Asian Bioethics Review (2019) 11:41–56
https://doi.org/10.1007/s41649-019-00079-1

ORIGINAL PAPER

Ethical Consideration of National Health Insurance Reform for Universal Health Coverage in the Republic of Korea

Yuri Lee[1,2] · Siwoo Kim[1] · So Yoon Kim[1,3] · Ganglip Kim[4]

Received: 28 June 2018 / Revised: 11 March 2019 / Accepted: 13 March 2019 /
Published online: 29 March 2019

Abstract

In the current era of the Sustainable Development Goals (SDGs), many countries are attempting to strengthen their health system and achieving Universal Health Coverage (UHC). The Korean National Health Insurance (NHI) system functions as a core element of health financing, contributing to achieving UHC by promoting public health and social security through insurance benefits for prevention, diagnosis, treatment, rehabilitation, childbirth, and health promotion. The Republic of Korea achieved 100% NHI coverage of the target population in 1989, 12 years after the introduction of the social insurance system. However, poor coverage of health services and lack of financial protection are major obstacles to achieving UHC. Therefore, the Korean government announced and implemented 'Moon Jae-in Care' in August 2017 to enhance the coverage rate of NHI by 70%. First, this study reviews the existing health insurance system in Korea from the perspective of health financing and UHC. Second, it analyses 'Moon Jae-in Care', based on the main framework of UHC. Third, it considers the ethical implications of these developments, with focus on the principles of equity, fairness, autonomy, and solidarity. Although the NHI reform is expected to propel Korean health care closer to UHC, many ethical, social, and political issues remain.

Keywords National Health Insurance · Universal Health Coverage · Republic of Korea · Sustainable Development Goals · Moon Jae-In Care

✉ Ganglip Kim
glkim@hanmail.net

[1] Asian Institute for Bioethics and Health Law, Yonsei University, Seoul, Republic of Korea

[2] Graduate School of Public Health, Yonsei University, Seoul, Republic of Korea

[3] Department of Medical Law and Ethics, College of Medicine, Yonsei University, Seoul, Republic of Korea

[4] Office for Planning and Coordination, Ministry of Health and Welfare, Sejong, Republic of Korea

Introduction

Among the health-related Sustainable Development Goals (SDGs), target number 3 'health and well-being for people' includes various sub-targets, such as infectious diseases, non-communicable diseases, maternal and child health, and injury prevention. Universal Health Coverage (UHC) is a core concern to the various sub-targets (Tangcharoensathien et al. 2015), as it functions as an umbrella encompassing various health-related sub-targets. UHC means that everyone has access to essential, safe, affordable, effective, and quality-ensured health services without any discrimination (WHO and World Bank 2017). UHC is a high-level target compared to other health-related targets based on the vertical approach, as it takes a horizontal approach that requires a long-term and systematic plan. It is only when patients receive appropriate health services at an affordable cost that society can achieve its health outcome goals.

The World Health Organization (WHO) advocates the importance of Health Systems Strengthening (HSS) in achieving health-related SDGs and UHC (WHO and The World Bank 2017). Based on a composite framework, HSS is both an input and output element, whereas UHC is an outcome of this process, resulting in the ultimate impact of achieving the health-related SDGs. In this framework, there are six building blocks of an effective health system, that is, leadership and governance, health financing, health workforce, medical products and technologies, information and research, and service delivery. The outputs are responsiveness, efficiency, fairness, quality, and resilience (WHO 2017).

Among the six building blocks, 'health financing' can be a key policy instrument in improving health status and reducing health inequalities when its primary objective is to facilitate universal coverage by removing financial barriers to access, and preventing financial hardship and catastrophic expenditure (Kutzin 2013). Health insurance, which is a major health financing mechanism, prevents the risk of overspending on healthcare by equally sharing the burden of health care expenses and providing adequate insurance benefits (Saksena et al. 2014). It ultimately promotes health and social security of individuals by redistributing income. Thus, HSS is essential for achieving UHC, and the role of health financing, including health insurance, is very important in HSS.

Since the beginning of the MDGs and continuing into the SDGs era, many countries have set UHC as a national health goal; however, countries are progressing at hugely different rates. A study (Stuckler et al. 2010) on the global progress of UHC in 2009 showed that only 75 out of 194 countries have legislation mandating UHC, and among them, only 58 meet certain accessibility, quality, and outcome criteria in health services. This study selected Korea, together with the UK and Germany, as a model country for achieving UHC, and performed a case review. Another study (Sachs et al. 2017) developed a UHC Tracer Index, using statistical data regarding the SDGs indicators published by the United Nations (UN), and showed results by country, ranging from 33.6 to 94.6 on a scale of 100. Korea recorded a relatively good result of 90.5 points.

At 7.2%, Korea's health expenditure is lower than the Organisation for Economic Cooperation and Development (OECD) average of 8.9%; however, considering life expectancy of 82.3 years and an infant mortality rate of 3 per 1000, it can nevertheless be assumed that Korea has a good health system (OECD 2016). There is indeed a high degree of freedom of choice for healthcare providers, short waiting time, and world-class quality of treatment and care for acute diseases (OECD 2012). Thus, it may seem

that Korea succeeds in providing high-quality health services, at a relatively low level of spending. This achievement, however, comes at a cost; at 63.4%, the rate of health service coverage is insufficient, and the rate of out-of-pocket health expenditure is 36.8%, exceeding the OECD average of 20.5% (Kim 2017). The proportion of catastrophic health expenditure has risen from 1.6% in 2000 to 4.5% in 2015, resulting in about 440,000 middle-class households falling below the middle-class level, which is six times the OECD average of 0.7% (OECD 2016).

In Korea, the issue of reinforcing the benefits and financial coverage of the National Health Insurance (NHI) is a repetitive one, especially for the underprivileged population (Lee et al. 2012). In August 2017, the Korean government announced NHI Reform 'Moon Jae-in Care' to increase the coverage rate to 70% by 2022 (Ministry of Health and Welfare 2017a). The fact that the current government takes this reform very seriously is apparent in the inclusion of the president's name in the reform. Although the NHI Reform is a step forward on the road to UHC, many ethical, social, and political problems remain.

The purpose of this study is to review the existing NHI system in Korea from the perspective of health financing and UHC. Second, the study analyses the NHI Reform 'Moon Jae-in Care' based on major components of UHC. Third, the study elucidates the ethical implications of the reform.

National Health Insurance System in the Republic of Korea

Health Financing Perspective

According to WHO (2010), health financing has three components: first, sufficient funding (Kwon 2011); second, a financial risk sharing system that pools financial resources across population groups; and third, a financing governance system supported by relevant legislation, financial audit, and public expenditure review, along with clear operational rules to ensure the efficient use of funds. This study analyses the NHI system of Korea based on these three factors of health financing.

First, raising revenue in the Korean NHI system is mandated as social insurance, comprising 85% (47.6 trillion won; 43.2 billion USD) of the insurer's premium collection, 12.6% (7.1 trillion won; 6.4 billion USD) of government subsidy and other income. In relation to the premium, the monthly contribution of the employee is determined based on monthly salaries, which are shared equally by the employee and employer. Insurance premium for the self-employed is calculated based on scores for income, property, gender, age, automobile, etc. NHI revenue has grown to 7.1% over the past 3 years and the premium rate increased by 0.9% in 2016 (Ministry of Health and Welfare 2017b).

Second, the Korean Ministry of Health and Welfare (MOHW) suggests the direction of health insurance policy, manages, and supervises the system, while an affiliated organisation, the National Health Insurance Service (NHIS) manages the eligibility of the insured, imposes the insurance premium, and refunds insurance fees. NHI is mandatory for all people and designates all health institutions obligatorily. Every individual must enrol and is assigned to a designated health institution by the government, which is the single insurer and operates as a whole. After the unification of

multiple health insurers in 2000, health insurance financing oscillated between red and black; however, it has come into the black recently (the reasons for this will be discussed below). In 2016, total income was 52,633.9 billion won (47.849 billion USD) and total expenditure was 52,248.3 billion won (47.498 billion USD), with surplus, of 3856 billion won (3.505 billion USD) and accumulated savings of 20,656 billion won (18.778 billion USD).

Third, Health Insurance Review and Assessment Service (HIRA), an affiliated organisation of the Korean MOHW, examines and evaluates the payment fee, as a purchasing organisation. The health institutions apply a prescribed insurance benefit scheme, and its payment system is based on fee-for services (FFS) for both inpatient and outpatient health services, regardless of the type of health care providers. It also has a diagnosis-related grouping (DRG) system, which groups similar inpatient treatments and sets a price that includes a certain process of treatment. With regard to health institutions, the per-diem payment system and Pay-for-Performance (P4P) are applied by evaluating the quality of healthcare. Every individual pays insurance premium to the NHI, and healthcare providers receive insurance payment according to healthcare costs. The healthcare institutions request payment from the insurer, which makes the payment after an examination. The enrolled individuals receive health services from healthcare institutions and make some co-payments for uninsured services (Table 1).

Universal Health Coverage Perspective

UHC consists of three axes: scope of the target population, scope of health services, and financial protection. To achieve UHC, it is necessary to increase the number of insured and reduce the number of non-insured, increase the coverage of insurance benefits, expand the scope of insurance payment services, ensure quality of health care, and decrease the burden of payment by increasing coverage. An assessment of the NHI of Korea according to these three components of UHC is as follows.

First, the population coverage reached 100% in the 12 years since the introduction of the NHI as social insurance in 1977 (Kwon 2009). As of December 2016, 50.76 million (97.1%) of the population are covered by the NHI, while 1.15 million (2.9%) people receive medical aid owing to lack of financial means (Park 2017a). The NHI includes Korean citizens staying overseas for long durations and foreigners residing in Korea. According to the National Health Insurance Act and its subordinate regulation, overseas Korean citizens and foreigners residing in Korea are considered to have employee status. Their dependents are also registered with the NHI and even if they do not work, they will continue to be covered if they live in Korea for a period of 3 months or more, or are expected to live in Korea for the period covered by their visa. As of 2016, there are 812,000 foreigners covered by the NHI, which illustrates its comprehensiveness.

Second, the number of health insurance claims has increased continuously since the introduction of the NHI. In 1977, the number of claims for health insurance benefits was 884,000, which increased to 141.48 million in 1990, 800.08 million cases in 2005, and 1353.85 million cases in 2015. Simultaneously, the total health insurance benefit payments recorded 4.5 billion won (4.18 million USD) in 1977, 190.32 billion won (176.79 million USD) in 1990, and 17.99 trillion won (16.35 billion USD) in 2005 (Lee and Park 2017). As of 2015, health insurance benefits in Korea accounts for 63.4% of the total health care services and about 75–90% for severe diseases in the population.

Table 1 Korea's National Health Insurance System: components of health financing

Components of health financing	Concept	Korean National Health System
1. Revenue raising	· Core financing source · General taxation, mandated social health insurance contributions, voluntary private health insurance contributions, or out-of-pocket payments	· Mandated social health insurance as social security · Contributions collected by the insured cover 85% of the premium and governmental subsidy covers 12.6% · Employers multiply the insurance premium rate with monthly salary, while residents must quantify their level of income, properties, and automobiles
2. Pooling	· Accumulating revenue to spread risks across population groups · Single pool or competing multiple pools · Voluntary or compulsory pool membership	· National Health Insurance Service (NHIS) manages the eligibility of enrolee, imposes insurance premium, and repays insurance benefit payment as a single insurer · Annual negotiations between NHIS and representatives of provider groups · Every individual is mandatorily registered and healthcare institutions are also designated mandatorily
3. Purchasing	· How pooled funds are channelled to pay for the service · Strengthening purchasing and resource allocation to improve efficiency and equity of the health system	· Health Insurance Review and Assessment Service (HIRA) examines the insurance benefit payment and evaluates the appropriateness of the payment · Fee-for-service (FFS) covers 93%, DRG 3%, per-diem 5%, Pay-for-Performance (P4P) 0.07%

The covered benefits include diagnosis, test, treatment, surgery, and rehabilitation as well as drugs and medical supplies, and cash payment (2.3%; 1.2 trillion won or 1.09 billion USD) to pay for appliance for the disabled and examination during pregnancy and childbirth.

The range of benefits are set out according to a negative list system, where even unlisted illnesses may be covered. This negative list system applies when a patient pays for the full cost of the treatment that is not covered by the NHI. There are three types of uninsured services. First, therapeutic uninsured services are innovative procedures applied for the diagnosis and treatment of diseases. Examples of these 'listed uninsured services' are Da Vinci Robot Surgery and extracorporeal shock wave therapy, and 'standard uninsured services', such as ultrasound therapy and MRI diagnosis, which are included in insurance benefit but different coverage standards apply. Second, regulated uninsured services, such as non-standard room expenses and fees for issue of medical certificates, are services not covered by insurance due to particular regulatory provision. Lastly, 'selective uninsured services' are not included as they relate to elective non-therapeutic procedures, including beauty and cosmetic surgery, and gold crown dental filling. As of 2014, total expenses from uninsured services are 11.22 trillion won (about USD 10.20 billion) (Shin 2017). Therapeutic uninsured benefit takes up 54.6% of this budget; regulated uninsured services take 32.9%, and selective uninsured services take 12.3% (Kang 2018).

Third, financial protection aims to prevent financial hardship by providing affordable health services, and avoiding household bankruptcy due to catastrophic financial

burden. The total health expenses borne by individuals include the health insurance premiums, co-payment of insurance benefits, and the uninsured services. As out-of-pocket payments (OOPs) are defined as direct payments made by individuals to health providers at the time of service use (WHO n.d.), OOPs include both uninsured service and co-payment. When the National Health Insurance System was introduced in 1977, the rate of OOPs was 87.2%; however, it fell to 68.6% in 1987, 52.4% in 1997, and 38.0% in 2007 (Jeong 2011). There has been no significant reduction in OOPs since then, which was 36.8% in 2015. Of the average total health expenses of a person, the NHI covers 63.2%, uninsured service takes up 17.1% and the remaining 19.7% is co-payment (Shin 2017).

In the case of co-payment by a patient, inpatient care has a fixed rate of 20% of health benefit cost, while outpatient care has a rate of between 30 and 60%, depending on the type of health institutions. As of 2015, the burden of drug cost is 36.8%, nearly double the OECD average of 20.3% (OECD 2017), and secondary health providers prescribe 40–50% drugs for minor illnesses. To prevent excessive patient burden and expand the scope of health services, the NHIS (which is responsible for the management of NHI) reimburses 2 million won (1818 USD) to the fourth and fifth quintile income groups, 1.5 million won (1636 USD) to the second and third quintile groups, and 1.2 million won (1090 USD) to the first quintile group. In addition, the special deduction system reduces patient burden by billing only 5% of OOPs for serious diseases such as cancer and 10% for rare diseases. However, these schemes have been criticised as the amount of government subsidy is small, and they are applicable only to insurance benefits.

In 2015, OOPs were 36.8%, which is significantly higher than the OECD average of 19.5%, and imposing a significant burden on vulnerable populations. In addition, the rate of catastrophic health expenditure (to be understood as 40% of disposable income of a household spent on health expenses) was only 1.6% in 2000 but increased to 4.5% of total households in 2015. OOPs have a strong relationship with catastrophic expenditure and poverty (Xu et al. 2003), as they aggravate the financial burden of low-income groups (Lee and Shaw 2014). (Table 2).

Success and Failure of the National Health Insurance System

The greatest achievement over the past 40 years, since the introduction of Korea's NHI, is the expansion of coverage for the target population. The key success factors of Korea, one of the representative countries that achieved UHC within a short period of time, are as follows. The first is changes to the socio-economic conditions. Korea has successfully achieved rapid economic growth by successfully implementing the 5-Year Economic Development Plan (Yoo 2008). There was a strong public demand for health insurance in 1987, and the establishment of the NHI was a promise made during the presidential election. The second factor is the design of health insurance scheme. At launch, health insurance began with low levels of contribution, benefits, and reimbursement owing to the poor financial condition of the government. The current NHI system is the result of expanding coverage systematically, keeping in view individuals with relatively less understanding of the social insurance mechanism. The third contributing factor is the development and implementation of a strategic policy for health insurance. The government imposes mandatory participation, as legal obligation for

Table 2 Korea's National Health Insurance System by components of Universal Health Coverage

Components of UHC	Concept	National Health Insurance System		Quantitative evaluation[3]
		Before reform	After reform Moon Jae-in Care	
1. Target population	Who is covered? → Everyone (universality and equity)	·Achieved National Health Insurance (NHI) in 1989, after introduction in 1977 ·The insured under the NHI: 97.1% (including approximately 812,000 foreigners) and Medical Aid: 2.9% ·Overseas Korean citizens and foreigners residing in Korea included	·No reform occurs ·Target population remains 100%	Population covered by healthcare 100% (as is)
2. Coverage of health services	Which services are covered? → Access to a good quality of needed services	·63.4% of benefit coverage from total health services (75–90% for major illness)[1] ·Diagnosis, test, drugs, medical materials, treatments, surgery, preventive care, rehabilitation, hospitalisation, nursing, and transportation ·Negative list system for listed uninsured benefits, standard uninsured benefits, restricted uninsured benefits, selective uninsured benefits	·Shifting listed uninsured benefit to insurance benefit ·Abolishing selective treatment in regulated uninsured benefit, reduce burden in high-level wards, and nursing care services ·Increasing insurance coverage by 70%	Health insurance coverage rate 63.4% (2015) → 70% (2023)
3. Financial protection	What do individuals have to pay out-of-pocket? → No one faces financial hardship or impoverishment by paying for necessary services	·Out-of-pocket payments (OOPs) 36.8% (uninsured benefit 17.1%, OOPs 19.7%) in 2015 (OECD average 19.5%) ·OOPs 20%, outpatient 30~60%, general drug 36.8%, severe drug 40~50% among total health expenses ·Ceiling system of OOPs and benefit coverage extension of rare diseases ·Experience rate of catastrophic health expenditure[2] 4.5%, 440,000 households fall from above middle-income to below middle-income	·Keeping average premium rising rate of 3.2% ·Changing all listed uninsured benefits and some standard uninsured benefits as insurance benefits ·Reducing the burden of OOPs by adjusting the ceiling system of OOPs ·Adopting a support system for catastrophic health expenditure	Total health expenses, rate of OOPs 36.8% (2015) → 30% (2023)

[1] The coverage rate of health insurance refers to the proportion of health insurance borne by all hospitals and clinics

[2] The experience rate of catastrophic expenditure is when more than 40% of a household's income is spent on health care expenses

[3] Achieving UHC is more likely as the population under healthcare coverage and the health insurance coverage rate is closer to 100%, and the rate of OOPs in financial protection is closer to 0

both insurers and providers, and insurers must provide NHI services. The step-by-step expansion of coverage took into careful consideration the insured's ability to pay and the insurer's administrative capacity. By gradually expanding population coverage, Korea established the NHI 12 years after the introducing the health insurance system. Finally, the fourth factor is the use of information technology. In Korea, the government operates the residential identification system. This technology makes efficient management possible, enabling eligibility criteria management, imposition, collection, benefit management, claim review, etc.

Despite great progress in the system in the past 40 years, some limitations remain. First, although population coverage is comprehensive, there is insufficient benefits coverage. Although the medical necessity is recognised, there is insufficient uninsured benefit, such as not paying from health insurance owing to inadequate health insurance financing; thus, attributing to listed uninsured standard and non-standard services. Therefore, the coverage is limited in depth. Second, there is a lack of protection mechanism when the rate of catastrophic health care expenses is high. The financial burden on the low-income class registered in the NHI is substantial, and households often go bankrupt from health care expenses. The low-income population has limited access to insurance owing to high OOPs and uninsured services. In addition, while many higher-income individuals have private insurance since the amounts covered by NHI are limited, the low-income population does not have the capacity to buy private insurance. Third, the financial stabilisation system of health insurance is insufficient, and it is necessary to consider diverse financial resources. The current NHI fund depends on premiums and government subsidies. As the burden of disease (and associated medical needs) increases with ageing and non-communicable diseases, the financial resources should also be increased. Some countries are introducing an automatic alteration system that raises or lowers insurance premiums depending on the financial situation of the NHI. In addition, the tax on alcohol, carbonated beverages, and junk food, which causes obesity, can be considered as a source of health insurance financing.

National Health Insurance Reform 'Moon Jae-in Care'

The government has spent an average of 500 billion won (466 million USD) annually and about 36 trillion won (32 billion USD) in annual health insurance to expand the coverage of health insurance from 2005 to 2017. However, the coverage rate of health insurance, which refers to the rate of health insurance in total health expenditure, did not improve significantly, from 64.5% in 2006 to 63.4% in 2015 (Kang 2018). This is because health insurance benefit payments rose by 215 to 10% during 2006 to 2015, while payment for uninsured services rose by 272% over the same period (Kim 2017). If the government expands the list of health insurance benefits, health institutions tend to increase uninsured services that are not affected by the insurance scheme. This is a structural phenomenon due to low insurance benefit payment. The current cost of health services covered by the insurance is only 87% of the original cost; therefore, the health institutions lose out when providing insurance covering services. This contributes to the cycle of poverty owing to high rates of uninsured services.

In this context, the current government's policy is to reduce OOPs and provide appropriate service payment to healthcare institutions, by including all uninsured services into insurance benefit packages and ensuring a coverage rate of 70%. The uninsured services that Moon Jae-in Care tries to incorporate relate to essential healthcare. It includes 3800 listed uninsured benefits of 800 services that have been proven to be effective and 3000 treatment materials. Second, it includes 477 uninsured services among standard procedures with limited treatment, consumables, and implications. Third, healthcare expenses could be reduced by abolishing selected healthcare treatment among the three uninsured services systems, and applying health insurance to 2 to 3 person wards to eliminate expenses for upper-grade wards and expanding integrated nursing and care service. In addition, to reduce the burden of low-income underprivileged population from OOPs, the following services should be partially or fully covered by the NHI: dentures and implants; inpatient treatment for individuals less than 15 years of age; subfertility treatment; and disability aid. Developing a ceiling system for OOPs is expected to reduce the burden of low-income underprivileged population, along with institutionalising supporting projects for all types of diseases that lead to catastrophic health expenses.

Lastly, appropriate payment should be discussed to prevent the loss of health institutions in the process of including uninsured services as insurance benefits. Moreover, the ceiling for OOPs is set higher for high-income individuals and is adjusted depending on the income of the fourth and fifth income group quintiles of 1.5 million won (1363 USD), the second and third income group quintiles of 1 million won (909 USD), and the first income group quintiles of 0.8 million won (727 USD). Furthermore, providing subsidy of just under 20 million won (18,181 USD) per year could strengthen the support system for emergencies and catastrophic healthcare expenses for patients with lower than 50% of the income level and receiving inpatient and expensive outpatient treatments.

Moon Jae-in Care attempts to improve access to healthcare by reducing the burden of health expenses through health insurance reform, adequate health services without limitations of standard insurance benefits, and ensuring appropriate insurance benefit payments in order to ensure that health care institutions operate efficiently. Analysing Korea's previous NHI system and Moon Jae-in Care, according to the three components of UHC, shows that the target population remains 100%; the coverage rate of healthcare services has increased from 63.4% to more than 70%, and financial protection has decreased the OOPs rate from 36.8% to less than 30%. (Table 2).

Ethical Consideration for Universal Health Coverage

Although NHI Reform is expected to take Korea's health care closer to UHC, there some ethical considerations that are discussed in this section.

Expanding Coverage to Uninsured Services

UHC means that all people receive the health services they need without suffering financial hardship, that is, the concept of universality and equity (Rodney and Hill 2014). The WHO has proposed service coverage and access, financial protection, and non-discrimination as the major action domains for achieving UHC from the

perspective of equity, among the five components of the health care system (WPRO 2016). The impact of health insurance reform on improving equity may be evaluated as follows.

First, it will expand the coverage of health services by primarily investing in the underprivileged population, such as the low-income group, the elderly, minors under the age of 15, and the disabled. However, while the target of health insurance reform includes uninsured services, and the listed and standard uninsured services are all included as insurance benefits, restricted and selective uninsured services will continue to burden patients.

Second, it seeks to reduce financial and non-financial barriers to access. Reinforced statutory health insurance will reduce OOPs for individuals, minimising catastrophic expenditure. At the population level, it targets the underprivileged population and at the individual level, government subsidy could support those that cannot pay. However, there is scepticism as to how effective this catastrophic expenditure support system is likely to be. At present, the bottom 90% of Korea's income structure can fall into poverty owing to high healthcare expenses. This group is likely to expand if access to uninsured services is taken into account. In turn, reducing the burden of OOPs in uninsured services can reduce national OOPs and strengthen health service coverage.

Third, from the perspective of non-discrimination, the provision of coverage for uninsured services could violate the principle of universal health delivery, as the high-income group has more access to healthcare services. If uninsured service is included as insurance benefits, it could increase inequality, as the high-income group receives relatively cheaper healthcare services in proportion to their net economic value or income.

Lack of Attention for Primary Healthcare

It is estimated that 30.6 billion won (33.70 million USD) is needed to implement Moon Jae-in Care until 2022, and the government plans to increase subsidies every year and utilise the accumulated saving to expand the coverage of health services. Similarly, financial support is necessary to expand coverage, and it is necessary to consider the wisdom of channelling this finance into expanding services that are to be covered by health insurance.

As of April 2018, the proportion of total health insurance benefit payment by types of healthcare institutions is as follows: 11.8% of tertiary hospitals, 16.5% of general hospitals, 9.4% of hospitals, 9.3% of nursing homes, 20.6% of clinics, 5.6% of dental clinics, 3.3% of oriental medicine clinics, 22.7% of pharmacies, and others 0.8%. Although Korea has primary, secondary, and tertiary health delivery system, the rural population can receive health services at hospitals in metropolitan areas; however, even patients with mild diseases receive healthcare services from general hospitals, which create problems in the delivery system. There is a differential co-payment system imposing charges of 60% for tertiary hospitals, 50% for general hospitals, 40% for hospitals, and 30% for clinics; hence, there is no normalisation of healthcare service delivery.

Implementing the Moon Jae-in Care will accelerate the transfer of patients to general hospitals or hospitals located in metropolitan areas, as it will reduce the differences in health expenses. This can result in faster development of tertiary hospitals located in the

metropolitan area; however, hospitals in rural areas may face difficulties in providing services or have to lower the quality of health services. While there may be plans to exclude the policy on dentures and implants to reduce OOPs from 50 to 30%, and expand the fixed rate of health services among the elderly, there is no policy concerning primary health facilities in the Moon Jae-in Care. The Moon Jae-in Care should guarantee the coverage of healthcare services and reorganise the healthcare service delivery system by strengthening primary health care.

The NHI should compensate the examination fee and education fee of clinics classified as primary healthcare facilities. By investing the resources of health insurance reform into secondary healthcare facilities, hospitals located in rural areas could develop into acute, rehabilitation, and nursing care specific hospitals. In case of tertiary health facilities, such as teaching hospitals, patients with mild diseases should be reduced, while increasing healthcare expenses of serious patients, so that the hospital can focus on complex treatment. Although the Moon Jae-in Care considers financial accessibility to increase access to health services, reforming the healthcare delivery system is critical in that it can disturb geographical accessibility and healthcare delivery. Thus, it is necessary to establish an incentive structure to differentiate the functions of healthcare institutions and to normalise the healthcare delivery system.

Limiting Professional Autonomy

Korea's NHI system is a national establishment, and all health institutions are obliged to participate in health insurance. However, can the provision of all health services covered under NHI be justified? For a country that lacks egalitarianism as a social or constitutional ideology, different standards of healthcare service are inevitable. In many cases, it is difficult to prevent the use of new medical technology in a clinical setting, even in the absence of sufficient scientific proof. Such use may be directed as different purposes, like developing medical technology overall.

If reforms under the Moon Jae-in Care seek to include currently uninsured services, the health institutions need to bear the reduction in income, as they will be unable to impose fees for these services. In addition, the health providers cannot apply new medical technologies. Previously, when a new medical treatment was developed, it could be immediately used after going through the new medical technology evaluation system of the government. However, after the reforms, new medical technology can be used only when it goes through not only the new medical technology evaluation system but also the national insurance benefit examination process.

The adoption of new medical treatment and drugs as insured services may also be restrained due to concerns with the sustainability of health insurance financing. In this context, private practitioners argue that the health insurance reform violates the healthcare provider's independence and autonomy. Furthermore, the freedom of doctors to implement medical treatment based on professional judgment may be limited. In addition, if many uninsured services such as MRI and ultrasound scans are included as insurance benefits, medical use will increase and so will healthcare cost. However, the estimated cost is unclear, which may have radical effects on health insurance financing. It is necessary to review payment and reimbursement systems to minimise the losses of healthcare providers due to the health insurance reform.

Solidarity

The NHI, as a form of social insurance, is based on the principle of social solidarity. Health services should be covered within the scope of financial resources; however, as financial resources are limited, they should be used efficiently. Since Korea's NHI is based on a fee-for-service payment system and only the price of each treatment is controlled depending on the treatment delivered by the health provider, there is no mechanism to manage total health expense. When the uninsured services are included under Moon Jae-in Care, it is highly likely that medical use will increase. As of 2015, the average length of hospital stay in Korea is 16.1 days, the second highest among OECD countries, and is much higher than the OECD average of 6.9 days. The number of consultations per person is 16 cases, which is also higher than the OECD average of 6.9 days (OECD 2017). It is likely that the cost of ultrasounds, MRI, and expensive anticancer drugs will increase for all patients, regardless of the number of times the treatment is used. Various examinations are necessary based on the patient's disease condition and the frequency of treatment. After the reform however, it is unclear how conventional medical practice will be affected. In addition, the number of outpatient visits to the clinic may increase, and long-term hospitalisation at hospital-level healthcare institutions may increase. Although access to healthcare services is expected to improve, financial sustainability is a concern since reducing financial burden may lead to moral hazards and increase instability and inefficiency in the system (Park 2017b). Therefore, it is important to prevent moral hazards in order to minimise overspending in health financing (Sohn and Jung 2016). In terms of policy, it is necessary to strengthen the NHI's capability of evaluating insurance benefits.

Financial Sustainability

In order to enhance the coverage rate of NHI, financial input is crucial. Prior to the NHI reform, it has been anticipated that increase in elderly population and non-communicable diseases will result in the growth of NHI expenses, which could undermine the sustainability of NHI. The Korean National Assembly Budget Office estimated that USD 27.8 billion is required by 2023 to implement Moon Jae-in Care (National Assembly Budget Office 2017). To secure the budget, the government plans to expand NHI subsidy, impose a health insurance fee, and keep to the expenditure reduction measure by maintaining the average rate of increase in the health insurance fee at 3.2%.

However, the sustainability of the NHI is still questionable even with these measures. Large increase of health insurance fee will increase the use of healthcare services, so that overall expenditure can go beyond government estimates. Since payment is received by providers for the amount of services they provide, NIH only manages fee for each service but lacks control over the overall healthcare expenditure. The inclusion of non-insured services in this setting is likely to result in an increase in out-of-pocket payment due to increase in healthcare expenditure. If the use of healthcare services is inappropriately managed, it will only deepen the conflict between the government and the healthcare sector. In this context, there is a need to evaluate the fee structure by the Health Insurance Review and Assessment Service, to ensure sustainable health insurance finance needed to implement Moon Jae-in Care. From 2015 to 2017, Korean government invested accumulated amount of USD 32 billion to NHI System but the

result of coverage expansion policy was insignificant (Kim 2017). If Moon Jae-in Care does not succeed, it may lead to a loss of coverage that has been achieved over the years.

Discussion

This paper analyses the on-going NHI reform by the Korean government from the perspective of UHC implementation and the ethical considerations arising in the process. At present, when many countries are attempting to achieve health-related SDGs and UHC (Van Minh et al. 2014), particularly in health financing reforms (Tangcharoensathien et al. 2011), Korea's National Health Insurance reform offers some insights.

Korea's NHI has improved the accessibility of health services and health outcomes, and received global recognition for increasing life expectancy and reducing infant mortality rate. However, despite these achievements, the comprehensiveness of insurance coverage does not meet the OECD average, due to low premiums and low insurance payments. Perhaps the Moon Jae-in Care is the right direction for health policy, to advance UHC by expanding the coverage and comprehensiveness of services to prevent catastrophic health expenses. The reforms expand the role of the government and insurance to comply with the WHO Charter and the Alma Ata Declaration, and to align with people-centred healthcare. They also coincide with the right to healthcare in Article 25 of the Universal Declaration of Human Rights (UDHR) proclaimed in 1948 (Chapman 2016) and the right to health as a fundamental human right in the Korean constitution. Implementing health insurance reform will enable the state to meet its obligations in the right to health.

Recognising the difficulty in achieving 100% UHC, it is now a direction rather than a destination, and Korea's Moon Jae-in Care is a policy reform in the right direction in terms of UHC. As the target population is already under insurance cover since 1989, the reform focuses on service coverage and cost sharing, which ultimately affects the financial protection of the insured. OOPs at the point of service determine catastrophic expenditure on health, impoverishment, and the unmet needs of healthcare (Kim and Kwon 2015). UHC, the core component of the NHI reform, offers an ideal conceptual and philosophical goal; however, it is difficult to achieve 100% coverage of the target population, service coverage and cost sharing, and ethical considerations arise when deciding which direction to take. Especially in health financing, limited insurance coverage of services and high OOPs weaken the resilience of health systems by reducing the availability and affordability of health services.

The participation of representative stakeholders and transparent procedures will be important in deciding the scope of coverage and priority for a concrete action plan of implementing of Moon Jae-in Care, announced in 2017 and continuing until 2022. It would be easier to promote social engagement if there are institutional arrangements that allow the participation of key stakeholders such as citizens, healthcare providers and the government in decision-making (Oh et al. 2015). It is through engagement that social consensus, needed to successfully implement the national insurance reform, can be made.

Financial support is essential to implement the reform and strengthen insurance coverage. Although 3.06 billion won (2.78 million USD)—the estimated amount necessary for implementation—is theoretically sufficient, there is uncertainty. In addition, converting all existing uninsured services to health insurance benefits may still not be

enough to meet all needs that draw an ever-increasing pool of services. Therefore, there are many difficulties and challenges in achieving 100% comprehensive coverage. Some people may choose private insurance as an alternative to the problems of low health insurance coverage and high health expenses in the current national insurance scheme. There are about 35 million people with private insurance, making up 70% of the population, as of 2017. The monthly average premium for each household is estimated to be 230,000 won (USD 209) as of 2014, and the total health expenditure by household is 178,000 won (USD 161) on average (Seo et al. 2016). Certainly, a considerable amount is being spent on private insurance other than health services, medical drugs, disposable items, etc. Considering that the health insurance premium for each insured resident is 94,000 won (USD 85), they spend large amounts on private insurance premiums. Under this system, the health expenses are high but efficiency remains low. The government will be able to improve health equity by expanding the coverage rate of health insurance and gradual increase of health insurance premiums, which will reduce the need for private insurance. Moreover, National Health Insurance should enhance health insurance coverage and reduce catastrophic health expenses to ensure social security.

Conclusion

Korea has shown unprecedented progress, especially in the field of health, where it provides high-quality healthcare at low expense. However, the need for more comprehensive health insurance coverage has contributed to the government implementing massive health insurance reforms. Health insurance coverage for achieving UHC is complex because it has many components. It is not easy to design healthcare plans and health systems to satisfy all the components (such as covering the expenses and ensuring quality and accessibility of healthcare) simultaneously. For these reasons, it has been argued that ethical considerations are important in the journey towards achieving UHC.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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