KOREA AND UK INCENTIVE SYSTEMS ON DRG-BASED PAYMENT REGIME

EUISIN JOUNG
National Health Insurance Service Research Institute, South Korea
E-mail: eui0503@hotmail.com

Abstract - Korea and UK have the incentive system under the DRG-based payment system, Vulnerable Zone Incentive and Market Forces Factors, to regulate the unavoidable costs from their geographical location differences. In UK, Market Forces Factors make providers use their resources more efficiently by paying the unavoidable costs occurred regardless of their effort. This is associated with reducing of patients unfair treatment services which by difference of location. Korea have also incentive system, Vulnerable Zone Incentive, to control the unavoidable costs from the location differences. However, Korean incentive systems are facing the efficiency issues are related to the public loss compensation in pilot project and the stakeholder problem. This investigation focuses on policy implications how to design the incentive of the DRG payment reform.

Keywords - DRG Payment reform, Unavoidable Cost, Inefficiency.

I. INTRODUCTION

Although Korea and UK have the same tool to solve their reimbursement problem, DRG-based payment system, they are facing the different healthcare environment at the present. While the UK has the Global budget and Capitation leading by government, Korean healthcare system is based on strong market competition condition and Fee for Service. DRG payment system was introduced to solve their each reimbursement problems in 2004 and 2009. The system is government or insurer pay for the medical service providers by fixed price to each disease groups. In this case, the price is determined at a national level. In particular, it has a purpose to reflect the cost in the most efficient provider. [Mason et al. 2011] The DRG payment system has the smaller autonomy of providers’ treatment than the Fee For Service does. But it seems to have the larger than the Global Budget and Capitation systems.

In Korea, there are two DRG payment systems. They were introduced in 1999 and 2009, respectively. In the former case, the system is Korean Prospective Payment System(KPPS) covered private providers but including only seven diseases. They are Caesarean section, Appendectomy, Lens procedure, T&A procedure, Inguinal & femoral hernia procedure, Uterine & Adenexa procedure for non-malignancy, Hemorrhoid procedure. In the latter case, Korean Case Payment System(KCPS) is being carried pilot project at the present. Pilot group are consisted of one private hospital and 39 public hospitals and target DRG is 552. Korea are facing financial risk in healthcare because the aging and the chronically are increasing faster and faster in terms of the demand factors. While, the factors of supply side are related to the absence of primary care and delivery system. More importantly, more than 93% providers are private under free market competition and the existing system, Fee For Service, have increase the unnecessary treatments and uncovered services unexpectedly. According to OECD, visit hospital per capita is the highest of 14.6 and average length of stay in hospital is 16.6 days which more than the average 7.3 days. This derived the reform of DRG payment reform so as to control treatment volume in the supply side.

In UK, under Global Budget and Capitation, they had also several problems. Under the NHS financial risk, they had to bear the waiting list problem, the improvement of service quality and efficiently using resources and so on. These were associated with their providers had to give services to the patients under fixed budget in supply side. This condition had the GPs and hospitals use their cost and resources inefficiently. In addition, it could be their patients accessibility of treatment service limited. In this situation, DRG system introduced by Healthcare Resource Group(HRG)1.0 to use benchmarking data between hospitals from 1992. And then, their payment method for the providers, Payment by Results(PbRs),was introduced in 2003-04. First, PbRs covered 15 HRG and expanded about 1,400 HRG in 2008-11.[DoH,2012] In 2012, The Health and Social Care Act(the 2012Act) reported the responsibility of the PbRs that it should support the delivery of good quality care for patients. [Audit Commission,2008] This means it makes patients improve accessibility and service quality by reducing the ALOS or expanding the treatment choice. Mean while, Department of Health transfer their authority the existing government-led system, SHA, PCTs to Monitor, NHS England, Clinical Commissioning Groups(CCG), etc in order to manage for more effectively. In response to these efforts, they increased the proportion of NHS expenditure about 28% for the PbRs in 2011, and the proportion of acute services provider income which covered by the PbRs was about 62%in 2012.
II. TWO INCENTIVE SYSTEMS

2.1. Market Forces Factor
In UK, under PbRs, they tried to support the tariff by adjusting the providers’ unavoidable costs from geographical location differences. The extra payment system, Market Forces Factors(MFFs), is the form of an index which has from a lowest value of 1.00 to a highest value 1.30. The providers in London had the highest the MFF value. It can be seen from Fig.1. It is because that they should have bear the larger building, labor, land cost, etc. than other location providers. This means the larger city providers have to have the unavoidable cost regardless of their efforts for saving resources.

![Figure1: MFFs of providers in 2012-11](image)

Containing allocating the budget on the costs variation of different location because they influenced by the population size and their necessity. Managing MFF more efficiently. MFF has been paid centrally by the DoH from been handled locally between 2005-06 and 2008-09. This contributed on the stability and the sustainability of compensation for unavoidable cost. This system was then raised about average 8% in the price. The components of MFF were Staff 54.9%, Medical and dental 13.9%, Building 2.7%, Land 0.4%, Other 28.1% in 2012. [DoH, 2012]

Audit Commission reported (2005) that MFF would support the inefficiency providers in the long-term, therefore we need to evaluate the MFF tool while regulating the avoidable cost. In 2008-09, MFF had been temporarily abolished to restricting the extra payment without the tariff.

2.2. Vulnerable Zone Incentive
In Korea, since the beginning of KCPS in 2009, the DRG-based incentive at 5% of the bundled payment has been given all providers participated in the KCPS. The participation incentive help the hospitals submit their data to the organization, HIRA, which set the tariff of DRG-based payment system. In other words, the incentive gave the all providers if just engaged the DRG payment reform. Since 2013, Korean government has emphasized the necessity of assistance for the public loss. This influence on the expenditure of incentive was extended to 15% of bundled payment in 2014. In this situation, four indicators had been added such as the average length of stay, drug costs saving, running of ICU and delivery room, the rate of the lower income groups.

Over the recent decades, Korean public hospitals have the important role in ensuring equity in access and providing service for the patients under competitive medical environment. Most private providers draw their supplies to the urban area at the moment because much of resources concentrate on the city. And Korea has mixed delivery system between the GPs and the hospitals. Meanwhile, the public hospitals have become target group of the DRG payment pilot project. A major challenge to reimbursement system changes in the Korean health system is dealing with resources more efficiently. However, there is disagreement for each goal of the pilot group between efficiency and public interest. Furthermore, in terms of the National Health Insurance fiscal management in Korea, the opinions were divided on the matter, how funded the budget between premium and tax. On the fiscal side, the incentives are financed by the premium from National Health Insurance System at the present. All of these background factors forced to give the extra payment for the more frail hospitals at vulnerable location. The KCPS was added an index on April in 2015, Vulnerable Zone Incentive(VZI), which is applied for 6 hospitals in a remote rural located. The definition of the Vulnerable Zone have implied the meanings of an insufficient supply on medical service. Regarding influential factors for it, the providers of vulnerable zone are relatively constrained using labor and capital by a geographical difference. Providers in Vulnerable Zone has been bearing their unavoidable costs from continuing provide their services in non-competitive region. On the hand, this provoked a different factor of affecting the vulnerable zone in public hospitals. Most public providers are the less competitive than the private providers due to have not to operate their hospitals flexibly. This rigid operation problem has also occurred the providers in urban area located as like vulnerable zone. Under the issues remained, VZI are facing the decision how to increase the expenditure for the future.

III. PROBLEM OF KOREAN SYSTEM REFORM

3.1. Pilot project
The reform of Korean reimbursement system is confront the expansion to all providers. However, a
large gap remains between the pilot groups and non-pilot groups with regard to perceive the incentive system in DRG reform as well. This is related to their two principles of the incentive system. [HIRA & Seoul Nat, 2015] First, during the pilot project, the incentive need to regulate the differences between a tariff of DRG payment system and a price of Fee for Service system. This regulation of the gap makes increase the payment accuracy for pilot group. Second, the incentive system have to related to the purposes of Korean DRG payment reform, such as an optimal volume control, reducing financial burden and so on. So as to effectively reform, the incentive system has to derive not only properly compensation at the present but also better compensation for the future.

There have been trade-off between two principles and more emphasized the first principle about the accuracy of payment. This means the incentive system should more carry out supplement function to improve the payment system and induce their compliance. Under pilot project, the second goal of the incentive system in KCPS has frequently overlooked. Concerning the future system, involving increased coverage for all providers with more efficiently payment system should consider the original intention not only as a means to secure a current level. Current discussions at the Korean reform, to pay the VZI point out the expansion to the most non-pilot group, private providers. However, as explained previously, Korea has a competitive environment compared to UK medical situation. 93% of Korean providers are private and 94% hospitals are based on Fee for Service system. Most human resources and capital gathered on the big cities and it makes increase the inequality of treatment provision. What to do for the public interest in this process, however, causes providers have waste their costs.

3.2. Efficiency issues
Korea has carried out the DRG payment reform which aim is the control of treatment volume and budget by inducing the providers use their resources more efficiently. However, Korean delivery system between the primary and second hospitals is mixed. Doctors who employed in second hospitals and owned in primary hospitals are competing with each other. For seeking for their profit in strong market competition, Korean providers seemed to manage their resources enough efficiently. In this environment, another challenge will be the possible resistance of Korean private providers to restrict their free competition. Better collaboration need to, however, achieve in the area of efficiency concepts. In terms point out the purpose for the providers of the reform once again, Korean providers’ efficiency have to evaluate in terms of patients interest. UK also has the efficiency goal of their DRG payment reform. It is for the providers using their costs more efficiently, at the same time, the result of cost efficiently used is related to improvement that patients’ accessibility and service quality. Concerning efficiency, DRG payment system is excellent tool in itself but it have to design associated with the reform goal, involving all stakeholders interest such as the reducing of financial burden, the proper reimbursement.

IV. THREE ALTERNATIVES FOR INCENTIVE SYSTEM

4.1. Focusing on Vulnerable zone
In terms of drivers of effectively change, the incentive can consider three alternatives. First, giving the incentive to the vulnerable zone continuously what it is doing similar to the VZI. This can contribute to increase the compliance to the pilot groups but also all public providers. And, it is meaningful that the enforcement of the reform is extended to all providers to perform the role of public interest. But the alternative is still remained the problem, as concerned previously, which the DRG payment reform supports inefficiency. Hence, there has been the financial problem where the funding comes from and this associated with the purpose of the incentive. So far, the incentive system has been managed by receiving their funding from premium not tax. Supporting the public interest, the insurer can be resist the expenditure of their premium and claim to fund the incentive for pilot group by tax. And, the alternative does not meet with the goal of DRG payment reform because the investment of public loss in vulnerable zone can create regardless of using resources efficiently.

4.2. Focusing on urban area
Second, the extra payment of the DRG payment system gives the providers in large cities like UK. Focusing urban providers’ loss with unavoidable, it can be expect greatly to the expansion to private providers in cities especially. It is because that the more incentive seems to increase their income temporarily without delivery system, in special non-competitive providers. However, the case of public hospitals in vulnerable zone will not participate the reform. Furthermore, the dependence of the city and the inequality between vulnerable zone and non-vulnerable zone will be even bigger. The important problem of the alternative is the patients in vulnerable zone can receive unfair treatment more and more. In the long–term, this may the providers use their costs more efficiently but the effectiveness can be harm for the different stakeholder.

4.3. Mixing system
Finally, we can apply the incentive for all providers regardless of their location and this mixing system may satisfy the providers in participation the reform. However, this system gives double financial burden for the patients and insured, not only the government
and insurer because increasing the beneficiary. In this situation, the necessity of the Korean DRG payment reform is ambiguous because the reform only contributes to the payment accuracy for the providers at the expense of another stake holders.

CONCLUSIONS
Korea and UK have incentives in DRG payment reform and seemed to have the similar goals. To regulate the unavoidable costs, they start to have the incentive system in transitory. However, the incentive system of Korean DRG payment system is in a state of confusion because the incentive system has to work for accomplishing their two purposes at the same time. The goals are the increasing of providers’ compliance and to drive using costs more efficiently. Before involving the tariff with any regulating system, it is important to decide what kind of index use and how to evaluate the system. Such kind of that, the principle in UK that the result of the reform should be associated to interest of the patients and taxpayers is showing implications to the Korean policymakers of DRG payment system reform.

REFERENCES

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