Projecting and Responding to Medical Expense Trend in Health Insurance

Swiss Re

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Two truths about trend and health insurance

- If you don't respond to trend, you will fail

- Trend in health insurance is inevitable

    - In this market, it will be high for years

    - We calculate about 17%

Components of trend

- Cost per service: how much would the same service cost at the same hospital from one year to the next

- Utilisation, the remainder

  - Number of services

  - Intensity of services

  Fuzzy area in between

- Sickness level (also called sickness burden, morbidity)
- Where treatment delivered
- What care delivered within a course of treatment
- Type of care covered

Calculating Cost-Per-Service Trend by Quarter and Hospital

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		Q107	Q207	Q307	Q107 to Q207	Q207 to Q307	Average
	Cost per Admission						
Hospital A	25,000	29,000	30,000	1.16	1.03	1.10
Hospital B	35,000	36,500	33,333	1.04	0.91	0.98
Total	30,000	32,000	31,000	1.10	0.99	1.04

	Mix of Admissions		
Hospital A	50%	60%	70%
Hospital B	50%	40%	30%

What's an RVU

DRG: Diagnosis related group:

Every admission is classified into a DRG, which is a clinically and expense-level similar grouping

Relative value unit: what the cost of each DRG is compared to a standard 1.00 (hernia)

- A00   Cholera   0.67
- A08   Intestinal infections   0.67
- D51   Vitamin B12 anaemia   0.89
- G61   Disorder of the peripheral nervouse system   1.11
- I71   Aortic aneurysm   2.13
- I62   Other nontraumatic intracranial haemorrhage   2.13
- K40   Inguinal hernia   1.00

Our current cost-per-service trend estimate is 10%.

Calculating Cost-Per-Service Trend by Quarter and Hospital with RVUs

	Q107	Q207	Q307	Q107 to Q207	Q207 to Q307	Average
Cost per Admission						
Hospital A	25,000	29,000	30,000	1.16	1.03	1.10
Hospital B	35,000	36,500	33,333	1.04	0.91	0.98
Total	30,000	32,000	31,000	1.10	0.99	1.04

	Average RVU		
Hospital A	0.80	0.82	0.88
Hospital B	1.05	1.08	1.09

Calculating Cost-Per-Service Trend with RVUs (Cont.)

	Q107	Q207	Q307	Q107 to Q207	Q207 to Q307	Average
Cost per Admission						
Hospital A	31,250	35,366	34,091	1.13	0.96	1.05
Hospital B	33,333	33,796	30,581	1.01	0.90	0.96
Total	32,292	34,738	33,038	1.07	0.94	1.01

	Mix of Admissions		
Hospital A	50%	60%	70%
Hospital B	50%	40%	30%

Utilisation trend can be calculated in two ways:

Total trend in cost per person less cost-per-service trend

Trend in the number of services

- Number of services is very tricky as just a change in processing method can impact it

- Money, in insurance terms, is real

Utilization trend must always be calculated after adjusting for all selection and benefit differences

Our current estimate of utilisation trend is 6% annually

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Inevitability of trend

It's increasing in every society

You show me the society that's kept it's long-term trend low low while quality is improving.

Health care is an income good

- The higher a society's income per person, the higher the percent of care spent on health care

- GDP is projected to grow annually about 7% to 10%,

- Current Indian health care spend is about 5% of GDP. Other societies' percents are 8 to 9%.

Inevitability of trend

Utilization levels among Indian insured aren't particularly low, so this would not be a large driver of trend

Payment levels here are low

- Physician fees lagging other professionals' pay

- Medical cost-per-service trend in most economices is about 3% higher than general inflation

Inevitability of trend (cont..)

Hospitals tend not to have complex equipment that could render better medical care

The ability to pay is emerging and will be followed by increased prices

- Higher income and more private medical insurance

Spending more on health care is a good thing

Responding to Trend

• Remember it's inevitable

• And for a long while it will be high

Related Issues

High trend makes everything more difficult since it's more difficult to make up for initial errors

- Initial rates

- Underwriting, and medical underwriting has a far higher impact for health than life

- Benefit plan and Provider Relations

First year estimates aren't that accurate because there are so many changes going on

Aging: expenses per covered person rise about 6% per year of age in addition to trend

Responding to Trend: Corporate

Keep a close watch on trend

Don't provide long-term rate guarantees

For new groups, demand access to current experience

- For smaller groups, medically underwrite

For renewing groups, use sophisticated renewal methodologies

Track your portfolio's emerging experience and adjust accordingly

Responding to Trend: Retail: Indemnity benefit controls

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Indemnity controls

- Sum insureds

- Internal limits

- Cost sharing

  - Deductibles and copays

- Driving care to the proper setting and without malingering

- Networks

Fixed Benefits

- Removes cost per service trend

Savings-linked benefits

- Setting the annual payments at well over the risk costs

- Excess would accumulate in a fund that would decrease need for high rate increases

- Would still need to monitor funding and increase contribution over time and age

- Change to tax code to allow for tax-deductibility for future medical premiums

Frequent premium re-sets

Costs will increase, deal with it

- Or change the laws of physics

Plan to change the new-business rates every year or so

- Otherwise early purchasers subsidise the later

- And your competition will have a price advantage

Monitor existing blocks and increase as needed

Get buy in for all the stakeholders

- Management

- Sales

- Customers

- Regulators

Modelling of difficulties with rate guarantees

Assume underlying trend of 17% and aging impact of 7%

	Annual Rate Review	Five Year Gaurantee
Year 1	1,000	1,641 (64% higher)
Year 2	1,250	1,641
Year 3	1,563	1,641
Year 4	1,953	1,641
Year 5	2,441	1,641
Year 6	3,052	5,002 (rate level triples)