BlueCross BlueShield

bhi Blue Health Intelligence

THE HEALTH OF AMERICA REPORT

SHOPPING FOR SURGERY:

HOW CONSUMERS ARE SAVING WITH THE SHIFT TO **OUTPATIENT CARE**

BLUE CROSS BLUE SHIELD, THE HEALTH OF AMERICA REPORT

THE RISE OF "SHOPPABLE" SURGICAL INTERVENTIONS

Recent years have seen a rapid increase in selected outpatient medical services, including surgical and interventional procedures, being performed in the outpatient setting, as hospitalized inpatient visits have fallen. Complex procedures and surgeries now are possible in outpatient facilities due to new medical technologies, such as minimally invasive surgical techniques, new anesthesia and pain control techniques, that prevent complications and allow patients to return home more quickly.[1,2]

THIS RISE IN OUTPATIENT PROCEDURES IS BEING DRIVEN BY:

- Consumer expectation of more convenience for elective surgeries
- Payer and clinical pressures of minimizing hospital stays
- Achieving similar quality with lower intensity medical services through clinical advancements

METHODOLOGY NOTES

Blue Cross Blue Shield, The Health of America Report is a collaboration between Blue Cross Blue Shield Association and Blue Health Intelligence, which uses a market-leading claims database to uncover key trends and provide insight into healthcare affordability and access to care.

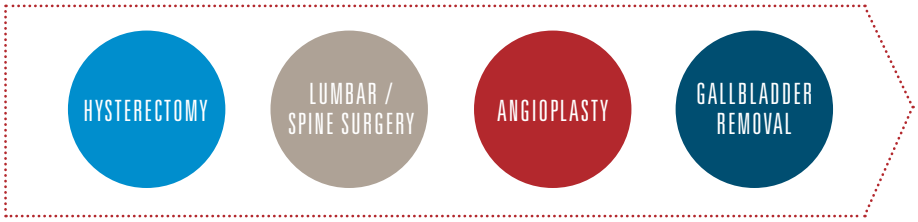
This report analyzed the claims data of approximately 43 million BCBS commercially insured members (excludes Medicare and Medicaid) under the age of 65 from 2010 to 2014. Data was pulled by procedure using a combination of coding processes to capture inpatient and outpatient procedures, including Diagnosis-Related Groups (DRGs), International Classification of Diseases (ICD) procedure codes and Current Procedural Terminology (CPT) codes. Cost and utilization were measured at the stay level for inpatient (total facility and all professional charges during an admission) and visit level for outpatient (total facility and professional charges for date of service). The data was not adjusted for patient risk.

1. Cullen KA, Hall MJ, Golosinskiy A. Ambulatory surgery in the United States, 2006. *Natl Health Stat Report.* 2009 Jan 28;(11):1-25.

2. Tsui C, Klein R, Garabrant M. Minimally invasive surgery: national trends in adoption and future directions for hospital strategy. *Surg Endosc,* 2013 Jul;27(7):2253-7.

For appropriate patients, outpatient surgery has been shown to be safe and effective, achieving similar or better outcomes as inpatient procedures while allowing patients to spend less time in a medical facility, recover faster and incur less pain. Spine surgery and angioplasty have been shown to be safe and are associated with similar or better outcomes in the outpatient setting.[3,4] Additionally, outpatient hysterectomy was found to have fewer 30-day complications, lower risk of perioperative morbidity, less risk of wound complications and other medical complications compared to inpatient, even after adjusting for demographic and operative differences between the two groups.[5]

This report highlights the general trend from 2010 to 2014 for select elective or "shoppable" procedures that could be performed in either inpatient or outpatient settings. Shoppable procedures were selected based on consumer interest in pricing and include planned procedures performed on a non-emergency basis that allow patients time to search for providers and select where and when they would like to receive surgery. This report examines four shoppable procedures during the study period, two of which showed a strong shift to outpatient care (hysterectomy and lumbar/spine surgery[6]) and two of which remained steady but at very different levels of outpatient care (angioplasty and gallbladder removal) during the study period.[7] These four procedures cost Blue Cross and Blue Shield companies, their members and employers nationwide an estimated $11 billion in 2014.



These four procedures cost all BCBS Plans, their members and employers nationwide **an estimated $11 billion in 2014**.

KEY TAKEAWAYS

1. Cost Savings (total costs and member costs)[8]

Member cost savings were achieved when procedures shifted to outpatient settings. For example, when members elected to have an angioplasty performed in an outpatient facility, they saved an average of $1,062 per procedure out-of-pocket (compared to when performed at an inpatient facility).

2. Annual Procedure Cost Trends[8]

Annual procedure cost trends (i.e., the percent increase in procedure costs over time) were greater for inpatient procedures. Angioplasties experienced the greatest difference, with inpatient cost trend at 6.1 percent and outpatient cost trend at 1.4 percent across the five-year time period.

3. Outpatient Utilization

While outpatient utilization increased during the five-year study period, overall utilization did not increase (i.e., outpatient utilization increases were offset by significant decreases in inpatient utilization).

3. Liu JT, Briner RP, Friedman JA. Comparison of inpatient vs. outpatient anterior cervical discectomy and fusion: a retrospective case series BMC Surg. 2009 Mar 5;9:3.

4. Slagboom T et al. Outpatient coronary angioplasty: feasible and safe. Catheter Cardiovascular Interv. 2005 Apr;64(4):421-7.

5. Khavanin N et al. Comparison of perioperative outcomes in outpatient and inpatient laparoscopic hysterectomy. J Minim Invasive Gynecol. 2013 Sep-Oct;20(5):604-10.

6. Lumbar / spine surgery includes only discectomy and laminectomy procedures.

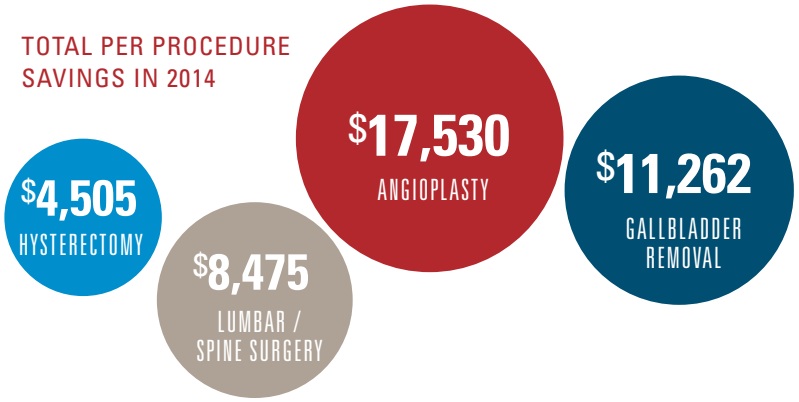
7. Other procedures we considered for this study were either already more than 98% OP at the start of the study period (hernia repair, kidney stone removal, knee arthroscopy, vasectomy) or remained at very low OP utilization rates throughout the study period (hip and knee replacement).

8. The results for all the procedures presented in this paper are not risk adjusted. However, a comparison of the relative risk of the patient populations receiving inpatient vs. outpatient care across all four treatments was conducted. Risk scores for Angioplasty and Hysterectomy patients were roughly similar across care settings. Risk scores for inpatient vs. outpatient patients receiving a lumbar/spine surgery or a gallbladder removal were moderately higher among those receiving inpatient care vs. outpatient care. This could explain, in part, the cost differences for these two treatments across care settings — though not likely the rate of cost growth over time.

OUTPATIENT COST SAVINGS ON THE RISE[5]

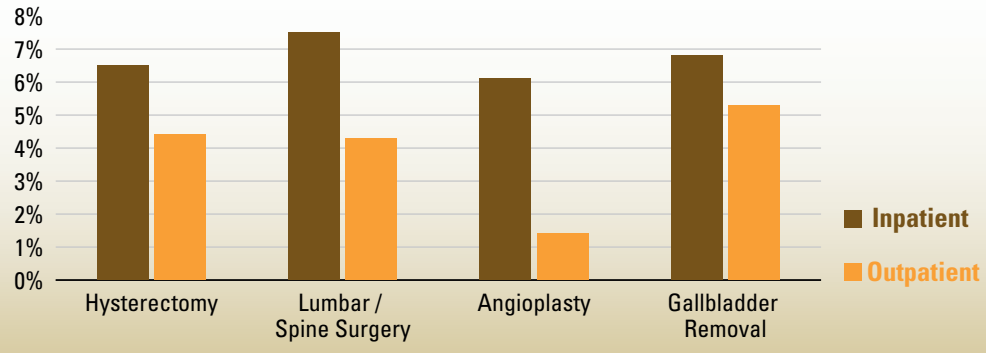
Cost savings for the four procedures we examined varied between inpatient and outpatient settings, but all increased consistently. Total per-procedure savings in 2014 ranged from $4,505 for hysterectomy to $17,530 for angioplasty. Core reimbursement structures are the primary driver of the cost difference between inpatient and outpatient procedures.

TOTAL PER PROCEDURE SAVINGS IN 2014



Between 2010 and 2014, the annual inflation rate for all four procedures was also a major factor impacting costs — it was higher for inpatient, resulting in a growing total cost advantage for outpatient procedures. Many factors contribute to this differential inflation rate, potentially including reimbursement policies, cost structures on the inpatient and outpatient settings, and differences in the health status of patients.

PROCEDURE YEARLY INFLATION RATES, INPATIENT & OUTPATIENT, 2010-2014

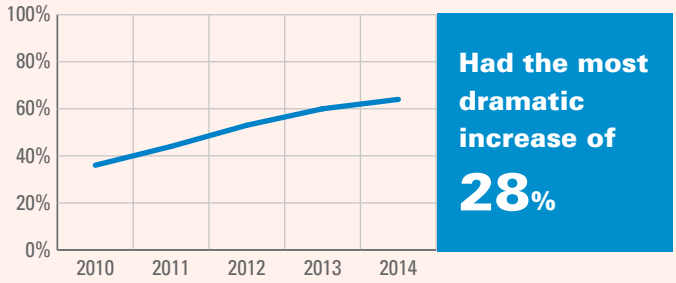


OUTPATIENT INCREASES VARY BY PROCEDURE

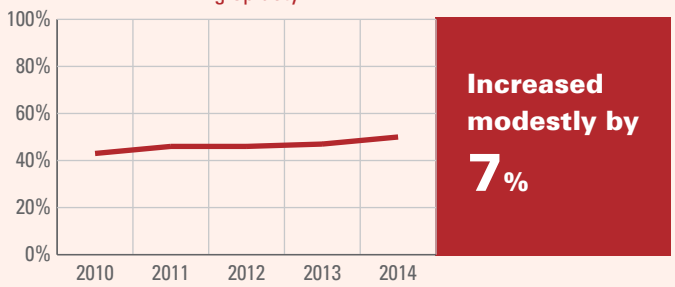
Hysterectomies underwent the most dramatic outpatient shift during the study period, with the proportion of those procedures increasing from 36 percent to 64 percent, while the proportion of outpatient lumbar/spine surgery grew from 61 percent to 82 percent. Angioplasty's outpatient share increased modestly from 43 percent to 50 percent. And even though laparoscopic gallbladder removal remained essentially flat, it had already shifted to mostly outpatient by 2010 (at 80 percent).

OUTPATIENT PERCENTAGE, ALL PROCEDURES, 2010-2014

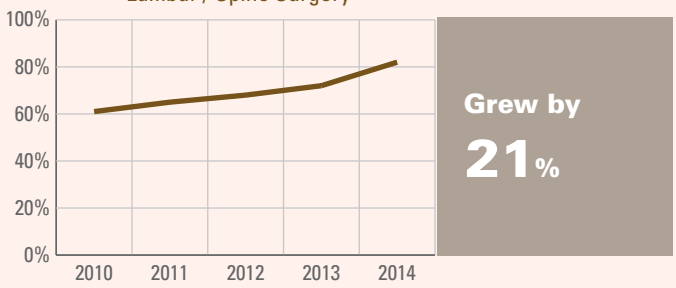
Hysterectomy



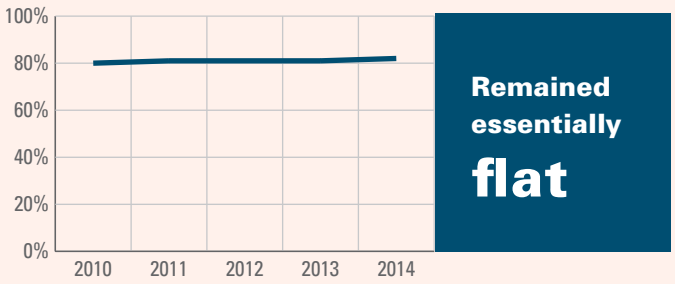
Angioplasty



Lumbar / Spine Surgery



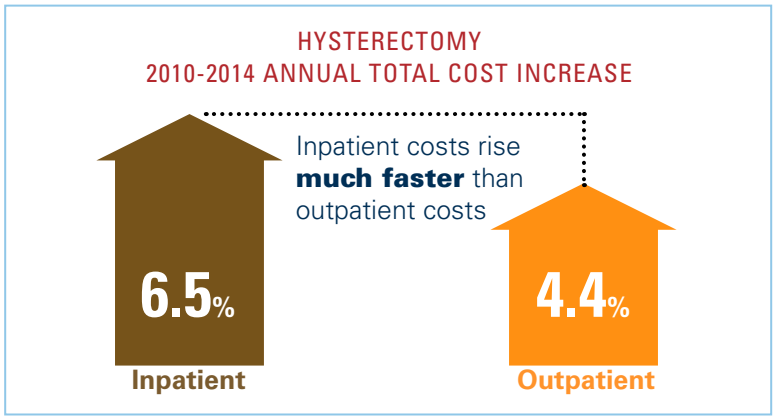
Gallbladder Removal



SIGNIFICANT SAVINGS FOR HYSTERECTOMIES

COST SAVINGS[8]

Outpatient hysterectomies create real — and growing — cost savings, with the average per-procedure cost inpatient to outpatient difference rising from $2,781 in 2010 to $4,505 by 2014. Members saved an average of $483 in out-of-pocket costs in 2014 by having an outpatient procedure.[9]

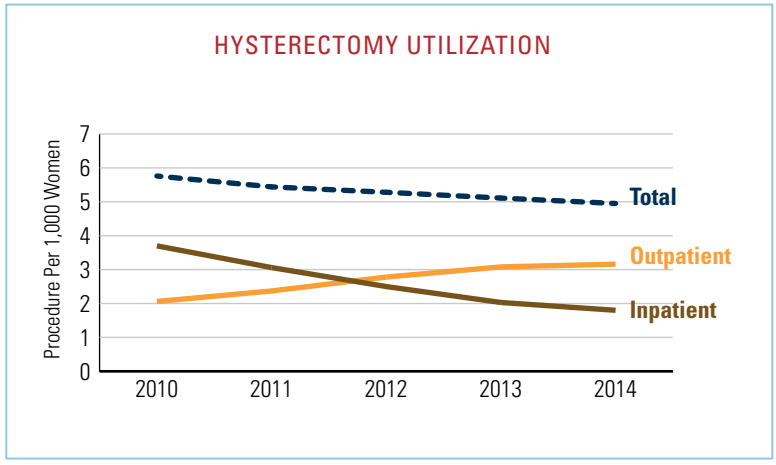


Member's average savings in out-of-pocket costs in 2014

$483

UTILIZATION

From 2010 to 2014, hysterectomy utilization shifted markedly toward the outpatient setting in each age band, with the overall outpatient share increasing approximately 28 percentage points from 36 percent to 64 percent. Overall hysterectomy utilization also declined slightly, with a sharp reduction in inpatient utilization and a significant increase in outpatient utilization.



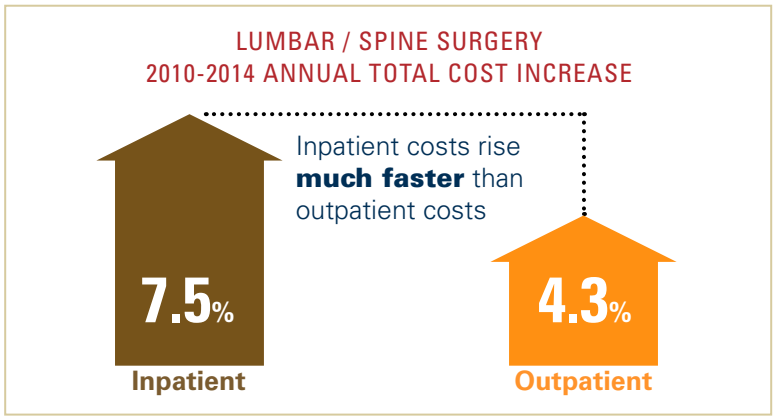
Hysterectomy treatment protocols have changed significantly in recent years as a result of new technology and surgical approaches.[10,11] The traditional abdominal hysterectomy, which often performed inpatient, remains the most common surgical approach, accounting for approximately 50 percent of hysterectomies. However, abdominal and vaginal hysterectomies have given ground to newer laparoscopic and robotic-assisted laparoscopic approaches that are more amenable to outpatient surgery and a likely cause of the shift.

9. Note that out-of-pocket costs vary significantly by plan type and benefit design and an average savings does not necessarily reflect what one particular person will save.
10. The American Congress of Obstetricians and Gynecologists. Hysterectomy. March 2015.
11. Office on Women's Health, U.S. Department of Health and Human Services. Hysterectomy. December 4, 2014.

CONSUMERS' OUT-OF-POCKET COSTS DROP FOR LUMBAR/SPINE SURGERY

COST SAVINGS[8]

Despite increasing procedure costs, outpatient lumbar/spine surgeries also represent significant and growing cost savings — from an average saving per procedure of $5,269 in 2010 to $8,475 in 2014. Members saved an average of $320 in out-of-pocket costs by having an outpatient procedure.[12]

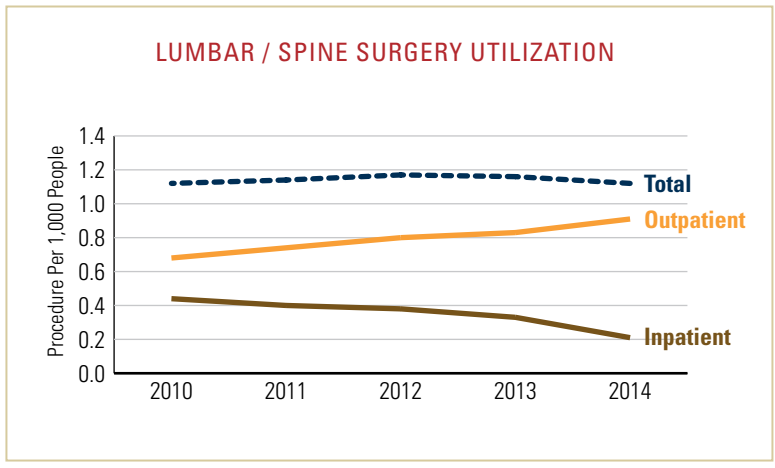


Member's average savings in out-of-pocket costs in 2014

$320

UTILIZATION

During the study period, lumbar/spine procedures shifted toward the outpatient setting by nearly 20 percentage points, from 61 percent to 82 percent. This shift to the outpatient setting occurred as inpatient utilization dropped by more than half. As a result, overall utilization for lumbar/spine remained flat.



Clinicians and the medical community have begun to scrutinize these surgeries more closely to better assess their efficacy and value. In some cases, findings regarding the relative benefits of surgery over conservative therapy have been uncertain.[13] As a result, some payers have created preauthorization protocols to ensure that more conservative, non-surgical therapies be attempted prior to surgery, as well as to ensure that the patient is predicted to benefit from the procedure.[14,15] These new protocols likely contribute to keeping utilization relatively stable.

12. Note that out-of-pocket costs vary significantly by plan type, benefit design and a patient's health status. Average savings does not necessarily reflect what one particular person will save.

13. Machado GC et al. Effectiveness of surgery for lumbar spinal stenosis: a systematic review and meta-analysis. PLoS One. 2015 Mar 30;10(3):e0122800.

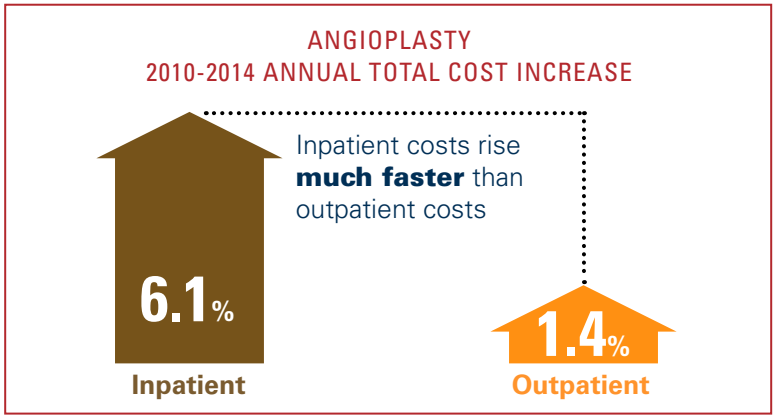
14. Dyrda, Laura. 6 Big Trends in Spine Surgery Reimbursement. Becker's Spine Review, September 23, 2013.

15. Lee, Jaimy. Rethinking spine care: Some health systems are moving beyond surgery in serving back pain patients. Modern Healthcare, March 22, 2014.

MODEST GROWTH, MAJOR SAVINGS FOR OUTPATIENT ANGIOPLASTIES

COST SAVINGS[8]

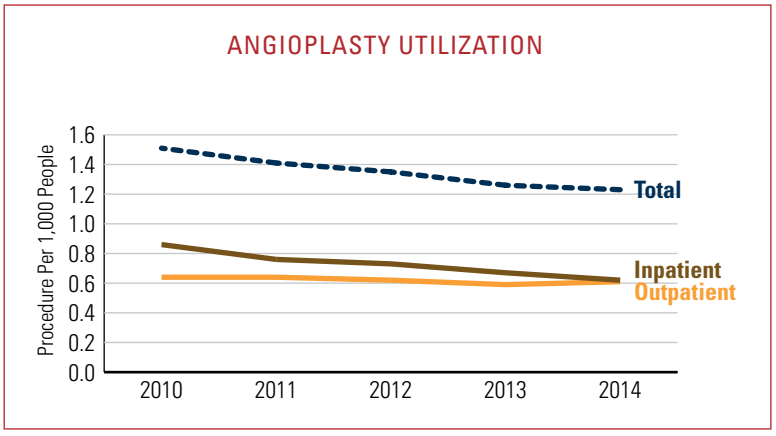
Outpatient angioplasties also represent significant cost savings despite the fact that outpatient growth was very modest during our study period. The average difference in procedure cost between inpatient and outpatient increased from $11,062 in 2010 to $17,530 in 2014. In 2014, members saved an average of $1,062 in out-of-pocket costs by having an outpatient procedure.[16]



Member's average savings in out-of-pocket costs in 2014 **$1,062**

UTILIZATION

The proportion of outpatient angioplasty procedures increased marginally from 2010 to 2014, from 43 percent to 50 percent. Overall utilization of angioplasties declined during the period of our study. This was the result of a strong decline in inpatient utilization, and a slight decline in outpatient utilization. This finding is consistent with a recent report also noting declining utilization of elective angioplasties.[17] One explanation for this decline is the introduction in 2009 of appropriate-use criteria for coronary revascularization reducing the number of unnecessary angioplasties.



The angioplasty results on the left include non-emergent, elective angioplasty for coronary arteries narrowed by coronary artery disease (CAD), and do not include angioplasties performed emergently following a heart attack (acute myocardial infarction). In the elective group, the outpatient fraction is currently about 50 percent and has been steady since 2010. It is likely this outpatient fraction has remained at this relatively low level compared to other procedures due to the risk of heart-related comorbidities; i.e., these patients are not ideal candidates for outpatient procedures. Additionally, the infrastructure needed to provide outpatient angioplasty, including appropriate facilities and dedicated staff, may not be available in all areas.

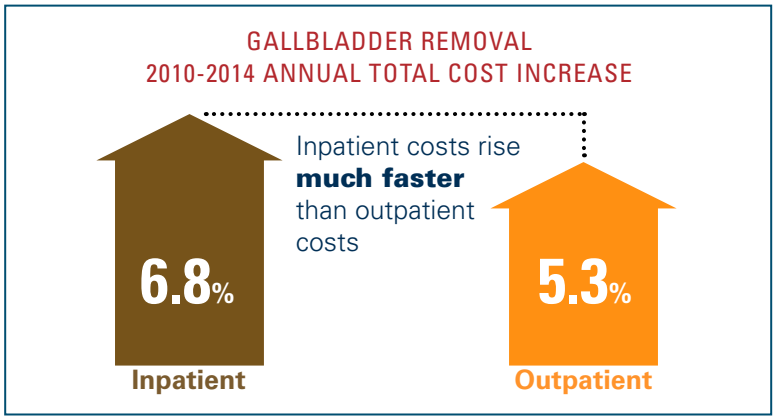
16. Note that out-of-pocket costs vary significantly by plan type and benefit design and an average savings does not necessarily reflect what one particular person will save.

17. Desai NR et al. Appropriate Use Criteria for Coronary Revascularization and Trends in Utilization, Patient Selection, and Appropriateness of Percutaneous Coronary Intervention. JAMA. 2015 Nov 17;314(19):2045-53.

FEWER GALLBLADDER REMOVALS, WHILE OUTPATIENT SAVINGS GROW

COST SAVINGS[8]

Like angioplasty, outpatient gallbladder procedures also represented significant and growing cost savings despite having a stable proportion of outpatient procedures done during our study period. The average per-procedure cost difference between inpatient and outpatient increased from $8,299 in 2010 to $11,262 in 2014. Members saved an average of $924 in out-of-pocket costs by having an outpatient procedure.[18]

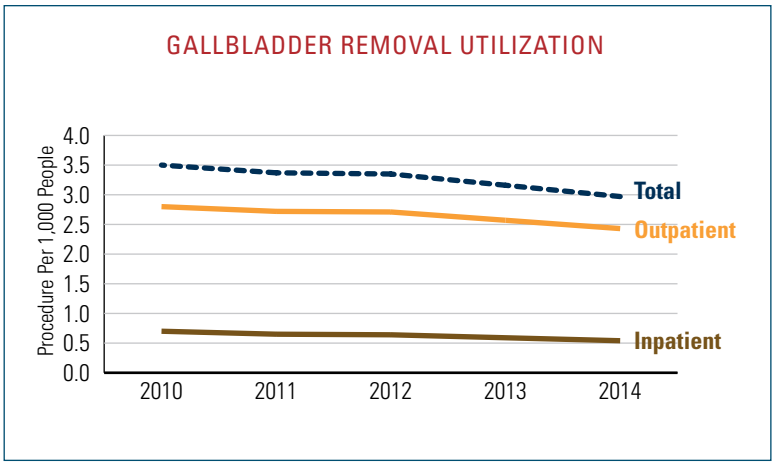


Member's average savings in out-of-pocket costs in 2014

$924

UTILIZATION

The proportion of outpatient gallbladder removals remained stable at approximately 80 percent between 2010 and 2014. Unlike the previous procedures examined, utilization for gallbladder removal fell significantly in both the inpatient and outpatient settings.



A majority of gallbladder removals shifted to outpatient settings during the last 20 years due to the innovation of laparoscopic instruments and new minimally invasive techniques. Gallbladder removal remains one of the greatest success stories of laparoscopic, minimally invasive surgeries and explains why outpatient procedures are so prevalent even prior to 2010. The remaining 15 percent to 20 percent of gallbladder surgeries that are performed inpatient likely involve patients who are not good candidates for outpatient surgery and are thus not likely to shift substantially in the future.[19]

18. Note that out of pocket costs vary significantly by plan type and benefit design and an average savings does not necessarily reflect what one particular person will save.
19. Danny A. Sherwinter, MD et al. Laparoscopic Cholecystectomy. Medscape, August 5, 2015.

CONCLUSION:

OUTPATIENT CARE LIKELY TO INCREASE

Members will need to be thoughtful when deciding where to receive care. Many carriers (including BCBS Plans) have programs to help members find appropriate settings of care and educate members on the cost and quality benefits.

Performing procedures in the outpatient setting will continue to provide valuable cost savings, which will likely grow in the near future. These savings will be especially important for members who are bearing an increasing share of the cost of their care due to rising deductibles and other cost-sharing methods.

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