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Health Care Cost Trends

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and other stress-related physician visits have likely increased across the country and are not necessarily limited to the geographic areas of the attacks. Physician visits for screening and testing to exclude anthrax will increase. Higher utilization will correlate with increased diagnoses of more severe diseases and will result in further treatment costs. The extent of these factors is unclear at this point in time. However, in constructing scenarios assuming how many individuals out of a hundred will receive mental treatment, how many will see their doctors for anthrax checks or other testing, and how many of those will require further treatment due to an unclear diagnosis, I am able to develop about a 3 percentage point additional cost increase, with even higher results for the New York area. Based on these factors, it seems appropriate to expect a medical base trend in the neighborhood of 16 to 18% depending on the plan type.

Leveraged Trend

For insurers and reinsurers in the stop loss market, the question "What is the trend for large health claims?" is crucial. The experience of the last two years shows that rate increases of 25 to 30% have not necessarily improved underwriting results. Currently, rate increases between 40 and 50%, depending on the deductible level, are not uncommon. Most of the factors described above including uncertainties related to the war on terrorism and the current bioterrorism scares will have a small impact on leveraged trend.

However, an increased utilization of outpatient care can trigger expensive treatments, which will exceed the employer's retention. Furthermore, the managed care backlash has caused managed care organizations to increase payments to providers and it is doubtful whether outlier thresholds have been adjusted adequately.

In this environment, it can be expected that particularly the number of large claims will increase, thereby resulting in an increase in leveraged trend. Trend assumptions of up to 30% at a deductible of $50,000 and up to 35% at a deductible of $100,000 do not appear overly conservative.

Future

The managed care backlash and recent events are further driving health care costs. Many companies will pass along cost increases to their employees. This cost shifting could accelerate in 2003, since many health care cost decisions for 2002 were made earlier this year when no recession was expected. Considering the current social and economic market environment there is no end in sight to double digit increases in health care costs.

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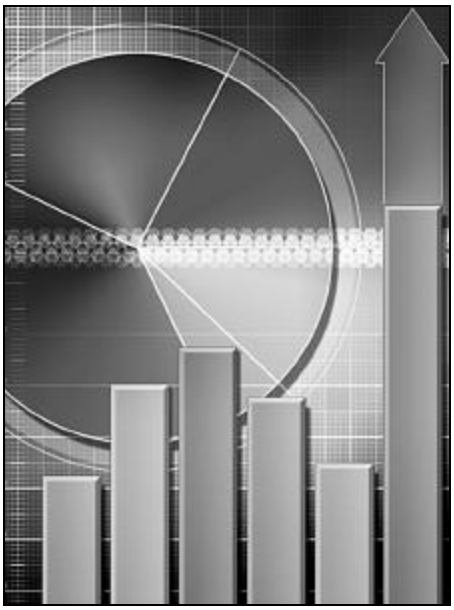
Investigation of High Deductible Trend

by G. Russel Hugh

Each year health actuaries repeat the activity of assessing and revising rate manuals for the upcoming year, and thus commences the annual debate over the elusive and decidedly significant figure of trend. This year, perhaps the result of uncertainty created by a few years of poor experience, estimates of trend have varied widely, especially at higher specific deductible levels. In an attempt to find some conclusive evidence to support a concrete figure for high deductible trend, I have examined large claim data with an eye on the variance in frequency and severity. As a result of this study I have noted some fluctuations in the last few years that deserve additional attention. The data, which I will detail below, bears out the reality that trend had increased dramatically since 1998. This increase was surprisingly large at the highest deductible levels, and was impacted by both the frequency and the severity of claims at these levels.

To conduct my study I have used a reasonably credible database of large claims spanning a six-year period from 1995 through 2000. The database, though not as large as the exposure base for the upcoming Society of Actuaries Large Claims Study, had a total certificate count of approximately five million. Claims represent amounts in excess of a minimum retention of $250,000 and a maximum retention of $750,000. Claims were limited to a total annual figure of $1,000,000. Completion factors were applied to more recent data to reflect expected claim reserves.



From my database, I have observed that since 1998 PEPM costs have increased by 30%, 74%, and 157% per year for the $250,000, $500,000, and $750,000 deductible levels, respectively.

These results are in line with the general consensus that trend has increased significantly in the last few years. For comparative purposes, using simplified assumptions of 12% underlying annual trend, constant frequency, and average ground-up claims of $390,000, $625,000, and $865,000 at the $250,000, $500,000, and $750,000 deductible levels, respectively, the expected leveraged trend from 1998 to 2000 was 31%, 51%, and 71%. In this simplified example, the actual and expected trends are nearly the same at $250,000, but I found it to be of particular interest that the increases in cost were so skewed to the higher deductible levels. Though I expected a larger figure at these levels due to deductible leveraging, I did not expect that alone to create such sizable increases.

In an effort to identify the cause(s) of the higher than expected trends, I looked at the frequency and severity of the claims at these higher deductibles. Table 1 shows the total PEPM costs, frequency rates, and average severity for the database by claim year and deductible level. At the $500,000 deductible, the frequency and severity have nearly identical impact on the PEPM cost. At the $750,000 deductible, however, the increase in cost is driven by the significant jump in frequency. If the pricing for 2000 were set using the 1998 expected trends, losses of about $2,200,000 and $1,000,000 would have resulted at the $500,000 and $750,000 deductible levels, respectively, as illustrated in Table 2.

It might have been adequate to conclude the study by simply determining and assigning a new trend figure to each deductible level for the upcoming year's manual. I am, however, reluctant to thus ignore a potentially critical trend in large claims and its impact on costs. Referring to recent SOA health meeting sessions, "outlier" provisions in provider reimbursement contracts, combined with rapid advances in medical technology, increasing consumer expectations, and population aging, may provide some anecdotal evidence as to the causes of the daunting increases in trend.

Though incomplete, this initial investigation into the existence of and causes of large cost increases at high deductible levels has convinced me that the issue is deserving of greater attention in the future to prevent a dramatic deterioration in results at what in the past may have been considered "safe" retention levels. The review of additional data with claims by diagnosis would be helpful in continuing this investigation, as well as input from claims management personnel and experts in emerging clinical research.

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TABLE 1

Database Results by Claim Year and Deductible

	Excess Claims				Excess Claim Frequency				Excess Claim Severity			
Claim	PEPM by Deductible			Claim	by Deductible			Claim	by Deductible			
Year	$250k	$500k	$750k	Year	$250k	$500k	$750k	Year	$250k	500k	$750k	
1995	$1.63	$0.21	$0.02	1995	0.174	0.018	0.005	1995	$112,252	$139,874	$63,745	
1996	$1.59	$0.19	$0.05	1996	0.172	0.016	0.006	1996	$111,378	$141,298	$95,576	
1997	$1.62	$0.31	$0.03	1997	0.191	0.018	0.006	1997	$101,624	$206,481	$73,413	
1998	$1.62	$0.24	$0.03	1998	0.141	0.023	0.003	1998	$137,984	$124,599	$113,369	
1999	$1.97	$0.55	$0.14	1999	0.156	0.029	0.012	1999	$150,924	$230,362	$141,469	
2000	$2.71	$0.73	$0.17	2000	0.211	0.040	0.016	2000	$154,684	$220,813	$131,647	

TABLE 2

Illustration of Actual to Expected 2000 Database Results

Deductible Level	'98 Actual PEPM Cost	Expected Annual Trend to '00	'00 Expected PEPm Cost	'00 Actual PEPM Cost	2000 Monthly Cert Count	2000 Monthly $ Gain/Loss	2000 Montly % Gain/Loss
$500k	$0.24	51%	$0.55	$0.73	1,000,000	-$2,193,312	-25%
$750k	$0.03	71%	$0.09	$0.17	1,000,000	-$987,324	-48%