

Suggested Answers for 2018 Econs H2 Prelims Paper 2

Essay Question 3:

3(a)	Explain how imperfect and asymmetric information can lead to market failure in the markets for healthcare services and healthcare insurance.	[10]
(b)	Discuss whether joint provision is the most appropriate policy to correct the market failure in Singapore's healthcare services.	[15]

Suggested approach to 3(a)

3(a)	Explain how imperfect and asymmetric information can lead to market failure in the markets for healthcare services and healthcare insurance.	[10]
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Question Requirement:

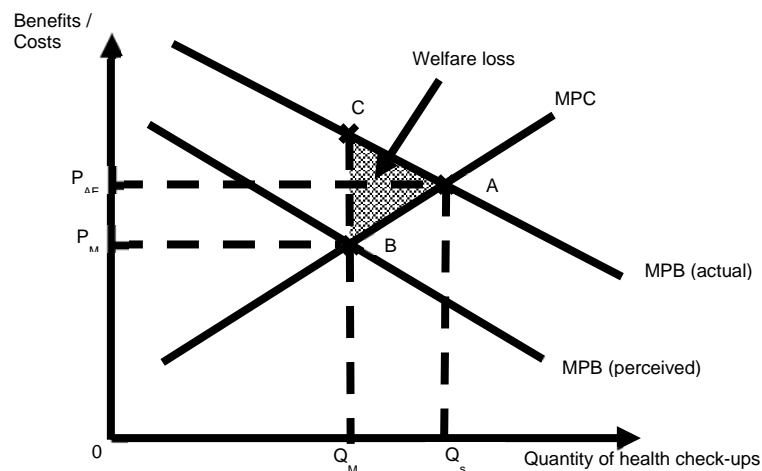
- Explain how imperfect information exists in 1) healthcare services market and asymmetric information in the 2) healthcare insurance market
- Explain how the sources can lead to market failures.
- Use of diagram(s) should help in explanation but not compulsory.

Introduction:

Market failure exists when resources are not allocated efficiently, therefore leading to welfare loss in the society. Imperfect information exists when the economic agents do not have perfect information about the product/service. Asymmetric information is when one party has more information than the other. There is imperfect information in the market for healthcare services and asymmetric information in the market for healthcare insurance. Therefore, without any form of government intervention, both markets fail.

Point 1: Imperfect information leads to under-consumption of healthcare services.

Economic agents may have **under-estimated the true private benefits** for themselves in the consumption of healthcare services, such as vaccinations, doctor consultations. For example, they may not see the doctor when they are sick if they underestimate the seriousness of their illness. As a result, the virus may spread to other healthy people close to the patient. In other times, the sick person may also over-estimated the costs of consuming the healthcare services, thereby refusing treatments and/or consultations. As rational economic agents, they will only consume healthcare services up to a point when their perceived marginal private benefit is equal to their marginal private cost. However, due to imperfect information, the true private benefits of the consumption of healthcare services is higher than the estimated marginal private benefit, there will be an **under-consumption of healthcare services, leading to market failure.**



As seen from the diagram above, the socially optimal level of consumption of healthcare services should be where the marginal private benefits (actual) equal to the marginal private cost, Q_s . However, because of imperfect information, the market level of consumption is only at Q_m , where the marginal private benefit (perceived) equals to the marginal private cost. As Q_m is lower than Q_s , there is under-consumption of healthcare services, therefore the market for healthcare services fails.

Point 2: Asymmetric information leads to market failure in the healthcare insurance market (adverse selection and moral hazard).

In the health insurance market, consumers have to pay insurance premiums when they purchase health insurance. These premiums are often linked to their health status/conditions. The better the health condition, the lower the insurance premium. Therefore, **some consumers may hide certain bad habits such as smoking or their true physical medical conditions from the health insurers, in order to pay lower premiums.** Without any form of intervention, health insurance companies may not be able to ascertain whether the information provided by the consumers are factual or not. Therein, this means that the consumers will have more knowledge about their own medical conditions than the health insurers.

As a result of such asymmetric information, the **health insurers may charge higher premiums for all consumers, therefore squeezing out the consumers who indeed have healthy medical status**, as they are less willing to pay for such high premiums since they are healthy. It is likely that the market may be left with those who have poor medical health, who are willing to pay the higher premiums if they view that the premiums can be offset by the sum they are insured of. This is a situation of **adverse selection**.

On top of that, after the consumption of health insurance, some consumers may be **more reckless in their consumption habits**, since they know they are insured. As a result, they may engage in more risky behaviour such as drinking and binge eating, as their medical costs can be claimed from the insurance companies. Insurance companies may end up having to fork out more insured payments, as a result of this moral hazard. This leads to wastage of resources.

Conclusion:

In conclusion, there is market failure in both markets for healthcare services and market for health insurance. The government will have to implement appropriate measures to reduce the imperfect information and asymmetric information in these markets, so as to achieve maximum social welfare and a socially optimal level of resource allocation.

Things to note:

- It is possible that students may explain asymmetric information in the consumption of medical services, where doctors have more information than the patients, hence leading to over-consumption of prescribed but not necessary treatments.
- **However, please take note that the focus of asymmetric information is still the result of adverse selection and moral hazard, therefore, it is still crucial for students to explain this in their answers.**
- In economics, the concept **“imperfect information”** entails **BOTH** under/over estimation of benefits/costs **AND** asymmetric information (where one party has more/less info than the other party).
- **Students are expected to explain BOTH situations even if question has only the term “imperfect information”.** This means that moral hazard and adverse selection should be included in the answers too.

Marking scheme:

Level	Descriptors	Marks
L3	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> • Explains both sources of market failure in the two markets [e.g. explain imperfect information in healthcare services AND asymmetric information in insurance market] • Max of 8m for answers that explain accurately how imperfect information AND asymmetric information lead to market failure only in the market for healthcare services. • Good and accurate use of economic analysis • Has sufficient support with good examples 	8 - 10
L2	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> • Either only explain one source of market failure in either markets (max 6m) [E.g. only imperfect information in healthcare services OR only asymmetric information in insurance market] • Explain either sources of market failures with some use of economic analysis but contain several inaccuracies • Attempts to support answers with some examples 	5 - 7
L1	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> • List the various sources of market failure without economic explanation. • Has no or minimal contextualised to either of the markets • Contains several gross inaccuracies • Does not have any examples used 	1 – 4

Suggested approach to 3(b)

(b)	Discuss whether joint provision is the most appropriate policy to correct the market failure in Singapore's healthcare services.	[15]
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Question requirement:

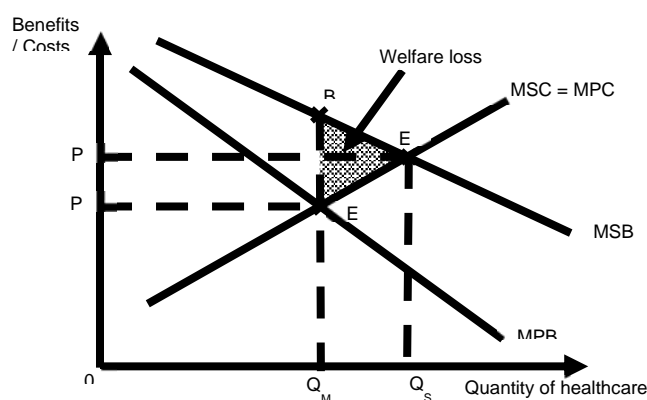
- Explain what it means by joint provision, in the context of Singapore's market for healthcare services
- Explain how joint provision can address the market failure in this market
- Explain the limitations/challenges about joint provision
- Explain how two other policies are required as well, which can address the limitations posed by joint provision.
- Synthesis and make a stand on the appropriateness of joint provision by taking into account the changing demographics also the short vs long-term sustainability.

Introduction:

Joint provision in the medical services means that medical services are provided jointly by the private sector and the government. In Singapore, there are public restructured hospitals such as Tan Tock Seng Hospital, Changi General Hospital as well as those private ones such as Gleneagles Hospital, Raffles Hospital. The intent of the Singapore government to intervene by joint provision is to correct the under-consumption and under-provision of healthcare services in Singapore's market. Whether joint provision is the most appropriate policy is dependent on whether it addresses the root cause of the problem and also the nature of the country itself.

Point 1: Joint provision is appropriate because it is able to correct the market failure in the healthcare market in Singapore.

Joint provision is able to address the problem of under-consumption of healthcare services. The private medical producers will only take into account their own marginal private benefits (mainly potential revenue earned by the provision of these services) and their marginal private cost (operating costs) and hence, will **only provide healthcare services, up till the market equilibrium level of healthcare, Q_m , which maximises their profits**. However, the socially optimal level of provision should be where marginal social cost (MSC) equals to the marginal social benefits (MSB). Therefore, the **government can intervene in by providing the remaining $Q_m Q_s$ level of healthcare services**. In this way, the provision of healthcare services can be at the optimal level, Q_s , where the social welfare is maximised. At the same time, joint provision also **increases the level of competition** among the healthcare providers. The higher level of competition should **encourage more competitive pricing** for the healthcare services, which can **increase the quantity of healthcare services consumed**.



In the context of Singapore, there are polyclinics and private clinics in the provision of primary healthcare services (such as doctor consultations for common ailments like influenza, fever etc.). In the secondary healthcare services such as X-rays, invasive surgeries etc, there are restructured hospitals and private hospitals providing such services. **If there are only the private healthcare providers in both the primary and secondary medical sectors in Singapore**, the private healthcare providers tend to **charge prices which may be unaffordable to the low-income families**. Moreover, these private providers tend to **cherry-pick by providing healthcare services in the sectors that are most profitable for themselves**, such as cosmetics surgeries, invasive surgeries, rather than outpatient treatment. This may result in a **gap for the provision of essential medical services**, especially for the low income families, **worsening the inequity issue in Singapore**. Therefore, **the need for government healthcare providers in both the primary and secondary sectors are to address the gap of under-consumption and for equity reasons**.

Point 2: Joint provision may not be so appropriate as it has its limitations in addressing the market failure problem

Joint provision may not be able to fully correct the problem of market failure as it is **difficult to accurately ascertain the amount of QsQm to provide**. In order to estimate accurately, the government will need to have accurate data and information. Some external benefits and costs in the provision of healthcare services are intangible in nature, for example, it is difficult to calculate the monetary value of a more productive workforce as a result of the provision of healthcare services. This makes the computation of MSB and MSC difficult. **[Evaluation:]** However, in the case for Singapore, this **limitation is not as severe as Singapore has systematic data collection**, therefore the Singapore government usually has sufficient and accurate data to estimate the amount of provision needed.

Sometimes, even with joint provision, the healthcare services could still be **too expensive** to the poor, discouraging them from the consumption of healthcare services. Therefore, the consumption of the healthcare services may still be under-allocated. In recent times, **healthcare costs have been rising due to a rise in demand for healthcare services across all sectors**. This is made worse, especially by the private healthcare providers cherry-picking the provision of medical services that are most profitable for themselves. There could also be the problem of **supply-induced demand** where the healthcare providers may have more medical knowledge and information than the patients, **resulting in the providers recommending certain treatments/surgeries to the patient, driving up the demand and hence, prices of such treatments**. Without any form of financial support from the government, the cost of the treatments could be too expensive for the consumers. Overall, **joint provision, while it can increase the provision of healthcare services, it is not sufficient to work on its own** to fully address the market failure in the Singapore's market for healthcare services.

Point 3: Subsidies is also needed to complement joint provision so as to improve accessibility for the poor.

There is a need to complement the use of joint provision with subsidies to correct the under-consumption of healthcare services in the Singapore's market. Subsidies can help to **reduce the cost of operating** and hence, **reducing the prices of the medical services**. Targeted subsidies given to the poor can also directly offset the out-of-pocket expenses for them. In Singapore, the poor / less privileged pay a subsidised consultation and/or hospitalisation fees. In this way, subsidies can help to resolve the unequal accessibility issue in the market for healthcare.

However, provision of subsidies is **not a long-term solution** as it is taxing on the government budget to finance such subsidies in the long term. This problem may be especially more severe as Singapore's population ages, and there will eventually be a growing pool of old and poor families. **[Evaluation:]** Singapore circumvented this limitation by providing **target subsidies instead of blanket subsidies**. This is done through **means-testing**, where the households from lower income will receive greater subsidies from the Singapore government.

The Singapore government also provides subsidies to help the low-income families through the private healthcare providers. This can be seen by how some private clinics offer subsidised consultation fees for pioneers and elders, holding the senior citizens' pass and the Community Health Assist Scheme (CHAS) card.

However, subsidy is only a **corrective measure**, rather than a preventive measure. As Singapore's population ages, the demand for and prices of healthcare services will only increase in the future. As such, it is **necessary to also complement** joint provision and subsidy policy with a **long-term preventive measure** such as **public education**, to promote healthy and active living through correcting the mind-set and behaviour of the consumers.

Point 4: Public education is a long-term preventive measure that is also necessary to correct the imperfect information in the market for healthcare services.

The under-consumption of healthcare services is also the **result of imperfect information among the public**. Some may have under-estimated the true benefits of regular health screening and check-ups while others may lack the knowledge or information about certain medical conditions, hence reducing their willingness to seek medical help/attention. Therefore, **public education is necessary to improve the level of information for the public, to correct certain misconceptions and mind-set**. Public education is actively done by the Singapore government to promote healthy living. This is seen by how community centres partner up with the Ministry of Health and polyclinics to offer free medical check-up for the public. In addition, the Singapore government also holds public campaigns, such as the "war against diabetes" and organises healthy outdoor games and activities for organisations and neighbourhoods. Posters are also put up by the Health Promotion Board to raise awareness of the risk of diabetes and ways to cut down our sugar intake. These public education efforts seek to improve the resource allocation of healthcare services in Singapore, through improving the level of information for the public. Although the outcomes from public education are uncertain and requires long-term implementation to see its effects, it is still necessary and appropriate for Singapore to **manage government's spending on healthcare services as our population ages in the next decade**.

Conclusion:

Joint provision is an appropriate measure to correct the market failure in the market for healthcare services in Singapore. Not only does it provide a cheaper alternative for the consumers, it also encourages greater competition among the healthcare providers, leading to better quality and variety of healthcare services. **As Singapore's population ages and human labour is our only resource, ensuring a healthy workforce is a priority for the Singapore government. This further necessitates the role of our government** in the provision of healthcare services. However, **joint provision cannot be the only measure** implemented by the Singapore government, as subsidies and public education also have to go hand in hand to ensure accessibility for all and long-term sustainability.

Marking scheme:

Level	Descriptors	Marks
L3	<p>For an answer which:</p> <ul style="list-style-type: none"> Provides balanced and well-developed argument on whether joint provision is appropriate or not Good and accurate use of economic analysis Is sufficiently contextualised to the Singapore's healthcare market, taking into account certain demographic changes within Sg 	8 - 10
L2	<p>For an answer which:</p> <ul style="list-style-type: none"> ONLY provides well-developed explanation on joint provision and how it works, including limitations EITHER provides a balanced argument but not adequately developed OR provides a one-sided argument but well-developed Some use of economic analysis but contain several inaccuracies Attempts to support answers with some examples 	5 - 7
L1	<p>For an answer which:</p> <ul style="list-style-type: none"> List the various government intervention but without much economic explanation. Has no or minimal contextualised to the Singapore context Contains several gross inaccuracies 	1 - 4

Evaluation:

Level	Descriptor	Marks
E3	<p>Good attempt to provide well-reasoned evaluation/opinions, supported with clear explanation/evidence</p> <p><i>E.g. While joint provision may help to solve the under-provision problem in the Singapore's healthcare services market, it cannot be the only measure implemented by the Singapore government, as subsidies and public education also have to go hand in hand to ensure accessibility for all and long-term sustainability. The long-term measure of public education aims to promote healthier living, reducing the demand for expensive secondary healthcare services, therefore managing the healthcare costs for Singapore.</i></p>	4 - 5
E2	<p>Some attempt to provide synthesis/conclusion but lack clear substantiation/elaboration</p> <p><i>E.g. Singapore should adopt a multi-pronged approach as each policy has its own limitations.</i></p>	2 - 3
E1	Listing of opinion/conclusion, without any substantiation	1