TRUVEN HEALTH ANALYTICS™

What Are the Leading Drivers of Employer Healthcare Spending Growth?

Highlights

- Spending growth is being driven mainly by outpatient medical services
- Musculoskeletal conditions are the costliest and most rapidly growing group of diseases
- Complications of surgical and medical care are occurring more frequently in part due to the growing use of surgery to treat orthopedic conditions
- Preventive health services are "good" services that are being used by a growing percentage of plan members
- While overall pharmacy spending growth has slowed, diseases treated with specialty drugs are growth drivers
- Obesity and its metabolic and musculoskeletal complications are major contributors to spending growth

Introduction

In 2011 an estimated 147 million persons less than 65 years of age in the U.S. were enrolled in employer-sponsored health plans. The increasing cost of providing such coverage has contributed to an erosion of the percentage of workers and their families who receive health benefits and of the comprehensiveness of benefits for those who continue to be covered.

Efforts to understand the drivers of growth in employer healthcare spending often focus on which services were purchased, but not why those services were needed. This study was designed to highlight the importance of particular diseases based on their contribution to the growth in employer healthcare spending over a recent 5-year period, 2006-2011.

Data and Methods

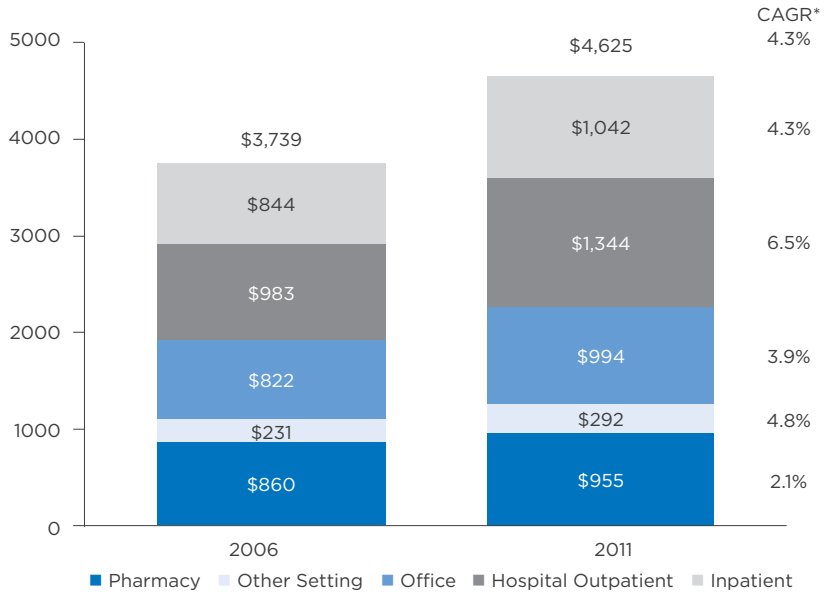
National spending by employers in 2006 and 2011 for all healthcare services and for prescription drugs was estimated using claims data from the MarketScan® Research Databases developed by Truven Health Analytics™. We selected all employees and their dependents who were enrolled in fee-for-service plans to ensure that total spending would be captured. The samples included approximately 8 million persons in 2006 and 12 million in 2011, and were projected to the national population with employer-sponsored health insurance in those years. Projection weights were calculated using the household component of the Medical Expenditure Panel Survey developed by the Agency for Healthcare Research and Quality (AHRQ).

Each person's health insurance claims were attributed to specific diseases using the Truven Health Medical Episode Grouper (MEG). MEG groups claims into episodes of care. It is diagnosis-driven and includes an exhaustive classification of 572 conditions. For each person utilizing services, total claim payments (i.e., allowed charges) were summed by MEG category. Numbers of persons with each disease and total disease-specific spending were expressed as a rate per member per year (PMPY). Spending growth was measured in absolute terms, as the change in PMPY amounts from 2006 to 2011. These changes in PMPY were then decomposed into the amount attributable to the growth in disease prevalence and the amount attributable to the increase in cost per case. The latter reflects changes in both the utilization of services and unit prices.

Findings

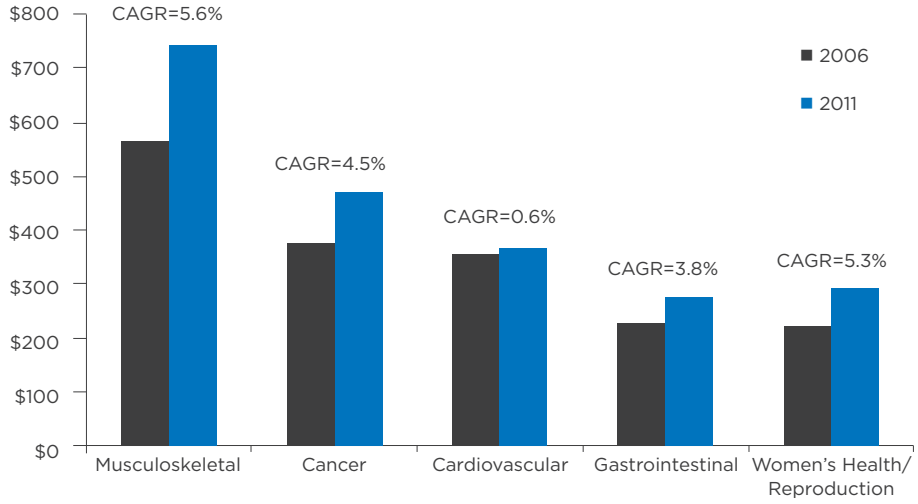
Between 2006 and 2011, employer healthcare spending PMPY grew at 4.3 percent per annum, from $3,739 to $4,625 in 2011 (Figure 1). Spending on hospital outpatient services grew at an annual rate of 6.5 percent while pharmacy grew at 2.1 percent.

Figure 1: Overall Healthcare Spending 2006–2011



Total spending PMPY on the top five major diagnostic categories (MDCs) is shown in Figure 2. Musculoskeletal conditions are the largest and fastest-growing MDC. Cardiovascular conditions are the third-largest category, but did not contribute to growth.

Figure 2: Spending PMPY by Major Diagnostic Category



The top 20 MEGs by growth in PMPY spending are shown in Table 1. Together they account for 41 percent of the overall growth in employer spending from 2006 to 2011. The leading MEG is Preventive Health Services, which alone accounted for 9 percent of spending growth. The second-leading contributor to growth was Osteoarthritis, Except Spine — one of six musculoskeletal conditions in the top 20. The third was Multiple Sclerosis, which more than doubled in PMPY spending. That rate was exceeded by Crohn's Disease, another autoimmune disorder.

When growth is decomposed into disease prevalence and cost per case, we see that most growth is driven by cost per case. In most cases the increase in cost per case is attributable to medical and surgical procedures. Exceptions included three diseases treated with specialty drugs (Multiple Sclerosis, Crohn's, and HIV Infection). Growth in spending on Complications of Care, Obesity, Diabetes, and Renal Failure was driven mainly by growing disease prevalence while cost per case declined or remained flat.

Here are some of the factors involved in the top-five MEGs driving spending growth:

- Preventive Health Services: There was a general increase in utilization and cost of routine checkups and cancer screenings. Also there was a marked growth in influenza vaccination over the period 2006-2011.
- Osteoarthritis, Except Spine: Inpatient services for joint replacement surgery were the largest component of growth. Physical therapy accounted for much of the additional outpatient spending.
- Multiple Sclerosis (MS): Most of the cost of treating MS is for prescription drugs, particularly the self-administered interferons and glatiramer, which more than doubled in annual treatment cost per patient over the 5-year period.
- Delivery, Cesarean Section: The birth rate in the population covered by employer health plans increased over the time period, and Cesarean deliveries were a growing share of births. Most of the growth was due to price increases for hospital and obstetrician services.
- Complications of Surgical and Medical Care: The increase in complications is likely driven by both coding changes (following IOM report on medical errors) and increased use of surgical procedures. The rate per surgical patient may be constant or declining, but the overall volume is likely increasing.

Table 1: Top 20 MEGs by PMPY Growth

Medical Episode Group	PMPY Spending		Decomposition of Growth Factors		
	2006	2011	Growth	Prevalence	Cost per Case
Encounter for Preventive Health Services	$135.27	$213.71	$78.44	$33.06	$45.38
Osteoarthritis, Except Spine	$79.70	$118.49	$38.79	$2.88	$35.90
Multiple Sclerosis	$23.78	$48.31	$24.53	-$0.15	$24.68
Delivery, Cesarean Section	$43.93	$64.75	$20.82	$4.09	$16.74
Complications of Surgical and Medical Care	$50.24	$69.88	$19.64	$26.16	-$6.53
Delivery, Vaginal	$56.17	$75.29	$19.12	-$0.23	$19.35
Neoplasm, Malignant: Breast, Female	$69.18	$85.98	$16.80	$1.75	$15.05
Other Arthropathies, Bone and Joint Dis.	$66.21	$80.22	$14.02	$5.34	$8.68
Renal Failure	$45.25	$59.08	$13.84	$14.30	-$0.46
Osteoarthritis, Lumbar Spine	$42.40	$55.53	$13.13	$4.34	$8.79
Overweight and Obesity	$20.65	$32.24	$11.59	$15.79	-$4.20
Crohn's Disease	$14.08	$25.35	$11.28	$1.89	$9.39
Human Immunodeficiency Virus Type I	$11.72	$22.58	$10.87	$5.18	$5.69
Arrhythmias	$25.28	$36.05	$10.77	$0.34	$10.43
Other Spinal and Back Disorders	$42.94	$53.42	$10.49	$3.81	$6.67
Diabetes Mellitus Type 2	$66.59	$76.87	$10.28	$8.72	$1.56
Bursitis	$34.26	$44.08	$9.83	$0.33	$9.49
Other Inflammations and Infections of Skin	$35.82	$45.46	$9.64	$1.59	$8.05
Injury to Humerus (Head) or Shoulder	$20.42	$29.80	$9.38	$0.36	$9.02
Other Neuroses	$12.04	$21.18	$9.14	$4.84	$4.30

Conclusions

Comprehensive claims data from employers provide insights into the disease-specific drivers of healthcare spending growth. These results highlight how difficult it will be to manage healthcare costs while still providing the level of care that U.S. consumers expect. Preventive services such as vaccines and screening tests are viewed as quality care and hence public policy promotes the growth of these costs. Expensive specialty drugs for patients with serious diseases offer better health outcomes than were possible with traditional pharmaceuticals and new, innovative treatments are coming to market every year. Finally, the ongoing obesity epidemic is the underlying driver of many of the diseases noted in this report, a problem that will not be solved by improved healthcare delivery alone.

Suggested Citation for This Research

Huse DM, Marder WD. "What are the leading drivers of employer healthcare spending growth?" Truven Health Analytics, April 2013.

FOR MORE INFORMATION

Please email **info@truvenhealth.com**

TRUVEN HEALTH ANALYTICS™

ABOUT TRUVEN HEALTH ANALYTICS

Truven Health Analytics delivers unbiased information, analytic tools, benchmarks, and services to the healthcare industry. Hospitals, government agencies, employers, health plans, clinicians, pharmaceutical, and medical device companies have relied on us for more than 30 years. We combine our deep clinical, financial, and healthcare management expertise with innovative technology platforms and information assets to make healthcare better by collaborating with our customers to uncover and realize opportunities for improving quality, efficiency, and outcomes. With more than 2,000 employees globally, we have major offices in Ann Arbor, Mich.; Chicago; and Denver. Advantage Suite, Micromedex, ActionOI, MarketScan, and 100 Top Hospitals are registered trademarks or trademarks of Truven Health Analytics.

truvenhealth.com | 1.734.913.3000