



Special Issue



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Health Workforce Governance in Europe

Edited by Ellen Kuhlmann, Ronald Batenburg and Gilles Dussault

Health human resources are crucial for healthcare, and better workforce governance is increasingly recognized as burning policy issue. In Europe, the healthcare sector is confronted with increasing shortages and imbalances in the skills-mix and geographical distribution of health professionals. The future health workforce needs to be congruent with new healthcare needs resulting from demographic, epidemiological and socio-cultural changes. As the size and composition of the health workforce are also changing as a result of its ageing, mobility within and out of the EU and professional, organizational and technological developments, in most countries the quantitative and qualitative match between healthcare services demand and supply will be increasingly difficult to achieve and to sustain. On this backdrop, governance innovation is gaining significance, and here, Europe provides a 'natural laboratory' of diverse political, financial and social conditions to explore the changes, challenges and future strategies of health workforce governance.

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Guest Editorial. Health workforce governance in Europe: Where are we going?

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Ellen Kuhlmann, Ronald Batenburg and Gilles Dussault

Recruitment and retention of health professionals across Europe: A literature review and multiple case study research,

<http://www.sciencedirect.com/science/article/pii/S0168851015001906>

Marieke Kroezen, Gilles Dussault, Isabel Craveiro, Marjolein Dieleman, Christel Jansen, James Buchan, Louise Barriball, Anne Marie Rafferty, Jeni Bremner and Walter Sermeus

Many European countries are faced with health workforce shortages and the need to develop effective recruitment and retention (R&R) strategies. Yet comparative studies on R&R in Europe are scarce. This paper provides an overview of the measures in place to improve the R&R of health professionals across Europe and offers further insight into the evidence base for R&R; the interaction between policy and organisational levels in driving R&R outcomes; the facilitators and barriers throughout these process; and good practices in the R&R of health professionals across Europe. The study adopted a multi-method approach combining an extensive literature review and multiple-case study research. 64 publications were included in the review and 34 R&R interventions from 20 European countries were included in the multiple-case study. We found a consistent lack of evidence about the effectiveness of R&R interventions. Most interventions are not explicitly part of a coherent package of measures but they tend to involve multiple actors from policy and organisational levels, sometimes in complex configurations. A list of good practices for R&R interventions was identified, including context-sensitivity when implementing and transferring interventions to different organisations and countries. While single R&R interventions on their own have little impact, bundles of interventions are more effective. Interventions backed by political and executive commitment benefit from a strong support base and involvement of relevant stakeholders.

Health professional mobility in the European Union: Exploring the equity and efficiency of free movement,

<http://www.sciencedirect.com/science/article/pii/S0168851015002146> (open access)

Irene A. Glinos

The WHO Global Code of Practice on the International Recruitment of Health Personnel is a landmark in the health workforce migration debate. Yet its principles apply only partly within the European Union (EU) where freedom of movement prevails. The purpose of this article is to explore whether free mobility of health professionals contributes to "equitably strengthen health systems" in the EU. The article proposes an analytical tool (matrix), which looks at the effects of health professional mobility in terms of efficiency and equity implications at three levels: for the EU, for destination countries and for source countries. The findings show that destinations as well as sources experience positive and negative effects, and that the effects of mobility are complex because they change, overlap and are hard to pin down. The analysis suggests that there is a risk that free health workforce mobility disproportionately benefits wealthier Member States at the expense of less advantaged EU Member States, and that mobility may feed disparities as flows redistribute resources from poorer to wealthier EU countries. The article argues that the principles put forward by the WHO Code appear to be as relevant within the EU as they are globally.

Health workforce planning in Europe: Creating learning country clusters,

[http://www.healthpolicyjrn.com/article/S0168-8510\(15\)00252-3/abstract](http://www.healthpolicyjrn.com/article/S0168-8510(15)00252-3/abstract)

Ronald Batenburg

In this article, the different dimensions and determinants of health workforce planning (HWF) are investigated to improve context-sensitivity and mutual learning among groups of countries with similar HWF characteristics. A novel approach to score countries according to their HWF characteristics and type of planning is introduced using data collected in 2012 by a large European Union project among 35 European countries (the 'Matrix study'). HWF planning is measured by three major dimensions: (1) data infrastructure to monitor capacities and dynamics of health workforces, (2) the institutions to define and execute labour market regulation, and (3) availability of strategic or forecasting models to estimate

supply-demand gaps and predict imbalances. The results show that the three dimensions of HWF planning are weakly interrelated, indicating that countries invest in HWF in different ways. Determinant analysis shows that countries with larger health labour markets, National Healthcare Service (NHS), unbalanced cross-border mobility, and strong primary healthcare score higher on HWF planning dimensions than others. Consequently, the results suggest that clustering countries with similar conditions for HWF planning is a way forward for mutual and contextual learning.

Medical workforce education and training: A failed decentralisation attempt to reform organisation, financing, and planning in England,
<http://www.sciencedirect.com/science/article/pii/S0168851015002274>

Pavel V. Ovseik and Alastair M. Buchan

The 2010-2015 Conservative and Liberal Democrat coalition government proposed to introduce a radical decentralisation reform of the organisation, financing, and planning of medical workforce education and training in England. However, following the public deliberation and parliamentary scrutiny of the government's proposals, it had to abandon and alter its original proposals to the extent that they failed to achieve their original decentralisation objectives. This failed decentralisation attempt provides important lessons about the policy process and content of both workforce governance and health system reforms in Europe and beyond. The organisation, financing, and planning of medical workforce education is as an issue of national importance and should remain in the stewardship of the national government. Future reform efforts seeking to enhance the skills of the workforce needed to deliver high-quality care for patients in the 21st century will have a greater chance of succeeding if they are clearly articulated through engagement with stakeholders and focus on the delivery of undergraduate and postgraduate multi-professional education and training in universities and teaching hospitals.

The 'rural pipeline' and retention of rural health professionals in Europe's northern peripheries,
<http://www.sciencedirect.com/science/article/pii/S0168851015001888>

Dean Carson, Adrian Schoo and Peter Berggren

Abstract: The major advance in informing rural workforce policy internationally over the past 25 years has been the recognition of the importance of the 'rural pipeline'. The rural pipeline suggests that people with 'rural origin' (who spent some childhood years in rural areas) and/or 'rural exposure' (who do part of their professional training in rural areas) are more likely to select rural work locations. What is not known is whether the rural pipeline also increases the length of time professionals spend in rural practice throughout their careers. This paper analyses data from a survey of rural health professionals in six countries in the northern periphery of Europe in 2013 to examine the relationship between rural origin and rural exposure and the intention to remain in the current rural job or to preference rural jobs in future. Results are compared between countries, between different types of rural areas (based on accessibility to urban centres), different occupations and workers at different stages of their careers. The research concludes that overall the pipeline does impact on retention, and that both rural origin and rural exposure make a contribution. However, the relationship is not strong in all contexts, and health workforce policy should recognise that retention may in some cases be improved by recruiting beyond the pipeline.

Enumerating the preventive youth healthcare workforce: Size, composition and regional variation in the Netherlands,
<http://www.sciencedirect.com/science/article/pii/S016885101500189X>

Marielle Jambroes, Majda Lamkaddem, Karien Stronks and Marie-Louise Essink-Bot

The progress in workforce planning in preventive youth health care (YHC) is hampered by a lack of data on the current workforce. This study aimed to enumerate the Dutch YHC workforce. To understand regional variations in workforce capacity we compared these with the workforce capacity and the number of children and indicators of YHC need per region. A national survey was conducted using online questionnaires based on WHO essential public health operations among all YHC workers. Respondents (n=3220) were recruited through organisations involved in YHC (participation: 88%). The results show that the YHC workforce is multi-disciplinary, 62% had > 10 years working experience within YHC and only small regional variations in composition existed. The number of children per YHC professional varied between regions (range 688-1007). All essential public health operations were provided and could be clustered in an operational or policy profile. The operational profile prevailed in

all regions. Regional differences in the number of children per YHC professional were unrelated to the indicators of YHC need. In conclusion, the essential public health operations provided by the YHC workforce and the regional variations in children per YHC professional were not in line with indicators of YHC needs, indicating room for improvement of YHC workforce planning. The methodology applied in this study is probably relevant for use in other countries.

Health workforce governance and oral health: Diversity and challenges in Europe, <http://www.sciencedirect.com/science/article/pii/S016885101500247X>

Jenny Gallagher and Ken Eaton

Throughout the life course, oral diseases are some of the most common non-communicable diseases globally, and in Europe. Human resources for oral health are fundamental to healthcare systems in general and dentistry is no exception. As political and healthcare systems change, so do forms of governance. The aim of this paper is to examine human resources for oral health in Europe, against a workforce governance framework, using England as a case study. The findings suggest that neo-liberalist philosophies are leading to multiple forms of soft governance at professional, system, organisational and individual levels, most notably in England where there is no longer professional self-regulation. Benefits include professional regulation of a wider cadre of human resources for oral health, reorientation of care towards evidence-informed practice including prevention, and consideration of care pathways for patients. Across Europe there has been significant professional collaboration in relation to quality standards in the education of dentists following transnational policies permitting freedom of movement of health professionals; however, the distribution of dentists is inequitable. Challenges include facilitating employment of graduates to serve the needs and demands of the population in certain countries, together with governance of workforce production and migration across Europe. Integrated trans-European approaches to monitoring mobility and governance are urgently required.

Primary care team composition in 34 countries, [http://www.healthpolicyjrnl.com/article/S0168-8510\(15\)00192-X/abstract](http://www.healthpolicyjrnl.com/article/S0168-8510(15)00192-X/abstract)

Peter P. Groenewegen, Stephanie Heinemann, Stefan Greß and Willemijn L Schäfer

Health care needs in the population change through ageing and increasing multimorbidity Primary health care might accommodate to this through the composition of practices in terms of the professionals working in them. The aim of this article is to describe the composition of primary care practices in 34 countries and to analyse its relationship to practice circumstances and the organization of the primary care system. The data were collected through a survey among samples of general practitioners (n= 7,183) in 34 countries. In some countries, primary care is mainly provided in singlehanded practices. Other countries which have larger practices with multiple professional groups. There is no overall relationship between the professional groups in the practice and practice location. Practices that are located further from other primary care practices have more different professions. Practices with a more than average share of socially disadvantaged people and/or ethnic minorities have more different professions. In countries with a stronger pro-primary care workforce development and more comprehensive primary care delivery the number of different professions is higher. In conclusion, primary care practice composition varies strongly. The organizational scale of primary care is largely country dependent, but this is only partly explained by system characteristics.

Work environment issues and intention-to-leave in Portuguese nurses: A cross-sectional study, <http://www.sciencedirect.com/science/article/pii/S0168851015002432>

Claudia Leone, Luk Bruyneel, Janet E. Anderson, Trevor Murrells, Gilles Dussault, Élvio Henriques de Jesus, Walter Sermeus, Linda Aiken and Anne Marie Rafferty

This study extends the Registered Nurses Forecasting (RN4CAST) study evidence base with newly collected data from Portuguese nurses working in acute care hospitals, in which the measurement of the quality of work environment, workload and its association with intention-to-leave emerge as of key importance. Data included surveys of 2235 nurses in 144 nursing units in 31 hospitals via stratified random sampling. Multilevel multivariate regression analysis shows that intention-to-leave is higher among nurses with a specialty degree, nurses aged 35-39, and in nursing units where nurses are less satisfied with opportunities for career advancement, staffing levels and participation in hospital affairs.

Analysis with moderation effects showed the observed effect of age and of having a specialty degree on intention-to-leave during the regression analysis is reduced in nursing units where nurses are more satisfied with opportunities for career advancement. The most important finding from the study suggests that promoting retention strategies that increase satisfaction with opportunities for career advancement among Portuguese nurses has the potential to override individual characteristics associated with increased turnover intentions.

Health workforce planning and service expansion during an economic crisis: A case study of the national breast-screening programme in Ireland,

<http://www.sciencedirect.com/science/article/pii/S0168851015002183>

Sheena M Mc Hugh, Ella Tyrrell, Bridget Johnson, Orla Healy, Ivan J Perry and Charles Normand

This article aims to estimate the workforce and resource implications of the proposed age extension of the national breast screening programme, under the economic constraints of reduced health budgets and staffing levels in the Irish health system. Using a mixed method design, a purposive sample of 20 participants were interviewed and data were analysed thematically (June-September 2012). Quantitative data (programme-level activity data, screening activity, staffing levels and screening plans) were used to model potential workload and resource requirements. The analysis indicates that over 90% operational efficiency was achieved throughout the first half of 2012. Accounting for maternity leave (10%) and sick leave (3.5%), 16.1 additional radiographers (whole time equivalent) would be required for the workload caused by the age extension of the screening programme, at 90% operational efficiency. The results suggest that service expansion is possible with relatively minimal additional radiography resources if the efficiency of the skill mix and the use of equipment is improved. Investing in the appropriate skill mix should not be limited to clinical groups but should also include administrative staff to manage and support the service. Workload modelling may contribute to improved health workforce planning and service efficiency.

The impact of the financial crisis on Human Resources for Health Policies in three Southern-European countries,

[http://www.healthpolicyjrn.com/article/S0168-8510\(15\)00196-7/abstract](http://www.healthpolicyjrn.com/article/S0168-8510(15)00196-7/abstract)

Tiago Correia, Gilles Dussault and Carla Pontes

Abstract: The public health sector has been the target of austerity measures since the global financial crisis started in 2008, while health workforce costs have been a source of rapid savings in most European Union countries. This article aims to explore how health workforce policies have evolved in three southern European countries under external constraints imposed by emergency financial programmes agreed with the International Monetary Fund, Central European Bank and European Commission. The selected countries, Greece, Portugal and Cyprus, show similarities with regard to corporatist systems of social protection and comprehensive welfare mechanisms only recently institutionalized. Based on document analysis of the Memoranda of Understanding agreed with the Troika, our results reveal broadly similar policy responses to the crisis but also important differences. In Cyprus, General Practitioners have a key position in reducing public expenditure through gatekeeping and control of users' access, while Portugal and Greece seeks to achieve cost containment by constraining the decision-making powers of professionals. All three countries lack innovation as well as monitoring and assessment of the effects of the financial crisis in relation to the health workforce. Consequently, there is a need for health policy development to use human resources more efficiently in healthcare.

Health workforce governance in Italy,

<http://www.sciencedirect.com/science/article/pii/S0168851015002262>

Giuvanna Vicarelli and Emmanuele Pavolini

More precise health workforce governance has become a prominent issue in healthcare systems. This issue is particularly important in Italy, given its strongly doctor-centered healthcare system and the dramatic aging of its physicians' labour force. Using different sources of information (statistical data, official planning documents and interviews with key informants), the article attempts to answer two questions. Why has the Italian healthcare systems found itself in the situation of a potential drastic reduction in the amount of doctors in the medium term without a rebalancing through a different mix of skills and professionals? How good is the capacity of the Italian healthcare system to plan healthcare

workforce needs? The widespread presence of 'older' physicians is the result of the strong entry of doctors into the Italian healthcare system in the 1970s and 1980s. Institutional fragmentation, difficulties in drafting broad healthcare reforms, political instability and austerity measures explain why Italian health workforce forecasting and planning is still unsatisfactory, although recent developments indicate that changes are under way. In order to tackle these problems it is necessary to foster closer cooperation among a wide range of stakeholders, to move from uni-professional to multiprofessional health workforce planning, and to partially re-centralise decision-making.

Mapping the governance of human resources for health in Serbia,

<http://www.sciencedirect.com/science/article/pii/S0168851015002201>

Milena Santric-Milicevic, Milena Vasic and Matt Edwards

This article maps the current governance of human resources for health (HRH) in relation to universal health coverage in Serbia since the health sector reforms in 2003. The study adapts the Global Health Workforce Alliance/World Health Organization four-dimensional framework of HRH in the context of governance for universal health coverage. A set of proxies were established for the availability, accessibility, acceptability and quality of HRH. Analysis of official HRH documentation from relevant institutions and reports were used to construct a governance profile of HRH for Serbia from the introduction of the reform in 2003 up to 2013. The results show that all Serbian districts (except Sremski) surpass the availability threshold of 59.4 skilled midwives, nurses and physicians per 10,000 inhabitants. District accessibility of health workforce greatly differed from the national average with variances from +26% to -34%. Analysis of national averages and patient load of general practitioners showed variances among districts by $\pm 21\%$, whilst hospital discharges per 100 inhabitants deviated between +52% and -45%. Pre-service and in-service education of health workforce is regulated and accredited. However, through its efforts to respond to population health needs Serbia lacks a single coordinating entity to take overall responsibility for effective and coordinated HRH planning, management and development within the broader landscape of health strategy development.

Health workforce policy and Turkey's healthcare reform,

<http://www.healthpolicyjrn.com/article/S0168-8510%2815%2900245-6/abstract>

Tuba I. Agartan

The healthcare industry is labour intensive and depends on well-trained and appropriately deployed health professionals to deliver services. This article examines the health workforce challenges in the context of Turkey's recent health reform initiative, Health Transformation Program (HTP). Reformers identified shortages, imbalances in the skills-mix, and inequities in the geographical distribution of health professionals as among the major problems. A comprehensive set of policies was implemented within the HTP framework to address these problems. The article argues that these policies addressed some of the health workforce challenges, while on the other hand exacerbating others and hence may have resulted in increasing the burden on the workforce. So far, HTP's governance reforms and human resource policy have not encouraged meaningful participation of other key stakeholders in the governance of the healthcare system. Without effective participation of health professionals, the next stages of HTP implementation that focus on managerial reforms such as restructuring public hospitals, improving the primary care system and implementing new initiatives on quality improvement could be very difficult.

The role of governance in implementing task-shifting from physicians to nurses in advanced roles in Europe, U.S., Canada, New Zealand and Australia,

<http://www.healthpolicyjrn.com/article/S0168-8510%2815%2900224-9/abstract>

Claudia B. Maier

Task-shifting from physicians to nurses is increasing worldwide, however, research on how it is governed is scarce. This international study assessed task-shifting governance models and implications on practice, based on a literature scoping review; and a survey with 93 country experts in 39 countries (response rate: 85.3%). Governance was assessed by several indicators, regulation of titles, scope of practice, prescriptive authority, and registration policies. This policy analysis focused on eleven countries with task-shifting at the Advanced Practice Nursing/Nurse Practitioner (APN/NP) level. Governance ranged from national, decentralized to no regulation, but at the discretion of employers and

settings. In countries with national level regulation, restrictive scope of practice laws were shown as barrier, up-to-date laws as enablers to advanced practice. Countries with decentralized regulation resulted in uneven levels of practice. In countries leaving governance to individual settings, practice variations existed, moreover data availability and role clarity was limited. Policy options include periodic reviews to ensure laws are up to date, minimum harmonization in decentralized contexts, harmonized educational and practice-level requirements to reduce practice variation and ensure quality. From a European Union (EU) perspective, regulation is preferred over non-regulation as a first step towards the recognition of qualifications in countries with similar levels of advanced practice. Countries early on in the process need to be aware that different governance models can influence practice.

Why we need multi-level health workforce governance: Case studies from nursing and medicine in Germany, <http://www.sciencedirect.com/science/article/pii/S0168851015001918>

Ellen Kuhlmann and Christa Larsen

Health workforce needs have moved up on the reform agendas, but policymaking often remains 'piece-meal work' and does not respond to the complexity of health workforce challenges. This article argues for innovation in healthcare governance as key to greater sustainability of health human resources. The aim is to develop a multi-level approach that helps to identify gaps in governance and improve policy interventions. Pilot research into nursing and medicine in Germany, carried out between 2013 and 2015 using qualitative methodology, serves our analysis to illustrate systems-based governance weaknesses. Three explorative cases address major responses to health workforce shortages, comprising migration/mobility of nurses, educational reform of nursing, and gender-sensitive work management of hospital doctors. The findings illustrate a lack of connections between transnational/EU and organizational governance, between national and local levels, occupational and sector governance, and organizations/hospital management and professional development. Consequently, innovations in the health workforce need a multi-level governance approach to get transformative potential and help closing the existing gaps in governance.

Health workforce governance: Processes, tools and actors towards a competent health workforce for integrated health services delivery,

<http://www.sciencedirect.com/science/article/pii/S0168851015002468> (open access)

Erica Barbazza, Margrieta Langins, Hans Kluge and Juan E. Tello

A competent health workforce is a vital resource for health services delivery, dictating the extent to which services are capable of responding to health needs. In the context of the changing health landscape, an integrated approach to service provision has taken precedence. For this, strengthening health workforce competencies is an imperative, and doing so in practice hinges on the oversight and steering function of governance. To aid health system stewards in their governing role, this review seeks to provide an overview of processes, tools and actors for strengthening health workforce competencies. It draws from a purposive and multidisciplinary review of literature, expert opinion and country initiatives across the WHO European Region's 53 Member States. Through our analysis, we observe distinct yet complementary roles can be differentiated between health services delivery and the health system. This understanding is a necessary prerequisite to gain deeper insight into the specificities for strengthening health workforce competencies in order for governance to rightly create the institutional environment called for to foster alignment. Differentiating between the contribution of health services and the health system in the strengthening of health workforce competencies is an important distinction for achieving and sustaining health improvement goals.