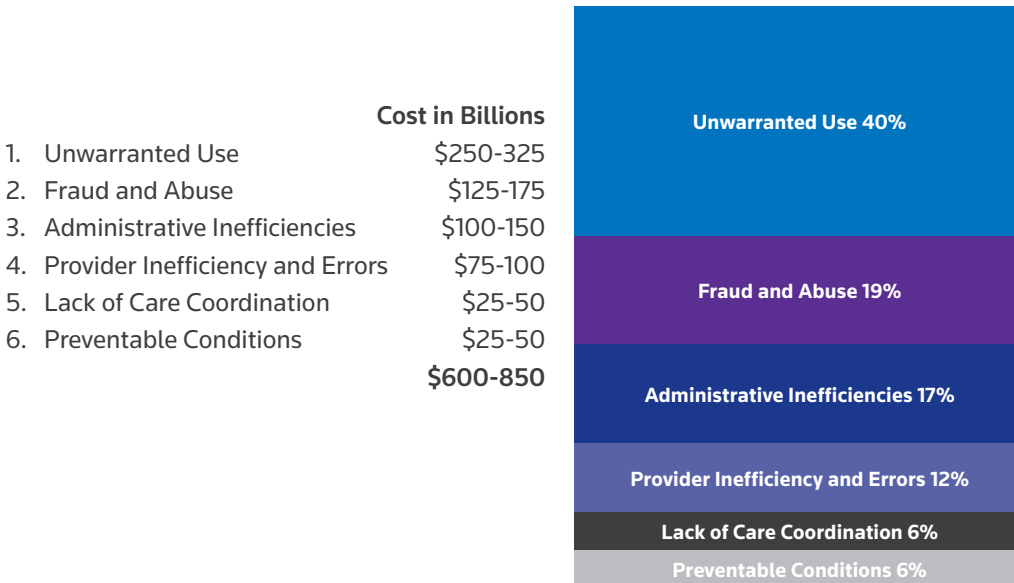
Price transparency is one area where information is especially lacking. Studies show that healthcare costs for the same procedure in the same market can vary by more than 100 percent. Providing consumers with clear, comparative information on the cost of services is key to further engaging them in the decision-making process and, ultimately, reducing healthcare costs.

This white paper explores how reducing price variation for the 108 million Americans with employer-sponsored insurance could save the nation as much as \$36 billion per year.<sup>3</sup> It also draws on Truven Health Analytics<sup>SM</sup> research findings and respected literature in the field to identify key issues surrounding price transparency and offers eight best practices for implementing successful price transparency initiatives.

## EXPLORING THE RADICAL VARIATION IN HEALTHCARE PRICING

Much has been written about healthcare waste in the United States. The facts, as outlined in the chart below, tell a powerful story. The bottom line is, if the United States does not better control healthcare expenditures, system waste could reach \$1.6 trillion by 2020 — doubling in just 10 years.<sup>4</sup>

**FIGURE 1: The High Cost of Healthcare Waste**

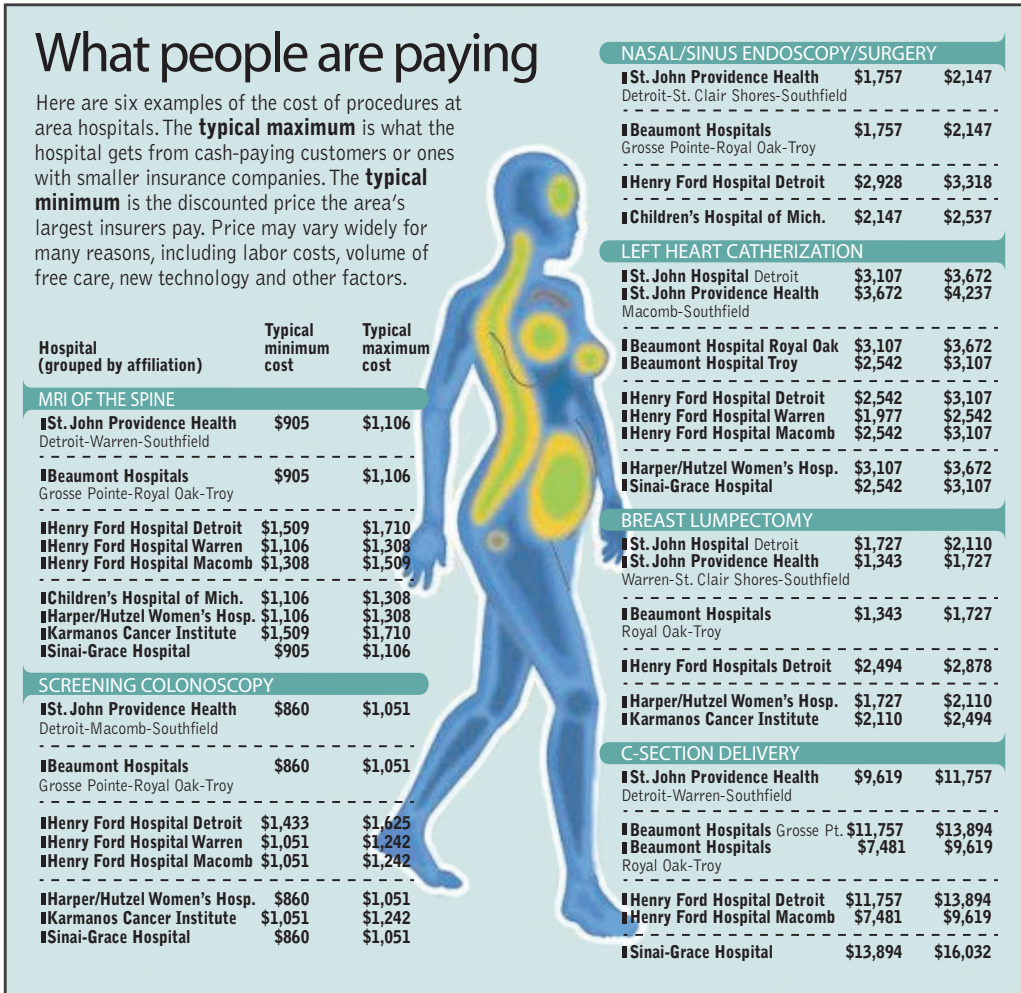


Source: Where Can \$700 Billion in Waste Be Cut Annually From the U.S. Healthcare System?, Truven, 2009

One specific factor driving the high cost of healthcare is the significant price variation — sometimes more than 100 percent — for the same healthcare services in the same geographic market. This topic has been well-documented. An annual survey of healthcare costs in Massachusetts found that prices paid for the same hospital and professional services vary significantly and cited a three- to six-fold price difference. The most striking finding was that if prices for hospital inpatient and professional services were narrowed to the range spanning prices in the 20th to 80th percentile, the potential savings were more than \$265 million.<sup>5</sup>

The chart below clearly illustrates the broad range of prices paid for different services in the Detroit metropolitan area. Broad variances such as these reinforce the importance of providing consumers with access to pricing information specific to their benefits and location, so they can make informed decisions about their care.

**FIGURE 2: Shopping Comes to Healthcare**



Source: *Detroit Free Press*, March 4, 2011

### Service Sites Impact Costs

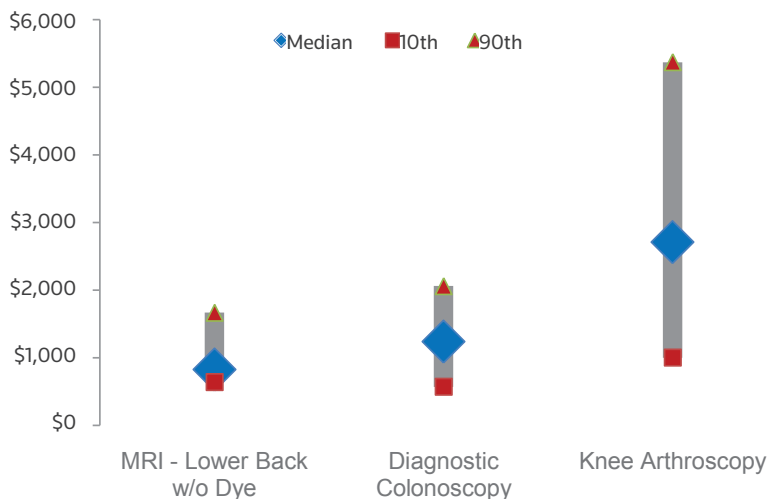
When it comes to outpatient procedures, the location where services are rendered — physician's office, ambulatory care facility, or hospital outpatient facility — can dramatically impact the cost. The total cost of procedures performed in a physician's office or an ambulatory care facility is typically much lower than those accrued in a hospital outpatient site.

The degree to which services are delivered in office settings varies geographically. Recent data from a large New York health insurer show that 85 percent of colonoscopies (about 26,000 procedures) for metro New York consumers were performed in physicians' offices. The cost for these procedures averaged \$450 each, with no additional facility fee. In contrast, a Chicago insurer found that 78 percent of its colonoscopy procedures were performed in hospital outpatient facilities. While the average physician fee for this service was just \$330, the facility charge for each procedure ranged from \$2,000 to \$6,000.<sup>6</sup> Thus even though the professional fee was \$120 more expensive in New York, the total cost for Chicago consumers was dramatically higher due to the facility component of the charge.

### Price Variation for an Illinois-based Employer

In a study on price variation for an Illinois-based employer using our Truven Health Analytics<sup>SM</sup> MarketScan<sup>®</sup> database, Truven findings revealed a variance of +102 percent/-23 percent between the median and 90th and 10th price percentiles for an MRI: Lower Back Without Dye. Diagnostic Colonoscopy and Knee Arthroscopy procedures showed a similar price variance.<sup>7</sup>

**FIGURE 3 : Price Variation for Chicago, IL - based Employer**



Based on this research, the potential cost savings for this company were estimated at \$83,000 for these three procedures if its employees selected providers delivering these services at or below the median cost:

- \$42,000 or 26 percent for Diagnostic Colonoscopy
- \$12,000 or 18 percent for MRI: Lower Back Without Dye
- \$29,000 or 33 percent for Knee Arthroscopy

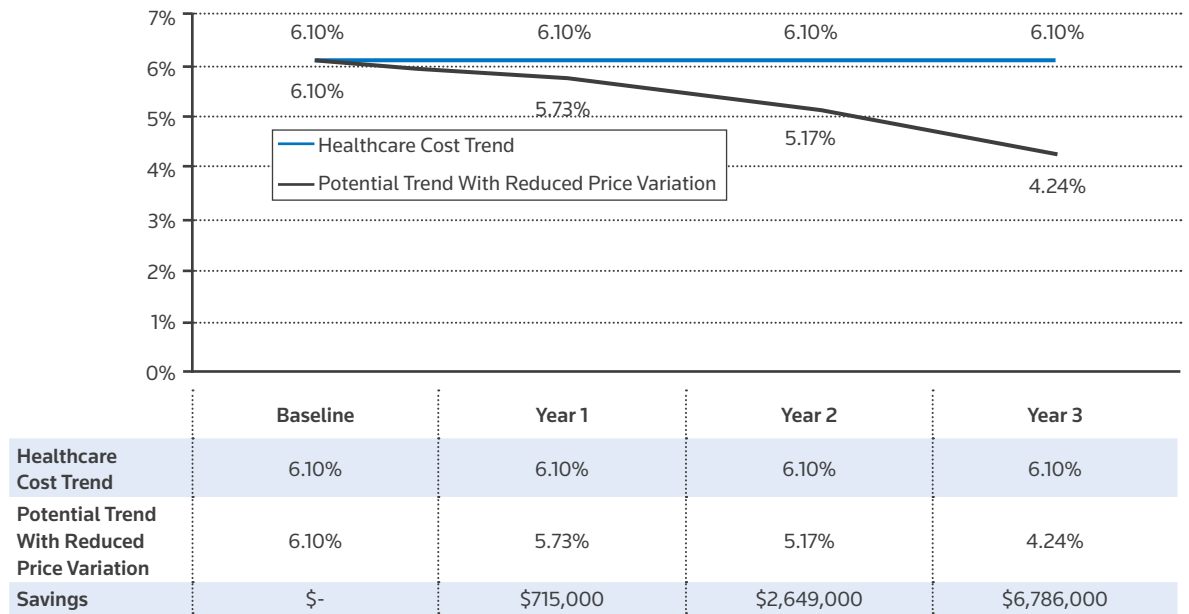
For the individual consumer, understanding this variation and factoring it into their decisions about where to go for services provides a real opportunity for savings. A consumer in a high-deductible plan (average \$1,750 deductible and 20 percent coinsurance) who needs a knee arthroscopy and hasn't yet met their deductible has the opportunity to save between \$200 and \$500 by going to a provider who offers this service at or below the median price.

### Reducing U.S. Healthcare Costs by \$36 Billion

Using our MarketScan database, Truven observed a similar variation in prices in every market of the country. By analyzing the variation in prices in each market for a set of 300 "shoppable" procedures (high-volume procedures that consumers would plan for and schedule in advance), we were able to identify a significant savings opportunity associated with reduced healthcare costs. In each market, we modeled the cost savings that could be found by reducing prices for the targeted services that were above the median to the median price, after removing high-cost outliers. This reduction in prices would reduce overall medical spending by 3.5 percent. When we apply this savings opportunity nationally to the 108 million Americans under 65 who receive insurance through their employer, the savings potential is large — \$36 billion.

Even more conservative models on the impact of price transparency yield impressive savings results. Consider an employer with 20,000 employees and a healthcare cost trend of 6.1 percent — which is the median faced by employers today.<sup>8</sup> It's unlikely that all consumers will use healthcare information to inform and change their decisions about where to seek treatment. The chart on the next page shows the impact of cost savings over time as consumer engagement and adoption of a price transparency tool grow from year to year. In the first year, we assumed that approximately 10 percent of employees would use the information provided to change their behavior and move to median-priced providers for the targeted procedures. In years two and three, we assumed adoption rates of 25 percent and 50 percent respectively. As a result, this employer could uncover a potential savings of \$715,000 in the first year and \$6.8 million by the third year.

**FIGURE 4: The Impact of a Price Transparency Tool on Healthcare Cost Trends**



**CONSUMER ENGAGEMENT AS A STRATEGY TO REDUCE WASTEFUL SPENDING**

One way to remove waste from the system is by increasing consumer engagement. This strategy focuses on making patients better consumers of healthcare services and strives to elevate individuals’ interest and participation in healthcare decision making to the same level as other important decisions in their lives. Central to any effort to enhance consumer involvement in their own healthcare decision making is a need for improved information resources. Put simply, for consumers to be actively involved in choosing between treatment options, they must be privy to information on costs, services, and quality.

In a report to state government leaders, Deloitte authors wrote, “... there is consensus among providers and payers that engaging consumers more directly in making better decisions about their health is a key to improved care, lower costs, and avoidable errors resulting from nonadherence to treatment regimens.”<sup>9</sup> But according to a study by Vanderbilt Center for Evidence-Based Medicine, 90 million consumers have difficulty understanding their healthcare options today and this is directly responsible for from three to six percent higher healthcare expenditures.

**The Need for Price Transparency**

Price transparency is a key factor in supporting consumers’ ability to make informed, well-reasoned healthcare decisions. Price transparency in healthcare refers to “the availability to consumers of precise total costs for specific services provided by healthcare service providers (doctors, hospitals, labs, outpatient facilities, and other service providers). Total costs include those amounts paid by consumers out of pocket or through their high-deductible insurance program and the amount paid by an insurer/ intermediary on their behalf.”<sup>10</sup>

Currently 34 states require reporting of hospital charges or reimbursement rates and another seven have established a forum for voluntary price reporting.<sup>11</sup> And more than 30 states are pursuing legislation to increase price transparency in healthcare. California has already amended its healthcare transparency law to prevent any provider contract with a health plan from including a clause that limits price transparency. At a national level, the Patient Protection and Affordable Care Act (PPACA) of 2010 requires hospitals to provide charge information to the public. These legislative activities are driving greater adoption of price and quality transparency tools by health plans though there is clearly opportunity for improvement.

### Price Versus Quality

The old adage, “you get what you pay for,” expresses a strongly held belief that higher-cost care is better care.<sup>12</sup> However since price variation often results from separate contract negotiations between insurers and providers, it is not necessarily correlated with quality, burden of illness, or cost.

In fact, a number of studies show no correlation between cost and quality. Research done by the Massachusetts Attorney General’s office states, “Our results indicate that there is no correlation between price and quality, and certainly not the positive correlation between price and quality we would expect to see in a rational, value-based healthcare market. We interviewed numerous providers and insurers who confirm that there is no correlation between the price paid to providers and the quality of the providers’ services.”<sup>13</sup> In a related study, the Massachusetts Division of Health Care Finance and Policy reported that despite the large differences in price, there was little difference in quality. In fact, lower-priced hospitals are often associated with high quality scores.

This is counterintuitive for most healthcare consumers. To help educate consumers on the lack of correlation between price and quality, it’s important to couple any price information with quality designations on providers. Such information truly empowers the consumer to make educated decisions about healthcare.

### Consumer Cost Sharing

The reality is that many consumers do not know what their healthcare costs and what portion their insurers are paying for the services they receive. According to a 2010 Deloitte consumer survey, before going to the hospital, only 32 percent of consumers verified that their health plan covered the treatment and 29 percent determined in advance if the hospital honored their insurance.<sup>14</sup>

Cost sharing can be a powerful incentive in empowering consumers to ask questions and understand their costs and options before they receive care. But until recently, insured patients have had very little incentive to choose a lower-cost provider. This is changing as consumers become responsible for a greater share of their costs. In particular, out-of-pocket costs are what matter to today’s consumers. Research indicates that a consumer with their own money at stake via a high-deductible/high-involvement health plan is more likely to seek out more affordable options and, in some cases, to ask the question, “Do I really need this treatment?” Today, 20 percent of employer-insured Americans are enrolled in plans with a deductible of \$1,000 or more.<sup>15</sup>

A number of studies on shared decision making find that when consumers are engaged with information on their treatment options and efficacy, they make decisions that often reduce overall costs and utilization.<sup>16</sup> The Rand Health Insurance Experience study is the most notable. This controlled, longitudinal study consisted of a control group in a free plan and other consumers in plans with cost sharing. The Rand study demonstrated that coinsurance rates of 25 percent resulted in a decline in healthcare costs by 19 percent due to the out-of-pocket costs. In addition, Wennberg’s studies found that when a group of consumers received additional information on their options and outcomes for discretionary procedures, such as a prostatectomy, hysterectomy, and laminectomy, costs were reduced by 3 percent primarily because patients chose less invasive options. Behavioral economics tell us that people’s satisfaction increases when they have choice and control. Reducing costs and increasing consumers’ satisfaction with their healthcare are two powerful benefits of engaging consumers with information.

Procedures that are elective, performed for conditions that do not threaten life, and can be performed well in a variety of settings are often the procedures most appropriate for price shopping. Employers need to be careful that they are pursuing value-based benefit models to ensure that consumers aren’t deciding to forego important preventive care to detect issues early and care for chronic conditions to maintain health — both of which also contribute to reducing costs.

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*“Ask most Americans how much it costs to visit a doctor and they probably do not know.”*

**CNNMoney.com**

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## BEST PRACTICES FOR IMPLEMENTING PRICE TRANSPARENCY SOLUTIONS

Price transparency provides consumers with the information they need to be more fully engaged in their healthcare decision making and to make financially prudent healthcare choices. The hope is that price transparency will ignite a transformational trend in care delivery that will reshape the process and lead to lower costs. However solutions are rarely as straightforward as they may appear initially and healthcare price transparency is no exception.

The following best practices can inform healthcare information-gathering to ensure that it is as useful as possible to the patient and to the long-term quest of lowering healthcare costs.

### 1. Drive demand for involvement by structuring health benefits in a way that gives consumers a vested interest.

Whether it be a high-deductible, consumer-directed health plan or a more traditional design, consumers need strong economic incentives to select affordable care options. History tells us the majority simply will not concern themselves with the prices charged to their insurance providers.

### 2. Provide information on both price and quality variation by provider.

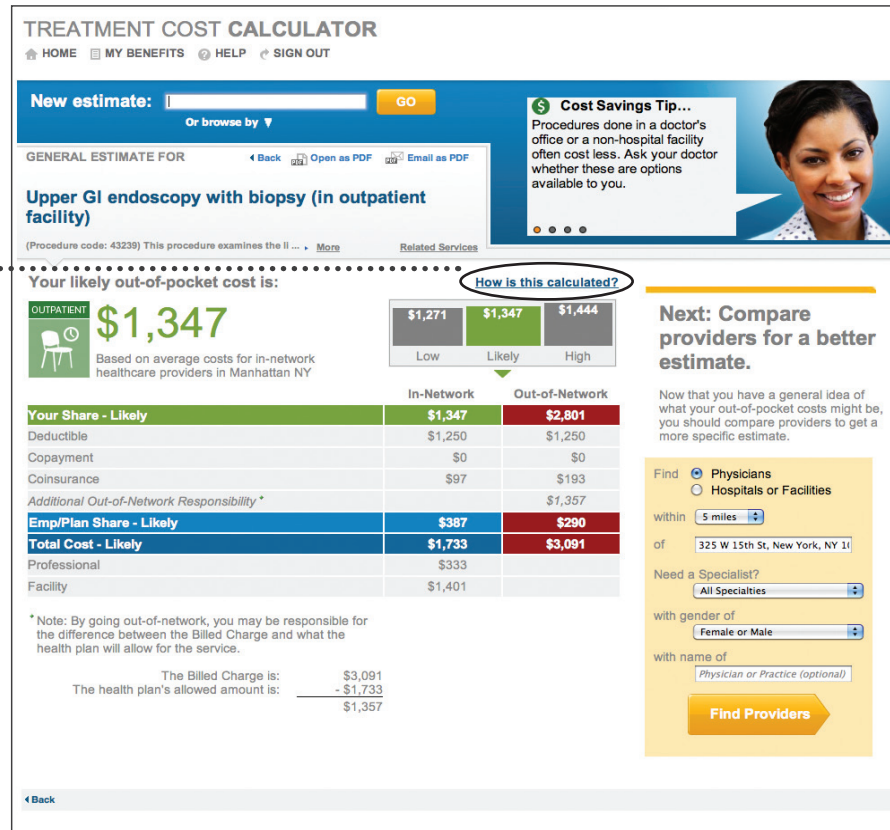
Providing balanced information to make decisions is key. Consumer trust is low and providing information on price without addressing quality can raise concerns about the intent. Consumers value information on convenience, such as location, office hours, and languages spoken. Integrating this information in one place provides the context necessary to make informed decisions.

### 3. Calculate out-of-pocket costs and show how benefits apply.

Consumers care about their out-of-pocket costs but are often confused about what their benefits cover. To make the information you provide to consumers as valuable as possible, use a tool that starts with relevant geographic pricing and then integrates real-time benefits information, such as remaining deductible and out-of-pocket obligations, to accurately calculate costs. Use this information to educate people on how their health insurance benefits apply to the service.

FIGURE 5: Market Area Cost Estimate for Upper GI Endoscopy

- Calculate out-of-pocket costs
- Apply benefits real time to personalize estimates
- Help members understand how their benefits apply

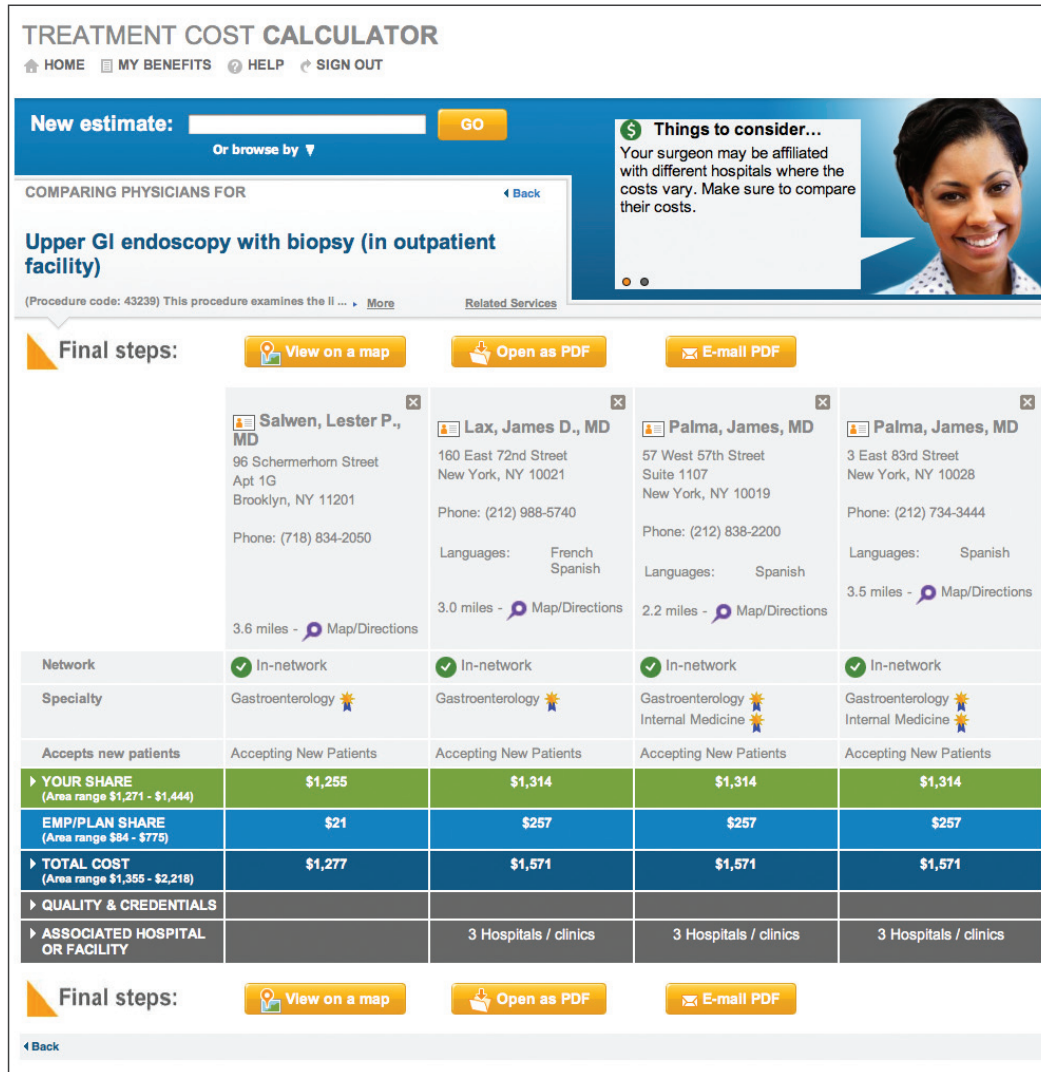




#### 4. Show total costs and components.

Costs can vary significantly depending on where services are performed (physician's office, hospital, or outpatient facility). As a healthcare patient, it can be surprising to receive multiple bills for a healthcare service — a professional bill, a facility bill, a bill for a diagnostic test, a bill for an anesthesiologist, and so on. For price transparency to be of maximum benefit to the consumer, it is vital that the total costs associated with a particular service or treatment, as well as how they vary based on where a provider practices, are clearly illustrated since consumers often have a choice.

FIGURE 6: Provider Cost Comparison for Upper GI Endoscopy




- Educate on total costs and components of care
- Illustrate how costs vary based on where providers practice
- Support comparisons on quality and other attributes

5. Highlight ways to save money.

To ensure consumers understand how they can control or impact costs, it's important to convey options, such as the pros and cons of various care settings, treatments, and provider choices. Patients need to be alerted to the potential for certain procedures not to be covered (cosmetic or elective surgery), statistics on the effectiveness of certain procedures, and whether they will be liable for any expense not covered by insurance.


FIGURE 7: The Avatar, Gina, Provides Useful Health Information, Key Statistics, and Helpful Suggestions

- Engage consumers with important information about how they can control or impact their costs
- Convey options in care setting, treatments, and providers




**💰 Did you know?**  
You may have to pay the difference between the doctor's charges and what your health plan allows. Ask your provider if you will owe the difference.

Progress indicator: 1 of 7 items active



**💰 Did you know?**  
According to a National Institute of Health study, 39% of patients do not see measurable relief in back pain after surgery.

Progress indicator: 2 of 7 items active



**📖 Did you know?**  
Skin Lesion Destruction may be considered cosmetic, and therefore not covered. Please consult your health plan for more information.

Progress indicator: 3 of 7 items active

**6. Educate by providing deep, embedded health content to raise consumer awareness.**

Informed consumers are more relaxed patients and are often more satisfied with their outcomes and benefits. It is important to arm consumers with information about risks, prognosis, and alternatives to the planned course of action. Dr. Sharon B. Arnold, vice president of Academy Health and directory of The Robert Wood Johnson Foundation’s Changes in Health Care Financing and Organization initiative, wrote, “... when consumers are armed with the right information, they will demand high-quality services from their providers, choose treatment options wisely, and become active participants and self-managers of their own health and healthcare.”<sup>17</sup>

**FIGURE 8: Embedded Educational Content for Knee Arthroscopy**

**New estimate:**  **GO**

Or browse by ▼

GENERAL ESTIMATE FOR [Back](#) [Open as PDF](#) [Email as PDF](#)

**Knee arthroscopy (in outpatient facility)**

(Procedure code: 29881) This is a surgical procedure i... [More](#) [Related Services](#)

**Cost Savings Tip...**  
Procedures done in a doctor's office or a non-hospital facility often cost less. Ask your doctor whether these are options available to you.

**Your likely out-of-pocket cost is:**

**OUTPATIENT** **\$1,577**  
Based on average costs for in-network healthcare providers in Manhattan NY

**How is this calculated?**

|         |         |         |
|---------|---------|---------|
| \$1,373 | \$1,577 | \$1,800 |
| Low     | Likely  | High    |

**Next: Compare providers for a better estimate.**

Now that you have a general idea of what your out-of-pocket costs might be, you should compare providers to get a more specific estimate.

|                               | In-Network     | Out-of-Network |
|-------------------------------|----------------|----------------|
| <b>Your Share - Likely</b>    | <b>\$1,577</b> | <b>\$8,358</b> |
| Deductible                    | \$800          | \$800          |
| Copayment                     | \$0            | \$0            |
| Coinsurance                   |                |                |
| Additional Out-of-Network Res |                |                |
| <b>GE's Share - Likely</b>    |                |                |
| <b>Total Cost - Likely</b>    |                |                |
| Primary Procedure             |                |                |
| Other Procedure               |                |                |
| Facility                      |                |                |
| Lab, X-ray, Anesthesia        |                |                |
| Other Costs                   |                |                |

◆ Note: By going out-of-network for the difference between the the health plan will allow for the

**Knee arthroscopy**

1 2 3 4 5 ▶

**Normal anatomy**

**Femur**

**Patella**

**Posterior cruciate ligament**

**Anterior cruciate ligament**

**Meniscus**

**Tibia**

**Meniscal ligament**

Provide deep, embedded health content to raise consumer awareness:

- Procedure details
- Risks
- Prognosis
- Alternatives

7. Engage consumers to help them manage conditions and control costs.

As part of the process of advanced decision making, patients need to be made aware of care guidelines for any chronic disease or condition and the likelihood of complications if they do not follow the appropriate preventive care regimen. Wise treatment decisions require excellent information resources and an understanding of the tradeoffs one makes to pursue each course of action. The quality of treatment decisions a patient makes significantly impacts the quality of care they ultimately receive. Providing clients with a more complete understanding of all aspects of their care will lead to better care decisions, improved compliance with physicians' instructions, and more positive healthcare outcomes.

FIGURE 9: Care Guidelines for CAD

Engage consumers to help them manage conditions and control costs:

- Incorporate recommended care guidelines
- Show percent of patients who have complications and related costs to provide incentive

**TREATMENT COST CALCULATOR**  
 HOME MY BENEFITS HELP SIGN OUT

New estimate:  **GO**  
 Or browse by ▾

DISEASE/CONDITION ESTIMATE: [Back](#) [Open as PDF](#) [Email as PDF](#)

**Coronary artery disease (CAD)**

This is a narrowing of the small blood vessels that supply blood and o ... [More](#)

**Summary:**  
 This is a narrowing of the small blood vessels that supply blood and oxygen to the heart. CHD is also called coronary artery disease.  
[Read the Full Article](#)

**Next: Get detailed estimates or find providers.**

Cost Overview Recommended Yearly Care Potential Complications

**People like you with CORONARY ARTERY DISEASE (CAD) typically have these expenses:**

The following services are recommended to better manage this condition and reduce the risk of disease complications and associated costs. This list of services is based on standard healthcare guidelines to treat Coronary artery disease (CAD) for an entire year. Physicians may recommend care beyond those shown here. Work with your physician to develop a plan to best manage this condition.

| Recommended Yearly Services  | Times per year | Annual Total |
|--|----------------|--------------|
| <a href="#">Cholesterol-lowering medication</a> ?                                  | 4 scripts      | \$331        |
| <a href="#">ECG (electrocardiogram)</a> ?  | 1              | \$39         |
| <a href="#">Flu vaccine for adults</a> ?   | 1              | \$19         |
| <a href="#">Glucose blood test</a> ?   | 1              | \$8          |
| <a href="#">Hemoglobin (Hgb) blood test</a> ?                                      | 1              | \$4          |
| <a href="#">High blood pressure medication: ACE inhibitors (e.g., Captopril)</a> ? | 4 scripts      | \$124        |
| <a href="#">Lipid panel test</a> ?   | 1              | \$22         |
| <a href="#">Office Visit - Established Patient for Moderate Problems</a>           | 1              | \$92         |
| <b>Total Cost</b>  |                | <b>\$641</b> |
| <b>Your Likely Cost</b>  |                | <b>\$281</b> |

• Based on cost for in-network providers in Manhattan NY  
 • Your Likely Cost depends on you plan design and how much of your co-pay, deductible and coinsurance have been applied to

## 8. Promote. Promote. Promote.

One of the critical problems with consumer decision support tools is a lack of awareness and underuse. To derive savings from price transparency, organizations need to raise awareness about the value of the tool by creatively promoting it, illustrating the cost-savings potential, and reinforcing this message throughout the year.

Through its 2007 survey, the California Healthcare Foundation (CHF) reported that only 23 percent of Californians were aware of ratings information on hospitals, and only 1 percent were using that information to select a hospital for planned procedures. The CHF conducted a pilot marketing project in three markets (San Francisco, Sacramento, and San Diego) to encourage pregnant women to use its CalHospitalCompare.org Website to assess medical care at nearby hospitals.

Goals of the study included (1) to build awareness of its Website and increase its use for maternity care, and (2) to discover which approaches are most cost-effective for encouraging consumers to use health-ratings services.

The test included Google AdWords purchases for search engine marketing, branded emails, and event sponsorship. The results of the test showed that the online ad campaign had an immediate impact of driving up online visits to the CHF site. Before the campaign, only three of the 25 most-visited maternity web pages on the site were for Bay area hospitals. After the campaign started, all of the 25 most-viewed pages were in the Bay area. In fact, 33 of the top 35 were in the Bay area. Visits to Bay area hospital maternity pages in the month before the campaign were at 153, and during the seven months after the campaign, visits jumped to 1,710 visits per month.<sup>18</sup>

## CONCLUSION

As a nation, we urgently need to find solutions to stem the rapid rise in healthcare costs. Our history of deeply insulating consumers from the costs of their healthcare choices and the pervasive systems that obscure visibility into the cost of services bear at least some of the blame for year-after-year double-digit growth percentages for healthcare costs.

Price transparency is currently on the legislative agenda for many states throughout the country. By working through the issues inherent with price transparency, legislatures will enable employers, patients, and health insurers to devise a better, more equitable healthcare system. An informed, educated, and engaged consumer is at the heart of achieving this goal.

Price transparency tools that encourage more informed, financially intelligent healthcare decisions, combined with benefit plans that are designed to require more conscious healthcare choices by consumers, will help create engaged, informed, educated consumers — and by our estimate, save \$36 billion (3.5 percent) from annual healthcare expenditures.

The best practices outlined in this white paper provide a blueprint for what to look for in a price transparency tool — an important resource in the ultimate quest toward more affordable healthcare.



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## **ABOUT TRUVEN HEALTH ANALYTICS**

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