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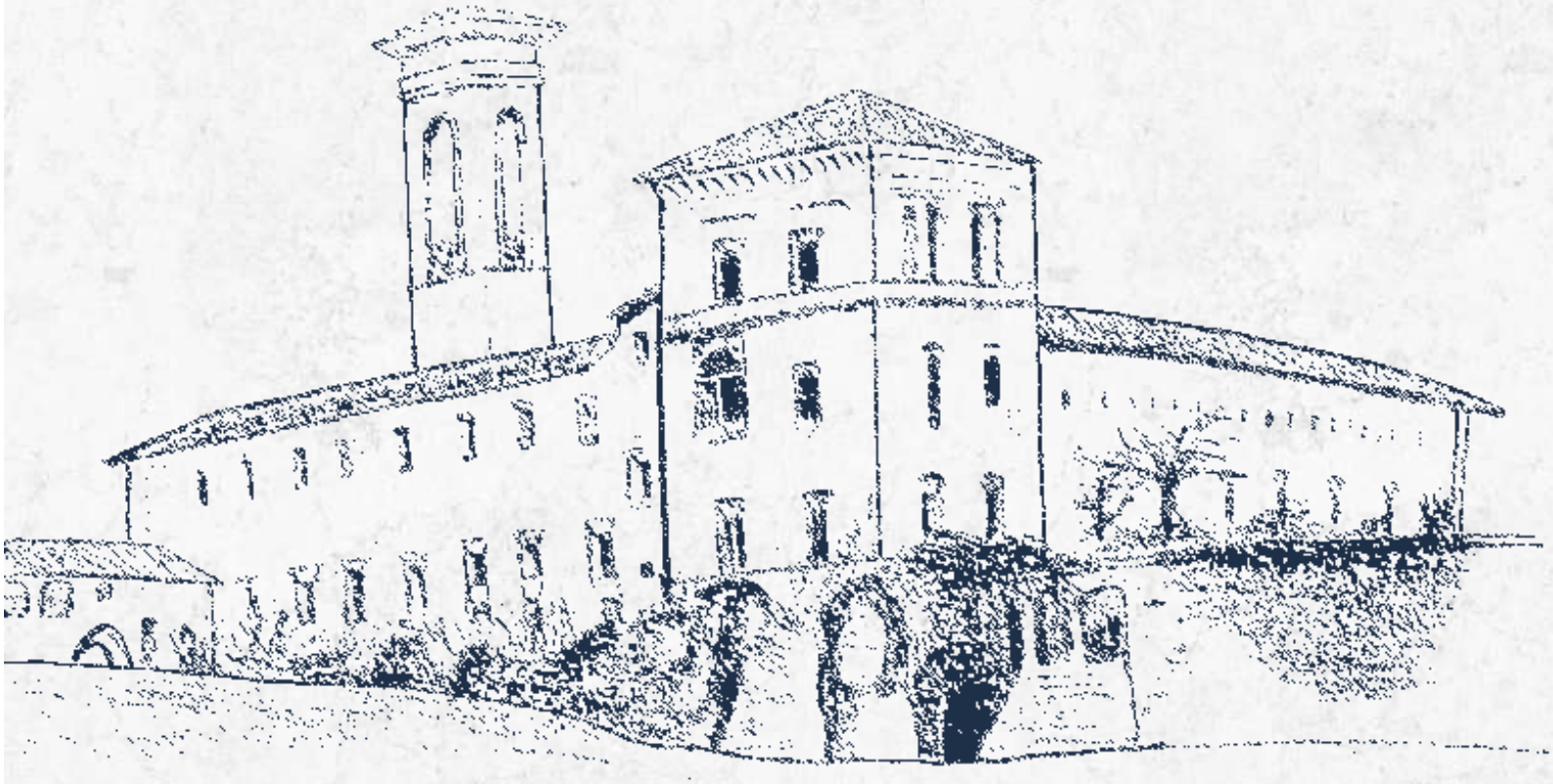

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The International Mobility of the Highly-Skilled: Why Has Sweden so Many Foreign-trained Medical Doctors and the Netherlands so Few?

Gijsbert van Liemt *

Abstract

This paper discusses the role of pull factors in the international mobility of medical doctors by comparing the experiences of two host countries. Over 28% of doctors active in Sweden have been trained abroad. In the Netherlands foreign-trained doctors make up barely 3% of the total. How can this difference be explained? The Netherlands has long aimed for self-sufficiency. Sweden educates and trains fewer doctors than it needs- not because candidates are lacking but because of a lack of places in medical school (some 25% of the foreign-trained are Swedish citizens). Doctors in Sweden are typically employees. Doctors in the Netherlands are mainly self-employed. Health workforce planning in Sweden is highly decentralised and takes place within the public sector; in the Netherlands it is a more inclusive exercise that is organized at central level. In contrast to the Netherlands, few Swedes have their 'own' family doctor; this facilitates the acceptance of foreign-trained doctors. The re-registration requirement and strictness in the testing of language skills may also have played a role. The paper is based on official documents and other publications, in addition to interviews with practitioners and experts in the medical field in Sweden and the Netherlands.

Keywords: International Migration; Workforce planning in Open Labor Markets; Healthcare systems.

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1. Introduction

Medical doctors have a long tradition of moving across borders[1]. Doctors who emigrate risk leaving their home country understaffed. This loss of critical skills ('brain drain') presents countries of origin with difficult questions, a key one being: how many doctors should we train when so many emigrate after training? This paper argues that host countries face a similar, if more luxurious question. They may be tempted to educate fewer doctors than they need, but they still need to decide to what extent they want to depend on foreign-trained doctors.

The international mobility of the highly-skilled is greatly facilitated by the mutual recognition of diplomas. For example, the Nordic Common Labour market for health professionals provides mutual acceptance of competences for those who received their diploma in Denmark, Finland, Norway, Sweden or Iceland[2].

Automatic qualification recognition makes it even easier to work in another country[3]. Since 2005, the European Union (EU) encourages the intra-EU mobility of doctors (and a select group of other professionals) through automatic diploma recognition. According to EU Directive 2005/36/EC, healthcare professionals who received their diploma in an EU member state can exercise their profession in any other EU member state whether they move there permanently or just want to work there occasionally or on a temporary basis[4].

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[1] For background and context information on the international mobility of health professionals see *inter alia* J.Buchan, M. Wismar, I. Glinos, J. Bremmer, J. (Eds.) *Health Professional Mobility in a Changing Europe: New dynamics, mobile individuals and diverse responses Volume II* (Observatory Studies Series No.32; European Observatory on Health Systems and Policies) 2014, other studies produced by the World Health Organization's European Observatory on Health Systems and Policies www.euro.who.int, and the Health Working Papers produced by the OECD's Directorate for Employment, Labour and Social Affairs (DELSA). https://www.oecd-ilibrary.org/social-issues-migration-health/oecd-health-working-papers_18152015.

[2] P-G Svensson, M. Rosberg Gustafsson, D. Kaplan *Sweden: Mobility of Health Professionals* (MoHProf Mobility of Health Professionals, WIAD Wissenschaftliches Institut der Ärzte Deutschlands, Bonn, 2011; Statens Offentliga Utredningar (SOU) *För framtidens hälsa- en ny Läkarutbildning* SOU 2013:15, Stockholm 2013 www.regeringen.se.

[3] L. Glinos, J. Buchan "Health Professionals crossing the EU's internal and external borders: a typology of health professional mobility and migration" in J.Buchan et al 2014 *supra* 1 p. 142.

[4] M. Peeters, M. McKee, S. Merkur, "EU Law and health professionals" in: R. Baeten, E. Mossialos, T. Hervey (Eds.) *Health Systems Governance in Europe: the role of EU law and policy;*

To put the significance of the EU's automatic recognition into perspective, it suffices to compare it with the hurdles that physicians trained outside the EU (in the context of this paper, the term 'physician' is used loosely for doctors) have to overcome[5]. They need to obtain a work and residence permit and pass tests to assess their skill and educational level and experience. These procedures can be long and cumbersome. Not infrequently, non-EU trained doctors must undergo additional training in the host country.

In contrast, EU member states cannot refuse a license to a physician trained in another EU member state. Nor can they demand extra tests or adaptation periods[6]. They may set only two conditions. First, candidates must have a Certificate of Current Professional Status (CCPS) to certify that they are not subject to any restrictions in the exercise of their profession. Second, candidates must have knowledge of the language necessary for practicing in the host member state.

Despite the EU having certified them as perfect substitutes, there are huge differences in the extent to which EU member states rely on foreign-trained physicians. Their share ranges from 41 % in Ireland to virtually nil in Italy (Figure 1 provides figures for 2019 or nearest year).

Based on these considerations, this paper compares the contrasting experience of the Netherlands and Sweden. For the Netherlands, international migration of medical doctors is a comparatively minor phenomenon overall. For Sweden, foreign-trained doctors are a major source of supply. The questions this paper addresses are: Why do these two countries differ so much in their reliance on foreign-trained doctors? What are the consequences for workforce planning? Can one assume that Sweden will continue to be able to attract foreign-trained doctors? More fundamentally, can and should a domestic balance of supply and demand of medical doctors be an official policy goal and is such a goal compatible with their free mobility within the EU?

*Health economics, policy and management (*Cambridge University Press, Cambridge UK) 2010 p. 592.

[5] See e.g. P. Herfs *International Medical Graduates in the Netherlands; a future of medical doctors or cleaners?* PhD Thesis, Utrecht University, Utrecht 2011.

[6] J. Buchan, I. Glinos, M. Wismar" Introduction to Health Professional Mobility in a changing Europe" in: Buchan et al 2014 *supra* 1 p.8.

1.1. Why Doctors Move

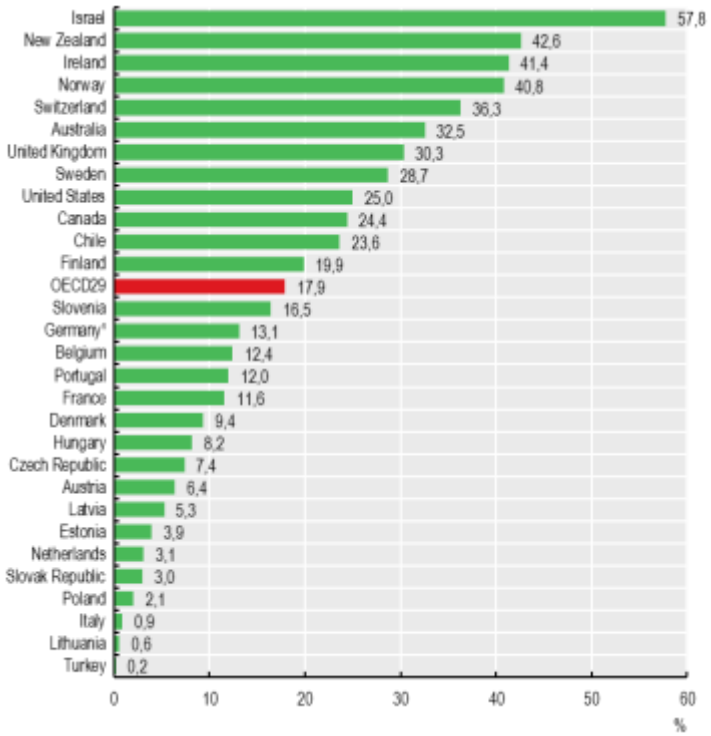
Medical doctors move to other countries for a combination of 'push' and 'pull' factors, the latter often being the mirror image of the former[7]. The absence of advanced training facilities is an oft-mentioned push factor and the availability of such facilities an obvious pull factor. Other push factors are poor remuneration, unemployment, a stressful work environment, a poor quality of life, low morale, and lack of political or religious freedom.
However, these factors say little about the attractiveness of individual host countries, particularly when these offer similar employment opportunities, training facilities and living conditions. Sweden and the Netherlands are among the wealthiest EU Member States and the local languages are not widely used outside their borders. It thus seems reasonable to assume that neither language nor attractive incomes are main explanations for the difference in their reliance on foreign-trained physicians. So, what does explain this difference? An obvious answer to this question would be to ask the physicians themselves. But research on this is scarce[8].
Medical doctors, just like other migrants, typically have different, and often multiple reasons for wanting to move to another country. One category consists of spouses or partners of persons who move for professional reasons. A second are refugees who are usually trained outside the EU. A third consists of spontaneous jobseekers who flee worsened working conditions at a time of economic hardship, look for further professional development or for improving their incomes, or who consider it interesting to be working for a while in a foreign country. There is a priori no reason to assume that the volumes involved are significantly different between Sweden and the Netherlands.
Two other categories, however, are more important for Sweden than for the Netherlands: the actively recruited, and natives trained abroad. In Sweden's decentralized healthcare system, regional authorities[9] and hospitals actively recruit foreign-trained health professionals. The second typically Swedish source of supply is native Swedes who receive their

[7] See e.g. the sources mentioned in note 1.
[8] The Advisory Committee on Medical Manpower Planning (*Capaciteitsorgaan*) began surveying the motives of foreign-trained doctors for coming to the Netherlands but gave up after a very low response rate.
[9] For administrative purposes Sweden is divided into 21 regions. Until 2019, Sweden had regions and counties but the latter were renamed regions as from 1 January 2019. To make it easier for the reader, all references to the counties have been changed into references to the Regions.

training abroad. There are also Dutch doctors trained abroad but their number pales in comparison to the thousands of young people with a Swedish background who study medicine abroad.

This paper is organized as follows. To provide context, Section 2 takes a closer look at the healthcare systems of the two countries, focusing on some key differences between them. Section 3 discusses demand for medical doctors and Section 4 domestic supply. Matching demand and supply through workforce planning is the subject of Section 5, whilst Section 6 considers the role of the foreign-trained as a source of supply. The last section provides some concluding remarks.

Figure 1. Share of foreign-trained doctors, 2019 (or nearest year)[10]



Source: OECD Health at a glance/OECD Health Statistics 2021 www.oecd-ilibrary.org.

2. The Healthcare Systems in Sweden and the Netherlands: Some Differences

Healthcare systems are notoriously hard to describe, let alone compare. They are made up of many different parts with complex rules and social codes, and strong interdependencies among the different parties

[10] The OECD data on reliance on foreign-trained doctors that this paper uses should be considered as approximations. Neither Sweden nor the Netherlands collects data on the number of practicing doctors. In contrast to Sweden where these do not exist, the Netherlands has public registers for active physicians (see Box 1) that show who is *allowed* to practice medicine. However, a significant number of those registered (some 4% in January 2016 according to *Capaciteitsorgaan*'s 2018 annual report www.capaciteitsorgaan.nl) are (Dutch and foreign-trained) specialists who work abroad but opted to continue their Dutch registration. Older doctors may stop working shortly after re-registration. The registers give no indication of how active each doctor is, how many hours each works.

involved[11]. Conflicts of interest and conflicting objectives among stakeholders contribute to their complexity[12]. They are subject to continuous change, the result of government initiatives, demographic developments, innovations in treatment and efforts to control costs. *Comparing* two countries adds a layer of complexity. On the whole, it is slightly easier to describe the Dutch than the Swedish system because the latter is highly decentralised. In Sweden the Regions are responsible for the management and organisation of healthcare. They have a high level of autonomy and differ from one another in many respects.

The Dutch and Swedish healthcare systems both seek to provide timely, high-level healthcare at reasonable cost. However, different actors (doctors, trainers, training institutions, patients, universities, politicians, civil servants and -in the Netherlands- insurance companies) do not necessarily have the same views on how these objectives can best be reached. For policy makers the challenge is to make optimal use of the insights, skills and experience of these actors.

Demand for healthcare keeps going up. Thanks to medico-technical developments, research and innovations ever more illnesses can be diagnosed and more medical conditions can be treated than before[13]. Heightened expectations of citizens[14] also increase demand.

A key question is how to keep costs from spiralling out of control. Expenditure on drug prices is held back by stimulating the use of generic drugs. Hospitals have reduced the number of patient days in hospital and increased the share of outpatient surgery[15] (although shortage of beds creates planning problems which can be time-consuming to solve). The regional concentration of highly specialized care such as regional cancer centers aims to increase the cost-effectiveness and the quality of care. Yet healthcare is very labour intensive and efforts to keep salaries under control can be a source of frustration for the professionals concerned.

Reducing demand should help lower costs. Waiting lists and own contributions discourage those seeking care. Yet containing demand is complex because patients are largely immune to rising costs. In most

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[11] W. Meerding, M. van den Berg *De zorgstelselcompetitie* (publicatie 16-04; Raad voor Volksgezondheid en Samenleving, Den Haag, 2016).

[12] Socialstyrelsen *Tillgänglighet i hälso- och sjukvården* (Artikel nr 2018-2-16, Socialstyrelsen Stockholm, 2018) www.socialstyrelsen.se.

[13] Socialstyrelsen NPS *Nationalla Planerings Stödet* Stockholm, www.socialstyrelsen.se 2019

[14] SOU 2013:15 *supra* 2 p.67.

[15] E. Mossialos, M. Wenzl, R. Osborn, D. Sarnak (Eds.) *International Profiles of Health care Systems 2015* (The Commonwealth Fund, New York 2016 www.commonwealthfund.org; CBS (Statistics Netherlands) *CBS Statline https://opendata.cbs.nl.*

sectors, higher prices lead to lower demand but health and medical care constitute an exception. In Western Europe it is rare for patients to pay directly for the higher costs of the services rendered[16] because the "payer" (the government; insurance companies) is separated from the recipient, i.e. the patient. Higher prices for healthcare thus do not automatically result in lower demand[17]. Despite these and many other similarities the two countries differ in some key aspects. Note that these are often a difference in degree.

(a) Sweden has a decentralised healthcare system

Swedish Regions enjoy considerable autonomy, including fiscal autonomy[18]. They have great freedom to decide how they organize and provide care[19]. As in the Netherlands, Sweden's central government is responsible for formulating healthcare policy, for setting standards and for oversight. It must also ensure that all citizens, regardless of where they live, have access to health and medical care under the same or similar conditions[20]. But the implementation of these policies is decentralized to the Regions. The 21 Regions have their own IT systems, handling of waiting lists, role of private operators[21], list of approved medicines, level of provider fees, and compensation model[22].
The Regions also differ in their reliance on foreign-trained doctors[23]. A Region such as Stockholm, with few manpower challenges, recruits selectively abroad when the need for a specific competence arises. Others,

16 S. Simoens, J. Hurst, J. *The Supply of Physician services in OECD countries* (OECD Health Working Papers No.21 OECD Paris 2006) www.oecd-ilibrary.org ; M. Grignon, Y. Owusu, A. Sweetman, A. *The International Migration of Health Professionals (*IZA Discussion Paper No.6517; Institute for the Study of Labor, Bonn, 2012) https://ftp.iza.org/dp6517.pdf.

17 Simoens et al 2006 *supra* 16 p. 30.

18 The high level of fiscal autonomy makes it difficult for the central government to use access to finance as a stick for driving through reform (Riksrevisionen *Staten och SKL- en slutrapport om statens styrning på vårdområdet* (RIR 2017:3; Riksrevisionen, Stockholm 2017) p.5 www.riksrevisionen.se.

19 Statens Offentliga Utredningar (SOU) 2017 *God och nära vård En gemensam färdplan och målbild* SOU 2017: 53, Stockholm 2017 p.26 www.regeringen.se.

20 Socialstyrelsen NPS 2019 *supra* 13 p.162.

21 Socialstyrelsen Nationella Planerings Stödet 2018 www.socialsyrelsen.se.

22 A-C. Olsson, Th. Parker, J. Reinbrand *ST i en föränderlig sjukvård: Nya förutsättningar för läkares specialiseringstjänstgöring* (Sveriges Läkarförbund, Stockholm 2014) p. 9.

23 Svensson et al. 2011 *supra* 2.

in contrast, recruit actively abroad[24]: they use recruitment agencies and are present at international recruitment fairs where they compete with each other. They promote work in their Region among Swedish students at foreign universities- where they compete with other Regions.

(b) The place of primary care in the system

Healthcare is typically divided into Primary, Secondary and Tertiary care. Primary care doctors are mainly General Practitioners (GPs), aka family doctors. Secondary and tertiary care is dispensed by medical specialists. Tertiary care is typically provided by higher-level specialists, often in academic hospitals[25]. It is slightly confusing that in many countries GP is now defined as a specialty in its own right.
Traditionally, Dutch primary care was built around private, single person practices, possibly with an assistant. Over the years, partnerships with two or more GPs and other disciplines have become more common, but these never reached the size of the much larger Swedish healthcare centres where groups of family doctors work together with other types of health professionals[26].
Swedish primary care centres are expected to fulfill a range of tasks that is broader than that of a Dutch GP practice. The average visit to a Swedish GP lasts longer (22.5 minutes compared to 9.8 minutes for a Dutch GP (see appendix table 1). Swedish GPs see fewer patients per year than their Dutch counterparts. The number of consultations per person is higher in the Netherlands than in Sweden. Swedes' reluctance to see a doctor[27] may be related to the shortage of GPs. Most patients do not have their "own" GP (see below); they cannot be sure whom they will meet.

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[24] Their different recruitment strategies illustrate how far apart the Regions can be. Västra Götaland Region refrains from hiring doctors from Poland and the Baltic States to avoid 'brain drain'. In contrast, the Örebro region focuses its recruitment drive on Polish doctors, whilst Kalmar Region even opened its own recruitment agency in Poland (Svensson et al 2011, *supra* 2, pp.17-19).

[25] R. Fujisawa, G. Lafortune, *The Remuneration of General Practitioners and Specialists in 14 OECD Countries: What are the factors Influencing variations across countries?* (OECD Health Working papers, No.41, OECD Paris 2008) https://www.oecd-ilibrary.org/docserver/228632341330.pdf?expires=1651756724&id=id&accname=guest&checksum=80AB352E7ADB14A71C02A49A7F6E3DC3.

[26] Statens Offentliga Utredningar (SOU) 2018 *God och nära vård- en primärvårdsreform* SOU 2018:39 SOU Stockholm, 2018 p.87 www.regeringen.se.

[27] see e.g. A. Björnberg *Euro Health Consumer Index 2016* (Health Consumer Powerhouse, 2017 www.healthpowerhouse.com.

Both countries try to steer patients to primary care because it is considered to be more cost-effective. The Netherlands appears to have been more successful in this than Sweden. In the Netherlands primary care doctors constitute a larger share of the total than in Sweden.

(c) Ownership and employment status

In Sweden, the public sector plays a much greater role in the provision of healthcare than in the Netherlands. Swedish hospitals are typically publicly owned. In the Netherlands, hospitals are mainly private, not-for profit organisations[28]. In Sweden, primary care centres are typically owned and managed by the public sector and despite successive waves of privatization a majority still is. Nationally, 78% of those active in health and medical care in Sweden work in the public sector[29] but there are considerable differences by region. In Stockholm, the majority of primary care doctors work for a privately run healthcare centre[30].

With few exceptions, Swedish physicians work for a salary in an employment relation. Swedish GPs receive fairly detailed instructions on how to run their healthcare center and how to deal with patients. The autonomy that in other countries attracts students of medicine to primary care[31] is much circumscribed in Sweden. This has been mentioned as a reason why, despite relatively good incomes, becoming a GP is less popular in Sweden and why Swedish GPs switch jobs frequently[32].

The employment status of Dutch doctors is more varied. Dutch GPs are typically self-employed, whether they work alone or in a partnership with one or more colleagues. Dutch GPs have more autonomy in how they approach their job, discharge their duties and organize their working day.

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[28] see e.g. M. Kroneman, W. Boerma, M.van den Berg, P. Groenewegen, J. de Jong, E. van Ginneken, *The Netherlands health system review* (Health Systems in Transition, Vol. 18 no.2 2016, WHO, Copenhagen, 2016 https://apps.who.int/iris/handle/10665/330244.

[29] Socialstyrelsen NPS 2019 *supra* 13.

[30] S. Pettersson, K. Engblom, *Läkarförbundets Primärvårdsenkät 2015: Metodbeskrivning och basuppgifter om primärvårdens läkarverksamheter* (Sveriges Läkarförbund, Stockholm, 2015) pp. 34-37 https://docplayer.se/14782478-Lakarforbundets-primarvardsenkat-2015-metodbeskrivning-och-basuppgifter-om-primarvardens-lakarverksamheter.html.

[31] S. Stordeur, C. Léonard, "Challenges in physician supply planning: the case of Belgium" in: *Human Resources for Health* 8:28 2010.

[32] Pettersson et al 2015 supra 30; M. Lövtrup "Läkares arbetsmiljö har blivit sämre" *Läkartidningen* Volume 113 #1-2 2016; I. Svevonius *Jag vill avskaffa mig själv: låt proffsen styra vården* Stockholm 2019.

Dutch medical specialists are either self-employed (some 39% of the total), employed (50%) or a combination of the two (11%)[33] .

(d) Organization and Funding

In Sweden healthcare is universal and automatic. Financing and provision of care are handled within one organisational system. The Netherlands has a mandatory health insurance system: all citizens must take out a basic health insurance with a private insurance company. These companies have a duty to accept: they may not refuse customers for the basic insurance package. Nor may they demand a higher premium from people who are bound to make more and/or more expensive claims because of old age or due to a chronic illness. A national system compensates the companies for the different risk profiles of their portfolios[34].
In this "regulated market system" health insurers compete with each other for clients. Healthcare providers compete with each other for the business of the health insurers (GPs feel that their autonomy is increasingly circumscribed by the superior bargaining power and the detailed demands of the insurers). Patients choose the healthcare provider that suits them best -although this latter freedom is increasingly circumscribed by the insurers. Collectively, the insurance companies spend millions of Euros each year to attract customers.

(e) Patient satisfaction: accessibility and continuity of care

Both Swedish and Dutch healthcare score highly in international comparisons of medical quality[35]. However, among the Swedes

[33] Capaciteitsorgaan *Capaciteitsplan 2020-2023; Deelrapport 1: Medische Specialismen, klinisch technologische specialismen, spoedeisende geneeskunde* (Capaciteitsorgaan, Utrecht 2019) https://capaciteitsorgaan.nl. However, the employment status of Dutch and Swedish doctors is becoming more similar as, in the Netherlands, the share of both GPs and specialists who are employed is increasing (Capaciteitsorgaan (CO) *Capaciteitsplan 2016 Deelrapport 2: Huisartsgeneeskunde* (Capaciteitsorgaan, Utrecht, 2016) https://capaciteitsorgaan.nl; Capaciteitsorgaan *supra* 33 p.13; P. Meurs, M. Bontje, H. Borstlap, J. Legemaate *Gezond belonen: Beleidsopties voor de inkomens van medische specialisten* (Commissie Inkomens Medische Specialisten) 2012 p.10 https://gezondezorg.org/files/arbeidsvorm_rapport-cie-Meurs.pdf.

[34] CPB (Centraal Plan Bureau) *Zorgkeuzes in kaart: Analyse van de beleidsopties voor de zorg van tien politieke partijen* (CPB, Den Haag, 2015) www.cpb.nl ; Meurs et al 2012 *supra* 33; Kroneman et al 2017 *supra* 28.

[35]according to Vårdanalys 2016 *Vården ur befolkningens perspektiv 2016- en jämförelse mellan Sverige och tio andra länder; Resultat från The Commonwealth Fund International Health Policy*

confidence in the system is falling. Dutch patients have a more positive view of their caregivers' capability to provide information and support[36].
Much of the dissatisfaction among Swedes can be traced to poorly developed continuity of care[37]. In the Netherlands, continuity of care is a much appreciated right. Attempts in 2015 by the Dutch Government to limit this right were met with massive protests by patients and care providers alike. Nearly all Dutch patients have a steady contact with the primary care doctor of their choice compared to 26% of Swedish patients (in 2020, down from 50% in 2010[38]). For Sweden's patients to have a close link (*anknytning*) to the doctor of their choice was considered so important that the concept of PAL (*"Patientansvarig läkare"*/patient-responsible physician) was introduced into the Law in 1991. However, in 2010 PAL was taken out again[39] and replaced by '*fast vårdkontakt'* [steady contact with the health care center of choice].
The reasons for this change of heart are unclear although the shortage of primary care doctors must have made PAL difficult to apply. The high mobility of Swedish doctors must also have played a role: it is much more common for Swedish doctors (who are all employed) to switch jobs than it is for Dutch doctors (in large majority self-employed). A survey found that half of all primary care doctors in Sweden had worked less than five years at their current place of work[40].
Accessibility has many components, including distance to the healthcare center, level of own contributions, a patient's ability to obtain and understand relevant information[41] and, above all, waiting times. Waiting times are a source of irritation and frustration for patients everywhere. In

Survey (PM 2016:5; Myndigheten för Vård- och OmsorgsAnalys MYVA Stockholm 2016) www.vardanalys.se.

[36] SOU 2017:53 *supra* 19 p. 27.

[37] Statens Offentliga Utredingar (SOU) 2018 *supra* 26 p.13.

[38] Vårdanalys 2016 supra 36; F. Mellgren "Läkarförbund kritiserar regeringens vårdreform" Dagens Medicin 21 december 2021).

[39] Much to the dismay of the Swedish Medical Association: 'Most people know the name of their hairdresser or dentist …they have the same physiotherapist … but those who take care of the most intimate we have, our body and soul, are a variety of anonymous doctors" (Heidi Stensmyren, Chairperson of the Swedish Medical Association SLF/SMA in Metro Debatt 9 april 2018).

[40] Pettersson et al 2015 *supra* 30. It is unclear why Swedish GPs switch job often. For sure, being an employee when, overall, GPs are in short supply makes it easy to find another job quickly. They 'vote with their feet' when they are not happy with their work environment. Switching employer is also a way to get a higher salary.

[41] Socialstyrelsen *Tillgänglighet i hälso- och sjukvården* (Artikel nr 2018-2-16, Socialstyrelsen, Stockholm, 2018) p.8 www.socialstyrelsen.se.

Sweden, it can take a particularly long time before a doctor can see you or before you can undergo an operation. This has been a hot political issue in Sweden since the 1960s)[42]. There is strong pressure on politicians to improve the situation. However, the Central Government does not have the operational responsibility for healthcare, which lies with the Regions.

(f) Re-registration requirement

In the Netherlands medical doctors must re-register periodically to ensure that they are sufficiently active and that their knowledge is up-to-date (see Box 1). In Sweden no such register exists.

> Box No. 1. Time bound registration for medical doctors in the Netherlands
>
> All professionally active physicians must be registered according to Dutch law. This public register states what doctors are allowed to do (use a legally protected title) and are subject to (Dutch disciplinary law). Every five years they must ask for re-registration. This is granted provided they have been sufficiently professionally active in the preceding five years or can prove that they fulfil certain educational requirements. Those who do not re-register lose their registration.

It is an open question whether a re-registration requirement guarantees the competence of medical doctors. Dedicated professionals will want to keep their knowledge up-to-date regardless of a re-registration obligation[43]. In Sweden, a license is permanent but may be revoked due to

[42] Socialstyrelsen supra 46 p.51. Swedes have a comparatively high level of confidence in the public authorities (see e.g. Daun, Åke *Svensk Mentalitet: Ett jämförande perspektiv* Rabén & Sjögren, Stockholm 1989) but this confidence is severely tested by the perceived poor accessibility to healthcare. To the point that in several Regions "Vårdpartier" (political parties with good healthcare provision as their main rallying point) have successfully participated in elections, particularly in the thinly-populated Regions. The local success of these parties -with up to 30% of the votes- has so far not translated into a successful national election campaign (see e.g. A. Heimersson "Det våras för vårdpartierna- men kan de göra skillnad?" In Dagensarena 21 September 2018 https://www.dagensarena.se/innehall/det-varas-vardpartierna-men-kan-de-gora-skillnad

[43] The Swedish Doctors' Association's focus is on employers' giving doctors sufficient time for Continuous Professional Development (CPD) to keep their skills and knowledge up-to-date. This has been on a downward slope for many years. The Association considers that ten days should be the norm. In 2015, doctors were given on average six days for CPD, down from 8.5 days in 2004 (P. Wahlstedt *Fortbildnings enkät* Sveriges Läkarförbundet, Stockholm 2018).

malpractice, gross incompetence or conviction for a serious criminal offence. Nonetheless, some observers consider it remarkable that Sweden does not have a system that regularly tests the knowledge level of medical doctors[44].

It is not possible to say whether the absence of a re-registration requirement influences foreign-trained doctors' decisions to come to or remain at work in Sweden nor whether this requirement has kept foreign-trained doctors from coming to work in the Netherlands.

(g) Language requirements

Good knowledge of the local language is essential for doctors to be able to inform their patients in clear and comprehensible language and for a patient to give informed consent[45]**.** This includes understanding the subtleties of language and dialect, the nuances of non-verbal communication and social and behavioural norms[46] as well as the ability to give and receive instructions and discuss cases[47].

Through Directive 2005/36/EC the EU certifies that all EU trained doctors are perfect substitutes but it is unclear to what extent patients view them as such. Systematic research on this question is scarce but media reports suggest that this is not a foregone conclusion. The issue is sensitive from a political angle because of its potential xenophobic undertones. Many of the foreign-trained doctors have a good command of the Swedish language, but this is not the case for all of them.

The EU considered it important that the language requirement was not used to exclude doctors from the host country labour market. Both Sweden and the Netherlands interpreted this as systematic language

[44] M.Ström "Genom att ta upp misstag belyser man problem (Intervju med Christian Unge)" *Läkartidningen* 7/2018 https://lakartidningen.se/aktuellt/nyheter/2018/02/christian-unge ; also: "Applådar är fint men sätter inte bröd på bordet" in *Dagens Medicin* 21 April 2020. https://www.dagensmedicin.se/opinion/debatt/applader-ar-fint-men-satter-inte-brod-pa-bordet.

[45] Peeters et al *supra* 4 , p. 509.

[46] Slowther et al. 2009 in: P. Wickramasekara 2014 *Assessment of the impact of health professionals on the labour market and health sector performance in destination countries* (ILO Asia Pacific Working Paper series, ILO; Manila) https://ideas.repec.org/p/ilo/ilowps/994855613402676.html.

[47] M.Den Adel, W. Blauw, J. Dobson, K. Hoesch, J. Salt 2008" Recruitment and the Migration of Foreign Workers in Health and Social Care" in H. Kolb, H. Egbert (Eds.) *Migrants and markets: perspectives from Economics and the Other Social sciences* (Amsterdam University Press, Amsterdam, 2008 p.203).

controls not being allowed under 2005/35/EC, leaving that responsibility to the physicians and their employer. However, on occasion the employer's assessment of the language skills was colored by the desire to recruit the candidate, as an informed observer put it. Surveys showed that older patients in particular had trouble understanding their doctor[48].

Directive 2013/55/EU, the successor to 2005/36/EC, gave more prominence to patient safety and allowed competent authorities to apply language controls. It is unclear whether a less than strict enforcement of the language skill requirement has been a factor for foreign-trained doctors to choose to come to Sweden. But the year after Sweden introduced systematic language controls for EU-trained doctors, the number of licenses issued to these doctors dropped by no less than one-third of their previous years' levels[49].

Patients in places with a shortage of doctors are happy to have access to a doctor, any doctor. Elsewhere, their freedom to choose is often also limited: primary care doctors change job comparatively often. When turnover is high it is often futile to insist on seeing a specific doctor because he or she may have moved on. The acceptance of foreign-trained doctors is evidently greater when patients do not know which doctor they will see next.

3. Demand for Medical Doctors

It is difficult to say how many doctors a country needs. Demand for doctors' services is derived from the demand for healthcare- a concept that is hard to capture in numbers and that appears to be almost limitless: there is no end to new types of treatment, new techniques and new medicines that become available.

Doctor density- the number of doctors per 1,000 inhabitants- varies enormously around the world; within the EU it ranges from 2.4 in Poland to 6.2 in Greece[50]. The doctor density in Sweden (4.2) is higher than in the Netherlands (3.4) (appendix table 1).

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[48] See e.g. J. Widell "Utländska läkare svåra att förstå" *SVT Nyheter* 15 November 2012; also. J. Widell "Landstinget tummar på språkkraven" *SVT Nyheter* 16 November 2012).

[49] F. Mårtensson "Hälften så många EU-legitimationer senaste halvåret" *Läkartidningen* 12/2017; H. Scarabin; E. Höglund "Språket är viktigt för patientsäkerheten" *Dagens Medicin* 3 Juni 2016.

[50] OECD Health at a Glance 2021 (figures for 2019 or latest) OECD Paris https://www.oecd.org/health/health-at-a-glance.

But doctor density says little about the number of doctors who are *active* and about *how active* they are, i.e. how many hours they work per week, month or year. FTEs (Full-Time Equivalents) provide a more accurate picture. To illustrate the point, between 2007 and 2016 the number of GPs in the Netherlands increased by 21% whilst in terms of FTEs capacity increased by no more than 9%[51]. Yet, to keep track of doctors' working time is complex; hours worked often go unregistered; underlying trends need not point in the same direction.

On one side are the junior doctors who frequently work excessive hours. Traditionally the healthcare sector makes maximum use of doctors in training who are -often reluctantly- willing to work long hours to gain experience, in the knowledge that this will only last a few years[52].

Legislation limits the number of hours worked but actual practice is more complex. Swedish employers and trade unions are free to deviate from national legislation by locally negotiated collective agreements on working time, rest and holidays, and often do[53]. In the Netherlands most doctors are self-employed and thus free to decide how many hours they want to work.

On the other is the trend for doctors to work fewer hours to achieve a better work-life balance. Partly this is related to the rapid feminization of the workforce (see appendix 1). Female doctors work fewer hours than their male counterparts do and are more likely to take career breaks or to work part-time[54]. But it is not just women doctors who seek a good work-life balance. The newest generation of doctors (both men and women) attaches greater importance to this than their older peers did[55]. Many young doctors have a partner with his or her own professional career and this frequently leaves them no choice.

In Sweden, a good work-life balance is considered a priority for healthcare personnel, just like it is for workers in other sectors of the economy. Regulated working hours and regulated free time are the norm. The maximum working hours set by law and collective agreements are by and large respected. Swedish doctors –who are employed- have much time to

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[51] L. Van der Velden, R. Batenburg, *Aantal huisartsen en aantal FTE van huisartsen vanaf 2007 tot en met 2016: Werken er nu meer of minder huisartsen dan 10 jaar geleden en werken zij nu meer of minder FTE?* (Nivel, Utrecht, 2017) www.nivel.nl.

[52] Peeters et al *supra* 4 p.633.

[53] Barysch, Katinka *The Working Time Directive: What is the fuss about?* (Center for European Reform) 2013 p.3 www.cer.org.uk.

[54] Stordeur et al *supra* 31.

[55] see e.g. S. Versteeg, E. Vis, L. van der Velden, R. Batenburg *De werkweek van de nederlandse huisarts in 2018: een vergelijking met 2013* (Nivel, Utrecht, 2018) www.nivel.nl.

spend with their family or for other activities[56]. In the Netherlands a growing number of medical specialists opt for employment rather than be self-employed (who work longer hours)[57]. For planners the challenge is to predict the net effect on demand and supply of these different sources of pressure, changing preferences, and increased feminization.

Demand for doctors is in large part replacement demand, i.e. to replace doctors who retire or leave the profession for other reasons. In both countries, doctors are retiring later than before (although they may be working fewer hours towards the end of their working life). In Sweden, 8% of all practising doctors were over 65 in 2018, more than twice the percentage of ten years earlier[58]. The effect of this delayed retirement is partly undone by the fact that new doctors start their working life at an ever higher age.

When part of the tasks of a doctor are taken over by a health professional with fewer years of training (vertical substitution) this should reduce demand for doctors' services. In the Netherlands, the number of physician assistants and nurse practitioners has risen from fewer than 200 in 2005 to 4500 in 2019[59]. Nonetheless, the shifting of certain tasks can be controversial (young doctors may see this as a threat); may not be permitted under the law (because only licensed doctors are allowed to do them); may lead to the deskilling of doctors (when these cease to perform certain tasks for which they have been trained); and may create confusion as to who is legally responsible in case of complications.

Higher productivity and efficiency, achieving higher levels of production without a commensurate increase in inputs, should also lower demand for doctors. In healthcare "input" is usually measured either in number of doctors or in total working time. "Production" typically refers to the number of procedures or the number of patients treated even though the

[56] Many of the (politically controversial) "*lyrläkare/stafettläkare*" (locum doctors) who are essential for keeping healthcare running in the thinly populated Regions have a regular job elsewhere.

[57] Capaciteitsorgaan 2019 *supra* 33.

[58] P. Ruin "Han får trappa ner med full lön" in *Läkartidningen* 29 January 2020 https://lakartidningen.se/aktuellt/nyheter/2020/01/det-ar-bra-att-inte-behova-jobba-100-procent.

[59] Capaciteitsorgaan (CO) *Recommendations 2021-2024; Advisory Committee on Medical manpower Planning; Main Report concerning the intake in medical, clinical, technological, dental, mental healthcare, FZO (Hospital Training Fund), Physician assistant, nurse practitioners and related degree and postgraduate programmes* (Capaciteitsorgaan, Utrecht, 2019) https://capaciteitsorgaan.nl

OECD[60] rightly argues that doctor's productivity should rather be measured by improvements of patients' health and responsiveness.
Specialists in training are, in part, a cost to the host clinic because a trainer/supervisor must make time available to train them and, in part, a benefit -because they contribute to production. In general, it is hard to say how productive specialists in training are[61] but in the later stages of their training they are a valued resource to their training clinic. In fact, many hospital departments rely heavily on the inputs of junior doctors.
Judging by the number of consultations Dutch GPs would appear to be more productive than their Swedish counterparts are. Length of consultations explains part of the difference (see appendix table 1). However, these metrics must be considered in conjunction with the way the healthcare system is organised. When GPs must deal with complex (read: time consuming) cases, their productivity as measured by the number of patients they see goes down. In contrast, when a consult consists of a cursory examination followed by a referral a GP can see more patients.

4. Domestic Supply

To meet demand, doctors must be educated and trained domestically, or they must be recruited from abroad (discussed below)[62]. Domestic supply goes through some distinct phases. A sufficient number of students is needed to fill the available places in medical schools. There must be enough trainers and training places for students to do their practical training and for junior doctors to do specialist training. Upon completion of their training these specialists must find an employment or (in the Netherlands) a private practice or a place in a partnership.
In both countries, there are far more candidates than there are places in medical schools. This limited number of places (*numerus fixus*- see below)

[60] OECD *The looming crisis in the Health Workforce: How can OECD countries respond?* (OECD Health Policy Studies, OECD, Paris) p.53 https://www.oecd.org/els/health-systems/41509461.pdf.
[61] A. Houkes-Hommes *De kosten van verruimen of loslaten van de numerus fixus* (SEO Economisch Onderzoek, Amsterdam 2010).
[62] Persuading them to prolong their working life beyond retirement, prolong their working week by e.g. employing them as locum doctors (*hyrläkare)* at another location, and persuading non-practising doctors to restart their practice are other methods. But the (potential) numbers involved are small. Moreover, whereas in Sweden non-practising physicians can start practising again at any moment, in the Netherlands, with its time bound license system, they must first re-apply for a license to practice.

tends to receive much attention even though adequate numbers of trainers and training places are equally essential. The job of trainer must be seen as attractive: a competent, dedicated supervisor should be recognized as such- in professional status, in financial compensation, or both.

The scheduled time to become a medical doctor is long in both countries and in Sweden particularly so. Swedish students graduate after 5.5 years and then do a minimum of 18 months mandatory practical service (AT *allmäntjänstgöring*) before they receive their doctor's license[63]. Dutch students receive their license after 6 years of study with progressively more practical training. For GPs the difference in length of study is particularly striking. In the Netherlands, a student can become a GP in nine years (six years to receive a license and three years GP specialization). In Sweden this takes at least 12 years (seven years basic training and five years specialization).

In actual practice the study takes considerably more time than scheduled. In Sweden, graduates must themselves find a place where they can do their AT. Waiting time for doing AT is on average 10 months[64]. The average time between graduation and obtaining a license went up from 30 to 36 months between 2008 and 2018[65].

In the Netherlands, *co-schap* internships are part of the curriculum but scheduling problems can result in many months waiting periods for students. However, the main delay occurs between graduation and the start of specialist training (interval time). Many graduates first want to acquaint themselves with a particular specialization and so improve their chances of obtaining a training place[66]**.** The average time between the start of the search for a training place and the start of this training is between

[63] Sweden is in the process of transforming MD training. AT will be abolished. The study will last six years to bring it into line with the rest of the EU. The training of clinical skills will be integrated into the theoretical parts of the programme (SOU 2013:15 *supra* 2). However, the first students under the new system will be graduating in 2026/27 at the earliest. We will therefore continue to discuss the system as it exists today.

[64] M. Ström "Västerbotten tar bort var femte AT-tjänst nästa år" *Läkartidningen* 41/2019; "Väntar du också på AT? Du är inte ensam" *Läkartidningen* #8 2019 pp.370-371; Svensson et al *supra* 2.

[65] C. Krabbe 2021 *Statistikbaserade flödesbeskrivningar för yrkesgruppenläkare* Nationella Vårdkompetensrådet, Stockholm 2021 www.nationellakompetensradet.se.

[66] M. Dekker "Wachten, wachten, wachten..." in *Medisch Contact* 21 August 2018 https://www.medischcontact.nl/arts-in-spe/nieuws/ais-artikel/wachten-wachten-wachten-....htm; Capaciteitsorgaan (CO) 2016 *Capaciteitsplan 2016 voor de medische, klinisch technologische, geestelijke gezondheid, FZO en aanverwante (vervolg) opleidingen Revisie 3.0* (Capaciteitsorgaan, Utrecht, 2016) p.6 https://capaciteitsorgaan.nl.

14 and 18 months[67]. Interval time is even longer because many do not start their search immediately (ibid).

In Sweden, the training of medical doctors is the joint responsibility of the central government and the Regions. Just like in the Netherlands, the central government finances initial education in medical school but the Regions are responsible for organizing and financing the mandatory post-graduate internships (AT) and the training of medical specialists (ST)[68]. To make the Regions responsible for AT and ST was a deliberate decision to achieve an adequate spread of medical doctors across the country. During their training, doctors get to know the Region and to integrate. Most remain professionally active in their Region of training but a significant minority does not[69]. AT and ST doctors are employed by their place of work or by the Region[70].

In the Netherlands, the Central Government finances post-graduate training although there is a difference between medical specialists and GPs. For specialists the government determines the total number of training places and their distribution among regions and training hospitals. It finances the costs of this training to avoid a distortion of competition among those hospitals that do and those that do not provide training[71]. Specialists-in-training have an employment contract with their training institution.

Those who want to become a GP are employed by a non-profit, publicly funded foundation (SBOH) that pays all the costs associated with being an employer, including the financial compensation to the trainers[72]. Employment by SBOH relieves the GP trainer of the administrative burden that comes with being an employer. For GP trainees, SBOH employment avoids them being dependent for both employment *and* training on one and the same person. In case of an unworkable

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[67] Capaciteitsorgaan 2016 *supra* 66 p.61.

[68] SOU 2013:15 *supra* 2 p.106.

[69] S. Pettersson, J.Reinbrand, J. *System och strategier för att öka antalet ST-läkare i allmänmedicin: Kunskapsunderlag om hur vi kan nå balans i primärvårdens läkarförsörjning* (Sveriges Läkarförbund, Stockholm) 2014 https://slf.se/app/uploads/2018/05/rapport-om-st-lakare-i-allmanmedicin.pdf; Svensson et al. *supra* 2 p.49.

[70] SOU 2018: 39 *supra* 26 p.222. The Regions finance their training entirely, or together with the receiving clinic. Where all training clinics are publicly owned, the source of funding is thus the same. However, where they are not, privately operated clinics have shown reluctance to contribute to training when they felt insufficiently compensated (Olsson et al *supra* 22).

[71] Capaciteitsorgaan 2016 *supra* 66 pp.21-22.

[72] Capacitietsorgaan 2016 supra 66 p.22.

relationship between trainer and trainee the latter can be placed with another GP without the employment relationship being terminated.

5. Planning Supply

It is a moot point whether governments should engage in workforce planning but when it concerns medical doctors, many do. This 'medical exception'[73] is based on the view that doctors are particularly precious to and vital for society's well-being[74]; that governments have no choice given the long delays and the costs involved in education and training; and that it can help prevent geographical imbalances.

Moreover, a long-standing criticism of traditional workforce planning models –that they assume a one-to-one relationship between occupation and education[75]- is less applicable to the medical profession because it offers only limited possibilities for substitution. Other occupations may well employ graduates from different education programmes[76] but such substitution is not common among medical doctors, and this strengthens the case for planning. The skills acquired by physicians can be applied elsewhere, but the opposite (for outsiders to be active as medical doctors) is not common and can be punishable by law.

Both Sweden and the Netherlands restrict the number of places they finance in medical schools and so engage in workforce planning. They make an approximate judgement of the number of doctors needed in the future and then decide how many they want to train domestically. Swedish health workforce policy goals may be less clear-cut than those of the Netherlands but avoiding a surplus appears to be a key feature of both. Educating too many medical doctors is costly. Low frequency of doctor-

[73] P. Zurn, J-C. Dumont *Health Workforce and international Migration: Can New Zealand compete?* (OECD Health Working paper No. 33, DELSA/HEA/WD/HWP(2008)3; OECD, Paris 2008) https://www.oecd-ilibrary.org/social-issues-migration-health/health-workforce-and-international-migration_241523881673.

[74] H. Bradby *A review of research and policy documents on the international migration of physicians and nurses* (Max Planck Institute for the Study of Religious and Ethnic Diversity, MMG Working Paper 13-07, Göttingen, 2013) https://www.mmg.mpg.de/60718/WP_13-07_Bradby_A-Review-of-Research.pdf.

[75] F. Cörvers, H. Heijke *Forecasting the labour market by occupation and education: Some key issues* (ROA-W-2004/4 Researchcentrum voor Onderwijs en Arbeidsmarkt, Maastricht University, Maastricht 2004) https://doi.org/10.26481/umarow.2004004.

[76] H. Heijke *Working on heterogeneous human capital* (ROA-TR-208/6, Research Centre for Education and the Labour Market, Maastricht University, Maastricht 2008) https://doi.org/10.26481/umarot.2008006.

patient contacts negatively influences the quality of care[77]. Insufficient professional activity may lead to doctors losing their registration (in the Netherlands). Nonetheless, the ready availability of doctors makes it easier for patients to find a GP of their choice; they need not travel or wait so long to have an operation.

Health workforce planners seek to achieve a balance between future supply and demand[78]. Projections typically take the status quo as their point of departure, assume that supply and demand are more or less in equilibrium, identify the variables that influence demand and supply in the future and attempt to quantify these. Given the long time horizon this can be a complex exercise with considerable uncertainty on both the supply and the demand side[79]. Moreover, even the best projections cannot guarantee a balanced spread across specialties and geographies.

5.1. Health Workforce Planning in the Netherlands

In 1972 the Netherlands Government introduced a cap on the number of places available for medical education[80]. It tried different mechanisms for setting that number until in 1999, three groups of key stakeholders (the medical professions, the medical training institutes, and the health insurers) together established the Advisory Committee on Medical Manpower Planning (*Capaciteitsorgaan*)[81]. This Committee, entirely financed by the Ministry of Health, regularly estimates future demand for medical specialists and makes recommendations on the training capacity needed and the yearly number of students to be admitted. The Committee attempts to quantify the likely effects of feminization, of changes in the number of hours worked, in the *de facto* age of retirement, in international migration, in horizontal and vertical substitution, in the expected changes in demand for healthcare, and in efficiency measures within the medical profession. The *Capaciteitsorgaan* is a very small undertaking (some 5 FTEs) that relies on specialised institutes for analytical work.

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[77] Stordeur et al *supra* 31.

[78] T.Ono, G. Lafortune, M. Schoenstein *Health workforce planning in OECD countries: A review of 26 projection models from 18 countries* (OECD Health Working Papers No.62, DELSA/HEA/WD/HWP (2013) 3 OECD, Paris) 2013.

[79] Socialstyrelsen NPS 2018 supra 21; Capciteitsorgaan 2016 *supra* 66.

[80] M.Van Greuningen, R. Batenburg, L. van der Velden, "Ten years of health workforce planning in the Netherlands: a tentative evaluation of GP planning as an example" in: *Human Resources for Health* 10:21 p.2 2012.

[81] ibid, p. 3.

Each time, the *Capaciteitsorgaan* prepares several estimates based on different scenarios. The relevant 'chamber of experts' (e.g. the chamber for GPs; the chamber for medical specialists), each with representatives of the medical professions, the training institutes, and the health insurers then selects one or two of the scenarios that it considers the most plausible. These are then presented to the Minister for Health[82] who is not obliged to follow the recommendations and on occasion does not. However, they carry weight because they are the outcome of a process in which the main concerned parties -with different if not opposing views- managed to reach agreement. The Advisory Committee considered that educating and training enough doctors would make immigration unnecessary. For GPs that has indeed be the case. The number of licenses issued to foreign-trained specialists has been in decline since 2006[83].

Just like in Sweden, achieving a balanced regional spread of GPs is considered a challenge in the Netherlands, albeit of a different order of magnitude. In fact, finding enough qualified candidates for thinly populated areas is a problem that many countries are faced with. To attract graduates to work in underserved areas, their governments use fiscal and other incentives[84], including immigration policies[85] but within the EU these cannot be applied to EU-trained doctors. In the Netherlands, peripheral medical schools are allotted a more than proportional number of training places. Some medical schools established annexes in underserved areas. Combining centralized selection with decentralized allocation[86] is another way of trying to achieve a balanced geographical spread.

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82 Capaciteitsorgaan (CO) *Capaciteitsplan 2016 Bijlagen deelrapport 2: Huisartsgeneeskunde* (Capaciteitsorgaan, Utrecht, 2016) https://capaciteitsorgaan.nl.

83 Capaciteitsorgaan 2016 *supra* 67 p.13; Capaciteitsorgaan *Capaciteitsplan 2024 tot 2027 Deelrapport 1; Medische specialismen, Klinisch technologische specialismen, Spoedeisende geneeskunde* (Capaciteitsorgaan, Utrecht, 2022) https://capaciteitsorgaan.nl.

84 For example, graduates who practice in North Norway are partially exempted from the obligation to reimburse their student loan (Simoens et al *supra* 16 p.40).

85 Canada, the US and Australia are among the countries that offer special incentives to foreign doctors willing to work in 'underserved' areas. In the US, physicians on J-1 training visas who normally must return home after completing their residency, may remain in the US if they practice for at least three years in an area with a healthcare professional shortage (Government Accountability Office (US-GAO) *Foreign Medical Schools* (Report to Congressional Committees GAO-10-412, GAO Washington 2010) https://www.gao.gov/assets/gao-10-412.pdf.

86 Capaciteitsorgaan (CO) *Capaciteitsplan 2016 Bijlagen deelrapport 2: Huisartsgeneeskunde* (Capaciteitsorgaan Utrecht, 2016) p.13 https://capaciteitsorgaan.nl.

5.2. Health Workforce Planning in Sweden

The Swedish planning exercise takes place within the public sector. Quantifying long term supply and demand is seen as a challenge[87] if only because of the difficulties involved in establishing the *current* situation[88]. Sweden counts with a yearly inflow of 800 foreign-trained doctors[89]. The Swedish Government appears undecided about how dependent it wants to be on these foreign-trained doctors. Or in the words of the responsible minister: "…It is very positive that people with foreign medical training want to come to Sweden for work, but we cannot be totally dependent on this…" [90].

In the Swedish decentralized healthcare system the National Board of Health and Welfare (*Socialstyrelsen*) plays a supporting role. Once a year it publishes the *Nationella Planeringsstöd* (NPS- The National Planning Support) that estimates the nationwide supply of and demand for doctors and other health professionals[91] as a service for the Regional governments[92]. The information is compiled through a yearly survey of the Regions, with added information from other (mainly) public sources such as Statistics Sweden (SCB) and the Public Employment Office (*Arbetsförmedlingen*), as well as from the Association of Local Authorities and Regions (SKR/SALAR), the National Trade Union for University Graduates SACO, and the Swedish Doctors Association (SLF).

The yearly survey focuses on the *current* situation and asks the Regions for different specialties whether (a) demand exceeds supply, (b) these are in equilibrium, or (c) supply exceeds demand. As did earlier surveys, the 2019 NPS survey showed that virtually all Regions were short of doctors and that over half had shortages in over 20 specialties.

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87 MYVA in Socialstyrelsen NPS *Nationalla Planerings Stödet 2019* (Socialstyrelsen, Stockholm, 2019) p. 156 www.socialstyrelsen.se; Olsson et al *supra* 22 p.20.

88 Socialstyrelsen *Framtidens Vårdkompetens: Starkt samverkan för att möta sjukvårdens kompetensförsörjningsbehov* (Socialstyrelsen, Stockholm, 2019 p.50 www.socialstyrelsen.se www.framtidensvardkompetens.se.

89 For an estimated *net* inflow of 370 (Nationella Vårdkompetensrådet; Socialstyrelsen 2022 Kompetensförsörjning inom primärvården: Slutrapport 2022 www.socialsyrelsen.se).

90 Minister Helene Hellmark Knutsson in: J. Andersson; A. Lundbäck "Läkarutbildningen byggs ut- 440 nya platser fram till 2023" *Läkartidningen,* 13 September 2017 https://lakartidningen.se/Aktuellt/Nyheter/2017/09/Lakarutbildningen-byggs-ut--440-nya-platser).

91 SOU 2013:15 *supra* 2 p 108.

92 Socialstyrelsen *Ett nationellt stöd till landstingens planering av kompetensförsörjning* (Socialstyrelsen, Stockholm, 2016.

This exercise in which a nationwide picture is derived from the information supplied by the Regions is not without limitations. For one, there is no agreement on what constitutes a shortage. Shortages are defined as the gap between the current situation and a desired goal[93] but these goals, how to finance them, and by when they should be reached, are decided at the level of the individual Region[94]. Whether aggregating these Regional assessments provides a good nationwide picture is a matter for debate.

In addition, the quality of the NPS compilation can be no better than the quality of the underlying data, which varies by Region[95]. Many of the Regions were found to have weak planning coordination[96] and incomplete information on e.g. age distribution, capacity use[97] and the number of specialists in training and at which stage of their training they are[98].

Moreover, it is assumed that upon completion of their training, doctors stay and work in the Region of training. But that need not be the case and quite often is not[99]. As a result of inter-regional mobility, less popular Regions (many with a weak fiscal base) must train more doctors than they need. In fact, less popular Regions have a double problem. Many have trouble attracting sufficient graduates who want to do their AT and sufficient doctors who want to do their specialist training. And they have trouble retaining these after completion of their training (a form of domestic "brain drain").

It has been suggested that the Regions work closer together; and that they treat training as a collective responsibility rather than the responsibility of each individual Region as is the case now[100]. Regions with good training capacity could than train more specialists than they need. However, currently such collaboration is poorly developed[101]. Regions see each other as competitors. The Medical Association would like the National

[93] Socialstyrelsen NPS 2018 *supra* 21 p.9.

[94] ibid; Socialstyrelsen NPS *Nationalla Planerings Stödet 2010* (Socialstyrelsen, Stockholm, 2010) p.12 www.socialstyrelsen.se.

[95] see e.g. Socialstyrelsen NPS *Nationalla Planerings Stödet 2017* (Socialstyrelsen, Stockholm, 2017) p.27 www.socialstyrelsen.se.

[96] Pettersson et al 2014 *supra* 69 pp.6-7.

[97] Socialstyrelsen NPS 2019 *supra* 13 p. 157.

[98] ibid, p.164.

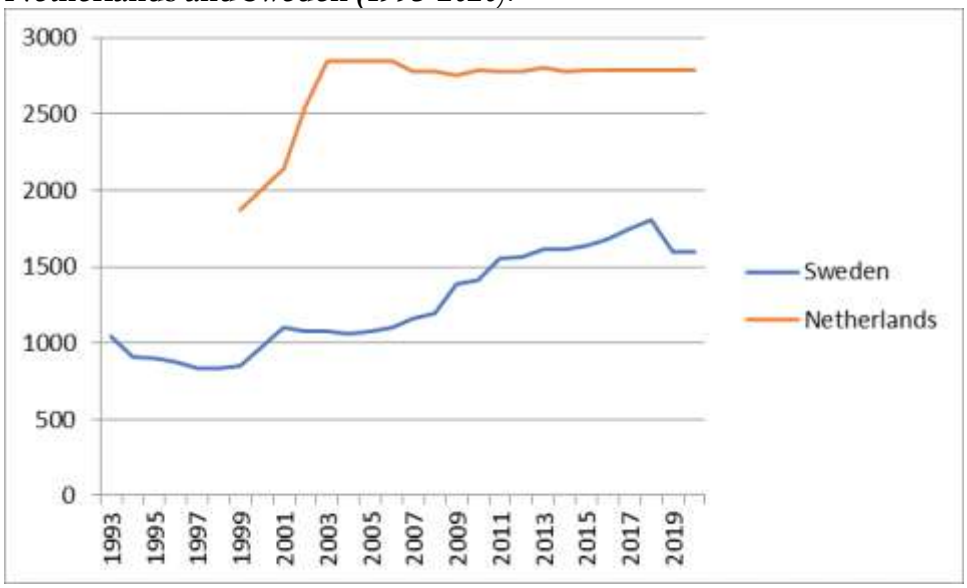
[99] ibid, p.156.

[100] Riksrevisionen *supra* 18.

[101] SOU 2013:15 *supra* 2 p. 108; Medical Association in Pettersson et al 2014 *supra* 69 p.13; Socialstyrelsen NPS 2019 *supra* p.13.

Government to take greater responsibility for allocating trainee places[102] but such a (re-) centralization is not uncontroversial.
In just ten years, between 1994 and 2004, the number of places for new students at Dutch medical schools virtually doubled from 1485 to 2850 and remained high thereafter (figure 2). Waiting lists had become a major political issue and the then minister, an experienced administrator and a medical doctor herself strongly defended the interests of patients. In that same period the number of starting places in Swedish medical schools hardly changed. Sweden had gone through a financial crisis in the early 1990s with drastic budget cuts, including in healthcare. In 2005/06 the number of new places in medical schools was no higher than it had been twelve years earlier. In fact, the number dropped some 20% between 1993/94 and 1998/99. Since 2006/07 it has been increasing.

Figure 2. Number of new students at all medical schools in the Netherlands and Sweden (1993-2020).



Sources: various.

6. The Foreign-Trained as A Source of Supply

In the Netherlands, the inflow of foreign-trained doctors declined after the number of places in medical schools increased[103]. On a five year

[102] Socialstyrelsen NPS 2019 *supra* 13 p.157.

rolling average the share of newly registered foreign-trained GPs decreased from 6% of the total in 2006 to 2.4% in 2015[104]. The share of newly registered foreign-trained specialists halved from 18.9% in 2006 to 9.3% in 2015 and continued its downward trend thereafter (60 newly registered in 2021)[105]. Over 95% of the foreign-trained inflow underwent their training in another EU country, mainly Belgium and Germany[106]. In the early 2000s about half of the foreign-trained were Dutch nationals (mostly trained in the Dutch speaking part of Belgium) but that share has declined since[107].

In Sweden the number of foreign-trained doctors started to increase in the mid-1990s. By the early 2000s some 400 foreign-trained doctors received a Swedish doctors' license each year, a number that went up rapidly thereafter. By 2003, *more new licenses were issued to doctors who had been trained abroad than to the domestically educated* (940 vs. 855)[108]. The share of the foreign-trained in the total number active doubled to 28% between 1995 and 2017[109].

Only in 2017 did doctors trained in Sweden regain the majority of the number of new licenses issued (52%; with 37% awarded to doctors trained in EU/EES and 11 % to those trained outside EU/EES[110]) mainly as a result of a drastic decline in the number of licenses issued to non-Swedish doctors trained in other EU countries[111]. This turnaround is possibly connected to the sharpening of the language requirements that took place in 2016. By 2020, still 44% of all new licenses went to foreign-trained doctors[112].The share of the foreign-trained in the total number of professionally active doctors is unlikely to go down much in the near future despite the increased number of starting places (see figure 2).

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[103] CBS Statline https://opendata.cbs.nl/#/CBS/nl.

[104] Capaciteitsorgaan 2016 *supra* 33.

[105] Capaciteitsorgaan 2022 *supra* 83.

[106] Capaciteitsorgaan 2016 *Capaciteitsplan Deelrapport 1 Medische specialismen; Spoedeisende geneeskunde; Ziekenhuisgeneeskunde; Klinisch-technologische specialismen* pp.42-43.

[107] Kroneman et al 2016 *supra* 28 p.120.

[108] SOU 2013:15 supra 2 p.98.

[109] Socialstyrelsen NPS *Nationalla Planerings Stödet 2011* (Socialstyrelsen, Stockholm, 2011) www.socialstyrelsen.se; Socialstyrelsen NPS 2017 supra 96; https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_WFMI.

[110] Socialstyrelsen NPS 2019 *supra* 13.

[111] Socialstyrelsen Årsredovisning 2017 www.socialstyrelsen.se.

[112] Socialstyrelsen NPS *Nationalla Planerings Stödet 2022* (Socialstyrelsen, Stockholm, 2022) www.socialstyrelsen.se.

A significant minority of the foreign-trained has a Swedish background. Before 2000 it was rare for Swedes to study medicine abroad but from the turn of the century their number increased rapidly. At its peak (2011-2014), some 3000, or *30% of the total* number of Swedes studying medicine, did so outside of Sweden[113]. Their number[114] has declined since but by 2016/17 still one fourth (2489) studied medicine outside Sweden. Poland is the current favourite among the Swedes who study medicine abroad with 42% of the total followed at considerable distance by Latvia and Romania. The share of Denmark- once a clear favourite- dropped from 41% in 2007/08 to 5% ten years later[115].

6. Conclusion

In Sweden, over 28% of all medical doctors have been trained abroad. In the Netherlands this group makes up some 3% of the total. The question this paper has sought to answer is: why is the share of foreign-trained doctors so high in Sweden, and so low in the Netherlands. In both countries the vast majority of the foreign-trained received their diploma in another EU Member State. Thanks to EU Directive 2005/36/EC these doctors benefit from automatic diploma recognition that allows them to work anywhere in the EU. Sweden and the Netherlands do not differ much in income levels or in language difficulty as a barrier. So, what explains the difference in their reliance on foreign-trained doctors?

The short answer is that Sweden trains fewer doctors than it needs. The Netherlands has long aimed for self-sufficiency; it makes projections of the number of doctors needed in the future and of how many it needs to educate. The Swedish Government wants to reduce the country's dependence on foreign-trained doctors but it is unclear by how much.

Sweden's decentralized planning system assumes that each Region has the capacity to collect and analyze supply and demand data; and that, upon completion of their training, doctors stay in the Region of training. These assumptions are not met in actual fact. When the Regions do not have a clear picture of supply and demand it is difficult for the Central Government to have one.

Would the Swedish government formulate clearer goals if it had better data on the number practicing and the number needed? Is the lack of

[113] A. Ström "Färre vill plugga till läkare i Polen" *Läkartidningen* 2017, 114: EYAD.

[114] Defined as students with a Swedish background who study with financial aid from the Swedish state (CSN). In actual fact their number may be higher.

[115] Socialstyrelsen NPS 2018 *supra* 21 p. 39-40.

precision in its objectives the consequence of not being overly concerned about the dependence on foreign-trained doctors? Or is it part of a more general policy of not wanting to be seen engaging in workforce planning at central level? These are key, if as yet unresolved questions. In the fragmented landscape of Swedish healthcare it is hard to find an 'official view' on whether the low number of starting places in medical school is considered a problem.

In the Netherlands, self-sufficiency in the supply of doctors is a broadly supported policy goal. The three main interested parties (the medical professions, the medical training institutes, and the health insurers) with partly overlapping, and partly opposing interests together periodically formulate agreed views of the expected demand for doctors, and make recommendations on how many should be educated. In Sweden, this planning takes place within the public sector, i.e. it is up to politicians and other top decision makers to adjudicate between potentially conflicting loyalties and to decide on the weight given to the interests of patients, to financial considerations, and to the existing organization[116].

Yet despite their differences, both countries face the same question: how to plan education numbers when it is impossible to predict the number of doctors who will migrate. The Dutch strategy to train enough doctors has by and large been successful. Even though self-sufficiency is not a policy goal, Sweden must also make assumptions on the expected number of foreign-trained when setting the number of starting places at medical schools.

This paper has suggested other possible explanations for Sweden's greater reliance on foreign-trained doctors but their relevance and weight could not be verified. The attention given to a good work-life balance, a lenient attitude towards language requirements, and the absence of periodic re-registration may have influenced foreign-trained doctors' decisions to come to or remain at work in Sweden.

Foreign-trained doctors are a fast and flexible, and a comparatively inexpensive source of supply. Their ready availability is convenient when the authorities have trouble agreeing on the number of new places in medical school. However, it assumes that Sweden will continue to be attractive to foreign-trained doctors. Considering that living and working conditions (including a good work-life balance) are well above those in most other countries, the country has reasons to be optimistic. But non-Swedish foreign-trained doctors are a volatile source of supply, as

[116] Björnberg *supra* 27.

witnessed by the sharp drop in the number of licenses awarded to EU-trained doctors in early 2016.

The Netherlands trains so many doctors that there is risk of oversupply. This would make it harder for doctors to find a job in their specialty, potentially place pressure on their working conditions, and possibly force some to emigrate. This would make planners vulnerable to accusations that they encourage 'training for export' which, considering the sums involved, could prove to be politically controversial.

In sum, in both countries the freedom of EU-trained doctors to work anywhere in the EU complicates the tasks of health workforce planners. Both oversupply and undersupply can lead to controversy. For now, the question is how dependent each country wants to be on foreign-trained doctors and, to paraphrase Richard B. Freeman[117] how to find a balance between domestic- and foreign-trained doctors in the workforce.

[117] R. B. Freeman "Labor market imbalances: Shortages, or Surpluses, or Fish Stories?" Paper presented at the Boston Federal Reserve Economic Conference "Global Imbalances- As Giants Evolve", Chatham Massachusetts June 14-16 2006 https://ideas.repec.org/a/fip/fedbcp/y2006n51x1.html.

Appendix 1: Doctors in Sweden and the Netherlands: Selected Indicators[118]

	Netherlands	Sweden
Share of foreign-trained doctors (2019)	3.1	28.7
Practising doctors per 1000 population (2020)	3.6	4.2
Medical Graduates per 100,000 population (2019)	15.1	13.5
Average visit time to a GP (minutes)*	9.8	22.5
Share of female doctors (2019)	56	50
Share of female doctors (2000)	35.3	39.6
Doctors Remuneration (ratio to average wage, 2019)		
Specialists (salaried)	3.3	2.3
Specialists (self-employed)	3.4	n.a.
General Practitioners (salaried)	2.3	n.a.
General practitioners (self-employed)	2.4	n.a.

[118] Source: OECD Health at a Glance 2021 OECD Paris https://www.oecd.org/health/health-at-a-glance; except (*): G. Irving, A. Neves, H. Dambha-Miller, A. Oishi, H. Tagashira, A. Verho, H. Holden, 2017 "International Variations in primary care physician consultation time: a systematic review of 67 countries" in *BMJ* https://bmjopen.bmj.com/content/bmjopen/7/10/e017902.full.pdf.

Appendix 2: Health Systems in Sweden and the Netherlands: Some key Indicators (latest available figures)[119]

	Netherlands	Sweden
Real GDP per capita (Euro)**	41.860	44.820
Overall Population (millions)**	17.6	10.5
Land area (1000 sq km)**	42	450
Population density	435	23
Total spending on health (% of GDP)	11.2	11.4
Hospital beds per 1000 population	3.1	2.1
Life expectance at birth	82.2	83.2
Population with healthcare coverage (%)	100	100
Access (%)		
Able to get same-, or next-day appointment*	77	49
% who did not take medicine, visit a doctor, or follow prescribed treatment for cost-related reasons*	8	8

[119] Source: OECD Health at a Glance 2021 OECD Paris https://www.oecd.org/health/health-at-a-glance; except for (*): I. Papanicolas, L. Woskie, A. Jha, "Health care spending in the United States and other high income countries" in: JAMA. 2018; 319 (10):1024-1039; and (**) Eurostat.

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