Healthcare: Japan’s Case

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* This is a DRAFT paper, and it contains many Charts, figures and tables for information. My presentation at the workshop and the final version of my paper will specifically focus on the cases of physicians and nurses, in order to limit the scope of my paper, to save time for my presentation, and to save pages (especially charts and figures).

Abstract
This paper focuses on the healthcare sector in Japan. Some statistics show that Japan is faced with a shortage of workforce: healthcare practitioners are unevenly distributed between urban and rural areas; and Japan as a whole comes to require a quite large number of practitioners. However, another statistics show that the number of the immigrant workers remains very low and they cannot be the solution for the shortage of labor force. Currently, it is unlikely that the number of immigrant healthcare workers increases, because Japan’s healthcare sector has two major barriers for immigrant workers to enter and practice in Japan: qualifications/licenses that are provided after one's passing the national examinations, and fluency of Japanese that is not popularly spoken in the world but is required to practice in Japan. Even under the special bilateral arrangement of the EPA (Economic Partnership Agreement), which allows nurses from Indonesia and Philippines to practice temporally and provides them with chances to be qualified in Japan, there are very few foreign nurses who passed the national examination. The EPA arrangement contains the conflicting political interests concerning accepting immigrant workers. Sooner or later, Japanese government and ministries, especially the Ministry of Health, Labour and Welfare, have to decide whether it invites immigrant healthcare workers, and have to reflect the decision to their policies and regulations.
Introduction
Today, developed economies are equally faced with low competitiveness, high unemployment rate and aging population. As far as healthcare sector is concerned, a society of aging population requires more financial and human resource than ever. However, low birth rate (the major reason for ageing population) reveals that younger generation cannot supply enough financial and human resource to afford/support aged generation. Every developed economy has to tackle with the shortage of workforce. This paper focuses on Japan’s healthcare sector, and examines whether Japan accepts immigrant healthcare workers to tackle with staff shortage.

The first section of this paper outlines the profile of healthcare sector in Japan. The section first examines the sector’s position in the national economy, and followed by the outlines of labor market in the sector. The second section exhibits the migrant employment patterns, the current role of migrants, the evolution of migrant employment and immigrant employment patterns. The third section attempts to assess the effects of migrant workers on the recruitment, remunerations and retention. The fourth section outlines the Japan’s policies and regulations to find out the relationship between policies and migration. Recently, Japan has concluded bilateral agreements to accept foreign nurses. This section also examines the arrangements in detail and assesses its influence on migration. The fifth section attempts to discuss the alternative options and scenarios by focusing on the positions of the Ministry of Health, Labour and Welfare. The last section concludes this paper.

1. Industry Profile
In Japan, healthcare sector in Japan does not gain a big share in the national economy. The OECD Health Data 2011 said that Japan’s total expenditure on health is 8.5% of gross domestic product (in 2008). Although its amount has been steadily increasing in the last ten years, the share is relatively low if compared with other OECD member countries such as the United States (16.0%), France (11.1%), Germany (10.7%) and the UK (9.8%). People’s expenditure on health is also lower than other OECD countries. In 2008, Japan’s total expenditure on health per capita (PPP: purchasing power parity) was 2,878 US dollar and lower than the OECD average (3,101 US dollar). Pharmaceutical expenditure per capita (PPP) was 558.3 US dollar and it was also lower than the OECD average (939.5 US dollar).

Although healthcare sector is relatively small in terms of price/value, it is a growth market in terms of labor/workforce. For example, the number of employed
person in the health care sector has been increasing, while that of employed person is shrinking in other sectors and total, especially after the Lehman Crisis (Chart 1). Of all the industrial sectors, health care sector and ICT sector are the growing labor markets (Chart 2). The number of un-fulfillment of job offers in healthcare sector has also increased for these five years, while those of other sectors and total have decreased (see Chart 3). It shows that the demand of workforce in this sector grows more rapidly than the supply.

If we look into health care sector in detail and examine the number of registered physicians, dentists and pharmacists in Japan, we find that each number is increasing and the number of foreign practitioners occupies less than one percent in each practitioners (Chart 4 to 6). Similar trends can be seen in the cases for nurses, midwives and public health nurses: the number of each subsectors increased in both full-time and part-time (Chart 7 to 9).

If we look into the geographical distribution of practitioners in the cases of physicians (Figure 1) and nurses (Figure 4), we will find that healthcare practitioners are unevenly distributed between urban and rural areas. In the case of physicians, Japan is faced with the shortage of practicing physicians in every prefecture, if we compare with the OECD average (3.1). In the case of nurses, in urban area, especially Kanto district (around Tokyo) is faced with the shortage of practicing nurses and they are less than OECD average (8.4).

After investigating the un-fulfillment of job offers, the increasing number of practicing healthcare workers, and the geographical imbalanced distribution of labor force as well as the shortage of human resource compared to OECD average, we can conclude that Japan requires more healthcare practitioners than ever before. How do the demands for labor force adjusted? Do immigrant workers contribute to supply of workforce? In the next section, this paper examines the distribution and the roles of immigrant practitioners.

2. Migrant Employment Patterns
The number of immigrant healthcare workers remains very low in Japan. The number of foreign physicians is always around 2,400, although the total number of practicing physicians has increased for these ten years (Chart 4). As for dentists and pharmacists, less than 1,000 foreign practitioners are practicing in Japan (Chart 5 and 6). In all cases, foreign practitioners occupy less than 1% of the total practitioners. Although the Ministry of Healthcare, Labour and Welfare (MHLW) does not collect the statistics of
immigrant nurses, midwives and public healthcare nurses, the data of physicians, dentists and pharmacists exhibit that immigrant workers do not have substantial impact on Japanese labor market quantitatively.

Statistics issued by the Immigration Bureau of Japan also illustrates the trend of immigrants. The number of immigrants that have the valid status of residence (Medical Services\textsuperscript{1}) has increased 133 (in 2000) to 379 (in 2010). However, new entrants have been less than 10 for these ten years, and the number of emigrants usually offsets that of immigrants. These facts lead to the low number of “stock” of foreign practitioners in Japanese labor market: the number of alien registration as "Medical Services" has been less than 300 for these ten years (Maximum: 265 person in 2010).

When we focus on the role of immigrant practitioners, statistics shows us that immigrant practitioners do not play an alternative role to Japanese practitioners. In the case of physicians, both local and immigrant practitioners tend to be working staffs at hospitals, founders/presidents of clinics and staffs of medical schools. The tendency has not drastically changed for these ten years (Chart 10 and 11). In the case of dentists, both local and immigrant practitioners tend to be founders/presidents of clinics\textsuperscript{2} and working staffs at clinics, and the tendency has not drastically changed in these ten years, as the case of physicians (Chart 12 and 13). In the case of pharmacists, both local and immigrant practitioners tend to work at pharmacies or hospitals/clinics and pharmaceutical companies. Similar to the cases of physicians and dentists, the trend has not drastically changed in these ten years (Chart 14 and 15).

The distribution of practitioners between urban and rural areas exhibits the fact that immigrant practitioners cannot be the alternative/solution for staff shortage and imbalanced distribution of workforce. As for physicians, foreign physicians tend to practice in populated prefectures, such as Tokyo, Osaka, Hyogo, Kanagawa, Kyoto, Chiba, Saitama, Aichi, Fukuoka, regardless the density of Japanese physicians (Figure 1). These prefectures holds heavily (over 500,000) populated cities and have national universities that have medical/pharmaceutical/nursing faculties. The similar trend can be seen in the cases of dentists (Figure 2) and pharmacists (Figure 3).

Japan still has many areas with no physicians and dentists. Figure 5 and Figure 6 show how many persons live in areas with no physicians and dentists in each prefecture. The thicker a prefecture is painted on the map, the more persons reside in areas with no physicians and dentists. The number printed in each prefecture exhibits the number of

\textsuperscript{1} This status allows immigrants to practice medical services. People who have the status are allowed to stay/practice in Japan one year or three years.

\textsuperscript{2} This implies that they tend to be independent and self-employed dentists.
foreign practitioners in each prefecture. Each figure exhibits that immigrant practitioners do not practice in thicker-painted areas, and also shows that immigrant workers cannot be a solution for the shortage of human resources.

To conclude this section, migrant employment has not increased for these ten years and its number remain constantly low. The employment patterns have not changed for these ten years, either. The role of migrant practitioners is not different from that of local/Japanese practitioners. These facts show us that immigrant practitioners currently cannot be the solution for local staff shortage, un-fulfillment of local practitioners and imbalanced distribution.

3. The Effects of Migrants

The conclusions of the previous section imply that the few number of immigrant practitioners cannot have substantial impact on the recruitment, remuneration and retention of local/Japanese practitioners.

As for recruitment, Japanese government and ministries, especially the MHLW, have historically planned the number of practitioners in the healthcare sector, by estimating the demand and supply of workforce. Under the Medical Care Act, Japan has its own calculation measure for deciding the number of healthcare workers. This calculation measure does not figure in the immigrant workers, and the minimum standard such as “150 physicians per 100,000 populations” does not meet the OECD average (3.1 physicians per 1,000 populations, in 2010). However, Japan became aware of international standards such as the OECD Health Data in recent years, and has come to define the uneven distribution of practitioners between urban and rural areas as well as between clinical departments/areas of excellence. In 2010, the MHLW carried an intensive investigation on the desirable numbers of physicians in each prefecture. The investigation figured out that Japan as a whole requires additionally 10% of the current number of physicians. The current possible solution under the Medical Care Act is increasing new entrants to medical schools/faculties/universities. Thus, Japanese government has increased the quota of new entrants since 2008. However, the newest statistics shows that the medical graduates per 100,000 populations have been around 6 persons for these ten years in Japan while OECD average in 2009 is 9.3 persons. Despite the statistical evidence, Japan expects that the supply of physicians will meet

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3 For example, see Ministry of Health, Labour and Welfare (2007).
4 For example, see Ministry of Health, Labour and Welfare (2011), pp.249-250.
5 OECD (2011).
the demand until 2022\(^6\).

The current situation of nurses is better than the case of physicians, but Japan faces the shortage of practicing nurses. In 2010, The MHLW issued the seventh estimation for demand and supply of nursing staffs for the years between 2011 and 2015. The plan did not expect immigrant workers: it planned to increase the numbers of new-graduate nurses, increase the numbers of re-entry into employments and decrease the number of retired nurses\(^7\) to meet the demands. The plan has been working better than in the case of physicians, and nursing graduates per 100,000 population is around 36 for these ten years and near the OECD average in 2009 (39.7)\(^8\).

As for remuneration/pay, the healthcare sector has been kept lower than the total/average for many years, although amount itself has increased in some sizes of hospitals/clinics (Chart 16 and 17). Compared with other sectors, the trend of remuneration/pay is contrasted, especially 10-99 size of hospital/clinics. If we look into the healthcare sector more specifically, remuneration tends to be higher in small size (10-99) in cases of physicians, dentists and pharmacists (Chart 18 to 20). The result relates to the numbers of self-employed practitioners that tend to have high remuneration. In the case of nurses, the remuneration correlates with the size of hospital/clinic (Chart 21). These consequences might be related to the alterations of medical fees that may make difference the revenues of hospitals/clinics.

As for retention (length of services), the length of year is slightly increased all the sizes and industries, except finance and insurance sector. The characteristics of the healthcare sector are: comparatively shorter years than other industrial sectors, and little difference between sizes (Chart 22 and 23). When we look into healthcare sector specifically, we cannot find a common feature between physicians, dentists, and pharmacists (Chart 24 to 26). The trend of dentists is prominent as the case of remuneration: This phenomena might be related to the oversupply of dentists, to government’s reaction to the oversupply since 2004 (such as improving national examinations), and to the introduction of compulsory clinical resident training system since 2006. The case of nurses exhibits a similar trend in all sizes of clinics/hospitals (Chart 27).


\(^7\) Ministry of Health, Labour and Welfare (2006) reported that 10% of nurses retired in one year.

\(^8\) OECD (2011).
4. Links between Migration, Labor and Other Policies

In Japan, the government and ministries do not figure in immigrant practitioners, when they calculate the balance between the demand and supply of healthcare workforce and when they make human resource plans. Under the current Medical Care Law, increase of new entrants to medical schools, increase of re-employees and preventing early retirements are possible measures to increase the supply of workforce.

Furthermore, the current Japan’s regulatory framework does not allow immigrant workers to practice in Japan, unless they are qualified as professional practitioners by the national examination. In the healthcare sector, Japan has no bilateral international agreement on mutual and automatic recognition of professional qualifications and licenses that allow immigrant practitioners freely practice professional activities in Japan. Thus, immigrant workers, who want to practice in Japan, have to pass the national examinations held in Japan.

If an immigrant worker wants to take the national examination, they have to undergo a review of eligibility requirement for the examination in advance. If he/she is judged to meet the requirements, then his/her language fluency is examined before he/she is formally judged as eligible to take examination. If applicants do not graduate from junior-high and high schools in Japan, they have to pass the Japanese-Language Proficiency Test (Grade N1). Dozens of people are judged as eligible to take national examinations in every year: most of them are Chinese or Korean nationality. Such system show us that immigrant practitioners have to pass Japan's national examination and exhibit their language skills, even if they have been already qualified and being practicing in their home countries.

As this paper iterates, the Japanese government has not accepted foreign skilled health care workers for a long time: the government has not depended on immigrant practitioners to tackle with staff shortage, and the regulatory framework in Japan has not allowed many immigrant workers to enter and practice in Japan. However, Japan became faced with both an increase of human mobility in the globalized world as well as the tide of trade liberalization for goods and services, the government and ministries

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9 Japan has bilateral agreements for interchanging physician's licenses with France, Singapore, the United Kingdom and the United States. However, these agreements have many restrictions: such as the number of physicians that are allowed medical examinations and treatments, the places where they can practice, and the people whom they can practice medical examinations and treatments.

10 In contrast to some other countries, Japanese government does not hold the national examinations in abroad.

11 The assessment of language fluency expects applicants to exhibit enough language abilities to practice medical examinations and treatments.
came to be concerned about attracting highly-skilled foreign workers. The Japanese government and some ministries, especially the Ministry of Foreign Affairs, regards the Economic Partnership Agreement (EPA) as a tool for strengthening bilateral economic cooperation with foreign countries. Japan has agreed to arrange special provisions for the movement of natural persons (skilled professionals including nurses) when concluding the EPA with Indonesia and Philippines. The same kind of agreements will be discussed with Vietnam and Thailand in few years.

If we take the arrangement with Indonesia for example, Section 6-1 of Annex 10, which refers to Chapter 7 defines that natural persons who has a purpose of being qualified as nurses under the laws and regulation of Japan, who have been qualified and registered as nurses in Indonesia, and who also have at least two years of nursing experience are allowed to enter and stay in Japan temporarily for one year. That stay may be extended for the same period (one year) not more than twice. Such persons are required to undergo six months of training courses, including a Japanese language course, before practicing at host hospitals/clinics in Japan. They may take the national examination for being qualified as a nurse under Japanese law during their stay (maximum: three times). If they pass the national examination, they can stay and practice in Japan after expiration day of their stay. The similar arrangement was prepared for certified care workers.

The EPA arrangement has attracted practitioners in Indonesia and Philippines, and candidate nurses and certified care workers came from Indonesia since 2008, and from Philippines since 2009 (Table 1 and 2). However, the results of the national examination were disappointing for candidates from Indonesia and Philippines, as well as host hospital/clinics in Japan. In 2009, none passed out of the 87 who took the national examination, and some pointed out that it was hard for the international nurses to have practiced reading and understanding both Japanese and Chinese characters, both of which are used in the examination. They also called for improvement the preparation course that foreign nurses take before coming to Japan. In 2010, 1 Indonesian and 1 Philippines passed the national examination. In 2011, 16 persons have passed, but it revealed that it is impossible for candidates to pass examination for

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13 Ibid.
15 As for Philippines, three-year practice is required.
16 They are permitted to enter Japan as “designated activity” in visa category.
17 For details of the outcome of the national examination and discussions, see Asahi Shinbun, November 2, 2009.
their first challenges (Table 3).

The low ratio of success was the result of conflicting policy interests in a single political arrangement. At the administrative level, the Ministry of Foreign Affairs was for the EPA in order to promote international cooperation through exchanging people (highly skilled workers) on the one hand, the MHLW emphasized that the arrangement in the EPA was not regarded as the solution for the shortage of workforce in the healthcare sector, on the other hand. The MHLW’s position was parallel to the position of the Japanese Nursing Association (JNA)\textsuperscript{18}. The JNA places a special emphasis on protecting the national labor market, on securing safety for medical staff and patients, and on preventing brain drain in source (home) countries. Then, the JNA declares that it denies the mutual recognition of qualifications. It also strongly requires foreign practitioners to be qualified in Japan (i.e. to pass the national examination) and to be fluent in Japanese language, because nurses engage in medical teamwork at local hospitals/clinics and provide services to local patients\textsuperscript{19}.

Furthermore, the JNA also requires host hospitals/clinics to pay overseas nurses the same wages as Japanese nurses. The “Equal Pay” rule was adopted as the requirement for host hospitals/clinics when they apply for accepting EPA candidate nurses\textsuperscript{20}. The requirement imposes an additional financial burden on the host hospitals/clinics that accept overseas nurses. They are usually faced with severe staff shortage, and they decide to accept nurses through the EPA arrangement with their motivation to secure human resource\textsuperscript{21}. Once they accept EPA candidate nurses, they have to train overseas nurses so that they can get used to Japanese on the job and they can prepare for the national examination. These tasks become practical burdens for host hospitals/clinics. In terms of recruitment, the EPA arrangement is attractive for the host hospitals/clinics that suffer from severe staff shortage, but they soon find that the arrangement bear practical and financial burden on them.

As we can see, government and ministries do not officially admit that they regard the EPA as a solution for the workforce shortage, while hospitals/clinics are faced with

\textsuperscript{18} As for the argument that the government’s position is parallel to the position of the JNA, see Ninomiya (2008), p.152.

\textsuperscript{19} For the position held by the Association, see for example http://www.nurse.or.jp/home/opinion/press/2008pdf/0617-4.pdf and http://www.nurse.or.jp/home/opinion/newsrelease/2006pdf/20060912.pdf (Accessed on December 14, 2009)

\textsuperscript{20} For the details, see http://www.jicwels.or.jp/html/hp_images/h24_tebiki_n.pdf (Accessed on February 24, 2012)

\textsuperscript{21} http://www.mhlw.go.jp/stf/houdou/2r9852000000054my-img/2r9852000000054pi.pdf (Accessed on January 5, 2012)
staff shortages and have a high demand for employees in reality. Officially, the government and ministries regard the path of the EPA as a part of trade liberalization and a special arrangement for foreign nurses to enter and practice in Japan temporarily. Thus, the government and ministries do not accept the mutual recognition of qualifications, and do not have procedures to assess the qualifications of overseas nurses, either. Under the framework of the EPA, if foreign nurses want to stay and practice in Japan after the expiration of their temporal stay, they both have to be qualified in Japan and have to acquire fluency in Japanese language. The EPA framework also has a quota and allows Japan to accept no more than 400 foreign nurses for two years. The arrangement of the EPA embodies such ambivalent and conflicting interests, which leads to the imposition of additional burdens on host hospitals/clinics rather than simply supplying them with employees.

5. Alternative Options and Scenarios
This section primarily focuses on the political interests and regulatory activities of the MHLW, in order to examine current policy debates and their consequences for the industry, local and migrant workers, and consumers and society.

Healthcare service is fundamentally face-to-face service, and it is delivered directly to recipients of the service. Therefore, the varieties and quality of the service depend on the place that recipients of the service live in. It is difficult for recipients to go over prefectures (in other words, administrative borders) to look for alternative service providers (healthcare workers), even if they are not satisfied with the current service that they receive: it is out of the questions for recipients to cross the national borders. In that sense, healthcare service has a nature of social security or national service although it also has a nature of competitiveness when we specifically focus on the advanced techniques and the research and developments.

In practically, it is laws and regulations that rule the minimum number of staffs/beds in healthcare facilities, balance between demand and supply of workforce, and the system of remuneration. They have direct and strong influences (sometimes coercions) on the industry: hospitals/clinics/institutions, local and migrant workers in terms of employment and wage, consumers (service recipients) and society. Stakeholders, especially service recipients (clients/patients), of course do not have the

alternative ways, if they have undesirable influences due to political/legal failures and forbearances. These are why this section focuses on the regulatory activities taken by the MHLW that is in charge of healthcare policies including employment and professional qualifications.

First of all, principles of the MHLW’s employment policy emphasizes that the MHLW does not take an easygoing action of inviting immigrant workers, although it admits that some claims that Japan should invite foreign workers to be prepared for the shortage of workforce in near the future23 (emphasis by the author). The MHLW also emphasizes that it promotes involvement of local youths, women, senior generations and handicapped persons, in order to avoid distortion of labor market and wage system by inviting foreign workers24. However, the MHLW says that it positively promotes recruitment of highly skilled workers and international students of high quality, in order to improve Japan’s competitiveness25. These arguments highlight that the MHLW does not regard the healthcare as the sector of competitiveness. The MHLW refuses to invite immigrant healthcare workers although it admits that the Japan is faced with imbalances between supply and demand of practitioners, as well as imbalances between rural and urban areas. It emphasizes that these problems are to be solved by increasing the numbers of new entrants to medical/nursing schools, by promoting reemployment of early-retired workers, and by attracting students to practicing in the remote and rural areas.

These MHLW’s principles, positions and solutions make it difficult for stakeholders to have open and constructive discussions on immigrant healthcare workers. One has to prove that the MHLW’s preconditions and solutions are incorrect, if he/she wants to discuss a regulatory framework that allows immigrant workers to enter and practice in Japan: for example, he/she must express doubts about the feasibility of the MHLW’s plan that estimates the supply of workforce will meet the demand in 202226, if he/she wants to change the MHLW’s assumptions and to urge the MHLW to examine the policy option for inviting foreign healthcare practitioners.

23 For the details, see http://www.mhlw.go.jp/bunya/koyou/gaikokujin18/index.html (accessed on February 27, 2012)
24 Ibid.
25 Ibid.
26 The National Institute of Population and Social Security Research in Japan expected that population will decrease by 5 to 6 million between 2010 and 2022. http://www.ipss.go.jp/syoushika/tohkei/newest04/gh2401.pdf (Accessed on February 27, 2012). If the MHLW expects the natural decrease of population in calculating the demand and supply of practitioners, there is possibility that the MHLW dares to wait for decrease of population in order to avoid inviting foreign workers due to severe shortage of national workers.
Such the MHLW’s regulatory positions can be also confirmed in the EPA arrangements. It was the cabinet and the Ministry of Foreign Affairs that took the current EPA arrangement had problems. Only 14% of the candidates of nurses from Indonesia can pass the national examination, even if they stayed and practiced three years in Japan (Table 3). The fact that qualified practitioners in their home country cannot be qualified in another (Japan) was reflected the number of applicants: the number of entrants was halved compared to the first year (Table 1 and 2). In 2011, the cabinet and the Ministry of Foreign Affairs made a diplomatic decision that allow the candidates of nurses and certificated care workers to stay one more years27. The MHLW responded passively, and announced a guideline that allows candidate nurses and care workers from Indonesia to practice one more years to be prepared for national examination. The guideline symbolized the Ministry’s attitude: it did not automatically allow the candidates who meet the conditions for additional stay, but required to prepare written forms that assured both candidates’ diligence for the next examination and host hospitals’/clinics’ modified teaching programs28. The MHLW tends to be strict to invite foreign practitioners, although the EPA arrangement was valid only between the parties (countries) that concluded the arrangement.

Such MHLW’s regulatory approach is too cautious if we compare with the UK’s experiences29. The UK was faced with shortage of nurses in the 1990s, and decided to invite foreign nurses in order to increase the number of registered and practicing nurses in the UK. The UK concluded bilateral agreements with Philippines and India, invited thousands of nurses, and successfully increased the number of practitioners (Table 4). In the 2000s, however, the UK became faced with the oversupply of nurses and financial difficulties to afford practitioners, the government and ministries decided to stop accepting nurses from Philippines and India. The ministries also introduced a new regulatory framework that verifies immigrants’ qualifications and language fluency. It succeeded to decrease the total number of foreign nurses in the UK (Table 4)30. Usually, it is thought that the UK tends to suffer from English-speaking immigrants from

27 Candidates who scored higher ranks (to the 81st candidates including successful applicants) were allowed to stay. For the details, see http://www.mhlw.go.jp/bunya/koyou/other21/dl/o21_1-4-5.pdf (Accessed on February 27, 2012)
28 Ibid.
29 For the details, see Inoue (2010) and Inoue (2011).
30 In the European Union (EU), the principle of mutual recognition of professional qualifications prohibits a member state to verify qualifications of practitioners from other member state. The EU also prohibits a member state to regulate free movement of people by nationalities and languages. Therefore, as Table 4 in this paper shows, the inflow from new member states has increased recently.
foreign countries, especially from the Commonwealth. However, the UK's experience exhibits that a bilateral agreement is convenient tool for adjusting the number of foreign workers as a government wishes, and also exhibits that verifying qualifications and language skill are effective tools for restriction of inflow of foreign workers. Language becomes very easy measures for European national governments to restrict inflow of immigrants and promote integration of immigrants to local society: In the latter half of the 2000s, major European countries began to oblige immigrants to take integration courses including language courses. Therefore, we can conclude that the MHLW takes several measures that have similar effects to restrict inflow of immigrant practitioners. Japan’s full-course regulation succeeds to protect national labor market, as the MHLW believes in.

For the stakeholders who want to invite foreign practitioners, especially healthcare service providers that suffer from staff shortage and fail to invite local staffs, they have to make independent efforts to promote immigrant workers to pass the national and language examination, under the current regulatory framework in general or the EPA arrangement.

6. Concluding Remarks
The case study of Japan’s healthcare sector may probably be a special case among the cases presented at the Conference: the MHLW that is in charge of the healthcare sector regulates inflow of foreign practitioners on its assumption that the staff shortage can be solved by only mobilizing national practitioners (and potential practitioners such as students and early-retired practitioners): Even under the special arrangement in the EPA, national examination as well as language fluency constitute barriers for the candidate healthcare practitioners who are qualified in their home countries. Currently, immigrant workers who want to practice in Japan have to pass the national examination in Japan and exhibit their language proficiency. This results in the small number of foreign healthcare practitioners in Japan.

However, Japan would have to think of recruitment of foreign healthcare workers, if the MHLW’s human resource plan results in failure and if Japan becomes faced with an unprecedented aging population and severe staff shortage. To be prepared in these situations, the relevant ministries are required to examine the relationship between regulatory measures and their effects on the inflow of immigrant workers as well as the relationship between immigrant workers and wages, retention and employment/recruitment by comparing the industrial sectors and countries.
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14
[Charts and Figures]
Chart 1: Employed persons by industry

Source: Statistical Survey Department, Statistics Bureau, Ministry of Internal Affairs and Communications, *Annual reports on the labour force survey.*
Chart 2: Trends in the number of employed persons in each industrial sector

Source: Statistical Survey Department, Statistics Bureau, Ministry of Internal Affairs and Communications, Annual reports on the labour force survey.
Chart 3: The number of unfulfillment of job offers in major industrial sectors (thousands)


Chart 4: The number of registered physicians in Japan (Total and Foreign practitioners)

Chart 5: The number of registered dentists in Japan (Total and Foreign practitioners)


Chart 6: The number of registered pharmacists in Japan (Total and Foreign practitioners)

Chart 7: The number of currently working nurses in Japan (Japanese only, no data of foreign practitioners)


Chart 8: The number of currently working midwives in Japan (Japanese only, no data of foreign practitioners)

Chart 9: The numbers of currently working public health nurses in Japan (Japanese only, no data of foreign practitioners)

Chart 10: Components of registered physicians in 2000

Chart 11: Components of registered physicians in 2010

Chart 12: Components of registered dentists in 2000

Chart 13: Components of registered dentists in 2010


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Chart 14: Components of registered pharmacists in 2000

Chart 15: Components of registered pharmacists in 2010

Chart 16: Comparison of remuneration by industry, and the number of workforce (2002) *


* No specific data for information communication.

Chart 17: Comparison of remuneration by industry, and the number of workforce (2010)

Chart 18: Trend in remuneration of physicians by the number of workforce


Chart 19: Trend in remuneration of dentists by the number of workforce *

* No specific data for the year 2002 to 2004.
Chart 20: Trend in remuneration of pharmacists by the number of workforce


Chart 21: Trend in remuneration of nurses by the number of workforce

Chart 22: Comparison of retention by industry, and the number of workforce (2002) *

*No specific data of information communication.

Chart 23: Comparison of retention by industry, and the number of workforce (2010)

Chart 24: Retention/Length of services by the number of workforce: Physicians


Chart 25: Retention/Length of services by the number of workforce: Dentists*


*No specific data for the year 20002 and 2004.
Chart 26: Retention/Length of services by the number of workforce: Pharmacists


Chart 27: Retention/Length of services by the number of workforce: Nurses

Figure 1: Physicians per 1,000 inhabitants and the number of foreign physicians

Figure 2: Dentists per 1,000 inhabitants and the number of foreign dentists

Figure 3: Pharmacists per 1,000 inhabitants and the number of foreign pharmacists

Figure 4: Nurses per 1,000 inhabitants

Figure 5: Areas with no physicians (2009) and the number of foreign physicians (2010)

Figure 6: Areas with no dentists (2009) and the number of foreign dentists (2010)

Table 1: Accepted Candidates for nurses and certified care workers by the EPA arrangement: Indonesian case

<table>
<thead>
<tr>
<th></th>
<th>Candidate for Nurses</th>
<th>Candidate for Certified Care Workers</th>
<th>Total</th>
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<tr>
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<td>2011</td>
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<td>58</td>
<td>105</td>
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Table 2: Accepted Candidates for nurses and certified care workers by the EPA arrangement: Philippines case

<table>
<thead>
<tr>
<th></th>
<th>Candidate for Nurses</th>
<th>Candidate for Certified Care Workers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>93</td>
<td>217</td>
<td>310</td>
</tr>
<tr>
<td>2010</td>
<td>46</td>
<td>82</td>
<td>128</td>
</tr>
<tr>
<td>2011</td>
<td>70</td>
<td>61</td>
<td>131</td>
</tr>
</tbody>
</table>


Table 3: Results of the national nurse examination in 2011: Under the EPA arrangement

<table>
<thead>
<tr>
<th></th>
<th>Indonesian</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Applicants</td>
<td>Successful candidate</td>
</tr>
<tr>
<td>Entrants in 2008</td>
<td>91</td>
<td>13</td>
</tr>
<tr>
<td>Entrants in 2009</td>
<td>159</td>
<td>2</td>
</tr>
<tr>
<td>Entrants in 2010</td>
<td>35</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4 Registration of nurses (Initial Registration)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Registration</td>
<td>17,954</td>
<td>21,418</td>
<td>25,123</td>
<td>30,693</td>
<td>31,775</td>
<td>34,617</td>
<td>33,257</td>
<td>31,402</td>
<td>27,704</td>
<td>25,864</td>
</tr>
<tr>
<td>Nurses from overseas</td>
<td>3,568</td>
<td>5,967</td>
<td>8,414</td>
<td>15,064</td>
<td>12,757</td>
<td>14,122</td>
<td>11,477</td>
<td>8,709</td>
<td>4,830</td>
<td>2,309</td>
</tr>
<tr>
<td>(Except EEA* countries)</td>
<td>(52)</td>
<td>(1,052)</td>
<td>(2,296)</td>
<td>(7,235)</td>
<td>(5,593)</td>
<td>(4,338)</td>
<td>(2,521)</td>
<td>(1,541)</td>
<td>(673)</td>
<td>(249)</td>
</tr>
<tr>
<td>(From Philippines)</td>
<td>(30)</td>
<td>(96)</td>
<td>(289)</td>
<td>(994)</td>
<td>(1,830)</td>
<td>(3,073)</td>
<td>(3,690)</td>
<td>(3,551)</td>
<td>(2,436)</td>
<td>(1,020)</td>
</tr>
<tr>
<td>Nurses from EEA* countries</td>
<td>1,412</td>
<td>1,416</td>
<td>1,295</td>
<td>1,091</td>
<td>802</td>
<td>1,033</td>
<td>1,193</td>
<td>1,753</td>
<td>1,484</td>
<td>1,872</td>
</tr>
<tr>
<td>(From Poland**)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(133)</td>
<td>(442)</td>
<td>(578)</td>
<td>(456)</td>
<td></td>
</tr>
<tr>
<td>(From Czech Republic**)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(23)</td>
<td>(65)</td>
<td>(66)</td>
<td>(52)</td>
<td></td>
</tr>
<tr>
<td>(From Romania***)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(57)</td>
<td>(382)</td>
<td></td>
</tr>
<tr>
<td>(From Bulgaria***)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(25)</td>
<td>(168)</td>
<td></td>
</tr>
</tbody>
</table>

Source: NMC, *The Nursing and Midwifery Council Statistical Analysis of the Register*

*EEA*: European Economic Area. This category includes both member states of the European Union and some EFTA members.

**Poland and Czech Republic**: Examples as countries that enter the European Union since 2004. Fundamentally, professional practitioners from the EU member states can allowed moving to another member states without verification of qualifications and language tests.

**Romania and Bulgaria**: Examples as countries that enter the European Union since 2007.