An Abstract From:

The Insurance and Takaful Industry Medical Cost Containment Task Force Study on the Drivers of Medical Costs and Medical Insurance Premium Inflation 2020

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MALAYSIAN TAKAFUL ASSOCIATION

PIAM

Background

Escalating medical insurance premiums over the past few years have raised concerns among policyholders if medical insurance can remain affordable in years to come. To address this concern and following a request from Bank Negara Malaysia (BNM) to investigate the drivers of rising medical insurance premiums, a Task Force was set up, represented by the Life Insurance Association of Malaysia (LIAM), Persatuan Insurans Am Malaysia (PIAM) and Malaysian Takaful Association (MTA). Actuarial Partners Consulting (APC) was commissioned by the Task Force to undertake **a study to identify and to quantify the main drivers of rising medical premium costs**.

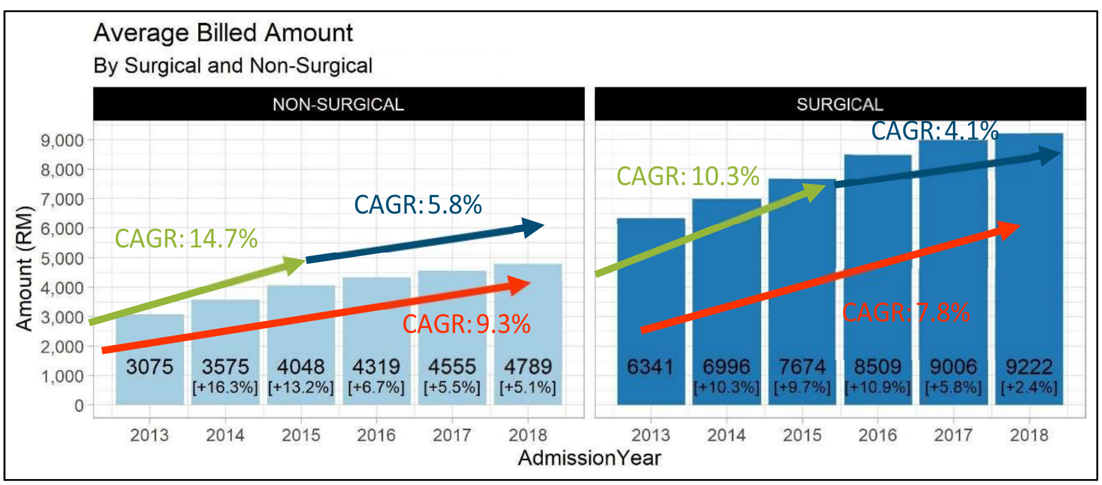
APC used data provided by insurance and takaful companies, both life and general, on their Hospitalisation and Surgical Insurance (HSI) products for the analysis. Additionally, information from surveys and interviews conducted with the other stakeholders, namely Third Party Administrators (TPAs) and private hospitals, were used to gain insights into rising medical costs and identify areas which could contribute to the rapid escalation in medical premiums.

Definition of Medical Inflation

Medical inflation, arising from growing demand for private medical treatment, has been a concern in recent years. There are many definitions of medical inflation in the healthcare industry. They could vary from stakeholder to stakeholder, depending on their areas of concern. Consumers may be concerned about the rising cost of treatment while the regulators may be concerned about overall medical consumption and the affordability of medical insurance. For this study, though, it is defined **as the year-on-year increase in the average treatment cost s** i.e. the claims severity.

Findings on Medical Inflation

The average annual rate of medical claims inflation experienced by the insurance and takaful industry continued to show an upward trend from 2013 to 2018. The chart below shows the average billed amount, split into non-surgical and surgical treatments.



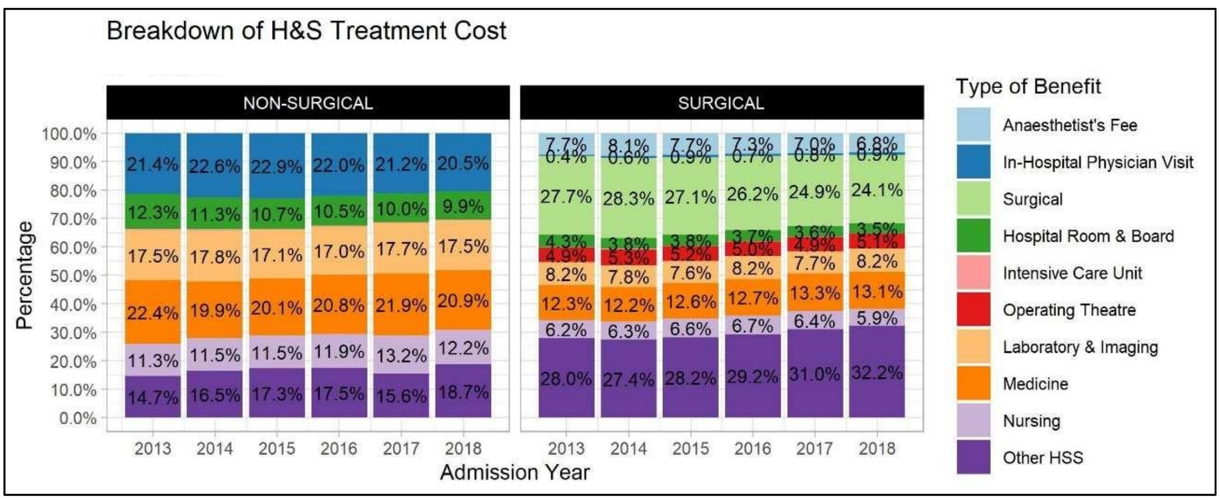
The average annual costs for non-surgical treatments between 2013 and 2018 rose by 9.3% while surgical treatments increased 7.8% per year for the same period. The proportion between non-surgical and surgical treatments moved from 32:68 in 2013 to 38:62 in 2018, probably due to a higher prevalence of Non-Communicable Diseases (NCDs).

The average billed amounts for both treatments saw a significant rise. In 2014, it was 16.3% and in 2015 it was 13.2% for non-surgical treatments. Meanwhile for surgical treatments, the rise was 10.3% in 2014 and 9.7% in 2015. This was due to the **upward revision of the fee schedule** which came into effect in January 2014 i.e. the Thirteenth Schedule of Private Healthcare Facilities and Services (Private Hospitals and Other Private Healthcare Facilities) (Amendment) Order 2013 which regulated doctors' and surgical fees, and to some extent from the depreciation of Ringgit Malaysia in 2015.

The Ministry of Health (MoH), regulates doctors' and surgical fees through the Thirteenth Schedule. Data provided by the insurance and takaful companies showed that doctors' and surgical fees rose significantly in 2014 when the Thirteenth Schedule was revised. Over the next two years, the fees stabilized according to the limits imposed under the Thirteenth Schedule. In December 2019, MoH announced that doctors' consultation fees would be liberalised. The fees were to be monitored pre- and post-liberalisation to assess the impact of the regulatory change on the overall medical cost.

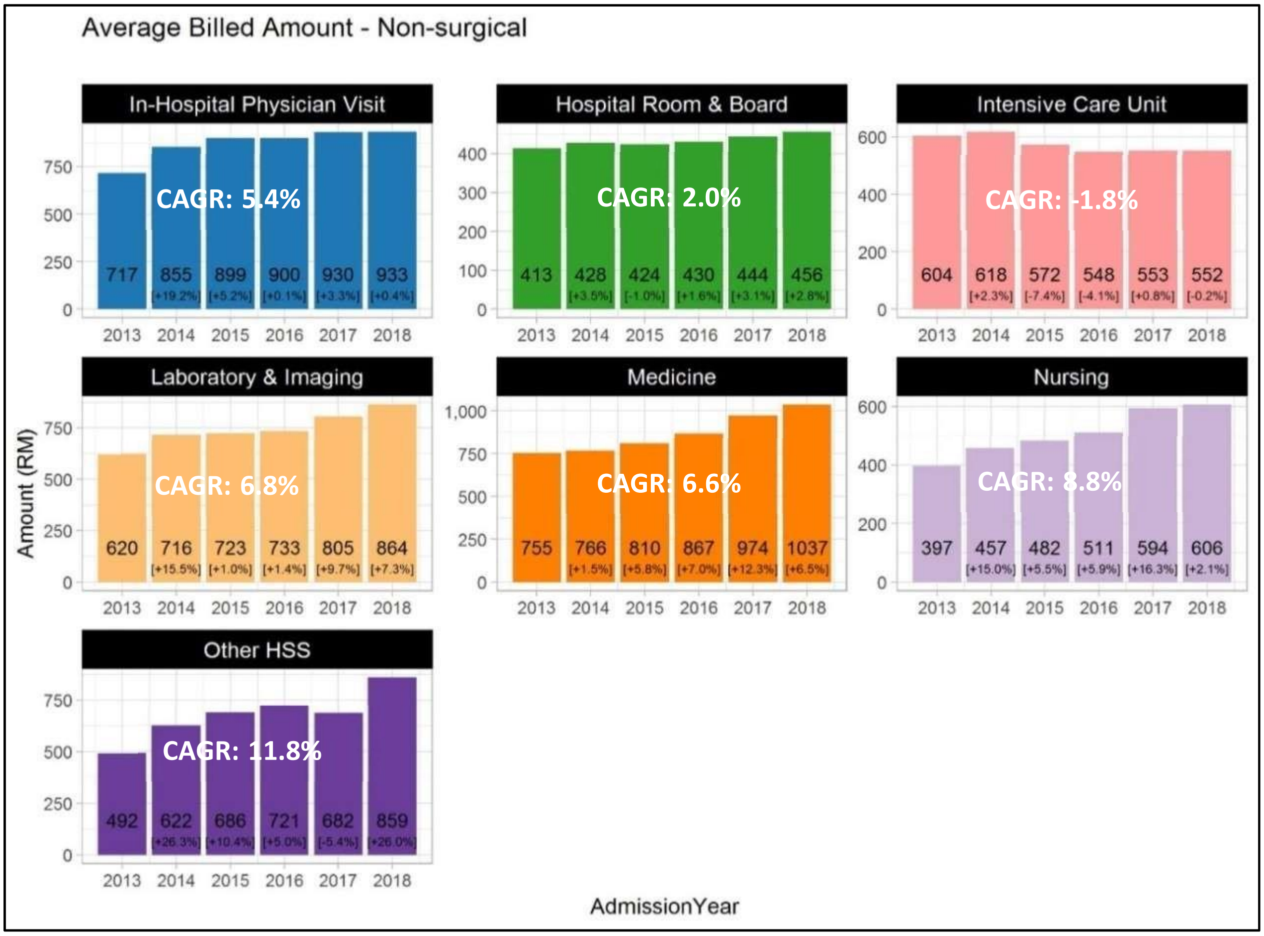
Rapid development in medical technology puts pressure on private hospitals to adopt these technologies to stay competitive. These technologies and equipment require substantial capital investment and as the innovative offerings are often imported from overseas, the cost escalation could be exacerbated due to the depreciation of the Ringgit. Hospital charges in 2015 showed a significant hike as the **Ringgit depreciated** the most in 2015 over the last five-year period against major foreign currencies such as the US Dollar, the British Pound and the Euro.

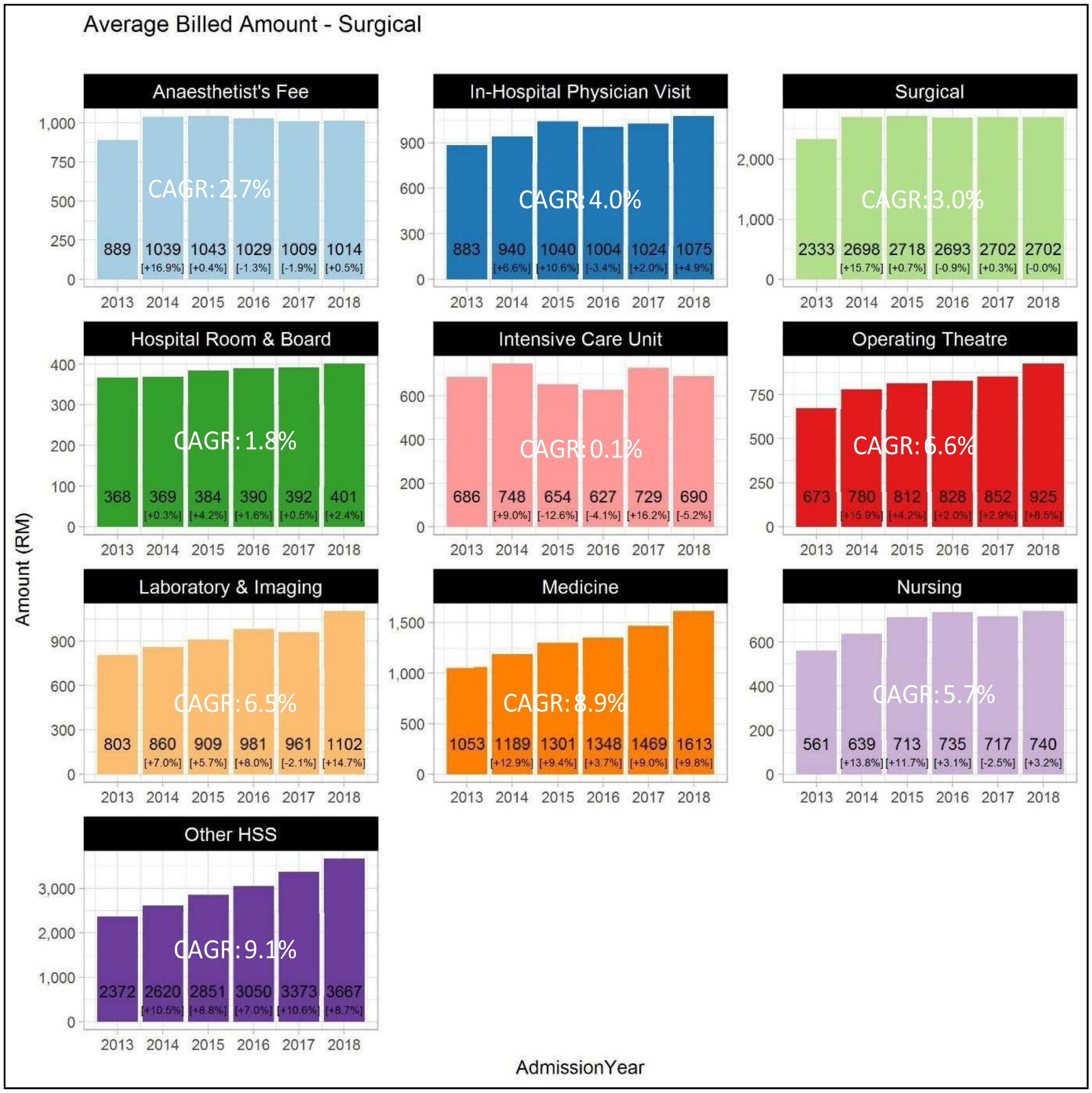
The average billed amount is categorised into benefit type as follows:



For non-surgical treatments, the breakdown of the average total billed amount for doctors' fees (i.e. in-hospital physician visit) was 20%, Room & Board (R&B) was 10% while Hospital Supplies and Services (HSS) was the highest cost at 70%. HSS covers laboratory & imaging, medicine, nursing and other miscellaneous items (Other HSS). For surgical treatments, doctors' fees (i.e. anesthetists' fees, in-hospital physician visits, surgical), R&B, operating theatre and HSS accounted for 32%, 4%, 5% and 59% of the average total billed amount respectively. ICU was only about 0.5% of the average total billed amount for both non-surgical and surgical treatments due to the low claim count of ICU cases.

The summary of medical inflation by benefit type for the non-surgical and surgical treatments are as follows:





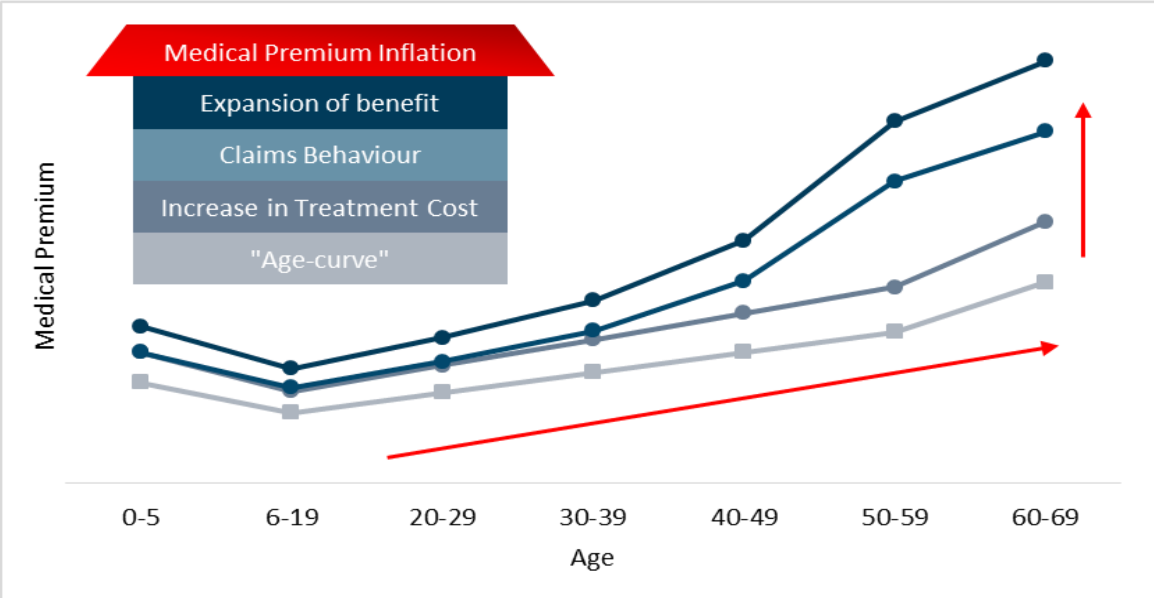
The above data show that the biggest contributor to the cost of care in a private hospital is the HSS, which accounts for 70% and 59% of the total bill for non-surgical and surgical treatments respectively. **HSS' annual increase is also higher than the other components of the bill.** Between non-surgical and surgical treatments, the CAGR of the average billed amount for HSS ranges between 5.7% and 11.8% from 2013 to 2018.

There is also some cross-subsidisation between the R&B charges (hospitals have stated that they have been kept low) and other charges, in particular the HSS.

In conclusion, the Thirteenth Schedule has, to an extent, helped control doctors' and surgical fees, judging from the plateau of medical inflation of these components since 2016. However, the overall medical cost is still on the rise, contributed by the by the HSS component. The HSS makes up 70% of the billed cost for non-surgical treatments and 59% for surgical treatments.

Medical Premium Inflation

Other than the increasing cost of care, medical premium inflation is driven by various factors. The chart below illustrates the key drivers of medical premium inflation:



Note: The above graph shows the impact of various factors towards medical premium inflation.

Medical inflation, or the year-on-year increase in treatment costs, directly affects the premium on HSI products as charged by insurers and takaful operators. Another factor is the aging effect of the insureds – the **"age-curve"** of premium rates. Regardless of medical inflation, premium goes up as the insured gets older. Higher risk of hospitalisation and longer recovery time as well as higher possibility of further complications are reflected by the curve for the premium table.

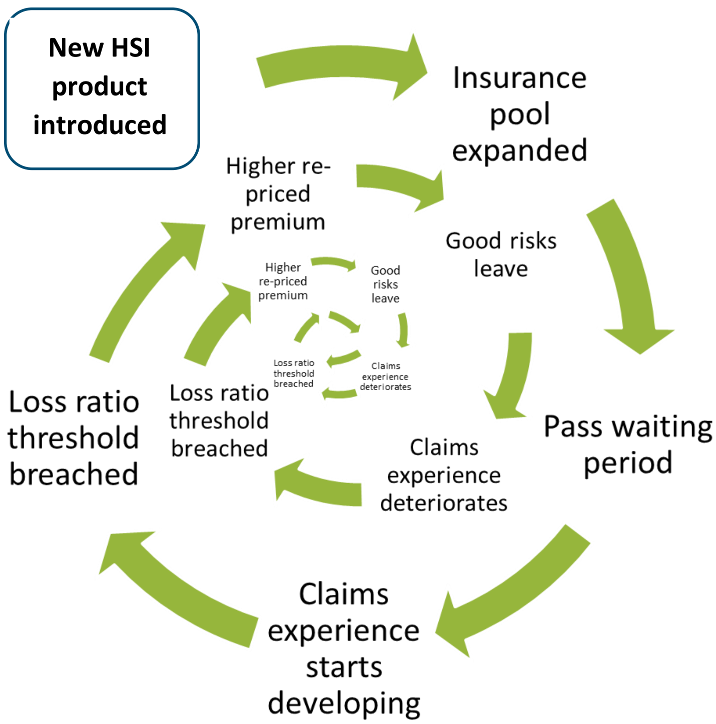
In addition to medical inflation and the "age-curve", the increase in medical insurance premiums is also due to **anti-selection by policyholders** throughout the life span of a medical insurance product. Typically, the life cycle of a medical insurance or takaful product starts with a competitively priced offering as it is introduced in the market. As time goes by, and more people take up the plan, the insurers and takaful operators will realise that the introductory price will not be able to cover the total claims cost in the now expanded pool. This is due to the rise in treatment cost and utilisation. As such, insurance and takaful companies will need to revise the products at a higher premium to maintain the sustainability of the pool.

At each re-pricing exercise, insurance and takaful companies would likely factor in future inflation of two to three years, so that they are able to pay out all claims in the next few years. Then, the product would need to be re-priced again. As the premiums become higher, the healthy insureds within the pool would likely seek coverage from other companies that offer lower premiums for the same or similar level of coverage. The pool will then shrink as healthier lives exit and there's no entry of new and younger policyholders into the pool. As a result, the claims experience of the pool will further deteriorate because the ones remaining are those who could not get new coverage from other companies due to their claims experience and/or pre-existing illnesses.

With the continuing cycle, the premiums will be re-priced each time at a yet higher level to reflect the pool's deteriorating experience as well as to build in an additional margin for further future expected inflation in respect of that pool. This vicious cycle will eventually lead to sustainability issues. Insurance and takaful companies will have no other option than to close the insurance pool and launch another new product to attract healthy insureds. Although insurance and takaful companies could invoke the portfolio withdrawal clause, this move is unfavourable as it would deprive policyholders of coverage. Furthermore, reputational risk can affect consumers' confidence in buying medical insurance products.

Although a re-pricing exercise may see healthy insureds exit their plan, insurers and takaful operators could, as a preemptive measure, offer them a new insurance pool with greater benefits coverage such as higher R&B limits and higher annual policy limits. The broader benefits coverage may come with higher but nevertheless still competitive premiums. Once this new insurance pool matures and claims experience develop, the cycle is repeated.

A typical HSI product re-pricing cycle is illustrated below:



Investment Link Policies with MHI Rider

As for Investment-Linked Policy (ILP) with unit-deducting medical rider, the increase in regular premiums due to re-pricing of medical rider is a little more complicated. When determining the level premium payable under the policy, insurers and takaful operators need to take medical inflation into account. These products can have a lifespan of more than 20 years but it is unlikely that insurers and takaful operators would factor in medical inflation for the full duration of the policy. This is due to several factors, the major ones being the uncertainty of future medical inflation and the competitive nature of such products.

For level premium ILP, any subsequent adjustment to the Cost of Insurance (COI) in the policy arising from medical inflation is likely to increase the initial level premium under the base policy. This increase is proportional to the years of cover remaining and the attained age of the policyholder. Thus, ILP with unit deducting riders, with longer unexpired duration of policy period would see their level premiums requiring top-ups or risk policy lapse. The adequacy of the level premium under the base policy will also be affected by the investment performance of the ILP funds (which is effectively pre-funding the future medical premium for the policyholder) relative to that assumed in the initial pricing of the level premium.

Beginning 1 January 2020, all insurers and takaful operators are required to conduct annual sustainability test for their ILP products and communicate its outcome to policyholders. If the product is deemed unsustainable for the remaining duration of the policy contract (i.e. the level premium needs to be topped up to ensure the policy does not lapse), policyholders have to be given the option of either topping-up their regular premiums, removing or withdrawing some of the riders or reducing cover or policy term. The test helps to keep policyholders informed on the sufficiency of their current premiums in covering the insurance. However, as multiple assumptions are included in the sustainability testing of the level premium, policyholders may not fully understand the results presented to them. As such, the sustainability test results have to be paired with further education and awareness programmes.

Medical Product Design and Consumers' Behavior

The increasing availability of medical insurance , the product design itself and the consumers' behavior also play a part in the increase in medical insurance premiums. The insured population has been growing and the principal products being purchased today are cashless and as-charged policies with high annual limits that are rarely breached. This is akin to offering a limitless "credit card" to spend on medical treatment as there is almost no immediate monetary ramification to insureds at the point of discharge. While this offers peace of mind to those insureds who want to hedge against high medical bills for serious illness, it could lead to unnecessary costs and over-consumption. This has been referred to as a "buffet syndrome" which ultimately increases the average claims per insured and subsequently leads to higher and more expensive medical insurance premiums.

Typically, an insureds preferred option when seeking treatment is look at hospitals that are perceived as premium. These premiums facilities are often more expensive with better hospitality and a comfortable environment. Given that the insurance policy will pay for all of the expenses, it's easy to understand why an insured prefers a premium facility. With the rising incidence of NCDs among Malaysians, it is expected that the utilization of private medical insurance would continue to increase further and fuel continued increases in the medical insurance premium.

As a consequence, the medical insurance premium would eventually become unaffordable to a large percentage of current insureds if no measure is taken to mitigate the rising medical costs and worryingly would discourage the younger and healthier population from purchasing insurance. When this group of people who are not insured subsequently require medical care, most would then turn to public healthcare facilities which are already over-utilised resulting in longer waiting times and increased financial burden to the government.

It is clear therefore that there are multiple factors contributing to the year-on-year increase in medical insurance premiums and these factors need to be assessed holistically without disregarding the impact of other factors. All stakeholders must come together to address the many issues that result in higher medical costs and higher medical insurance premiums.