Health Policy 119 (2015) 1188–1196

Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol

Review

Remuneration of medical specialists. Drivers of the differences between six European countries

Lucy Kok[a,*], Seán Boyle[b], Marloes Lammers[a], Caren Tempelman[a]

[a] SEO Economic Research, University of Amsterdam, The Netherlands
[b] London School of Economics, United Kingdom

ARTICLE INFO

Article history:
Received 18 May 2014
Received in revised form 1 February 2015
Accepted 8 April 2015

Keywords:
Remuneration
Medical specialists
International comparison
Reimbursement
Incentives

ABSTRACT

Between countries there are large differences in the remuneration of medical specialists. We compared the remuneration levels in 2010 in six countries: Belgium, Denmark, England, France, Germany and the Netherlands. We used OECD figures for the remuneration levels, but corrected them extensively for differences in measurement between countries. English doctors earned most in 2010, French doctors earned least. For the six countries under study the number of doctors per capita is most consistent with the differences in income. Surprisingly, the payment scheme (salaried or fee-for-service) does not seem to account for differences between countries, although within countries fee-for-service specialists earn more than their salaried counterparts. Differences in the role of the GP, differences in workload, composition of the workforce and education could not account for differences in remuneration between these six countries. As our conclusions are based on only six countries more research involving a larger number of countries is needed to confirm these findings.

1. Introduction

In many countries there is a debate about the remuneration of medical specialists. In the UK, the BBC reported on 13 January 2011: "Some consultants (medical specialists) are making more than £100,000 a year in overtime payments from the NHS, the BBC has learnt. The sums – paid on top of basic salaries and bonuses – have been criticised at a time when the health service is trying to save money." In France, extra billing of medical specialists has also been an issue in the newspapers. In the Netherlands, there was a public debate about the sharp rise in income of self-employed medical specialists in 2008 and 2009 after the introduction of a new payment scheme.

To analyse if there are differences between countries in the remuneration of specialists, and to explore what drives these differences, we compared six countries with a similar level of health care: Belgium, Denmark, England, France, Germany and the Netherlands. The OECD collects information about the remuneration of medical specialists (published on stats.oecd.org). However, these numbers are not comparable between countries, as for most countries the figures deviate from the OECD definition of gross income. We therefore corrected the OECD figures, based on national statistics and surveys.

2. Background

In two of the six countries (Denmark and England), most medical specialists work within public or private

* Corresponding author at: SEO Economic Research, University of Amsterdam, Roetersstraat 29, 1018 WB Amsterdam, The Netherlands. Tel.: +31 205251630; fax: +31 205251686.
E-mail address: l.kok@seo.nl (L. Kok).

http://dx.doi.org/10.1016/j.healthpol.2015.04.003
0168-8510/

Table 1
Share of specialists by employment status in 2010.

	Salaried (%)	Both salaried and self-employed (%)	Only self-employed (%)
Belgium[a]	19	7	74
Denmark[a]	82	8	10
England[b]	46	50	4
France	49	21	30
Germany	43	7	50
Netherlands	39	18	43

Data sources: Belgium: FOD Volksgezondheid. Planningsmodellen beroepsoefenaars in de gezondheidszorg. Data 2009. Denmark: Sundhedsstyrelsen. Arbejdsstyrken af sundhesuddannede 2000–2009. Data 2009 and Socha [1]. England: Office for Fair Trading: Private market Healthcare market survey, December 2011. France: Drees: Les médecins au 1er janvier 2010 and Attal-Toubert et-al. [2]. Germany: Bundesärztekammer (2009). Tabelle 3: Ärztinnen/Ärzte nach Bezeichnungen und ärztlichen TätigkeitsbereichenStand: 31. 12. 2009. Netherlands: CBS (2013). Medisch geschoolden; arbeidspositie, positie in de werkkring, naar beroep.

[a] 2009.

[b] 2011.

not-for-profit hospitals on a salaried basis. Only a few medical specialists are solely self-employed (10% and 4%, respectively), with a private practice outside the national hospital system. In Germany and France medical specialists in public or private not-for-profit hospitals also work on a salaried basis, but a large number of medical specialists work only in a self-employed capacity, in either a private hospital or their own practice (50% and 30% respectively). In England and France there is a substantial proportion of doctors who work both on a salaried basis in a hospital and as self-employed service providers (50% and 21% respectively).

In the Netherlands and Belgium, a large number of medical specialists are self-employed, and unlike the other countries, they are self-employed while working within the private not-for-profit hospital system. In Belgium, it is common for a medical specialist in a hospital to be self-employed. In the Netherlands, there is a mix of self-employed and salaried doctors in the hospital. In both countries, all medical specialists in academic hospitals are salaried. On the whole, 74% of medical specialists in Belgium and 43% of specialists in the Netherlands work only in a self-employed capacity. In Belgium, 7% of medical specialists are both salaried and self-employed; in the Netherlands, it is 18%.

In each country self-employed medical specialists are paid on a fee-for-service basis. The service underlying the payment may relate to a Diagnosis Related Group (DRG), or it can be an activity (e.g., a visit or an operation) (Table 1).

3. Materials and methods

The first step was to identify the differences between the OECD figures per country and the OECD definition. According to the OECD definition, gross annual income should include:

- The value of any social contributions (income), taxes, etc., payable by the employee
- All gratuities, bonuses, overtime compensation and 'thirteenth month payments'
- Any supplementary income

And should exclude:

- For salaried medical specialists: social contributions payable by the employer
- For self-employed medical specialists: practice expenses
- Income of physicians who are still in training to become a specialist
- Income of physicians who have specialised in general practice (GP)

The OECD reports national figures per FTE for salaried physicians and per head for self-employed physicians. However these are not reported on a comparable basis as they do not match the definition above.

We first sent a questionnaire to the national providers of the OECD data, via the OECD, to determine the differences between the OECD figures and the OECD definition. The OECD provides a technical document showing deviations of the published figures from the OECD definition (OECD Health Data: Definitions, Sources and Methods). This information was insufficient to determine the exact differences. Based on the questionnaire we corrected the national data making use of original national sources. For example, we excluded the specialists in training from the OECD data for England using the same NHS data that was used to calculate the OECD figure. Why the OECD publishes figures that deviate from the definition when the national statistical sources enable a correct figure to be calculated is unclear to us.

The next step was to correct remaining differences based on national surveys. We cooperated with national specialists, who provided relevant information, about both the figures we could use and how their health care systems functioned.

4. Results

4.1. Gross income of medical specialists per country

For salaried specialists, the reported OECD figures for England and Germany include physicians in training (foundation/registrars and Assistenzarzte, respectively). Therefore, the actual income of salaried specialists is underestimated for these countries. The values for Denmark, France and Germany include the salaries of GPs. In addition, England, Germany and the Netherlands do not include income from private practice.

The reported figures for self-employed specialists also deviate from the OECD definition in various ways. The French figure excludes social security contributions. In Belgium extra billing is excluded. On the other hand, OECD figures for Belgium still include practice costs, which should be excluded. According to the OECD physicians in training are included in the figure for German self-employed medical specialists.

The table below shows corrected gross income for salaried and self-employed specialists. English and Dutch