A SUN LIFE FINANCIAL STOP-LOSS REPORT | SPRING 2014

Claims research

Top ten catastrophic claims conditions

Sun Life Financial®

Executive summary

In its second annual stop-loss catastrophic claims report, Sun Life analyzed its stop-loss catastrophic claims data spanning four years from 2010 to 2013. The report surveyed the top ten medical conditions, discovered a new claims trend, and examined the relationship between self-insured employers' risk tolerance and claims costs.

The total of all stop-loss claims reimbursements during the four-year study was $2 billion. If the first-dollar claims for catastrophic conditions (which employers pay on their own) are added to the stop-loss claim reimbursements (provided by the stop-loss carrier to employers), the overall cost of the catastrophic conditions was $4.4 billion.

Here are the key findings of the report:

- The top ten claims conditions remained mostly the same compared to last year's rankings. The top ten costliest claims conditions comprised over half (53%) of the $2 billion in claims that Sun Life reimbursed to stop-loss policyholders between 2010 and 2013.
- Cancer continued to be the most costly catastrophic illness by a significant margin, representing one quarter (25%) of all stop-loss reimbursements during the four-year period.
- There was a significant rise in claims that were $1 million and above. From 2010 to year-end 2013, $1 million+ claims increased by 1,000%.
- Due to the variances in cost of catastrophic conditions and claims frequency, the stop-loss deductible level selected affected the total costs paid by the employers.

Did you know?

Sun Life is a leading stop-loss carrier in the United States. We have dedicated more than 30 years to helping make self-funding more affordable for employers. Sun Life Stop-Loss customers enjoy innovative programs including SunElite℠, SunResources®, SunExcel®, and Verisk Health's Sightlines™ Medical Intelligence.

These services assist self-insured employers in containing health care costs by providing access to medical plan document reviews, medical vendor networks at discounted pricing, transplant centers of excellence, and in-depth medical data analyses.

Top ten stop-loss claims conditions

From 2010 to 2013, the top ten medical conditions for which we paid stop-loss claims are shown here.

Total payments

34% Top 3 conditions

66% Remaining conditions

	Medical condition	Percentage of paid stop-loss claims	Value of paid stop-loss claims
1	**Malignant neoplasm** (cancer)	17.5%	$347,983,877
2	**Chronic/end stage renal disease** (kidneys)	8.2%	$164,304,588
3	**Leukemia, lymphoma, and/or multiple myeloma** (cancer)	8.0%	$159,012,585
4	**Congenital anomalies** (conditions present at birth)	4.3%	$86,438,173
5	**Disorders relating to short gestation and low birth weight** (premature births)	3.5%	$70,259,714
6	**Cerebrovascular disease** (brain blood vessels)	2.5%	$50,462,023
7	**Congestive heart failure**	2.5%	$50,154,043
8	**Complications of surgical and medical care, not elsewhere classified**	2.3%	$45,700,864
9	**Pulmonary collapse/respiratory failure** (lungs)	2.3%	$45,484,490
10	**Septicemia** (infection)	2.1%	$40,979,717
	All other conditions	46.8%	$933,059,768

The top ten conditions range from different cancers to premature birth complications to respiratory failure, and they represented over $1 billion in stop-loss claims reimbursements. Compared to last year's Sun Life research report, "Leading catastrophic claims conditions," the top three catastrophic conditions remained the same.

The top three conditions, malignant neoplasm (cancer), chronic/end stage renal disease (kidneys), and leukemia/lymphoma/multiple myeloma (cancer), represented 34% of all stop-loss claims reimbursements that Sun Life made from 2010 to 2013. During that time frame, the stop-loss claims reimbursements for the top three conditions totaled $671 million.

Except for septicemia (infection), which displaced dorsopathies (spine) for the #10 spot, the order of top ten catastrophic claims conditions remained consistent during 2010–2013, compared to 2009–2012. Dorsopathies now holds the #11 spot in the 2010–2013 time frame. It is unclear what caused the decrease in dorsopathy claims.

From 2010–2013, there was an overall increase of 11% in catastrophic claims cost in categories 1 to 9, compared to 2009–2012.

Conditions other than those in the top ten each represented less than 2% of claims reimbursements. Combined, those conditions represented 47% of all stop-loss claims reimbursements.

Cancer continues to be the leading cause of catastrophic claims reimbursements by a significant margin

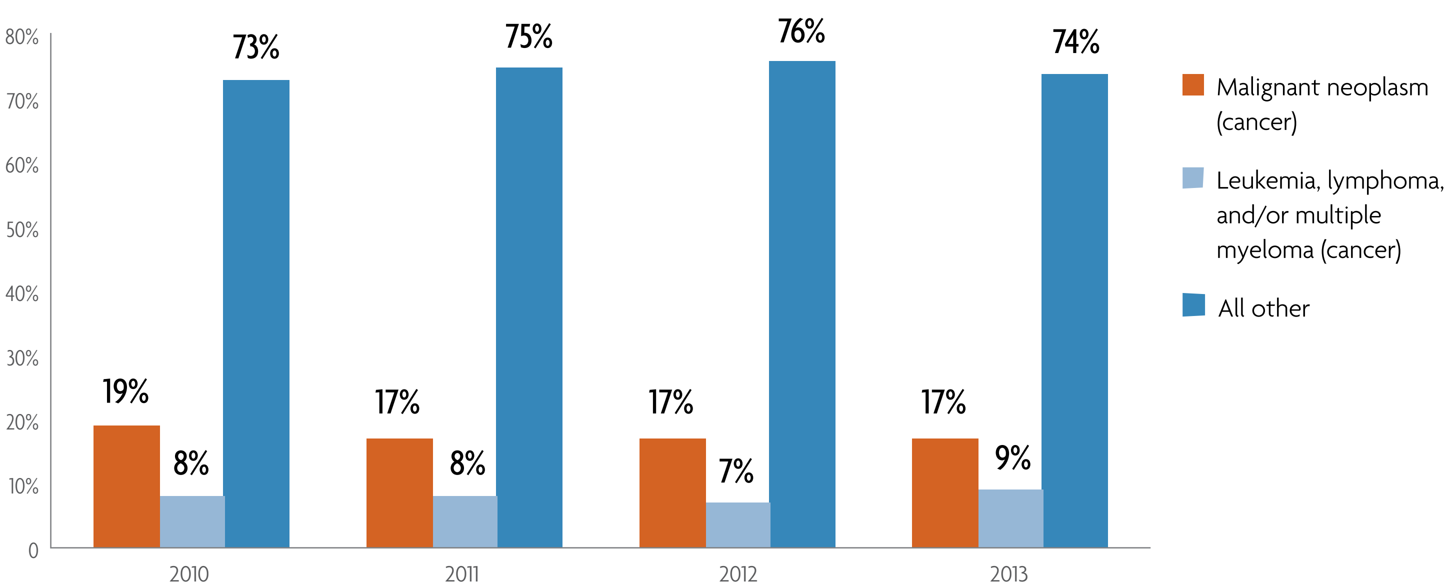
Cancer again showed up twice in the top ten leading causes of medical conditions. It held the #1 and the #3 positions as noted in the chart. Malignant neoplasm (cancer) was the number one condition, representing just over 17% of all stop-loss claims reimbursements. Another cancer category (leukemia, lymphoma, and/or multiple myeloma) was the third-leading condition, representing 8% of all stop-loss claims reimbursements.

Cancer conditions alone accounted for $507 million in stop-loss claims payments, which represents just over 25% of total stop-loss claims reimbursements.

The 2010–2013 data largely echo the 2009–2012 data and continue to demonstrate the significant impact that cancer diagnoses and treatment costs had on the self-insured employer. Cancer's financial impact was reflected in overall U.S. health care costs as well. In 2013, Forbes.com referenced Milliman research and included cancer as one of the top ten most expensive common medical conditions.[1]

Certainly for the near future, Sun Life continues to anticipate that cancer will remain the leading medical condition that results in stop-loss catastrophic claims reimbursements.

Cancer: leading catastrophic claims condition



1. www.forbes.com, "The 10 Most Expensive Common Medical Conditions," by David Whelan, February 25, 2012, published on http://www.forbes.com/sites/davidwhelan/2012/02/25/the-10-most-expensive-common-medical-conditions/, accessed on March 27, 2014.

Significant rise in $1 million claims

More than a billion

In the past four years, Sun Life processed over 100,000 claims and provided over $1.9 billion in reimbursements to self-insured employers.

(Data as of 2010–2013.)

From 2010 to 2013, the number of claims that were individually $1 million or above rose by 1,000%—a very significant rise in just four years. Specifically, there was a sharp 144% increase in 2013 of the total count of $1 million claims, compared to the prior calendar year. From 2010 to 2013, the three most common conditions with $1 million or above claims were leukemia, with 7.3% of the total $1 million claims, transplants with 12.2%, and premature baby and liveborn complications with 29.3%.

In fact, in 2013, 71% of the $1 million+ stop-loss claimants were dependent children. This represented a 27% increase of dependent children stop-loss claimants with $1 million+ claims, compared to 2012, and a 71% increase compared to 2009.

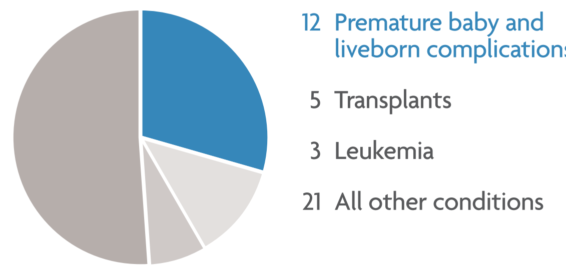
Sun Life believes that we will continue to see a rise in $1 million claims. A number of factors could create that increase.

For example, the Affordable Care Act (ACA) requires unlimited lifetime maximums and coverage for dependents until age 26, and prohibits excluding participants with pre-existing conditions.

Due to the removal of lifetime maximums, the catastrophic claims and the conditions associated with them have no cost ceiling. Employees who had previously reached lifetime limits can now re-qualify for coverage under the plan and for stop-loss coverage. Removal of pre-existing conditions restrictions means plan participants do not have to satisfy a waiting period before coverage begins for their chronic/catastrophic conditions. This means that those participants gain coverage earlier than they would have before. In addition, the ACA requires coverage for dependent children to age 26, which increases the number of dependents who would have been typically covered, compared to pre-ACA.

In addition, it is possible that increases in hospital-billed charges and advances in medical technologies will contribute to a greater number of $1 million claims in the future.

2010–2013 condition counts for $1 million+ claims



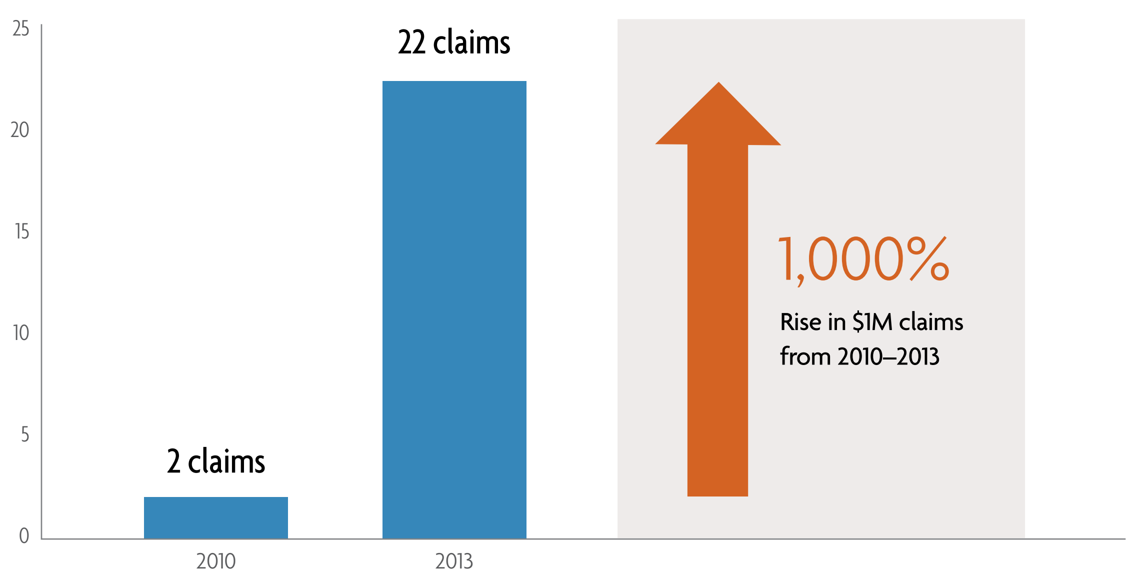


Chart data based on Sun Life Stop-Loss claims as of year-end 2013.

Frequency of top ten conditions

What conditions produced the highest number of individual stop-loss claims? The top three most frequent catastrophic conditions that resulted in a stop-loss claim mirrored the top three stop-loss claims conditions reimbursements. This demonstrates the dominant frequency and the significant costs that can be associated with those conditions.

However, the fourth most frequent diagnosis that resulted in a stop-loss reimbursement was dorsopathies, but dorsopathies did not make the top ten in the 2013 Sun Life Catastrophic Claims Conditions report. Why? Dorsopathy claims submissions occur more frequently at the individual claimant level, but are typically lower cost. In contrast, congestive heart failure ranks as the #7 condition based on total reimbursements made, but it does not occur often enough to make it into the top ten most frequent conditions.

Top ten conditions by frequency		
1	**Malignant neoplasm** (cancer)	19.8%
2	**Chronic/end-stage renal disease** (kidneys)	5.9%
3	**Leukemia, lymphoma, and/or multiple myeloma** (cancer)	4.5%
4	**Dorsopathies** (spine)	4.1%
5	**Coronary atherosclerosis** (heart disease)	2.3%
6	**Congenital anomalies** (conditions present at birth)	2.2%
7	**Cerebrovascular disease** (brain blood vessels)	2.0%
8	**Complications of surgical and medical care, not elsewhere classified**	2.0%
9	**General symptoms**	1.8%
10	**Cardiac dysrhythmias** (heart)	1.6%

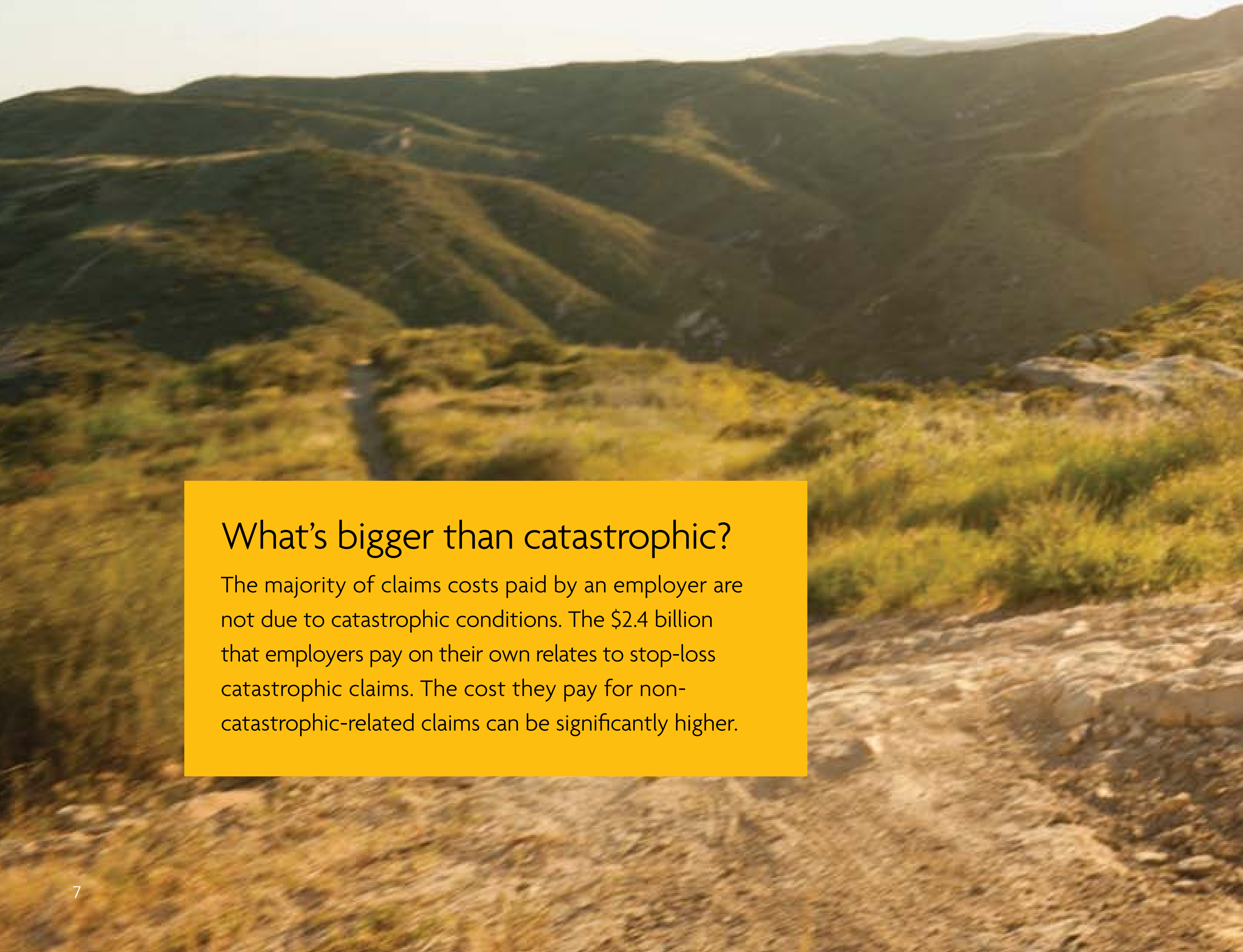
Risk tolerance and catastrophic claims

The 2010–2013 claims data show that there is a wide range of stop-loss deductibles in the self-funded market. Employers select deductible levels according to their risk tolerance. The selected deductible level affected costs that were directly covered by the employer and the stop-loss carrier. As the tables on pages 9 and 10 demonstrate, there were two main factors that drove those costs: the type of medical conditions and the related claims frequency.

Employers with low risk tolerances chose lower deductibles. These employers experienced a higher percentage of their total stop-loss claims comprised of lower-cost catastrophic conditions such as osteoarthosis (joint disorders).

Employers that took on a greater risk—by selecting higher deductible levels—saw more of their total stop-loss claims consisting of higher-cost catastrophic conditions such as congenital anomalies (conditions present at birth).

Sun Life expects variation in deductible levels to continue within the self-funded community. When selecting a deductible, an employer may review industry norms, claims experience, plan design, cost-containment measures, geography, employee demographics, and more. These factors—and changes within these factors—can lead to changes in risk tolerance and deductible level selection over time.



What's bigger than catastrophic?

The majority of claims costs paid by an employer are not due to catastrophic conditions. The $2.4 billion that employers pay on their own relates to stop-loss catastrophic claims. The cost they pay for non-catastrophic-related claims can be significantly higher.

Cost

Highest-cost claims reimbursements	Stop-Loss deductible under $100,000	Stop-Loss deductible $100,001 to $250,000	Stop-Loss deductible $250,001+
Malignant neoplasm (cancer)	1	1	2
Chronic/end stage renal disease (kidneys)	2	2	3
Leukemia, lymphoma, and/or multiple myeloma (cancer)	3	3	1
Congenital anomalies (conditions present at birth)	7	4	4
Disorders relating to short gestation and low birth weight (premature births)	5	5	6
Cerebrovascular disease (brain blood vessels)	8	7	10
Congestive heart failure		10	5
Complications of surgical and medical care	9	9	
Pulmonary collapse/respiratory failure (lungs)		6	9
Dorsopathies (spine)	4		
Septicemia (infection)	10	8	
Hemophilia/bleeding disorder			8
Transplants			7
Coronary atherosclerosis (heart disease)	6		

For each deductible level, this table ranks the top ten highest-cost claims conditions. For example, for employers with deductibles over $250,000, the seventh highest-cost claims condition was transplants.

The data show that there are claims that occur less frequently, but result in higher overall costs. This happens when a particular condition produces a lower volume of claims submissions, but represents a significant percentage of the total overall costs.

For example, neither transplants nor hemophilia/bleeding disorders reached the top ten level based on frequency, but they held the #7 and #8 positions for total dollars reimbursed for the $250,000+ deductible segment.

Another example of the impact of higher-cost conditions and frequency was disorders related to short gestation and low birth weight (premature births). That condition did move into a higher position in frequency ranking at higher deductible levels. However, because the costs associated with the condition tend to be very high, it maintained a relatively steady position as the #5 or #6 rank in total claim dollars reimbursed.

Frequency

Most-frequent claims conditions	Stop-Loss deductible under $100,000	Stop-Loss deductible $100,001 to $250,000	Stop-Loss deductible $250,001+
Malignant neoplasm (cancer)	1	1	1
Chronic/end stage renal disease (kidneys)	3	2	2
Leukemia, lymphoma, and/or multiple myeloma (cancer)	4	3	3
Congenital anomalies (conditions present at birth)		5	4
Disorders relating to short gestation and low birth weight (premature births)		10	5
Cerebrovascular disease (brain blood vessels)		7	7
Congestive heart failure			8
Complications of surgical and medical care, not elsewhere classified	10	6	9
Pulmonary collapse/respiratory failure (lungs)		8	6
Dorsopathies (spine)	2	4	
Diseases of the blood and blood-forming organs		9	10
Coronary atherosclerosis (heart disease)	5		
Osteoarthrosis (joint degeneration)	6		
Cardiac dysrhythmias (heart)	7		
General symptoms	9		
Arthropathies (joint disease)	8		

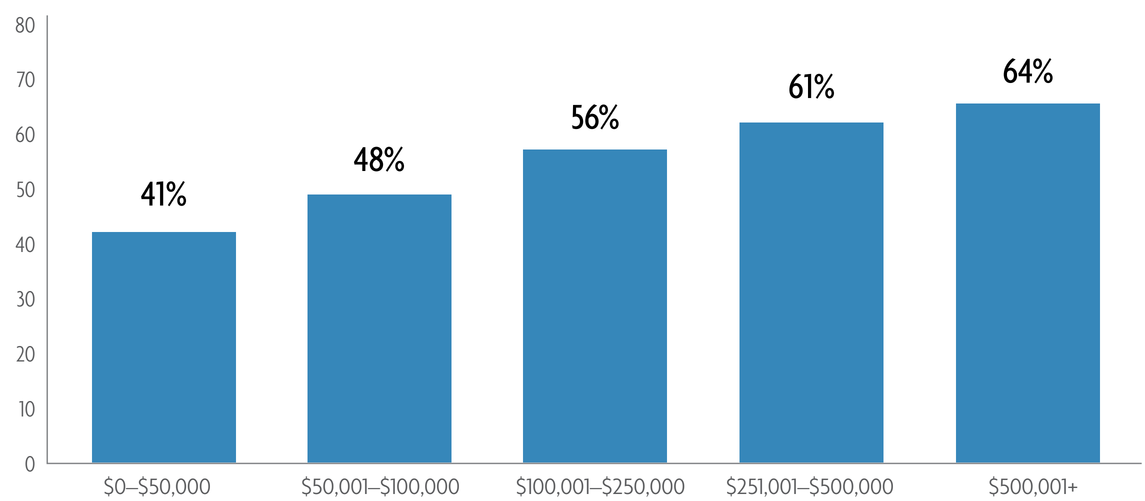
For each deductible level, this table ranks the top ten most-frequent claims conditions. For example, in contrast to the seventh-highest cost condition in the table on page 9, the seventh most-frequent claims condition for employers with deductibles over $250,000 was cerebrovascular disease (brain blood vessels).

Cost of conditions before and after they become catastrophic

Employers see claims for catastrophic conditions before they breach the stop-loss deductible. When employers choose lower stop-loss deductible levels, they take on less catastrophic risk. When employers choose higher stop-loss deductible levels, they assume a higher portion of the catastrophic risk.

The 2010–2013 data showed the percentage of catastrophic claims employers paid based on their stop-loss deductibles. For example, employers that selected a stop-loss deductible between $250,000 and $500,000 paid an average of 61% of the total catastrophic claims cost.

Deductible levels and average percentage paid by employers of total catastrophic claims cost



Employer	Stop-loss carrier	Total amount spent on catastrophic conditions
First-dollar claims payments on stop-loss claims only	**Stop-loss claims reimbursements**	**First-dollar stop-loss claims payments and stop-loss claims reimbursements**
$2.4 billion Conditions that become catastrophic conditions	$2.0 billion Catastrophic conditions	$4.4 billion

During the four years of the study, employers paid $2.4 billion in first-dollar claims for catastrophic conditions before they became stop-loss claims. If that $2.4 billion in first-dollar claims payments (which are paid solely by employers) is added to the $2 billion in stop-loss reimbursements provided to the employer by the stop-loss carrier, the overall cost of the catastrophic conditions was $4.4 billion.

Recommendations

What can a self-insured employer do to manage the rising costs of catastrophic medical events?

Sun Life recommends that employers analyze their self-insured strategy to make sure that it includes cost-containment best practices. If you are a self-insured employer, you can start the discussion by asking the following questions.

Innovation through insight

Sun Life periodically analyzes its stop-loss claims data to better understand trends in medical conditions that result in catastrophic claims payments. Sun Life uses this insight to develop innovative stop-loss features and services that assist self-insured employers in containing costs.

Are we addressing cancer from a business and employee perspective?
Employers can help combat the impact of cancer—the leading catastrophic claims condition—by developing a strong protection strategy that addresses cancer. By doing this, the employer can be there for employees who are facing cancer or helping a loved one with cancer. It's best to seek a complement of stop-loss cancer protection combined with cancer employee benefits.

Indeed, a person with cancer can expect to pay an average of $6,740 in out-of-pocket expenses.[2] Sun Life research published in 2013 revealed that over one-third of workers who survived a critical illness, such as cancer, were out of work for four months or longer,[2] resulting in significant costs for them and potentially for their employers. So, it's best to choose employee benefits that include a cash benefit that employees can use to pay those expenses.

Does our third party administrator (TPA) have access to a software program that makes it easy to perform multiple in-depth medical data analyses?
The software should include predictive models to help identify risk at both the individual and population levels. By examining the information, the TPA can advise the employer about opportunities to adjust risk retention and stop-loss coverage to strengthen the self-insured strategy.

Has the plan document been reviewed by an outside party for federal law compliance?
Does the plan comply with applicable federal laws such as the Affordable Care Act, the Women's Health and Cancer Rights Act, the Newborns' and Mothers' Health Protection Act, the Mental Health Parity and Addiction Equity Act, and others?

To make sure that the plan is in compliance with applicable federal laws, employers can get a review of their plan document by plan professionals. Employers can use the review to make decisions about how to strengthen the plan.

Are health and wellness programs in place?
A self-insured employer can take steps to help reduce the occurrence of catastrophic claims by making a commitment to supporting the health and wellness of its employee population. One way to do this is to provide programs at work to assist employees in developing and adopting healthier behaviors and activities. A healthier lifestyle may help reduce the catastrophic medical events that may lead to expensive claims. Offering these programs also demonstrates a commitment to employee health, which can deepen employee loyalty and enhance productivity.

Does our medical plan include early detection?
Early-detection programs can alert employees to conditions that may eventually develop into catastrophic events. Self-insured employers should coordinate these programs with the health and wellness programs in order to create more positive patient outcomes.

Does our medical plan document include language that helps contain costs related to dialysis and other conditions?
A self-insured employer can opt to include plan document language to help contain health care costs. This language can specify the breadth of care for catastrophic medical conditions such as cancer and lost kidney function. It is wise to have the medical plan document reviewed to confirm that it includes the language that clearly represents the employer's cost-containment strategy.

2. Sun Life Financial white paper, "Well-Placed Fears: Workers' Perceptions of Critical Illness," published in 2013.

Are relationships in place with key medical vendors with nationwide access?

The self-insured employer needs to develop a relationship with a vendor with a nationwide medical network to ensure that high-quality care is delivered in a cost-effective manner. A good example of that is a Center of Excellence for transplants.

Stop-loss carriers may negotiate lower fees so customers pay less to access particular vendor services. To increase opportunities for health care savings, customers should ask the stop-loss carrier to reimburse them for vendor access fees and percentage-of-savings fees.

Does our stop-loss policy include a "no new lasers at renewal" option with a renewal rate cap?

A "laser" is a higher deductible, a coverage limit, or an exclusion placed on an employee who has or may incur large health care claims.

By making sure the stop-loss policy includes a "no new lasers at renewal" option with a renewal rate cap, an employer can enjoy more stable, predictable stop-loss insurance costs by eliminating the potential for new lasers and unexpected rate increases at renewal.

About the study

Sun Life Financial conducted an internal aggregate analysis of its Stop-Loss claims conditions and associated costs. Data were compiled via internal systems records. All rounding was on a "to nearest" basis.

Change in methodology

It is important to note that this 2014 report uses a new data methodology compared to the 2013 report. In the 2013 report, we focused on claims incurred within 2008–2011. In the 2014 report, we focused on using claims paid as of December 31 for each year we included. In the 2014 report, when we referenced prior years, we performed new calculations using the new methodology.

Data demographics

The 2010–2013 claims data were from Sun Life Stop-Loss policyholders that range in size from approximately 35 to over 100,000 employees, located across the United States.

Top 20 primary industries for participating policyholders

	SIC code	Industry
1	8062	Health & hospitals: hospitals, general, medical, surgical
2	8211	Education: elementary and secondary schools
3	9111	Public/government: executive offices
4	8221	Education: colleges and universities
5	5961	Wholesale & retail trade: catalogue & mail order houses
6	8069	Specialty hospitals other than psychiatric
7	7011	Hotels, motels, and tourist courts
8	8711	Engineering services
9	8011	Offices and clinics of doctors of medicine
10	8051	Skilled nursing care facilities
11	8071	Medical labs
12	4213	Trucking other than local
13	8741	Management services
14	6732	Educational and religious trusts
15	8059	Nursing & personal care facilities
16	8351	Child day care services
17	8299	Schools & educational services
18	6411	Insurance agents, brokers, and service
19	5074	Plumbing & heating equipment & supplies
20	8082	Home health care services

About Sun Life

Sun Life offers a variety of stop-loss, life, disability, dental, accident, cancer, and critical illness insurance, so employers can choose the plan that fits.

To learn more about stop-loss, contact your local Sun Life Stop-Loss Specialist.

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The Sun Life Financial companies that provide Sun Life Stop-Loss include Sun Life and Health Insurance Company (U.S.) and Sun Life Assurance Company of Canada (collectively, "Sun Life Financial" or "Sun Life").

Group stop-loss insurance policies are underwritten by Sun Life Assurance Company of Canada (Wellesley Hills, MA) in all states, except New York, under Policy Form Series 07-SL. In New York, group stop-loss insurance policies are underwritten by Sun Life and Health Insurance Company (U.S.) (Windsor, CT) under Policy Form Series 07-NYSL REV 7-12. Product offerings may not be available in all states and may vary depending on state laws and regulations.

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