

BENEPLAN INC.

SECRETS...
Of Employee Benefit Plans

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Beneplan Inc.

Secrets of Employee Benefit Plans

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NOTE: These sections are written to be stand-alone articles. As a result, the reader will notice some sentences are repeated from one section to another.

Characteristics of Employee Benefits

There are two basic types of benefits:

Pooled Benefits

Pooled benefits are unpredictable, infrequent, and volatile and are often high in dollar amount. Life insurance, long term disability, accidental death and dismemberment and catastrophic health claims are pooled benefits.

For groups less than 10,000 employees, pooled benefits cannot be projected or predicted from claims history, they are based purely on statistical probabilities taking into account factors such as age and sex. Their rate is unrelated to claims unless the group is very large (over 2,500 employees); in that case the claims history of the group plays an increasing role depending upon the size of the group.

In rating the life insurance benefit, mortality tables become very accurate once the group goes over 10,000 lives. Insurance companies assemble large groups of people that want to insure their lives. They collect enough premiums so that they are able to pay the claims that occur in the group and realize a profit. Many insurance companies will spread the risk of larger groups by involving other insurance companies. This is called reinsurance.

Experience Rated Benefits

These are benefits whose rate is derived either partially or totally from their claims history. They are benefits that are **expected** to be claimed, they are frequent but generally small in dollar amount. Experience rated benefits usually account for 60% - 90% of the cost of a typical benefit plan.

Experience rated benefits are also referred to as **credible or pre-paid benefits**. In this context, credible means they can be projected accurately and prepaid means the premium is a deposit from which expected claims will be paid. Dental, Vision and Health are experience rated benefits. These benefits are more a commodity than an item requiring insurance; they are best suited for self insurance.

The credibility factor of a certain benefit is the degree of claims predictability of that benefit. Corporations that have stable employee populations in excess of 50 usually have 100% credibility for their Dental and Vision claims and between 80% - 90% credibility for Health and Drugs.

Insurance companies will base their rates for experience-rated benefits almost entirely on claims projections. They determine the rates for these benefits by analyzing the group's historic utilization trends; they accurately project the group's usage and add their margins.

Follow [this link](#) to see a real working example which will explain the differences between Pooled and Experience Rated Benefits.

Styles of Funding of Benefits

“Insuring or self insuring”

Companies must not immediately rush to insurance to fund liabilities that are not clearly understood.

It is prudent to determine the scope and magnitude of the liabilities; the median, best and worst case scenarios. Only if the cost of the worst case scenario is unacceptable should some type of insurance be considered.

If insurance is considered, then the cost and details of insurance should be thoroughly analyzed.

Insurance

Benefits such as life insurance, long-term disability and accidental death and dismemberment are very difficult to predict. They are rated based on statistical probabilities taking into account factors such as age and sex. Their rate is unrelated to claims unless the group is very large (over 2,500 employees). For groups to be credible and thus open for some type of self insurance, their population should be at least 10,000.

Insurance companies assemble large groups of people that wish to insure their lives. They collect enough premiums so that they are able to pay the claims that occur in the group and realize a profit.

Pooled benefits, for groups under a few thousand, are simply too unpredictable to be managed in any way but through insurance.

Self-Insurance

Dental, Vision and Health are experience rated benefits. Their usage is easily predictable for groups of 50 or more employees. Experience rated benefits usually account for 60% - 90% of the cost of a typical benefit plan. They tend to be benefits that are expected to be claimed and are frequent and generally small in magnitude. Experience rated benefits are sometimes referred to as pre-paid benefits or credible benefits.

Credibility is a factor used in the rating of experience rated benefits and pertains to the statistical reliability of claims. The credibility factor of a certain benefit is the degree of claims predictability of that benefit. Corporations that have stable employee populations in excess of 50 usually have 100% credibility for their Dental and Vision claims and between 80% - 90% credibility for Health and Drug claims.

For companies with more than 50 employees, insurance companies will base their rates for experience-rated benefits almost entirely on claims projections. They determine the rates for these benefits by analyzing the group's utilization trends; and they accurately project the group's usage then add inflation and their margins. Experience rated benefits are most suited for some degree of self insurance for groups of 20 employees or more.

A Combination of Both Insurance and Self-Insurance

We now know that there are certain types of benefits which are very erratic and volatile, and therefore difficult to budget. Many conclude that insuring is the only option, but there are many creative methods of obtaining the most cost effective funding while still being fully protected from the risks involved.

By combining both self-insuring and insuring methods, one can obtain the optimum level of funding. The problem with self-insuring is that the company assumes the risk. In combination funding, the company determines the point at which it feels it cannot absorb the cost and sets a Stop Loss at that point. The company self-insures the benefit up to the stop loss amount, and the insurance company assumes responsibility for claims above the stop loss.

Please follow [this link](#) for a real world case example of how Pooled Benefits and Experience Rated Benefits are funded.

Insured Funding

How are rates calculated?

Some relevant definitions:

Incurred But Not Reported (IBNR) Reserve

The IBNR reserve is set up to cover incurred but not reported claims. Insurance companies do this to fund claims they will have to pay after the date of termination of the contract. They set this reserve very liberally to protect themselves, although there are methods to measure it more accurately.

Insurance companies very often price the first year rates without regard to the IBNR i.e. They use the projected **paid** claims in the first year to set first year rates. This results in very competitive rates when they are bidding on a new group.

Insurance Companies build the IBNR at first renewal, which is why first renewals result in a very large increase. IBNRs are usually larger than they need to be and the insurance company usually keeps any funds left over in the Reserve.

Inflation, Utilization, Trend

Trend is the increase (or decrease) in the rate for the benefit that is being utilized.

Trend has two components, inflation and utilization.

Inflation is the increase in the cost of the components of the benefit year over year.

Utilization is the increase in benefit usage due to social, educational and lifestyle reasons.

Dental Inflation over the last few years has been only 3% on average, dental utilization was very high in the eighties, is now tame in the area of 2-5%, so total dental trend averaged between 5% - 7% over the last few years.

Health Inflation over the last few years has been high at 10% on average; Health utilization continues to be high, in the area of 5-10%, so total health trend averaged between 15% - 20% over the last few years.

Target Loss Ratio (TLR)

Expressed as a percentage; TLR is the **percentage of premiums** that the insurance company expects to pay as claims. A TLR of 80% means that of every \$100 of premiums the insurance company expects to pay \$80 as claims. This means the insurance company hopes to keep \$20 to cover their costs and profit. That is 20% of premiums or 25% of claims!

The larger the group the larger the TLR, a group of 20 employees is likely to have a 70% TLR, while typically a group of 40 employees would have a 75% TLR and a group of 60 employees would have a 80% TLR. The best and largest groups would have a TLR of 85%.

A TLR of 80% really translates into a mark-up on claims of 25%.
For example: the 20% as a percent of the 80% claims is a 25% mark up on claims

Rating Pooled Benefits

Pooled benefits are unpredictable benefits like Life Insurance, Long Term Disability, Accidental Death and Dismemberment and catastrophic health claims. These benefits are rated based on statistical probabilities taking into account factors such as age and sex. Their rate is unrelated to claims unless the group is very large (over 1,000 employees).

In rating a life insurance benefit, a credible population would be 10,000 lives. Mortality statistics indicate that on average 12 males of a group of 10,000 males will die in any year. This does not necessarily mean that of a group of 1,000 males 1.2 males will die in any year. For one sample of 1,000 males 5 may die and of another sample of 1,000 males none might die.

Insurance companies assemble large groups of people that want to insure their lives. They collect enough premiums so that they are able to pay the claims that occur in the group and realize a profit. Many insurance companies will spread the risk of larger groups by involving other insurance companies. This is called reinsurance.

Rating Credible Benefits

This section will illustrate how insurance companies set the rates for experience rated benefits.

A group of employees' and their dependents' claims may follow a particular trend. The group might fluctuate in number from year to year, so the trend is based on average claims per employee.

The first step is to project the claims that will be incurred in the period being rated for this group.

Setting the Dental Rates

All providers agree that the cost of dental claims increases at between five percent and seven percent as a result of both inflation and utilization.

The enclosed dental chart outlines the dental claims for employees of Client X over the last few years. The group size will change from time to time, so the emphasis is on claims per employee. You can assume that all employees have families and these are covered. You can also assume that every 2.5 single employee will claim the equivalent of one family.

Projecting claims going forward

It is apparent that Client X's group utilization trend is very stable and seems to be growing at about 6%. As seen in the [case history](#) the utilization rates of 2005 were \$78.40 and the projected utilization rate of 2006 is \$83.11.

Now that dental claims are projected, you can examine how various providers rate them.

Insurers

Insurers set the rate for Client X's dental benefit by dividing the expected dental claims per employee \$83.11 by the insurance company's declared Target Loss Ratio. In Client X's case assume it is 80%.

The monthly dental rate for 2006 is $(\$83.11/0.8) = \103.88
In reality the rate is slightly higher due to a small adjustment in reserves.

This will be the case if the rate is set by the current insurance company (A).

New Insurer bidding for the Plan

If a new insurance company (B) bids on the plan, they would rate the benefit slightly differently in the first year. Although they know full well that there will be \$83.11 incurred per employee with a family per month, they also know that the actual amount that they will pay in the first year will be somewhat less due to the deferral period between when the claim is incurred, submitted then paid. Typically, paid dental claims in the first year of coverage are about 8% less than incurred claims.

To secure the plan, the new company rates the benefit as follows:

Monthly **paid** claims rate = $\$83.11 * 0.92 = \76.46
The monthly bid rate for Client X for 2006 = $\$76.46/0.8 = \95.57

No doubt \$95.57 is attractive compared to \$103.88; however, the joy does not last long, as the new insurer goes back to the proper rate and more at first renewal. Their records would show that paid claims were \$76.46, but they will reintroduce the incurred claims and for the first time, the insurer will discuss the difference between paid claims and incurred claims, and the need to set up a reserve to pay incurred but reported claims.

The first renewal for Client X's dental benefit for 2007 will be as follows:

Paid claims per month per employee = \$76.46
Incurred claims per month per employees = \$83.11
Add utilization of 6% = $\$83.11 * 1.06 = \88.10
Add IBNR reserves of about 8% = $\$88.10 * 1.08 = \95.14
Apply target Loss ratio of 80% = $\$95.14/0.8 = \118.93
Monthly rate for 2007 = \$118.93, an increase of about 25%

Had Client X stayed with company A, the rate for 2007 would have been calculated as follows:

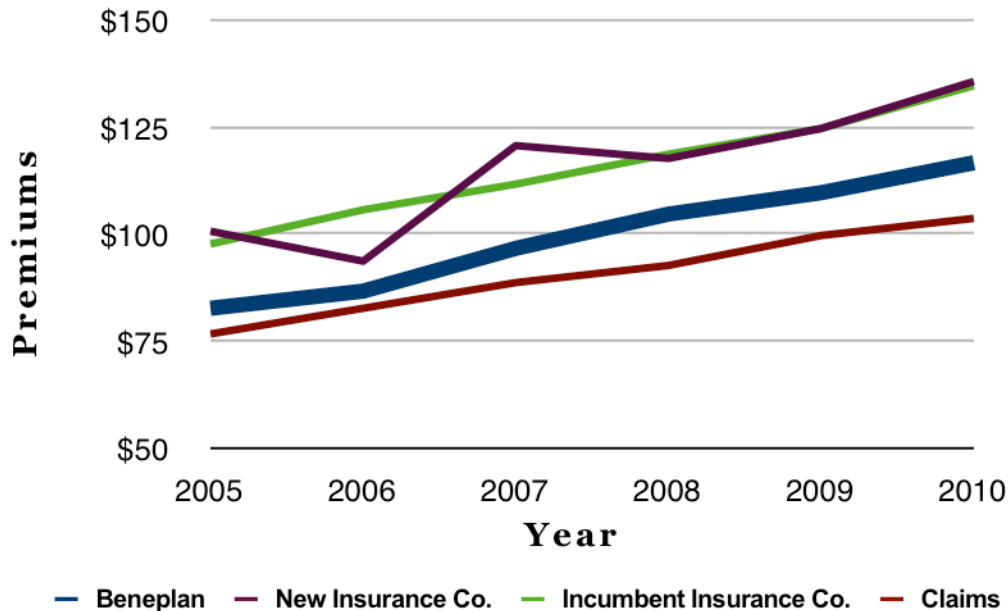
Monthly claims rate would be \$88.10
Apply target loss ratio of 80% = $\$88.10/0.8 = \110.12 per month

Monthly rate = \$110.12, an increase of 6% on their 2006 rate.

In 2008 the rate for both Co A and Co B would be exactly the same if their target loss ratios are the same. In effect, to secure the business, Co B simply gave Client X a small discount in year one then recovered it in year two!

Theoretically to secure really low rates, Client X could change carriers each year. However, Client X would be told (correctly) that no insurance carriers would bid on his business if he had been with his current carrier for less than two years.

Dental Benefit Cost Projection



Setting Health Coverage Rates

All providers agree that cost of health claims increases at between 15% and 17% as a result of both inflation and utilization. For this analysis we will use 15%.

Unlike the dental benefit, health utilization can be volatile. The main portions of the benefit prescription drugs and paramedical services have stable utilization; however other portions, the major medical items hospital, out of country emergency and medical appliances are not predictable, and can be very costly.

The enclosed health chart outlines the health claims that employees of Client X utilized in the last few years. Note that the group size will change from time to time, so the emphasis is on claims per employee. You can assume that all employees are *family coverage*. We also assume that each 2.5 single employees will claim the equivalent of one *family*.

Projecting claims going forward

It is apparent that Client X's drug and paramedical utilization trend is, for the most part, very stable but growing at about 15% per year. However, that major medical claims are very volatile. Taking that into consideration, you can project

Client X's Drug and Paramedical health claims for the year 2006 and beyond produce the chart and the table below. On the other hand, the major medical portions are simply not predictable. Furthermore while drug utilization is fairly stable, it may spike in rare cases when an employee or a dependant has an unusual medical condition that requires specialized medication. Follow [this link](#) to see a working case examples of how predictable Drugs and Paramedical claims are in addition to how unpredictable are Major Medical claims.

Now that health claims are projected, you can examine how various providers rate the benefit:

Insurers

Insurers can set a rate for the drug & paramedical portions of a health plan using the credible experience projection method. However, how do they deal with the major medical portion? The answer is simple. They would pool these benefits just like they pool the life insurance and disability benefits. Insurers charge a pooling rate in return for pooling any claims above the pooling point.

Any amount above the pooling point will not be considered credible claims for renewal purposes (these amounts are removed from the claims when renewal rates are calculated).

The renewal rate would be calculated using health claims under the pooling point and a pooling charge is added to this rate to produce the total health rate.

Setting the rate for health benefit

Insurers would set the rate for Client X's health benefit by dividing the expected health claims per employee for 2006 (\$170.61) by the insurance company's declared Target Loss Ratio. In Client X's case we you can assume it is 80%.

The monthly health rate for 2006 is $(\$170.61/0.8) = \213.26
Add the pooling rate of about \$10.00 and a small adjustment in reserves. The rate will be about \$223.26 per month.

The above will be the case if the rate is being set by the incumbent insurance company (A).

New Insurer bidding for the Plan:

If a new insurance company (B) is bidding on the plan, they would rate the benefit slightly differently in the first year. Although they know full well that there will be \$170.61 incurred per employee with a family per month, they also know that the actual amount that they will pay in the first year will be somewhat less due to the deferral period between when the claim is incurred, submitted then paid. Typically, paid health claims in the first year of coverage are about 12% less than incurred claims.

To secure the plan, the new company rates the benefit as follows:

Paid claims = $\$170.61 * 0.88 = \150.14

The monthly bid rate for Client X for 2006 = $\$150.14/0.8 = \187.68 , add the pooling rate of \$10.00 for a net rate of \$197.68

No doubt \$197.68 is attractive compared to \$223.26; however, the joy does not last long again. The new insurer goes back to the proper rate and more at first renewal. Their records would show that paid claims were \$150.14, but they will reintroduce the incurred claims and for the first time, the insurer will discuss the difference between paid claims and incurred claims, and the need to set up a reserve to pay incurred but reported claims.

The first renewal for Client X's health benefit for 2007 will be as follows:

Paid claims per employee per month = \$150.14

Incurred claims per employee per month = \$170.61

Add utilization of 15% = $\$170.61 * 1.15 = \196.21

Add IBNR reserves of about 12% = $\$196.21 * 1.12 = \219.76

Apply target loss ratio of 80% = $\$219.76/0.8 = \274.69 , add the pooling rate of \$10.00, for a monthly rate of \$284.69, an increase of 44%

Had Client X stayed with company (A), the rate for 2007 would have been calculated as follows:

Monthly claims rate would be \$196.21

Apply target loss ratio of 80% = $\$196.21 / .80 = \245.26 plus the \$10.00 pooling rate, \$255.26, an increase of 15% on their 2006 rate.

In 2008 the rate for both company (A) and company (B) would be exactly the same if their target loss ratios are the same. In effect, to secure the business, company (B) simply gave Client X a small discount in year one then recovered it in year two.

Theoretically to secure really low rates, Client X could change carriers each year. However, no insurance carriers would bid on his business if he had been with his current carrier for less than two years.

A Discussion of Risk

Definitions

Risk

Generally, risk is a contingent cost that might occur (or might not!) under a certain set of circumstances.

An example: “my house burning down; rebuilding it would cost a large amount of money that is not usually readily available. How do I manage this risk?”
Purchase fire insurance.

In life there are other costs that are variable, even volatile; an example is your gas bill; you know there will be gas usage, you also know that usage will vary from one season to another. Indeed depending upon the severity of the season and other factors your gas consumption would vary from one month to another within a season. Do you purchase insurance against that type of risk? I think not!

Credibility

This is a term used in describing the degree of predictability of certain benefits (dental, health and vision) within the benefit plan. It is the statistical reliability of claims projections that are derived from claims history.

The credibility factor of a certain benefit is the degree of claims predictability of that benefit. Corporations that have employee populations in excess of 50 usually have 100% credibility for their Dental claims and between 80-90% credibility for Health claims. Insurance carriers base their rates almost entirely on claims projections for these companies.

Stop Loss

Stop loss is a type of insurance or risk management. A stop loss amount of \$5,000 means that the sponsor (employer) would self insure up to \$5,000 of claims. Any amount above the \$5,000 stop loss would be paid by the insurance company that assumes the risk.

There are two types of benefits to be discussed: Pooled Benefits and Experience Rated Benefits.

Risk Profile of Pooled Benefits

Life Insurance and Long Term Disability are benefits that are impossible to predict for groups fewer than 5,000. The risk here is rare to occur but it is very high dollar amount if and when it occurs.

For groups smaller than 5,000, the only viable way to fund these benefits is through insurance.

Risk Profile of Experience Rated Benefits

These benefits, like the gas consumption above, are expected to be utilized, and indeed they also develop a trend of utilization for a group of 30 or more employees. The usage of these benefits can be determined for the following period by projecting the trend line forward.

The risk in these benefits is the amount of variance between the actual claims to the projected claims that may occur in any year. This particular risk is manageable through some form of self insurance or a combination of both self insurance and stop loss insurance. Some benefits under this class have lesser risk profiles than others:

Dental

Generally due to limitations specified in the dental benefit, both the plan restrictions as well as natural dental restrictions (e.g. number of teeth) the dental benefit's variance is very limited. In a benefit plan with 30 or more employees, normal dental utilization is easily predictable and very rarely will it change dramatically. People's visits to their dentist for cleaning, checkups, fillings and extractions are habitual and stable.

The only time dental claims would significantly exceed projections is when a large majority of plan members, plus dependants, choose to have surgery or major dental procedures in the same time period and this is a very unlikely scenario.

Typically most plans only cover basic dental procedures. In some cases when a plan covers major or orthodontic procedures, which are expensive, they limit

payment from the plan to 50% with an annual maximum which causes the employee to look for the most economical ways to perform the procedures.

Dental benefit's claims variance is between 5-10% from expected claims. With dental benefits, self insurance saves all or most of the margin that the insurance company charges. The potential saving far outweighs the risk.

Health

The health benefit provides drugs and paramedical services, as well as major medical.

Prescription drugs include maintenance drugs as well as emergency drugs. Maintenance drugs are the largest part of the drug benefit and are extremely predictable and stable. Emergency drugs are volatile but within a group of 30 or more employees, one can expect a certain amount of emergency drugs in any year. With prescription drugs: in 97% of the cases the variance is less than 5%. It is possible that 3% of the time, the variance may be higher than 5%. Indeed in rare cases the variance may be very large.

The best way to guard against a catastrophic drug usage is to purchase individual stop-loss from an insurance company that kicks in at an amount with which you can be comfortable.

Paramedical services claims are usually low in amount and are limited by a specified maximum. They can be utilized more than projected but this would not be surprising. It would simply be higher utilization. There is no variance with paramedical services benefits. Claims can be further controlled through innovative [plan design](#).

Major medical is the area that can and does produce variances. Although, in Canada, the most expensive medical services are usually covered by provincial government health insurance, some costly services are not. These might include large semi-private hospital charges, out-of-country medical procedures and expensive medical devices. These benefits cannot practically be limited by plan design because they can have catastrophic financial results to an individual.

Major medical claims cannot be accurately predicted. An employer either fully insures it or accepts the risk with or without a stop-loss. **It is highly inadvisable to self-insure the major medical benefit without a stop-loss.** Even with a stop-loss, it is possible to be subject to some financial liability. In one of every four years, on average, and depending on the selected stop-loss amount, self insuring the major medical benefit will result in a loss position.

The important factor in self-insuring the major medical benefit is the cost of stop-loss. The lower the level of stop-loss is set (for lower risk), the higher the cost of the stop-loss.

With an appropriate stop-loss level, you can indeed realize a saving by self-insuring the health benefit, compare to insuring, in three of every four years. In the loss year, the amount may vary from one half to the total amount of savings from the year before it. Of course, this is an average. It is possible to get lucky and not incur a loss for many years, but it is also possible to be unlucky.

Insurance companies realize consistent profits from pooling and reinsuring their risks. Statistics indicate that occurrences of certain kinds of incidents become more predictable when dealing with large populations. To manage risks, you need to create pools of similar risks.

Furthermore, insurance companies secure their profits by reinsuring their risks. They will pay a premium to another insurance company to accept certain unusual and unlikely liabilities.

The question begs: what stops a group of employers from coming together to form a cooperative for the purposes of employing techniques that insurance companies use for the purpose of reducing their risks, and costs?

The answer is: NOTHING!

The Beneplan Cooperative [\[external link \]](#)

Beneplan Cooperative's objective is to

provide employee benefits at the lowest cost possible

Beneplan has been pioneering self insurance for dental and health since the late 1980s. We had no problems with the dental and vision benefits; we simply developed software that enabled us to pay these claims ourselves resulting in 15% saving on these benefits. Our largest obstacle was purchasing stop loss for the health benefit or purchasing insurance for the major medical benefit while self insuring the drug benefit.

For a long period of time, we had our clients "insure" their Health plan with an individual deductible of \$5,000 for the drug portion i.e. any prescription drugs used by employees up to \$5,000 was self insured, but the balance of drugs and all other health items were insured. That method saved our clients about 15% on the drugs that were self insured.

Unfortunately insurance companies responded by simply raising the cost of insuring the health benefit when non-drug claims were large; they claimed that experience matters. But when non-drug claims drop, or are non existence, they kept the same rates claiming these benefits are "pooled" benefits, their experience does not impact their rates!

We, at Beneplan, noticed that our "pool" (all our clients' experiences as one) was stable as a whole even as some of our clients had bad years; most had normal (low non-drug claims).

Beneplan proposed a cooperative to our clients in 2000; we had developed the mathematics and the legal framework by that time. A courageous 11 clients joined together to form the Cooperative.

The Cooperative concerned itself with only the health benefit. The results have been spectacular; in every single year there was a dividend distribution. ([See Trust Results](#))

Starting in January 2007, the Cooperative will introduce a life insurance feature; where The Co-operators will refund to the Cooperative some of the Life Insurance premiums in years of low Life Insurance claims.

The Cooperative Risk Analysis

The extent of the risk in the case of the Cooperative as a whole:

The Cooperative sets the rate for each employer equal to the sum of:

1. The average utilization* of the group for prescription drugs and paramedical services, plus inflation plus the 13% admin fee and 2% premium tax.
2. A pooling rate for unexpected expenses not covered by provincial health insurance.
3. The \$10,000 stop-loss charge of \$0.85 per individual and \$1.94 family.

* Average utilization is calculated as 70% of the utilization per member of the group for the most recent period, plus 20% of the utilization for the period prior plus 10% of the utilization for the prior to the prior period.

Prescription Drugs under the stop-loss and **paramedical services** are expected to follow their trend in the largest majority of participating clients, and they do. In this area of the cooperative, the risk is extremely low as a whole.

Unexpected Claims

Unexpected claims are claim for services and supplies that are not covered by the provincial health plan. These might include out-of-country expenses, semi-private hospital, catastrophic drugs and medical apparatus and devices. They are very rare but they are expensive when they do occur.

Here are some facts Beneplan takes into account in mitigating such coverages:

- The statistical average (2005) that a Canadian pays for healthcare expenses not covered by a provincial health plan, and that are not normal prescription drugs or paramedical service is \$41.87 annually, or \$3.49 monthly.
- On average there are 2.56 members in a family covered by a typical employer health plan. So by extension, one could assume that a family will spend an average of \$8.93 per month on unexpected claims.
- By imposing a \$10,000 stop-loss amount per member, per year, including drugs and paramedical services, the average goes down.
- With the Cooperative, the 2005 average charge for a single person was \$6.62 and \$14.27 for a family for unexpected claims.

If employees covered by the Cooperative behave within a normal statistical range, the unexpected claims section will result in a surplus. A deficit occurs only if employees covered by the Cooperative claim well over 200% of the national average.

A thorough analysis of the Cooperative's surplus shows that about 90% is attributable to "unused unexpected major medical claims".

Methods of Funding

Evaluating the best funding method for your company's benefit plan

In the previous articles we have shown that Pooled Benefits for small and medium sized employers should be fully insured. However, how should these companies fund their Experience Rated Benefits?

First you need to identify the choices. There are two basic funding options: fully insured plan or self insure with appropriate risk management. Self insuring is the more economical of the two. However one needs to identify the potential savings as well as identify and quantify the risk. Other considerations are the fees that are payable and the cost of risk management (stop loss).

It is evident that any analysis of self-insurance should be compared to the insured option to determine the extent of the savings.

As a **point of reference**, an employer with about 100 employees and \$100,000 of projected claims, for each Health and Dental, should generally be able to insure these claims at \$125,000 with a TLR of 80%.

It is important to understand that a TLR of 80% is indeed equivalent to a fee of 25% of claims. **TLR is related to premiums but fees are related to claims.**

Evaluating Insured Options

To properly assess the option to insure outright, one must begin by obtaining rates from a list of selected insurance companies. But rates alone can be deceitful.

An example of when rates can be deceitful is when an insurance company will try to buy your business with a very attractive rate structure in the first year. As appealing as this may be, one would wonder what the rates will be at the renewal date of the following year. To be fully aware of the offerings which an Insurance company is offering you, one must insist on obtaining a declaration of the target loss ratio (TLR) and the Reserves that the Insurance Company will assign to your company.

*Click [here](#) for more information on New Insurers bidding for your plan

Evaluating and Comparing Self-Insured offerings (Administrative Services Only - ASO):

As we have discussed, the alternative to insuring outright is to self-insure, most often done with an ASO. For the purpose of clarity, we will analyze the ASO option using a case scenario.

One should do an analysis using one's own projected claims, rather than as pure percentages. That would simplify the process and translate the savings into actual dollars. We will use the example of the client with \$100,000 for both Health and Dental claims for our illustrations.

Analyzing ASO offerings must ultimately be compared with an Insured arrangement to get an accurate assessment of all possible offerings. To be a viable option, an ASO arrangement has to deliver enough savings from that of an Insured arrangement to at least cover the cost of assuming the risk.

The Self Insured Option cost:

To properly compare various ASO offerings, one must be thorough. Ask for a full list of ALL charges and whether they apply to claims or premiums. Then perform a full analysis using the projected claims.

Premiums, in this circumstance, are the sum of projected claims and an approximation of fees and taxes.

Refer to the table below for an analysis of an offering from a TPA.

| Projected Claims Estimated Premiums | | | Health & Drugs | Dental |
|--|---------------|-------------------|----------------|--------------|
| | | | \$100,000.00 | \$100,000.00 |
| | | | \$116,000.00 | \$110,000.00 |
| FEES | Percentage of | "premiums"/claims | | |
| Gen. Admin. | 00% | N/A | \$0 | \$0 |
| Risk Charge | 0% | Premiums | \$0 | \$0 |
| Profit Charge | 0% | Premiums | \$0 | \$0 |
| Health Admin. | 9.00% | Claims | \$9,000.00 | \$0.00 |
| Dental Admin. | 5.00% | Claims | \$0.00 | \$5,000.00 |
| Premium Tax | 2.00% | Premiums | \$2,320.00 | \$2,200.00 |
| Commission | 3.00% | Premiums | \$3,480.00 | \$3,300.00 |
| Pooling / risk management | | | \$1,500.00 | \$0.00 |
| Total charges | | | \$16,300.00 | \$10,500.00 |
| Total Costs | | | \$116,300.00 | \$110,500.00 |
| Total for the year | | | \$226,800.00 | |

In the scenario above the approximate savings is \$23,200, or about 9.28% of real savings, if that is worth considering, then the next step is to consider the potential [risk](#).

On the other hand some ASO offers are not as attractive. See the table below for an analysis of an ASO offering from an insurance company acting as a TPA.

| Projected Claims Estimated Premiums | | | Health & Drugs | Dental |
|--|---------------|-------------------|----------------|--------------|
| | | | \$100,000.00 | \$100,000.00 |
| | | | \$124,000.00 | \$124,000.00 |
| FEES | Percentage of | "premiums"/claims | | |
| Gen. Admin. | 5.00% | Premiums | \$6,200.00 | \$6,200.00 |
| Risk Charge | 0.80% | Premiums | \$992.00 | \$992.00 |
| Profit Charge | 3.00% | Premiums | \$3,720.00 | \$3,720.00 |
| Health Admin. | 4.50% | Claims | \$4,500.00 | \$0.00 |
| Dental Admin. | 4.00% | Claims | \$0.00 | \$4,000.00 |
| Premium Tax | 2.00% | Premiums | \$2,480.00 | \$2,480.00 |
| Commission | 3.00% | Premiums | \$3,720.00 | \$3,720.00 |
| Pooling / risk management | | | \$3,000.00 | \$0.00 |
| Total charges | | | \$24,612.00 | \$21,112.00 |
| Total Costs | | | \$124,612.00 | \$121,112.00 |
| Total for the year | | | \$245,724.00 | |

In this scenario, where the savings are less than \$5,000, it is hardly worth taking the risks to self insure.

Analyze the various offers, both insured and self-insured, and determine the potential annual savings for the best ASO offer over the best insurance company offer.

Of course the potential savings determined above assume that projected claims will come in on target. If actual claims are lower, then the savings with ASO will be more than expected, and if actual claims are higher, then the savings would be less, or maybe no savings at all. It is possible that costs in an ASO scenario are higher than the insured alternative if large, unexpected claims are incurred by a few employees or dependants.

Keep in mind that if actual claims do come in higher than projected, the insured rate will be increased for the following year, as insurance companies will change the trend upward, thus projecting claims for the following year at a higher level. In this scenario, Client X might pay higher premiums only to find that the claims for the prior year were unusual and did not reoccur.

Plan Design

“We’ve always done it that way”, employers often answer when are asked about their benefits plan.

Benefit plans have both a humane and practical basis for their existence. Often benefits are perceived by employees as an integral part of the compensation package, so they become necessary to attract and sometimes keep qualified and talented employees.

Employees often become like family and the employer is perceived as a patriarchal figure; employers without benefit plans find themselves in a bind when an employee, or his family, are faced with a financially significant catastrophe; they often turn to their employer for help. The employer finds themselves in a no-win situation: if they help, they face an expense not budgeted, if they refuse, they are branded as inhumane and are faced with a loss of morale and good will with other employees.

Benefits also have practical reasons, mainly to reduce absenteeism. Providing these benefits allow employees to quickly receive medical attention for any conditions which they or their family may have. This will improve the overall well-being of the employee and his or her family, thus reducing time-off due to ailments.

Each benefit has its reasons for being; let us examine each benefit:

Life Insurance

Imagine one of your employees passing away suddenly, his family would be devastated, his widow would face some major hardship, and might lose the family home, car, etc. His co-employees at your workplace will no doubt pass the hat for contributions to help and the hat will inevitably get to your door. You now have a dilemma: contribute a decent amount and face an unexpected expense, or decline and suffer a loss of credibility and good will.

Life insurance eliminates the problem for you and your employees. The widow would immediately receive a tax free payment that is perceived as a “payment from the employer”. A sad unfortunate occurrence becomes an opportunity to demonstrate how good it is to be an employee of your company.

The amount of life insurance should be related to the general needs of the widow if a death occurs. The widow of an en employee earning a larger salary

would need a larger amount than an employee earning a smaller salary, it is normal to set the benefit at a multiple of salary. One times salary is the most common for regular employees. Executives usually have a benefit set at 2 times their salary.

Accidental Death & Dismemberment

This is a benefit that pays something if the employee suffers a loss of a limb or an eye; it also pays an amount equal to the Life Insurance if death occurs as a result of an accident.

The benefit is meant to compensate in the case of a sudden trauma, to help an employee cope. Further, in the case of accidental death, the trauma is more significant than death that occurs as a result of medical reasons, thus the additional death benefit.

The cost of this benefit is very low.

Short-term or Long-term Disability (STD)

Imagine an employee becoming sick and unable to perform his duties; do you simply stop paying him? From a human resource perspective, the employer needs to ensure continuation of some income to ensure the employee recovers and return to work. In the absence of a short-term disability plan, employers find themselves obliged to help from a humane perspective.

It is important to be aware that the government has programs that are in place to help disabled employees; The Employment Insurance Sickness Benefit (E.I.) is available to employees whose sickness lasts longer than two weeks. In that event E.I. pays the employee 55% of their pre-disability wage up to a maximum of \$413 per week.

In some cases, the maximum that E.I. imposes could be simply too low for some classes of employees. In that case employers have two choices:

- Opt out of the E.I. sickness program (thus saving some E.I. premiums) in favour of an employer sponsored short-term disability program that is more appropriate.
- Introduce a Supplementary Sickness plan that would supplement the E.I. program to the appropriate level. In this case the employer does not opt out of the E.I. program and does not save the E.I. sickness premiums.

A full analysis of the employers' absentee trends would indicate the more effective approach for the particular employer.

A short-term disability plan has three basic components:

- What percentage of salary will be paid during disability and will a maximum be imposed?
- How long will the benefit be paid for?. Remember, for the benefit to qualify for E.I. sickness reduction; it must be for a minimum of 15 weeks.
- When will the benefit start? Typically the STD benefit is payable on the first day of an accident or hospitalization, otherwise it starts after a 7 day waiting period.

Employers must always keep in mind that a disability benefit that is too generous could reduce the incentive of employees from returning to work.

Long-term disability (LTD)

If an employee continues to be disabled for a few months, then it becomes necessary to examine whether the employee would ever recover and return to work. Further, the E.I. program has a maximum duration of 15 weeks (after the first two weeks waiting period).

It is important to note that employee may apply to the CPP Disability program, which pays about \$800-\$900 per month. But the CPP Disability program has a high threshold to qualify; it requires that the employee is “totally and permanently” disabled.

Both the amount of the CPP Disability and the threshold are sometimes impractical for many cases, and if your employees are high calibre employees that you wish to have back, then you would have to introduce an LTD plan.

An LTD plan can be either taxable or non-taxable. (See [Taxation of Benefits](#))

LTD plans have the following components:

- They are usually related to salary i.e. 60% or 66.67% of monthly earnings. They may be flat benefits also i.e. \$3,000 per month.
- Almost all LTD plans have a “not withstanding” clause that limits the amount payable to a maximum of 85% from pre-disability income from all source income. As a result it is important to ensure that employers avoid over insurance by arranging their LTD plan design accordingly.
- The benefit is payable after a period of a few months of disability (deemed the short term period), this period is referred to as the waiting period.
- Some plans provide that employees qualify for LTD only if they are totally disabled, so a person who is only partially disabled would never qualify. Residual LTD may be purchased, at a higher price, where partially disabled member may qualify for LTD.
- LTD plans have a maximum insured amount as well as a Non-Evidence Maximum (NEM). The NEM is the maximum that employees can be covered for regardless of their health condition, it is lower than the full maximum. To qualify for the full maximum; employees must submit to a medical questionnaire and pass.

LTD plans are usually offset by CPP disability (if the disabled is entitled) as well as other employment related income that the disabled is receiving i.e. pension, part time income etc.

Health, Dental and Vision

These benefits are not usually catastrophic. Health, except for drugs and paramedical services, is generally covered by the Provincial Government in which the employee resides. Drugs are not usually covered but they are not normally catastrophic in cost. Dental and Vision are certainly not large dollar items except in rare cases. So why would an employer provide these benefits?

The main reason is tax. The Income Tax Act provides that if the employer pays the cost of health benefits, then the benefit is NOT a taxable benefit to the employee. The cost of providing the benefit is fully tax deductible to the Employer. Thus these benefits are a more efficient method of compensation. It is usually safe to assume that we are all likely to spend some basic amounts on drugs, dental or vision, so it is prudent to provide some of the employee compensation in the form of tax free income.

In a large majority of plans, employees are required to contribute to the cost of the plan. That is very inefficient, when employees have to pay any premium sharing for the above benefits; they are paying with after-tax dollars. Somewhere over the last thirty years the idea of tax free compensation got twisted. Employees should pay the cost of Life insurance and LTD, but never the cost of health, dental or vision.

Requiring all employees to pay part of the cost of these benefits with after-tax dollars is unfair, as some employees will use it less than others. It is not fair to have some employees subsidize others with after tax dollars. If an employer wishes to reduce the cost of benefits then the way to do it is thru co-insurance not thru contribution to premium.

The other reasons to provide these benefits are:

- Preventing absenteeism; some employees could be living from pay check to pay check, and when a need arises for a prescription drug or a dental procedure, they might defer attending to them which could complicate the case and result in absenteeism.
- To attract above average employees and to be competitive with other employers in their industry.

Typically these benefits have a schedule of benefits that sets out the following:

- The services that are covered
- The deductibles, the maximums and the re-imbusement levels

This writer does not approve of deductibles; they are unfair to employees that hardly use the plan, the first (and maybe only) time they use the plan in the year, they are likely to be reimbursed with very little due to the deductible.

Co-insurance and maximums are very appropriate to control the cost of the plan as well as to control abuse of the plan. Benefits that are highly optional need co-insurance and maximums, otherwise employees could use them even if the procedure is not medically necessary.

As to some portions of the health benefit that is catastrophic in cost and nature, the “human” and “employer as the patriarch” syndrome comes back into play, these benefits should fall into the category of other Insurance items similar to Life Insurance or LTD.

Taxation of Benefits and Cost Sharing

In designing employee benefits the employer must take into account the tax aspects of each benefit for best utilization of benefit dollars.

Some benefits such as Health, Dental, Vision, Accidental Death and Dismemberment (AD&D) and Dependent Life Insurance are not taxable in the hands of the employee if funded by the employer.

The Life Insurance benefit is a taxable benefit in the hands of the employee if paid by the employer.

Income replacement plans (short and long term disability) are optional; they may be set up in one of two ways:

- If the premiums are taxed in the hands of the employee then the benefit becomes non-taxable in the hands of the disabled employee, on the other hand,
- If the premium is paid by the employer, and not taxed in the hands of the employee, then the benefit becomes taxable in the hands of the disabled employee.

In all cases the premiums payable by an employer is a tax deductible expense.

Let us examine how each benefit can be funded from a tax effective and cost sharing perspectives.

Life Insurance

Premium for the Life Insurance benefit is a taxable benefit in the hands of the employee if paid by the employer. It therefore stands to reason that if any benefit should be payable by the employee it should be the Life Insurance benefit.

If the employer pays the full or part of the cost of the life insurance benefit, the employer must declare the total life insurance premiums paid by the employer as a taxable benefit on the employee's T4.

Income replacement plans, Short and Long-Term Disability

Income replacement plans may be set up in one of two ways:

- If the premiums are paid by the employee then the disability income becomes non-taxable in the hands of disabled employees, but

- If the premium is paid by the employer then the disability income becomes taxable in the hands of disabled employees.

Employers who wish to fund the entire cost of their benefit plan but also wish their disabled employees to receive non-taxable income will add the cost of the income replacement benefit to employees' payroll, subject it to withholding then deduct it as if paid by the employee. If that is done, then it should be fully disclosed to employees.

Should the LTD benefit be taxable or non taxable?

Setting up a non-taxable disability income plan is not financially efficient, it stand to reason that there is less dollars being paid out from a disability plan that there is premiums being collected. Thus, in a non-taxable plan the group is paying more tax than the disabled employees. However, if the choice is between requiring active healthy employees to pay a small amount of tax on the premium vs. requiring the disabled employee to pay tax on income that is already significantly lower than the income they were earning pre-disability, the humane answer is obvious.

The taxability of an income replacement plan affects the plan design. Employers with a non-taxable plan will decide on a lower amount insured (lower percentage of income) as the net after tax impact on the employee is reduced. Taxable plans are usually more generous from the percentage of income insured.

Non-taxable plans are usually more expensive than taxable plans, as insurance companies believe that an employee that is receiving tax free income has less incentive to return back to work.

Health, Dental and Vision

The Income Tax Act provides that if the employer pays the cost of health benefits, then the cost of benefits is NOT a taxable benefit in the hand of the employee. The cost of providing the benefit is fully tax deductible to the Employer.

Thus these benefits are a more efficient method of compensation; and if there is a choice of which benefits should be funded by the employer it stands to reason the health benefits should be the ones. It is usually safe to assume that we are all likely to spend some basic amounts on drugs, dental or vision, so it is prudent to provide some of the employee compensation in the form of tax free income.

In a large majority of plans, employees are required to contribute to the cost of the plan. That is very inefficient, when employees have to pay any premium sharing for the above benefits; they are paying with after-tax dollars.

Requiring all employees to pay part of the cost of these benefits with after dollars is unfair, as some employees will use it less than others. It is not fair to have some employees subsidize others. If an employer wishes to reduce the cost of benefits then the way to do it is thru co-insurance not thru contribution to premium.

Somewhere over the last thirty years the idea of tax free compensation got twisted. Employees should pay the cost of Life insurance and LTD, but never the cost of health, dental or vision.

Current Plan Design Issues

Preferred dental

Beneplan and Spencer Dental are pleased to announce the launch of the Spencer Dental Preferred Dental Panel. This is a list of dental offices in the greater Metro Toronto area that will provide their services at a 25% discount from the current Ontario Dental Fee Guide.

The enrolment is optional, i.e. employees who choose not to enrol need not to; they keep the status quo. The cost to enrol in the preferred dental is \$2 per month per employee enrolled. This charge is equal to approximately 3-5% of the cost of the plan.

The Employer may utilize this arrangement in many ways; the following are two ways:

Improve the plan

If your plan is an 80% plan, you may offer a 100% plan to the employees that wish to enrol in the Spencer Dental arrangement. The cost is about \$2 per month per employee, and the caveat is they would only be able to receive 100% reimbursement if they perform their dental services at one of the preferred providers.

The net cost to the plan is nil, as the 25% discount would offset the additional 20% reimbursement and the cost of enrolment.

Alternatively,

Reduce the cost of the plan

The preferred Dental Network may be used to reduce the cost of the plan. In plans where employees pay 50% of the plan, their cost may be reduced by 20% if they opt for the Preferred Dental network. In this case the employer also saves 20% from their cost.

There are other benefits for enrolling in Spencer Dental; other expenses (dental services) not normally covered would also be discounted at 25%, and the annual dental maximum is stretched due to the discount etc.

Controlling Paramedical Services

Over the last number of years, Beneplan has kept a close watch on the general usage trends of Paramedical services. It has been our observation that more and more people are turning to alternative services such as massage therapy, acupuncture, naturopath and chiropractic. Unfortunately in some cases there is limited data to substantiate if these services and treatments are “medically necessary”. We are of the opinion that many employees are using these services only because they are covered under the benefit plan.

Upon inquiring with various insurance companies on how they adjudicate these types of claims it was clear that as long as there was a Doctors note (for some plans) and that the proper form filled out and receipt attached the claim would be paid. There is no real adjudicating process or due diligence in determining if the service being performed would actual help the member or if there was any real “Medical Necessity” for the treatment in the first place.

Beneplan decided in 2005 to change the way these benefits were being administered. We adopted a well used process from the dental benefits known as “Pre-determinations”. The basic premise is that all paramedical services would be scrutinized from the point of view of “Medical Necessity” and treatment efficiency of the service being requested prior to any treatment being performed, in other words on a “Pre – Approval” basis.

Beneplan developed our own Paramedical adjudication procedure which has three main components. The first component requires the employee to complete our Beneplan Paramedical form with his / her information. The second step is the “Attending Physician Statement”. This section would be completed by the member’s Doctor (MD) and it requires a full diagnosis of the ailment and possible recommended treatment or referral. The final step is the “Attending Paramedical Practitioner Statement” which requires what his / her assessment of the ailment and what treatment(s) would be provided, as well as approximate number of visits and cost per visit etc. All of these are reflected in a “Pre Approval” form provided to all employees.

Once this form is completed and sent (prior to any service being performed) Beneplan would then quickly determine if the claim is eligible and if so how much, etc, and the employee would be notified as to the decision. This entire process really amounts to performing some due diligence.

The first year results were nothing short of astounding. Many employees applied for these services without a diagnosable “medical necessity” and were subsequently questioned. Others, where a diagnosis was provided and a “medical necessity” was demonstrated were reimbursed.

The impact of this approach to the claims experience on many of our client's plans was significant, whereby claims in this area were reduced in many cases. Beneplan worked diligently to ensure that Paramedical Practitioners were performing the specified treatment plans submitted on the forms and that employees were made aware of how these benefits are to be used.

Other Effective Plan Design Ideas

There are other approaches that a Company may wish to consider:

- 50% reimbursement level combined with a per visit dollar maximum, but maintain the annual maximum amount.
- Employees must pay the Paramedical practitioner directly and the employee would then be reimbursed (no assignment of payment to the practitioner).

In discussing this approach it may become evident that the corporate philosophy may not be in agreement with this concept, however Beneplan has the ability and flexibility to manage this type of program as the Company sees fit.

Chronic and Extremely Expensive Drug Usage

The cost of prescription drugs is growing dramatically in Canada. The average rate of increase in most drug plans is between 15% and 25%. The increase is not necessarily pure inflation; in fact most existing drugs are rising at between 2% to 6%. It is the introduction of new, patented expensive drugs that is causing the escalation.

A significant number of the new, patented drugs are simply a slight modification of an existing drug. Many of these new expensive drugs are therapies for existing conditions that can be relieved effectively by less expensive generic drugs. Another class of very expensive drugs is ones that treat chronic diseases like MS, enzyme imbalances as well as certain rare and extreme arthritic conditions. Some of these drugs are extremely expensive (tens or hundreds of thousands of dollars annually).

In an experience rated or an ASO environment, employers eventually pay the cost of drug usage and fees. That means that an employer who has an employee or dependent using such chronic expensive drug would face dramatically escalating benefit plan cost. Reducing or canceling the plan at that time could result in legal action by the affected employee.

One way to protect against the above scenario is to impose an annual limit on drug usage per member or dependent. Employees or dependents that reach the maximum may resort to the Ontario Government Trillium Drug plan.

If a member or his/her dependent reaches the maximum during the calendar year, and if they do not have coordinated coverage elsewhere, then the member can apply for benefits under the Ontario Ministry of Health Trillium plan. After the satisfaction of a small deductible (approximately 4% of family income), Trillium will pay the balance of the expense.

More information can be obtained from the Ministry of Health's web site <http://www.health.gov.on.ca/english/public/pub/drugs/trillium.html>. Or call Beneplan at (416) 863-6718 ext 224.

Case History

This section provides a complete case history and analysis of an employers Dental and Health plans. The first section contains actual claims usage up to 2005, then projections of usage for 2006-2010. The following section discusses and compares the choices that the employer has with respect to funding the benefit. The final section offers a thorough analysis of how Insurance companies and Third Party Administrators' offerings on both insured and ASO basis should be analyzed.

The following articles refer to this working case example:

[Characteristics of Employee Benefits](#)
[Insured Funding: Setting Dental Rates](#)
[Insured Funding: Setting Health Coverage Rates](#)

Please read them to understand the concepts this scenario demonstrates.

Claims History

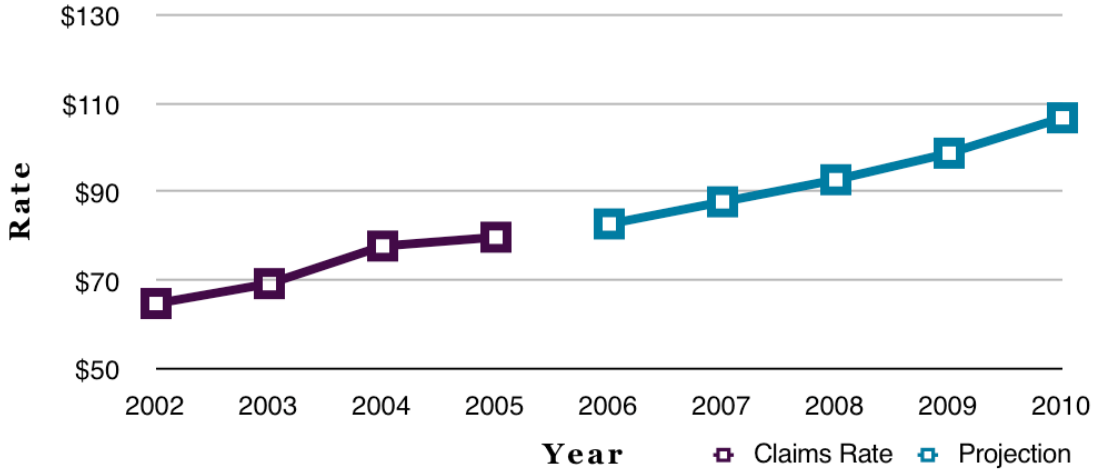
Dental

The following tables demonstrate the claims history for a group that has approximately 100 employees. We assume that all employees are "families", and we convert every 2.5 single employees to one family so as to obtain a uniform usage rate per family. The group's size will change from time to time, so the emphasis is on claims per employee.

| Dental Claims | | | | |
|---------------|---------------|------------|---------------------------------------|------------------------------------|
| YEAR | CLAIMS | POPULATION | ACTUAL UTILIZATION Claims/EE/month | PROJECTED USAGE Claims/EE/month |
| 2002 | \$ 62,177.00 | 78.00 | \$ 66.43 | |
| 2003 | \$ 70,994.00 | 86.00 | \$ 68.79 | |
| 2004 | \$ 79,659.00 | 87.00 | \$ 76.30 | |
| 2005 | \$ 78,090.00 | 83.00 | \$ 78.40 | |
| 2006 | \$ 82,775.40 | 83.00 | | \$ 83.11 |
| 2007 | \$ 87,741.92 | 83.00 | | \$ 88.09 |
| 2008 | \$ 93,006.44 | 83.00 | | \$ 93.38 |
| 2009 | \$ 98,586.83 | 83.00 | | \$ 98.98 |
| 2010 | \$ 104,502.04 | 83.00 | | \$ 104.92 |

It is clear that the above group's dental utilization trend is very stable and seems to be growing at about 5%. Based on that, one is able to project their dental claims for the year 2006 and beyond as per the chart and the table below.

Monthly Dental Rate



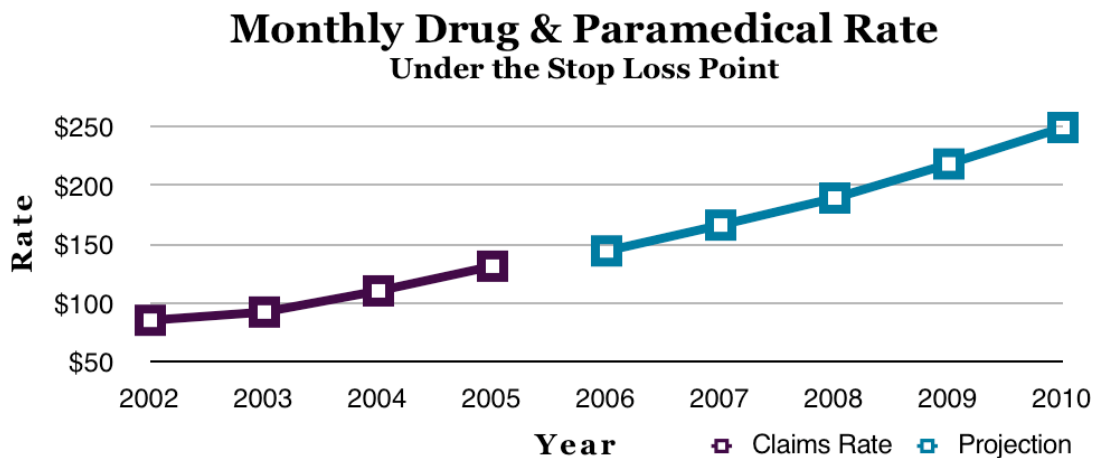
Health

Unlike the dental benefit, health utilization can be volatile. The main portions of the benefit, prescription drugs and paramedical services, have stable utilization; however other portions, the major medical items: hospital, out of country emergency and medical appliances are not predictable, and can be rare and expensive.

We have broken the health utilization into the drug/paramedical component and the major medical component.

| Drugs & Paramedical Claims | | | | |
|----------------------------|---------------|------------|---------------------------------------|------------------------------------|
| YEAR | CLAIMS | POPULATION | ACTUAL UTILIZATION Claims/EE/month | PROJECTED USAGE Claims/EE/month |
| 2002 | \$ 79,256.09 | 78.00 | \$ 84.68 | |
| 2003 | \$ 97,534.53 | 86.00 | \$ 94.51 | |
| 2004 | \$ 115,790.11 | 87.00 | \$ 110.91 | |
| 2005 | \$ 146,822.48 | 83.00 | \$ 147.41** | |
| 2006 | \$ 142,991.73 | 83.00 | | \$ 143.57 |
| 2007 | \$ 164,440.48 | 83.00 | | \$ 165.10 |
| 2008 | \$ 189,106.55 | 83.00 | | \$ 189.87 |
| 2009 | \$ 217,472.53 | 83.00 | | \$ 218.35 |
| 2010 | \$ 250,093.40 | 83.00 | | \$ 251.10 |

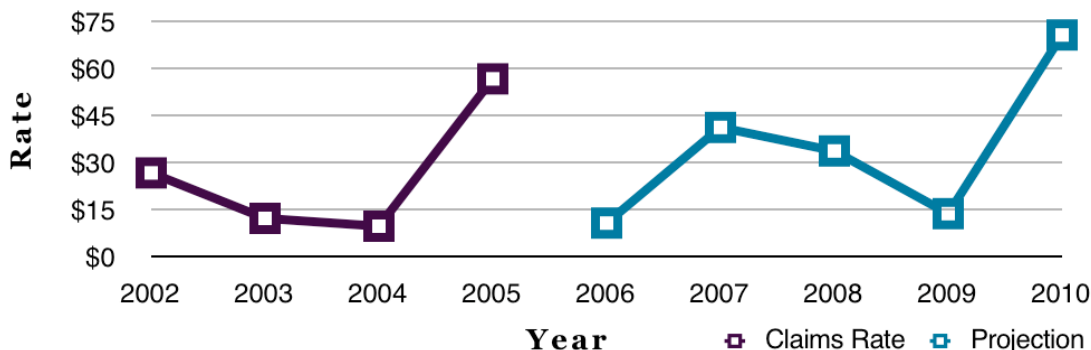
** Contained in these claims were unusual drug claims of one person who claimed about \$23,266.72 in that year, \$13,266.72 of these claims were removed from the experience for the purpose of future projections.



| Major Medical Health Claims | | | | |
|-----------------------------|---------------|------------|---------------------------------------|------------------------------------|
| YEAR | CLAIMS | POPULATION | ACTUAL UTILIZATION Claims/EE/month | PROJECTED USAGE Claims/EE/month |
| 2002 | \$ 25,421.76 | 78.00 | \$ 27.16 | |
| 2003 | \$ 11,166.24 | 86.00 | \$ 10.82 | |
| 2004 | \$ 8,894.88 | 87.00 | \$ 8.56 | |
| 2005 | \$ 56,094.72 | 83.00 | \$ 56.32*** | |
| 2006 | Unpredictable | 83.00 | | Unpredictable |
| 2007 | Unpredictable | 83.00 | | Unpredictable |
| 2008 | Unpredictable | 83.00 | | Unpredictable |
| 2009 | Unpredictable | 83.00 | | Unpredictable |
| 2010 | Unpredictable | 83.00 | | Unpredictable |

*** Contained in these claims was one major medical claim totalling \$42,828.00 made up of hospital and medical equipment charges.

Monthly Major Medical Rate



It is clear that the group's drug and paramedical utilization trend is, for the most part, very stable and growing at about 15% per year. However, major medical claims are very volatile. It is important to note that while drug utilization is fairly stable, it may spike in rare cases when an employee or a dependant has an unusual medical condition that requires specialized medication.

Stop Loss

Typically insurance companies pool claims above a specified stop loss, we will re-illustrate the same claims for Client X but with a \$10,000 stop loss.

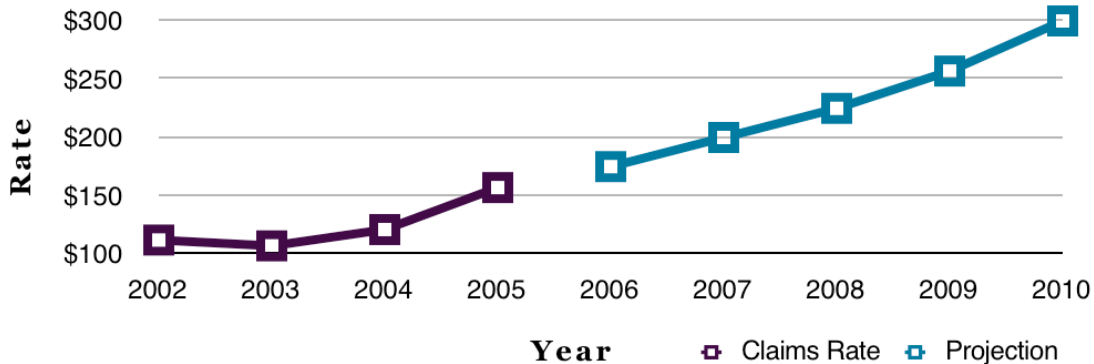
Health Claims under \$10,000 pooling point

| YEAR | CLAIMS | POPULATION | Claims/employee/month | Projected Claims /Employee/month |
|------|---------------|------------|-----------------------|----------------------------------|
| 2002 | \$ 104,682.24 | 78.00 | \$ 111.84 | |
| 2003 | \$ 108,700.56 | 86.00 | \$ 105.33 | |
| 2004 | \$ 124,726.68 | 87.00 | \$ 119.47 | |
| 2005 | \$ 157,766.56 | 83.00 | \$ 158.40* | |
| 2006 | \$ 169,927.56 | 83.00 | | \$ 170.61 |
| 2007 | \$ 195,425.16 | 83.00 | | \$ 196.21 |
| 2008 | \$ 224,737.44 | 83.00 | | \$ 225.64 |
| 2009 | \$ 258,442.08 | 83.00 | | \$ 259.48 |
| 2010 | \$ 297,206.40 | 83.00 | | \$ 298.40 |

* Contained in these claims are two instances of claims going above the \$10,000 mark, one for drugs and the other for hospital and medical equipment, the total above the \$10,000 pooling point was \$46,094.72. There were no claims above the \$10,000 pooling point in the other years

It is important to note that that the health rate in 2005 is higher than the trend and as a result it may impact the projections going forward. Projections must be reviewed annually to better reflect reality.

Monthly Health Rate Under Pooling Point



* This graph is the sum of both the above graphs, with the addition of a stop loss of \$10,000.

Click [here](#) to read the “Styles of Funding Benefits: Insuring or Self-Insuring” article which provides the theoretical information of which this scenario illustrates.

Funding Conclusions

Dental

Examining Client X’s dental claims history over a few years illustrates that usage per employee per year is stable and follows a trend line that is quite often very stable. If a particular employer accepts that his dental utilization was and will continue to be stable, then they need to ask why do they need an insurance company at all? Why would they not simply pay their own dental claims, their monthly cost would be the projected utilization rate plus 2% premium tax.

Many companies would not wish to pay their own claims for administration and privacy reasons, There are many third party administrators, (TPAs) that would process Client X’s dental claims (much as payroll administrators do) for a small fee, say 10%.

If Client X wishes to insure the benefits, insurance companies start with the same projections and they add their margins for administration, premium tax, commissions and profits etc.

The table below compares all the rates discussed above.

| Year | Utilization Rate | Self Administered | Third Party Administered | Insurance Company |
|------|------------------|-------------------|--------------------------|-------------------|
| 2005 | \$78.40 | \$79.97 | \$86.24 | \$98.00 |
| 2006 | \$83.11 | \$84.77 | \$91.42 | \$103.88 |
| 2007 | \$88.09 | \$89.85 | \$96.90 | \$110.12 |
| 2008 | \$93.37 | \$95.24 | \$102.71 | \$116.73 |

Health: Drugs and Paramedical Services

Unlike the dental benefit, the health benefit as a whole can be volatile. The main portions of the benefit, prescription drugs and paramedical services have stable utilization; however other portions, the major medical items such as hospital, out of country emergency and medical appliance are not predictable, and can be very costly.

Examining Client X's drug and paramedical claims history over a few years illustrates that usage per employee per year is fairly stable. Similar to the dental benefit, if Client X accepts that his drug and paramedical parts of the health utilization are and will continue to be stable, then why do they need an insurance company to insure these benefits? Why would they not simply pay their own drug and paramedical claims? Their monthly cost would be their projected utilization rate plus 2% premium tax.

Client X should be prudent and insure any drugs consumed by any member of the plan above a certain annual amount, say \$5,000 or \$10,000. This is called stop-loss insurance, and Client X could purchase it from an insurance company.

As with the Dental example there are many third party administrators (TPAs) that would process Client X's drug and paramedical for an all inclusive fee of say 15%.

If Client X wishes to insure the benefits, insurance companies start with the same projections and they add their margins for administration, premium tax, commissions and profits etc.

See the table below comparing all the rates discussed above:

| Year | Utilization Rate | Self Administered | Third Party Administered | Insurance Company |
|------|------------------|-------------------|--------------------------|-------------------|
| 2005 | \$147.41 | \$150.36 | \$169.52 | \$191.83 |
| 2006 | \$143.57 | \$146.44 | \$165.11 | \$187.46 |
| 2007 | \$165.11 | \$168.41 | \$189.88 | \$214.26 |
| 2008 | \$189.88 | \$193.68 | \$218.35 | \$245.05 |

Note that in there is a cushion of about 12% between the TPA cost and the Insured cost, so in years of high utilization the cushion would help, and in years of lower utilization, the savings are even larger.

Dealing with the Major Medical Claims

The Major Medical benefit, which is totally unpredictable, is simply not suitable for pure self insurance. Client X's options are to either fully insure the benefit or to self-insure it with stop-loss insurance.

Click [here](#) to read the "Styles of Funding Benefits: How to Select and Evaluate..." article which provides the theoretical information of which this scenario illustrates.