Payment of Hospital Specialists in Korea

2014. 8

심사평가연구소 연구조정실
심사연구팀
연구 진

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Overview of Korea health care system

Korea has a compulsory National Health Insurance (NHI) system with universal coverage. The National Health Insurance Program (NHIP) is a single insurer, covering the majority of the population, with the exception of a small portion (3-4%), who are poor and covered by the Medical Aid Program.

Under the National Health Insurance Act, all health care services, such as clinics, hospitals and pharmacies, whether public or private, are mandatory NHI providers and thus there is no opting out of the NHI scheme. Although a large majority of hospital beds are private hospitals, the payment system is uniform regardless of public or private hospitals. Private health insurance is supplementary and complementary. More than half of population purchase PHI in Korea.

Hospitals are paid on a fee-for-service (FFS) basis, excluding seven disease groups. FFS included hospital and physician costs. In other words, physician costs are not separated. All hospitals are applied to same fee schedule regardless of public or private.

Specialists working in hospitals are employed and paid on a salary basis. Most hospitals introduced a performance-based salary system for physicians. Private practices of salaried employees are prohibited by the medical law.

Unlike those in other countries, clinics have inpatient beds. This questionnaire is limited to specialists working in hospitals to compare with other countries.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment system</td>
<td>Directly reimbursed by NHI based on FFS</td>
</tr>
<tr>
<td>NHI reimburses hospitals directly based on FFS</td>
<td>Self-employed</td>
</tr>
<tr>
<td>then hospitals pay specialists by salary.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Hospital payment system

1 Complementary PHI: private health insurance that complements coverage of government/social insured services by covering all or part of the residual costs not otherwise reimbursed (e.g., costsharing, co-payments).

Supplementary PHI: private health insurance that provides coverage for additional health services not at all covered by the government/social scheme.

2 The DRG payment system is applied to the inpatients classified into seven disease groups (Lens procedures Tonsillectomy & adenoidectomy Appendectomy - Uterine & adnexal procedures - Inguinal & femoral hernia procedures for non-malignancy - Anal & perianal procedures - Cesarean section delivery) within four medical departments. The system also applies in outpatient surgery such as lens procedures inguinal and femoral hernia procedure and simple anal procedure.
Figure 2. Financial flow chart of the health care system of the Republic of Korea

Source: Chang Bae Chun et al. 2009
Please refer to the following documents.

References

Section I. Background information on the hospital sector and on specialists working in hospitals

a) How are the main categories of (somatic) acute care hospitals (e.g. public, private for profit, private non profit) defined in your country and what is their share of the total hospital sector? Please state if private for-profit hospitals treat public patients. If available please specify the share in terms of beds and/or cases and/or total hospital expenditure.

<table>
<thead>
<tr>
<th></th>
<th>Beds (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>59,196 (12.4)</td>
</tr>
<tr>
<td>Private non-profit</td>
<td>-</td>
</tr>
<tr>
<td>Private for-profit</td>
<td>416,548 (87.6)</td>
</tr>
<tr>
<td>total</td>
<td>475,744 (100.0)</td>
</tr>
</tbody>
</table>

Source: OECD health data 2013

b) Career pathways and duration of education:

① How long does it take to become a specialist? Please highlight if training duration differs by specialty.
- Medical education in Korea is based on either a six-year undergraduate degree or a four-year postgraduate degree³. After finishing their degree courses, students have to pass the national medical examination to obtain their medical licence. Medical specialists must pass a qualifying examination to enter their programme of choice;

³ Since 2006, those who do not major in medicine at undergraduate level have been able to enter a university medical faculty to undertake medical training through a four-year postgraduate course. A six-year undergraduate course takes place at a college of medicine, and is divided into two stages. The first preparatory stage takes two years, and the second regular stage consists of a four-year course.
they obtain their medical specialist certification after completing a one-year internship and 3–4 years of residency courses, ranging from three years for family medicine and preventive medicine to four years for other specialized fields including internal medicine (Source: Chang Bae Chun et al, 2009).

2 How many different hierarchical levels exist for specialists in hospitals? Please describe different levels (e.g. associate specialist vs. consultant vs. chief physician) and the formal responsibilities (medical and administrative) associated with each level. If possible please give percentages for different hierarchical levels.
   - Majority of hospital beds are private hospitals. They own their unique HR systems.

3 What are the main changes, problems, and debates in your country?
   1 Have there been recent reforms of specialist payment models in the last decade, for example to reduce income differences among specialties?
      - Payments reimbursed by NHI include the costs of the hospitals and physicians together. Hospital payments and specialist payments are not separated (hospital payment system can be seen as specialist payment systems).
      - The major reform of hospital payment system was an introduction of DRGs for seven diagnostic groups. In order to reduce unnecessary service usage, the Diagnosis-Related Group (DRG) system was first introduced in 2002 and is being expanded. For certain illnesses, the DRG system pays a lump sum based on the patient’s diagnosis. A pilot program of the DRG payment system was implemented from February 1997 to December 2001. The expanded main program was implemented from January 2002, on a voluntary basis. The DRGs payment system for the seven diagnostic groups has been mandatory implemented since July 2013.

   2 What are the trends in contractual relationships between specialists and hospitals?
      - Specialists working in hospitals are employed and paid by a salary.
      - Recently, most hospitals have a tendency to introduce a performance-based salary system.

   3 Are hospital specialists an important stakeholder in health policy making? Do they have impact?
      - Like those in other countries, the provider associations in South Korea are
involved in making health insurance policies. The Korean Medical Association (KMA), which represents physicians in the primary care sector, and the Korean Hospital Association (KHA) are the most influential provider organizations. These provider organizations promote their professions’ interests according to their associations’ goals, and thus often collide with MOHW and the NHIS, particularly in relation to negotiating fee schedules, setting payment methods, and defining the insurer’s role (Source: Chang Bae Chun et al, 2009).

④ Are there concerns that specialists earn too much (e.g. when compared with GPs, or across different specialties)?

- Physicians working in hospitals are salaried employees whose pay is above the mean income of all other employees, but is still likely to be lower than the average income of clinic-based physicians in independent practices. The revenues of independent physicians and those working in hospitals have different sources (Source: Chang Bae Chun et al, 2009).

- There is no sales(revenues) data by specialty for hospitals. It can be inferred from sales data by specialty for clinics, as physicians working clinics are most specialists. Specialty with high revenues were Orthopedics, Ophthalmology, Rehabilitation medicine.

⑤ Is there a waiting list problem?

- While long waiting times is considered an important policy issue in many countries, this is not the case in Korea (source: Health at a glance 2013, OECD).

⑥ Is there a shortage of specialists (e.g. for certain disciplines), and what are the perceived reasons (e.g. inadequate training, lack of planning, increased mobility, income)?

- There is a substantial variation in applying for residency program by specialty. Specialties of high application ratio are seen as oversupply of physicians in the table below.

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4 Source: Jaekuk Cho et al, An analysis of the financial structure of Korean medical facilities, Korea Institute for health and Social Affairs, 2011 (in Korean)

5 Yongho Oh et al, Estimating the mid to long-term supply and demand of health workforce, Korea Institute for health and Social Affairs, 2011 (in Korean)
Generally, applicants prefer the specialty that has more expected income after training completion. Expected income is mainly determined by degrees of supply as well as relative fee level of RBRV Sore of the specialty.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Ratio of applicant vs quota</th>
<th>Specialty</th>
<th>Ratio of applicant vs quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermatology</td>
<td>1.41:1</td>
<td>Laboratory Medicine</td>
<td>0.92:1,</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1.40:1</td>
<td>Anesthesiology and Pain Medicine</td>
<td>0.88:1,</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>1.39:1</td>
<td>Radiation Oncology</td>
<td>0.86:1,</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>1.34:1</td>
<td>Pathology,</td>
<td>0.71:1</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>1.34:1</td>
<td>Obstetrics &amp; Gynecology</td>
<td>0.55:1,</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>1.27:1</td>
<td>Surgery</td>
<td>0.51:1,</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>0.97:1</td>
<td>Preventive medicine</td>
<td>0.50:1</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>0.97:1</td>
<td>Thoracic and Cardiovascular Surgery</td>
<td>0.40:1</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>0.96:1</td>
<td>Urology</td>
<td>0.35:1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuberculosis</td>
<td>0.00:1</td>
</tr>
</tbody>
</table>

⑦ Are there regional differences in access to hospital care (e.g. maybe due to different payment models or differences in specialist income)? If yes, please describe and explain these differences.
- There are not regional differences in access to hospital care in Korea compared with other countries. The distribution of physicians between urban and rural regions was more equal in Korea (source: OECD health at a glance 2013)
Section II: Main payment models and contractual relationships between hospitals and specialists

a) What are the main categories of contractual relationships between specialists and hospitals? Please describe the main groups and give the percentages.
   - Most specialists working in hospitals are salaried employees.

b) What are the most important payment models for different groups of specialists (by hospital type, specialties, service, or payer Figure 1) in hospitals?
   - See the Overview of Korea health care system

c) What is the percentage of specialists paid according to each of the payment models described under II.a? If specialists receive a combination of salary and FFS please also give the percentage of each component (e.g. 70% salary + 30% FFS)
   - Hospitals are paid on the basis of FFS.

d) Please describe how the money is channelled to specialists.

   ① Are specialists paid by the hospital or another payer?
   - Specialists are paid by only the hospital. There are no other income sources.

   ② If they receive money from the hospital does the payment the hospital receives contain an earmarked portion for specialist payment? If hospitals receive the payment how is it redistributed among the specialists? Does this result in frictions?
   - The hospital payment includes physicians and hospitals costs, but each part of the costs is not separated (not earmarked for physician). Generally, specialists working in hospitals are paid by salary. Specialist's salary consists of basic pay and performance-based pay (bonus). Performance is mainly determined by sales (or volume of services) each specialist rendered. About 74.2% hospitals introduced performance-based salary system⁶.
   - Introduction of the performance-based salary system under the FFS negatively affects health care system in Korea. Specialists have incentives to raise more revenues (sales). They try to see more outpatients and then transfer their outpatients to inpatients, perform more frequent diagnostic

examination\(^7\). This leads to increase the total health expenditure.

③ Is there a governance structure in which physicians are represented?
   - See the Section I.C

④ If specialists are paid by another payer, is there another intermediary between the payer and the specialists?
   - No, Single payer.

e) Can specialists run private practices besides their hospital work?
   - Not applicable

Section III: Details of specialist payment systems

a) FFS payments are usually based on a fee catalogue and a system for converting the catalogue components into a payment amount (monetary conversion). When answering the following questions, please consider both, catalogue composition and monetary conversion:

③ Do different FFS systems exist? Please elaborate.
   - We have uniform FFS system. There are no differences among hospitals and regions.
   - See the box below for more details.

<table>
<thead>
<tr>
<th>Fee Setup Based on the RBRV(Resource-Based Relative Value) Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(source: HIRA 2013)</td>
</tr>
<tr>
<td>• Resource-Based Relative Value (RBRV) Score</td>
</tr>
<tr>
<td>The medical fee schedule is determined by multiplying each treatment’s RBRV score by the unit price of medical cost. The RBRV score, made public by the Minister, is calculated by considering the amount of resources the medical treatment entails, including time, effort, work amount, manpower, equipment and facilities, as well as risks.</td>
</tr>
<tr>
<td>• Method of Calculating Medical Fees</td>
</tr>
</tbody>
</table>

\(^7\) Cost compensation (relative value of RBRVS) of examination is high relatively compared with medical practices.
Healthcare institutions should claim an amount derived by multiplying the RBRV score per medical service by the unit price, which is the amount agreed upon between the head of NHIS and the representatives of each group of healthcare providers. The final fee schedule may vary for identical services in different institutions because different unit prices and additional rates are applied according to the size of the relevant healthcare institutions.

An additional fee schedule with set rates based on the size of the institutions ("additional rates by institution type") was implemented to induce effective performance, ensure smooth operation of medical service delivery, and encourage investment in research for the development of health technology. The additional rates by institution types as of January 2011 are 30% for tertiary hospitals, 25% for general hospitals, 20% for hospitals, and 15% for clinics.

② Who is formally responsible for developing/updating/modifying (each of) the FFS system(s)?

<table>
<thead>
<tr>
<th>organization</th>
<th>responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOHW (ministry of health and welfare)</td>
<td>Overall responsibility</td>
</tr>
<tr>
<td>NHIS (National Health Insurance Service)</td>
<td>Negotiation between NHIS and provider organization over conversion factor</td>
</tr>
<tr>
<td>HIRA (Health Insurance Review and Assessment Service)</td>
<td>Developing/updating/modifying of RBRV score</td>
</tr>
</tbody>
</table>

In general, the revision of the RBRV scores takes place every five years. However, partial adjustment, which possibly affects other RBRV scores of medical services, can be made and announced by the MOHW after review by the "RBRV Management & Planning Panel” and the “NHI policy deliberative Committee”

③ What factors are taken into account when developing/calculating the FFS system(s)? For example, is the fee catalogue based on historical cost studies, time measures, or psychological stress related to the performance of an intervention, risk, coordination activities, out-of-office working hours? How is each of these factors quantified?

- The RBRV score, made public by the Minister, are calculated by considering the amount of resources the medical treatment entails, including time,
effort, work amount, manpower, equipment and facilities, as well as risks.
- RBRV score is divided into three components: physician work, practice expense and risk (cost related to medical dispute mediation and arbitration).

4 If negotiations between stakeholders take place, please give details on frequency, participants, and influence of different groups. How are conflicts resolved and by whom?
- Negotiation between NHIS and provider organizations over conversion factor. The NHIS and provider representatives negotiate a unit price (conversion factor) of relative value points of each medical procedure and the contracts for it. Contract terms are for one year and are renewed annually. Contracts are negotiated three months before their expiry date.
- NHI policy deliberative committee is composed of 25 members including the chairman (the vice-minister of MOHW)

<table>
<thead>
<tr>
<th># of Members</th>
<th>participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>vice-minister of Health and Welfare</td>
</tr>
<tr>
<td>8</td>
<td>Representatives of the insured : Federation of Korean Trade Unions, Korean Confederation of Trade Union, Korea Employer’s Federation, Korea Federation of Small and Medium Business, Korea National Council of Consumer Organizations, Korean Advanced Farmers Federation, Korea Foodservice industry Association , Citizens United for Better Society</td>
</tr>
<tr>
<td>8</td>
<td>Representatives of medical and pharmaceutical industries : KMA, KHA, Korean Dental Association, Association of Korean Medicine, Korean Nursing Association, Korean Pharmaceutical Association, Korea pharmaceutical manufacturers association</td>
</tr>
<tr>
<td>8</td>
<td>Representatives of the government and experts : MOHW(Ministry of Health and welfare), MOSF(Ministry of strategy and finance), NHIS, HIRA, academic experts</td>
</tr>
</tbody>
</table>

5 Have payers introduced any measures that limit the total amount of money spent on FFS? For example, is there a hospital level budget on total FFS payments that can be made to specialists?
- The NHIS has different contracts for the value of service fees with each association of providers. Nevertheless, the NHIS, as the insurer, cannot control the expansion of health costs through these contracts because it
cannot control the volume of services rendered. Supplier-induced demand is controlled and checked by HIRA, which evaluates the appropriateness of health care benefits. Therefore, HIRA’s function could contribute to the financial stability of the NHI system. There is no provision for block contracts with other countries for cross-border health care provision (Source: Chang Bae Chun et al, 2009).

6. Are certain fees (e.g. in certain specialties) more profitable than others? Please elaborate. If so, what are the consequences (e.g. shortages in certain disciplines?)
   - See the Section I.c

b) Salaries usually consist of a fixed part (basic salary) and a variable part (e.g. depending on the number of night shifts, or performance-related bonuses). Please consider both components when explaining different salary systems.
   - Do different collective salary agreements exist? How are conflicts resolved and by whom? Please consider that they may differ by hospital type, specialties, service, or payer (Figure 1).
   - Which components constitute the total salary (fixed and variable parts)?
   - What factors are taken into account when negotiating/setting the salary scale? For example, is the salary based on experience, responsibility, a previously existing FFS income? How is each of these factors quantified?
   - If negotiations between stakeholders take place, please give details on frequency, participants, and influence of different groups. How are conflicts resolved and by whom?
   - Are salaries negotiated individually? Or are individual negotiations for salaries above the collectively agreed level possible and common practice?
   - Are salary levels higher for certain specialties, at certain hospitals, for certain payers, or for certain services? If so, what are the consequences (e.g. shortages in certain disciplines?)

c) Other financial benefits may consist of pension contributions, professional insurance, housing benefits, profit sharing or subsidised childcare.
   - There is no official data. Other financial benefits vary depending on hospitals.

Section IV: Non-financial incentives and other relevant factors
a) What is the workload of specialists measured in hours (or time per patient)?

b) Are there other relevant non-financial factors influencing the attractiveness of different payment models, e.g. professional independence, administrative workload, income security, on-site child care?
   - Clinic-based physicians in independent practices (self-employed) make more money than salaried specialists. However, due to income security and academic accomplishment etc, some specialists prefer working in hospitals rather than clinics.

c) Is the gender distribution across specialties a relevant factor for the relative importance of certain payment models?
   - No

d) If there are other relevant factors, please elaborate.
Appendix 1. Added Questions

Q1] Does it mean that it takes 10 years to become a medical doctor and another 4-5 years to become a specialist?
A1] It takes 9-10 years to become a specialist.

Q2] Not sure what that means in relation to the question which focuses primarily on hierarchical levels. Do you mean each hospital has a different hierarchy?
A2] I mean that each hospital has a different hierarchy. No uniform hierarchy system exists. However, most hospitals have similar system reflecting seniority and popularity etc. Specialists working in teaching hospital have both medical and teaching positions and responsibilities.

Q3] How is performance measured in those cases? Just by productivity (e.g. number of cases) or also by quality (e.g. rate of complications)?
A3] Performance is mainly determined by productivity (e.g. sales, number of patients, or volume of services) each specialist rendered. There are no hospitals introducing performance by quality.

Q6] I see that performance based salaries may set the wrong incentives in Korea. Are you able to give us more information regarding this problem. For example: How does a common contract between a hospital and specialists in terms of performance look like?
A6] I have no more information. Specialist's salary consists of basic pay and performance-based pay (bonus). The large portion of the pay is basic pay, and it is determined or negotiated by seniority and medical skills (abilities). The portion of bonus of salary varies by hospitals.

Q4] I understood that both hospitals and clinics are reimbursed by the same FFS? What are the differences? Why specialists in clinics earn more?
A4] There are no differences between hospitals and clinics besides additional fee schedule based on the level of the institutions. As specialists owned clinics see patients (volume), they make more money. Specialists working in hospitals are paid by salary. Although they are paid by performance-based bonus (incentive), the main part of salary is basic pay.

Q5] Does the table shows that dermatology is probably the best paid specialty follow by psychiatry?
A5] Yes

Q7] Considering Figure 1 all specialists are paid by salaries. Why haven't you replied to this block of questions? This is of great importance for us.
A7] As I mentioned earlier, NHI reimburses hospitals directly based on FFS and then hospitals pay specialists by salary. FFS included hospital and physician costs. In other words, physician costs are
not separated. So, I didn’t answer questions about salary system.
But I explained the salary system between hospitals and specialists I could. Specialists’ salary is contracted individually not by NHI but by hospital.
I asked the KHA(Korea hospital associations) and KMA(Korea medical associations) if they have the information about the salary system. But they don’t have data.

Q8] Haven’t you any data or maybe some anecdotal evidence?
A8] There is no statistics about working hours for specialists only. According to the survey of Occupational Employment Statics by Korea Employment Information Service 2009 (2010, KEIS), the average working hours per week of doctors was 61.5 hours. And they placed sixth in high working hours groups.

Q9] How do hospitals make themselves attractive for specialists? Or in other words: Why should I as a young and motivated specialist choose to work in a specific hospital?
A9] As of 2013, 46.4% of specialists work in clinics.
Clinic-based physicians in independent practices (self-employed) make more money than salaried specialists on average, while income gap is very wide. So, due to income security and academic accomplishment etc, some specialists prefer working in hospitals rather than clinics.
Appendix 2. Request Format

Expert survey on

Payment of hospital specialists in ten high income countries

A. Introduction

This survey is conducted as part of a larger project, which aims to contribute to discussions on future hospital payment reform in Belgium. In addition to this survey, we are conducting an extensive literature review. The results of both will be integrated into a report on the payment of hospital specialists in high income countries. Currently, services provided by specialists working in most Belgian hospitals are paid for on the basis of a fee-for-service (FFS) system, while (most) specialists working in university hospitals receive a salary. Future hospital payment reforms may either keep this system in place or may modify it based on the experiences from Canada, England, France, Germany, Korea, Luxemburg, Sweden, Switzerland, the Netherlands and the USA Medicare system which will be analyzed within this survey.

Our study aims to answer the following specific questions:

1. Which incentives (financial and non-financial) are used in different countries to influence and motivate hospital specialists to deliver effective, efficient, and high quality care?

2. How is the amount of hospital specialist payment calculated or negotiated under different payment systems in a selection of countries?

3. What is the impact of hospital payment systems on the relationship between the hospital management and medical specialists? And

4. How do hospital payment system reforms influence the willingness of specialists to work in hospitals or to shift towards private practice?

In order to analyze financial and non-financial incentives across countries, we have developed a framework to systematically describe different income components and non-financial benefits. Figure 1 shows that the income of an individual specialist may consist of FFS payments and/or salary and/or other financial benefits (e.g. pensions, professional insurance subsidies or profit sharing). Internationally, these are the most common forms of paying specialists in hospitals. Other possible payment methods like capitation or physician specific lump sums can be considered as sub types. The relative share of each component of total income will depend on different country specific factors, which can be grouped into four dimensions: the specialist, the payer, the service and the hospital.

For example, it is possible that FFS payments exist only for certain types of specialists (e.g. those at a higher level in the hierarchy), or only for specialists treating certain patients (e.g. private...
patients), or for specialists providing certain services (e.g. outpatient services), or for specialists working in certain hospitals (e.g. private hospitals). The same might be true for salaries, which might be paid only to certain types of specialists, treating certain patients, providing certain services, or working in certain hospitals; and also for other financial benefits. Of course, individual specialists might fall into several of these categories and receive their overall income from different components.

The variables suggested in Figure 1 for each dimension (e.g. public, private, university for the dimension hospital) are not exhaustive but rather suggestions to consider. For example, the geographical location of a hospital may be an additional variable and also influence the relative importance of the FFS component in a given country.

**Figure 1: Framework to analyze financial and non-financial incentives for hospital specialists**

In addition, non-financial benefits may play an important role in influencing specialists to work in a certain hospital environment or to be more productive at work. For example, income security, low administrative hurdles, acceptable workload, fewer night shifts, or the availability of on-site childcare might be increasingly important.

We would like to ask you to keep this framework in mind when answering the questionnaire below. The questionnaire is structured into four sections.

- The first section asks for background information on the hospital sector and on specialists working in hospitals.
- The second section seeks to identify the main payment models in your country and to describe the different groups of specialists to which they apply.
- Section three examines in greater detail the different components that make up the total income.
• Section four looks at non-financial incentives and other relevant factors.

Please be as specific as possible when answering the questionnaire. When you are asked for specific figures, please indicate also the sources of information. If there is relevant literature available in Dutch, English, French or German, it would be very helpful if you could draw our attention to it, and possibly send us these documents. Please always indicate the data year if applicable.
B. Questionnaire

Section I. Background information on the hospital sector and on specialists working in hospitals

d) How are the main categories of (somatic) acute care hospitals (e.g. public, private for profit, private non profit) defined in your country and what is their share of the total hospital sector? Please state if private for-profit hospitals treat public patients. If available please specify the share in terms of beds and/or cases and/or total hospital expenditure.

<table>
<thead>
<tr>
<th>Year: Public</th>
<th>% of beds</th>
<th>% of hospital cases</th>
<th>% of total hosp. expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>- budgetary unit*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- autonomous**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private non-profit***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private for-profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- contracted by public payer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- non-contracted (out-of-pocket/private insurance)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* typical characteristics: staff not employed by hospital but by health authority/city council etc.
** e.g. called trust, public enterprise, hospitals employ (and pay) staff
*** e.g. independent foundations or owned by charitable organizations, churches, Red Cross etc.

e) Career pathways and duration of education:

⑧ How long does it take to become a specialist? Please highlight if training duration differs by specialty.

⑨ How many different hierarchical levels exist for specialists in hospitals? Please describe different levels (e.g. associate specialist vs. consultant vs. chief physician) and the formal responsibilities (medical and administrative) associated with each level. If possible please give percentages for different hierarchical levels.

f) What are the main changes, problems, and debates in your country? This might include for example:
10. Have there been recent reforms of specialist payment models in the last decade, for example to reduce income differences among specialties?

11. What are the trends in contractual relationships between specialists and hospitals?

12. Are hospital specialists an important stakeholder in health policy making? Do they have impact?

13. Are there concerns that specialists earn too much (e.g. when compared with GPs, or across different specialties)?

14. Is there a waiting list problem?

15. Is there a shortage of specialists (e.g. for certain disciplines), and what are the perceived reasons (e.g. inadequate training, lack of planning, increased mobility, income)?

16. Are there regional differences in access to hospital care (e.g. maybe due to different payment models or differences in specialist income)? If yes, please describe and explain these differences.
Section II: Main payment models and contractual relationships between hospitals and specialists

Total income of an individual specialist can be determined by his salary, by FFS payments and/or other financial benefits (e.g. pensions, professional insurance subsidies) or different combinations of both (see introduction and Figure 1). Usually, different groups of specialists can be distinguished in relation to one of the following: the specialists’ characteristics, the payer, the service provided or the hospital. For example, specialists working in public hospitals may receive a salary and their professional indemnity insurance is covered while specialists in private hospitals charge FFS and do not receive any benefits (hospital dimension). Another example might be that specialists treating private patients may charge FFS while they receive a salary for the treatment of public patients (payer dimension). Or depending on their experience and responsibilities physicians may receive salary or FFS (physician dimension).

f) What are the main categories of contractual relationships between specialists and hospitals? Please describe the main groups and give the percentages.

<table>
<thead>
<tr>
<th>% of all specialists in hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specialists employed by hospitals</strong></td>
</tr>
<tr>
<td><strong>Self-employed specialists</strong></td>
</tr>
<tr>
<td><strong>Other possible arrangements</strong></td>
</tr>
</tbody>
</table>

g) What are the most important payment models for different groups of specialists (by hospital type, specialties, service, or payer → Figure 1) in hospitals?

h) What is the percentage of specialists paid according to each of the payment models described under II.a? If specialists receive a combination of salary and FFS please also give the percentage of each component (e.g. 70% salary + 30% FFS)

i) Please describe how the money is channelled to specialists.

1. Are specialists paid by the hospital or another payer?
2. If they receive money from the hospital does the payment the hospital receives contain an earmarked portion for specialist payment? If hospitals receive the payment how is it redistributed among the specialists? Does this result in frictions?
③ Is there a governance structure in which physicians are represented?
④ If specialists are paid by another payer, is there another intermediary between the payer and the specialists?

j) Can specialists run private practices besides their hospital work?

- If yes, please describe regulations that apply (e.g. income thresholds, working times).
- How does the payment system differ? Is it more profitable than hospital work?
- Does this result in recruitment and retention problems in hospitals?
- What are the motives of specialists to run private practices?
- Are there specific regulation or remuneration mechanisms to prevent a shift from hospital specialists towards private practices?
Section III: Details of specialist payment systems

Please describe in detail the FFS system, the salary system and other financial benefits that are in place in your country.

d) FFS payments are usually based on a fee catalogue and a system for converting the catalogue components into a payment amount (monetary conversion). When answering the following questions, please consider both, catalogue composition and monetary conversion:

⑦ Do different FFS systems exist? Please elaborate.
⑧ Who is formally responsible for developing/updating/modifying (each of) the FFS system(s)?
⑨ What factors are taken into account when developing/calculating the FFS system(s)? For example, is the fee catalogue based on historical cost studies, time measures, or psychological stress related to the performance of an intervention, risk, coordination activities, out-of-office working hours? How is each of these factors quantified?
⑩ If negotiations between stakeholders take place, please give details on frequency, participants, and influence of different groups. How are conflicts resolved and by whom?
⑪ Have payers introduced any measures that limit the total amount of money spent on FFS? For example, is there a hospital level budget on total FFS payments that can be made to specialists?
⑫ Are certain fees (e.g. in certain specialties) more profitable than others? Please elaborate. If so, what are the consequences (e.g. shortages in certain disciplines?)

e) Salaries usually consist of a fixed part (basic salary) and a variable part (e.g. depending on the number of night shifts, or performance related bonuses). Please consider both components when explaining different salary systems.

⑩ Do different collective salary agreements exist? How are conflicts resolved and by whom? Please consider that they may differ by hospital type, specialties, service, or payer (Figure 1).
⑪ Which components constitute the total salary (fixed and variable parts)?
⑫ What factors are taken into account when negotiating/setting the salary scale? For example, is the salary based on experience, responsibility, a previously existing FFS income? How is each of these factors quantified?
⑬ If negotiations between stakeholders take place, please give details on frequency,
participants, and influence of different groups. How are conflicts resolved and by whom?
- Are salaries negotiated individually? Or are individual negotiations for salaries above the collectively agreed level possible and common practice?
- Are salary levels higher for certain specialties, at certain hospitals, for certain payers, or for certain services? If so, what are the consequences (e.g. shortages in certain disciplines?)

f) **Other financial benefits** may consist of pension contributions, professional insurance, housing benefits, profit sharing or subsidised childcare.

- What are the main categories of other financial benefits available under the different payment models?
- Are other financial benefits regulated nationally and by whom?
- What is the relative importance of other financial benefits in relation to total income?
- Are certain benefits more appreciated than others for non-financial reasons? Is there any evidence from surveys or other studies?
Section IV: Non-financial incentives and other relevant factors

When answering the following questions, please keep in mind that these may differ across specialists paid according to different payment models.

e) What is the workload of specialists measured in hours (or time per patient)?

f) Are there other relevant non-financial factors influencing the attractiveness of different payment models, e.g. professional independence, administrative workload, income security, on-site child care?

g) Is the gender distribution across specialties a relevant factor for the relative importance of certain payment models?

h) If there are other relevant factors, please elaborate.