An Examination Of The Community Rating By Class (CRC) Pricing Methodology That's Used To Price Large Groups And Why It Needs To Be Vastly Improved

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The Community Rating By Class (CRC) pricing methodology that health insurers use to price large fully-insured groups, and to partially price experience-rated groups that are only partially credible, was invented over 60 years ago and can best be described as **primitive and problem-ridden**. In this paper, **we'll be focusing solely on "large group" pricing** because "small group" pricing is mandated under the Affordable Care Act.

The CRC pricing methodology that most health insurers use to price large fully-insured groups, and to partially price experience-rated groups that are only partially credible, relies on age/sex factors, geographic area rating factors, and industry rating factors. Although the vast majority of health insurers use sound age/sex factors, every other aspect of the CRC pricing methodology that they're using has serious problems. In short, there are three main reasons why the CRC pricing methodology that's being used to price large groups **routinely generates premium rates that are substantially (i.e., 10% OR MORE) off-target**.

- Geographic area rating is very imprecise the way that virtually every health insurer does it
- The concept of industry rating, and the industry rating factors themselves, are based on "junk science"
- There are a handful of "dynamics" that can substantially impact a group's claims experience (like a group's participation rate to name just one) that are totally ignored in a typical CRC pricing methodology

1. The problems with geographic area rating: The vast majority of health insurers develop "raw" geographic area rating factors that are sound. The "raw" geographic area rating factor that's developed for a specific geographic rating area assumes that the medical care will **actually be received** within this geographic rating area. Unfortunately, most health insurers then adjust their sound "raw" geographic area rating factors based on how their competitors vary premiums by geographic area even though their competitors have different provider deals than they have. They're also assuming that their competitors know what they're doing which is a mistake. Therefore, the resulting geographic area rating factors **aren't sound anymore**.

A bigger problem regarding geographic area rating has to do with how a specific group is assigned a geographic area rating factor. **Where will a group's covered members actually receive their medical care?** The vast majority of health insurers assign a geographic area rating factor to a group based on where the employer is located. These insurers are assuming that the group's employees and covered dependents will receive ALL of their medical care in the geographic rating area where the employer is located. There are a handful of obvious reasons why this approach almost always results in the group's geographic area rating factor (and therefore premiums) being off-target by anywhere from a few percent to as much as seven or eight percent. The ONLY INSTANCE when this approach would be reasonable is when an employer is located in the CENTER of a VERY LARGE geographic rating area and NEARLY ALL of their employees LIVE CLOSE to where they work!

There are also some health insurers that assign a geographic area rating factor to a group based on where the group's employees live. This is accomplished by taking a weighted average of all of the insurer's geographic area rating factors where the weights are determined by the percentage of the group's employees that live in each of the geographic rating areas. Although this is significantly better than the first approach, the assumption that each covered member will receive ALL of their medical care in the geographic rating area where they live is also very unrealistic. Although most people usually receive their routine medical care fairly close to where they live, when someone has a **very serious medical problem they often times receive their medical care at a large well-known hospital in a major city regardless of where they live, and these claims are usually LARGE.**

There's a vastly superior approach to geographic area rating where each specific group is assigned a **CUSTOMIZED** geographic area rating factor that's based on where the group's covered members **will most likely ACTUALLY RECEIVE their medical care**. This approach is MUCH MORE PRECISE than the two traditional approaches to geographic area rating that are described on the prior page. This approach generates a UNIQUE and HIGHLY APPROPRIATE geographic area rating factor for each specific group. We'll be examining this approach in depth at our seminar that we'll be doing this June in Las Vegas.

2. The problems with industry rating: For illustrative purposes, let's temporarily assume that the "dynamic" of geographic area is being properly reflected in a large group's premium rates, and the "dynamics" of age and sex are also being properly reflected in a large group's premiums. The only remaining type of rating factors being used in a typical CRC pricing methodology that's used to price large groups are industry rating factors. Therefore, industry rating factors have to properly reflect the combined impact of EVERY POSSIBLE "DYNAMIC" that can significantly impact a large group's claims experience (and premium rates) other than age, sex, and geographic area! So, the industry rating factor that's assigned to a specific large group would have to properly reflect the combined claims impact of the group's participation rate, their employee turnover rate, the types of employees that are actually in the group (as measured by income and/or education level), the prevalence of tobacco-use and obesity, as well as many additional "dynamics" that can have a significant or substantial impact on the group's claims experience. Industry rating factors would have to be "magic factors" in order to accomplish this **impossible task!** Let's look at just a few of the reasons why the concept of industry rating, and the industry rating factors themselves are based on **"junk science".**

When industry rating factors are developed, there are MANY INSURMOUNTABLE PROBLEMS that the person who is trying to develop the factors must try to overcome. One of the biggest problems is that no one has anywhere near enough claims data to be able to develop an industry rating factor for each four-digit Standard Industrial Classification (SIC) code. Therefore, the claims data that's associated with adjacent SIC codes must be combined to get a credible amount of claims data that will enable whoever is developing the factors to come up with an industry rating factor for a **RANGE OF SIC CODES**. Unfortunately, each of the SIC codes within a RANGE OF SIC CODES represents a different insurance risk. For example, if a health insurer has an industry rating factor of 1.05 for SIC codes 5511-5599, they're assuming that "home supply stores", "boat dealerships", "gas stations", and "motorcycle dealerships" represent identical insurance risks, which they're not. Another big problem is that everyone has a different opinion regarding how many member months are required to have a credible amount of claims data. There are **SO MANY SUBJECTIVE DECISIONS** that must be made when developing industry rating factors that if several people used the same exact claims data to develop industry rating factors, they'd all come up with industry rating factor tables that are VASTLY DIFFERENT from one another. This explains why every health insurer's industry rating factors differ greatly from one another. If you compared the industry rating factors that are used by any three health insurers, you'd find a five or ten point difference between the lowest and the highest industry rating factor for nearly every four digit SIC code. Occasionally, you'll see a fifteen point difference! What does this say about the validity of industry rating factors?

Another HUGE PROBLEM is that EVERY GROUP THAT HAS THE SAME SIC CODE isn't an identical insurance risk. They all have different participation rates, different employee turnover rates, and different types of employees as measured by income and/or education level to name just a few of the "dynamics" involved. For example, one company can have a 90% employer contribution and have a very high participation rate, while another company with the same SIC code can have a 50% employer contribution and have a very low participation rate. You could also have two manufacturers that have the same SIC code where one of them is highly automated with few blue collar employees, while the other manufacturer isn't automated at all and they have mostly blue collar employees. There are a tremendous number of additional examples that we could also use to illustrate why companies that have the same SIC code can be vastly different insurance risks.

In conclusion, industry rating factors MOST DEFINITELY should be replaced by a handful of non-traditional rating factors that will enable a health insurer to set highly appropriate premium rates for each of their large group clients. Most of these non-traditional rating factors are briefly discussed below.

3. Here you'll find a handful of "dynamics" that can substantially impact a group's claims experience that the CRC pricing methodology totally ignores: Virtually every actuary and underwriter in the group health insurance industry will tell you that **a group's participation rate** can have a huge impact on a group's claims experience. A group's participation rate has the potential to impact the group's claims experience by MUCH MORE than the group's age/sex demographics and/or geographic area can. So, why are there only a handful (at most) of health insurers in the industry that actually use participation rating factors when pricing a large group?

A group's claims experience will also vary substantially depending on **the types of employees that are actually in the group**. Since a person's salary is well correlated with the person's education level for the vast majority of occupations, the average employee salary at a company will indicate whether the group's employees have a below-average education level, or an above-average education level. This is important to know because the claims level of blue collar employees is significantly higher than the claims level of white collar employees. A person's attitude towards their health, having health insurance, seeking medical care, and taking physical risks varies by education and income level. As an example, according to various studies, people that have a high school education (or less) are approximately three times more likely to use tobacco than people that have a four year college degree or an advanced college degree.

A group's **annual employee turnover rate** should also be a consideration when pricing a large group. Every insurer would prefer to have a group with a 15% annual employee turnover rate instead of a group with a 90% annual employee turnover rate. Keep in mind that if a group has an annual employee turnover rate of 60%, there's only a 6.4% chance that an employee will still be in the group three years from now. This means that when you're examining the group's prior claims experience in order to develop renewal premiums, the vast majority of the people that contributed the claims experience are no longer in the company. Pricing a large group based on the claims experience of "ghosts" represents an additional risk that should be factored into the group's premium rates. When a huge number of people pass through a health plan each year, adverse selection will result and administrative expenses will also increase.

Lifestyle-related issues can also substantially impact a group's claims experience. Although approximately 20% of adults in the United States use tobacco, this percentage can be 40% or more at some companies like a manufacturing company for example. If a tobacco-users claims are 15% higher than a non-tobacco-user, the claims associated with a company where 40% of their employees and covered spouses use tobacco will be approximately 2.5%-2.9% higher than the claims associated with a company where 20% of their employees and covered spouse's use tobacco. Although obesity is a bigger problem, rating a group based on the prevalence of obesity would represent a public relations problem and is therefore not recommended.

In closing, even if the CRC pricing methodology being used by a health insurer was absolutely perfect, the premium rates generated by this pricing methodology will still need to be manually adjusted in many cases. This will depend on **what's going on with the group currently**. Will the employer be implementing some type of cost-reduction strategy on their next anniversary that will significantly impact their loss ratio and/or their enrollment level? Does the group have large open claims or large recurring claims? Will the group be allowing one or more of your competitors into the group next year? Is the group planning a major layoff? There are also many additional reasons why a group's future claims experience may be **very different** than their prior claims experience which will require a premium adjustment.

Everything that's been discussed in this paper will be examined in great detail at our seminar that we're having in Las Vegas this June.

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