the UNIVERSITY of GREENWICH

Briefing paper 'On the European workforce for Health'

by
Jane Lethbridge
j.lethbridge@gre.ac.uk

Paper prepared for the EPSU

EPSU
FSESP
EGÖD

A report commissioned by the European Federation of Public Service Unions (EPSU) www.epsu.org

Contents

Briefing paper to inform EPSU's response to the Green Paper 'On the European Workforce for Health'

In December 2008, the European Commission published a Green Paper *'On the European Workforce for Health'* (COM(2008)725/3 Commission of the European Communities). This paper provides a critique of the Green Paper and provides a guide to some of the published reports and research on the health workforce in Europe. It will include a report of the *Skills expert panel workshop – health and social work* 5/6 March 2009. It will conclude with a series of recommendations.

The paper is in four sections:
1. Critique of *'On the European Workforce for Health'*;
2. Relevant research and policy documents;
3. Report of *Skills expert panel workshop – health and social work* 5/6 March 2009
4. Conclusions and Recommendations.

1. Critique '*On the European Workforce for Health*'

In October 2007, the European Union (EU) health strategy White Paper *'Together for Health '* was published. This aims to address health threats, pandemics, lifestyle related diseases, inequalities, and climate change in order to promote good health. It is an example of the European Union taking a significant role in health policy, building on the legal framework and basis for action set out in Article 152 of the EC Treaty.

The Green Paper *'On the European Workforce for Health*' aims to raise the profile of labour force issues and to identify whether different member states face the same issues, with a view to informing the type of action needed at EU level. Although the health workforce has a significant role to play in the White Paper *'Together for Health'*, the health workforce is even more significant in the delivery of health care, which is still the responsibility of member states. The health workforce is defined in the Green Paper as including:

- Clinical workforce
- Allied health professionals
- Health management workforce
- Social care workforce
- Informal carers
- Alternative & complementary therapies
- Public health and surveillance
- Administrative and support staff
- Training professionals

The Green Paper *'On the European Workforce for Health'* starts by identifying four challenges facing health systems in Europe.
- Adapting health systems of an ageing population;
- New technology, which may increase the range and quality of health care but requires skilled/ trained staff, and also has to be paid for;
- New communicable diseases;

- Increases in health care spending which raises questions about the sustainability of health systems

The health care sector employs 1 in 10 of the EU workforce. Women make up 75% of the health workforce in Europe.   The health workforce is a significant factor in the EU economy. 70% of health care expenditure is on workforce and related costs.

The Green Paper identified six factors influencing the workforce:
1. Ageing workforce;
2. Public health capacity;
3. Training;
4. Managing mobility of health workers;
5. Global migration of health workers;
6. Data to support decision making.

It also highlights two additional issues: new technologies and; health care entrepreneurs. For each factor, the Green Paper sets out a series of '*possible areas of action*'.

For a topic that is so fundamental to the future of the health sector, the size and depth of this Green Paper is relatively thin and insubstantial. The areas for action are suggestions which have been drawn together with little detail as to how to implement them. The sections on migration do reflect the policies that other divisions within the Commission have been grappling with.

1.1.   Demography and promotion of sustainable health workforce

Several problems of an aging population and the resulting ageing workforce are set out, which are familiar. The key to maintaining an adequate workforce is educating, recruiting and retaining young practitioners and reinvesting in the mature workforce.

Comments on areas for action
Several of the possible areas for action are goals that EPSU would support, such as ensuring better working conditions and increasing staff motivation and morale, implementing policies for recruitment and training for staff aged over 55, and attracting people back into the workforce.

"*Providing for a more effective deployment of the available health workforce*" is also mentioned. This is one of several references throughout the document to the flexibility and mobility of the workforce. This must be explored more fully, particularly how it will be organised and the choice that health workers will have in the process.

"*Assessing levels of expenditure on the health workforce*" relates to an earlier statement that 70% of health expenditure is spent on health workers. This can be used in a positive way to raise awareness that health workers are a key component of health care.   Better health care depends on well paid health workers with good terms and conditions of employment. However, it can also be used in a more negative sense to try and reduce the costs of health workers, which may be linked to the use of new health technologies, which is discussed later.

1.2.   Public Health capacity

The need for a properly skilled public health workforce is recognised as essential to implement disease prevention and health promotion activities, which will, in the long term reduce demand for health services. Workplace health is highlighted as an important determinant of overall public

health. The Green Paper lists not just accidents at work but other factors, such as new rhythms of work, work-life balance, and job mobility, which require a focus on health at work. Specially trained occupational health staff is required to implement the EU health at work strategy.

Comments on areas for action

Strengthening the capacity for health promotion and disease prevention, and gathering of data on population health needs to inform the development of a public health workforce should be encouraged. The promotion of occupational health physicians is also a positive step, alongside stronger promotion of European Agency for Safety and Health at Work (http://osha.europa.eu/en), in workplaces.

The emphasis on workplace health is welcomed but it is worth considering the approach of the new EU strategy, *Improving Quality and Productivity at Work,* developed for the period 2007-2012. It aims to promote a culture of risk prevention through "*legislation, social dialogue, progressive measures and best practices, corporate social responsibility and economic incentives".* There is a strong emphasis on the role of social dialogue to implement the strategy. The overall aim is to support an increasingly older workforce.

However, the practicalities of implementing *Improving Quality and Productivity at Work* are shown in a study of Lithuania and the new EU strategy. Woolfson (2007) questions whether there is still a social dimension to the '*European project*' in terms of balancing social justice and economic development. He illustrates this argument by examining Lithuania, a county with a fatal accident rate of 113/100,000 as compared to the EU rate of 78/100,000.   In many of the new EU member states in Central and Eastern Europe, new legal frameworks and institutional structures have been set up.   The former labour systems have been replaced by standards, based on ILO and EU standards. New employer organisations are becoming involved in social partnerships for occupational health and safety (ILO, 2003: 36).

Yet in Lithuania, management is hostile to workplace representation, essential to monitoring OSH issues, because it is seen as part of the '*old*' system. Increasingly issues which would have been addressed through collective bargaining are being negotiated through individual contracts (Woolfson, 2007). This suggests that effective implementation of a European OSH has to address wider issues of representation.

Health leadership

Health leadership is a term that has become significant in the process of '*modernising*' health services. It is used in several different contexts. The World Health Organisation in its global work has used the term to mean promoting strategies for public health. The European Office of WHO uses the term '*health stewardship*' to capture the process of leadership that is needed for "*designing and steering health systems towards the most effective arrangements in order to secure better health outcomes*"(WHO, 2008). A wide range of different stakeholders can play a role in health stewardship.

The term health leadership is also used in relation to different professional groups. In the United Kingdom, nurses are being urged to play a leadership role in shaping the NHS and to influence public policies that will improve health outcomes. Practically, nurses are being encouraged to develop skills to operate within a political context.

A critique of leadership in relation to nurses has developed because there is concern that it is seen as a solution that will change the position of nurses in the health care system. It places a responsibility on an individual nurse – whether manager or nurse practitioner - to lead and make nurses more pro-active. If the structural position of nurses in the health care system is to change, it will require more than good leadership skills among nurses themselves. It will also need changes in the organisations in which nurses and other health professionals work (Hewison & Griffiths, 2004; Davies, 2004). Why are nurses considered in need of leadership skills? Why does the position of nurses needs strengthening?   Davies argues that nursing skills occupies a "*complex and ambiguous position*" in health care. There are increasing opportunities for nurses but nursing care can still be devalued. Effective nurse leaders will need supporting political analysis and will have to work with patients on a partnership rather than advocacy basis (Davies, 2004:241).

This analysis can also be applied to trade unions taking a leadership approach. Taking up opportunities to lead and influence health outcomes is important. However, what is the position of health workers and / trade unionists within health care systems? This position will not change just through stronger union leadership. Changes that acknowledge the role of health workers in the reforming and improving of public service delivery will be needed at all levels.

1.3.   Training

Training is considered an essential part of workforce planning. If there are to be more nurses and doctors, this requires more training places and additional planning and investment. Assessment of which specialist skills will be needed by member states, taking into account ageing population, ageing population and pattern of diseases and an increase in older people with chronic conditions. The training needs for health workers required as a result of new communicable diseases is also mentioned.

Comments on areas for action
This is an area where trade unions need to build on existing arrangements to identity training needs and to influence how these training needs are met. Continuous professional development for health workers is important for the updating of skills and expertise. Similarly, training courses to help mature workers re-enter the workforce, means that basic training is not wasted. The reference to language training is one of several indications in the Green Paper that the EU expects health workers to become more mobile, within Europe.

However, there is no mention of how the delivery of health and social care is becoming dependent on multi-skilled health and social care workers drawn from several provider agencies. There are also new models of care being developed that are more focused on the patient at home or in the community, rather than in a hospital. Delivering care in the future will depend on health and social care workers having a wider variety of skills and being more flexible in their professional roles. The training implications of these changes will have to be planned by all stakeholders. The establishment of an observatory on the health workforce might also focus on these growing issues, especially with trade union input.

1.4.   Managing mobility of workforce

The section on managing the mobility of the workforce raises some important issues for trade unions. The legislation that affects the free movement of workers, fundamental freedom Article

39 E Regulation 1612/68, Article 43 right to work as a self employed workers in a member state, informs the development of the internal market.

Directive 2005/36/EC provides for recognition of professional qualifications in view of establishment in another member state and '*in view of facilitating the provision of cross-border services in a member state other than the one of establishment'.* Initiatives such as the '*Health Professionals Crossing Borders*' and the professional card pilot are mentioned.   The '*Health Professionals Crossing Border's* project consists of three strands:
   a) European Certificates of Good Standing to share fitness to practice information from one country to another;
   b) The development of a database on health care regulators;
   c) Six countries will develop a strategy to address some of the issues raised by health care professionals working in different countries (Department of Health (UK), 2005).

Health professionals move for various reasons and mobility can affect distribution and disparities within and between countries. The Green Paper argues that the *"increased mobility of the workforce may require workforce managers/ local or national level – to review recruitment and professional development measures".* One element of the draft directive on cross border health care will be to create European cooperation through "*European references networks of specialised centres through EU network for health technology assessment or through e-health*".

Comments on areas for action
The possible areas for action include: fostering bi-lateral agreements between member states, investing to train and recruit enough health personnel to achieve self sufficiency at EU level, encouraging cross border agreements on training and staff exchanges, and promoting 'circular' movement of staff. These recommendations all suggest that there will be increased pressure for health workers to move within Europe. Trade unions will have to identify their own strategies for dealing with this pressure so that the needs of health workers are central to any movements.

1.5.   Global migration of workers

The Green Paper sets out the need for the EU to have an adequate health workforce in the context of global migration of health workers. Unless the EU becomes self sufficient, the '*negative impact on the health systems of developing countries is not likely to decrease*'. This has important implications for EU external and development policy.   The EU is also developing a common immigration policy which will promote circular migration rather than increases the flow of health workers from developing countries.

Several codes of practice for ethical recruitment are highlighted. The work of the European Social Dialogue committee in the hospital sector in adopting a '*Code of Conduct and follow-up on ethical cross border recruitment and retention*' is mentioned as an example of EU level action. The EU is committed to develop a Code of Conduct for ethical recruitment from non-EU countries (2007-13 Communication from Commission to the Council and European Parliament: a programme for action to tackle the critical shortage of health workers in developing countries).

Comments on areas for action
The possible areas for action include a set of principles to guide recruitment of health workers from developing countries and methods for monitoring; supporting WHO in its work on a global code of conduct for ethical recruitment; and stimulating bi- and pluri-lateral agreements to

stimulate circular migration.   The involvement of trade unions in these developments will be important, drawing on trade union experience of working with health workers involved in migration.

1.6.   Data to support decision making

There is a lack of up-to-date and comparable data on health workers in Europe. European wide information is important for planning and providing health services in the EU. Much of the data on the movement of health workers is based on applications to registration authorities in different countries. There is no follow up data which shows whether the health workers actually took up a post in another country.   EUROSTAT provides information on the recognition of qualifications but again, does not show whether health workers actually moved to another country. A European Migration network study of managed migration in the health sector in 11 countries found that data, especially on third country national health workers, was limited. An OECD survey, currently in progress, in 25 countries on the migration of doctors and nurses is expected to identify similar data problems.

Comments on areas for action
Possible areas for action include: harmonising or standardising health workforce indicators; setting up systems to monitor flows of health workers; and ensuring availability and comparability of data on the health workforce, particularly looking at movements of specific groups of the workforce.

The issue of data collection is important for trade unions. They need to be involved in the planning of information systems on the movement of health workers, by identifying the data to be collected and how it is made available for planning purposes.

The Green Paper also discussed two additional issues:
- New technology in the health care sector
- Health Entrepreneurs

1.7.   Impact of new technology: improving the efficiency of the health workforce

In contrast to the lack of discussion of the training needs of multi-skilled/ multi-disciplinary models of care, the Green Paper places an emphasis on new technology in health care. It presents new technology as enabling health workers to work more closely together and to deliver care away from hospitals.

Telemedicine is seen as a way of addressing the problems of delivering care to remote rural areas or where there are shortages of health care workers. The European Commission has issued a Communication of '*Telemedicine for the benefit of patients, society and the economy*' which sets out a European framework to address the issues raised by new technology in health care.

Comments on areas for action
Apart from ensuring training for health professionals to use new technologies, the areas for action focus on encouraging the use of new technologies in the health sector. The promotion of new technologies as a solution for shortages in health workers will have to be treated with some caution. The developments in new technologies may mean a retreat from direct care. Patients and users must be involved in the application of new technologies to health and social care. Trade unions need to play a role in this process.

1.8.   Role of health professional entrepreneurs in the workforce

The Green Paper links the development of an EC Communication on '*Small and medium sized enterprises - key for delivering more growth and jobs*' with health professionals that operate as entrepreneurs, employing their own staff. The Small Business Act is part of the EU Growth and Jobs Strategy (Commission Communication COM (2008)394) which presents a strategy for expanding small and medium sized enterprises.

Comments on areas for action
The two recommended areas of action are to encourage more entrepreneurs to enter the health sector and to examine barriers to entrepreneurial activity in the health sector. These recommendations show how the internal market and EU growth and jobs strategy are being applied to the health sector. The implications for the delivery of public health care are serious. Although there are already some health professionals who operate as health entrepreneurs, it is often difficult for national health care systems to involve them in future planning. Similarly the implication for encouraging more health professionals to become entrepreneurs may threaten carefully constructed public health care systems.

Health entrepreneurs
The term entrepreneur may be defined as "*one who shifts economic resources out an area of lower (productivity) and into an area of higher productivity and greater yield*" (Drucker, 1999). An '*intrapreneur*' is a person who operates in this way, within a corporation or large institution. Since the 1980s, the term '*social entrepreneur*' has been developed to describe individuals who apply some of the same principles to social problems. The term '*health entrepreneur*' has evolved from the concept of social enterprise and social entrepreneurs, in relation to community health services.

Internationally, the International Council of Nurses (ICN) estimates that 0.5-1.0% of nurses operate as nurse entrepreneurs. It is difficult to be accurate as there are many different definitions of the term. There is limited and inconsistent data collected on the activities of nurses and midwives.

The term advanced practice nurse (APN) entrepreneur is used in the United States to describe "*an individual who identifies a patient's need and envisions how nursing can respond to that need in an effective way, and then formulates and executes a plan to meet that need*". Clinically trained, APNs operate their own businesses and work outside an organisation (Ieong, 2005). They plan, organize, finance, operate their own businesses, and they work outside an organization.

Table : Self – employed nurses

Country	Type of nurse business
Germany	800 nurses 'business owners', mainly operating in community health services
New Zealand	50 (0.1%) of total registered nurses practice independently. The largest group are occupational health nurses.
France	15% registered nurses practice as self-employed but nurse-owned consultancies or nurse workforce providers are not registered, so the rate may be higher.

Source: Traynor et al, 1997:62.

Table : Self-employed midwives

Country	Independent/ self-employed midwifes
Netherlands	64% midwives work in their own practices, some in group practices
New Zealand	50% midwives are self-employed
Africa	Some African countries have independent nurses and maternity practices, e.g. Ghana, Uganda, Kenya.

Source: Traynor et al, 1997:62.

The United Kingdom has a dedicated strategy to move health practitioners from within the NHS to independent social enterprises, which will increase the supply of health and social care providers. In 2006, the Department of Health set up a Social Enterprise Unit, which will "*encourage innovation and entrepreneurialism in health and social care and pave the way for new services which better meet patients and service users' needs*" (Department of Health , 2006). This was to support the White Paper, *Our Health, Our Care, Our Say – a new direction for community heath services*, published that year, which encouraged existing health practitioners, working in community health services, to develop new forms of organisation, to deliver care to people living in the community.

Social and health entrepreneurship is being used as a tool to tackle health inequalities and to make more services available so that patients are able to make a choice about their use of health services (Traynor et al, 2007). Entrepreneurship is being used as a way of solving some of the problems faced by existing organisational arrangements for community health services. It will help to increase patient choice by increasing the number of providers, testing out different models of care and aiming new provision at previously under-served areas (Traynor et al, 2007).

In 2006, the Department of Health (UK) and the National Council for Graduate Entrepreneurship (NCGE) launched a '*Flying Start Programme for Social Entrepreneurs in Health'* (FSPSEH) for graduates, within 10 years of graduation, who would like to start a business in the health care industry (Department of Health, 2007).

The Nursing Times reported, in February 2009, that in the north west of England, the strategic health authority is encouraging the creation of clinical health entrepreneurs, who will deliver clinical care at community level. This is part of the '*Transforming Community Services'* programme that the Department of Health launched in 2006.

Some of the disadvantages of the use of social/ health entrepreneurs may be that it will fragment the provision of care.   The need for coordinated care at a local level is recognised. If a range of providers try and deliver tailored care packages, the patient/ service user will have to gather information on the different services available, thus breaking down some of the care pathways that have been developed recently in the NHS.

The concept of health entrepreneurs challenges some of the basic principles of universality and shared risk that underpin public health care services.   It also links to the debates about whether health care is a service of general interest and whether is should be treated differently to other services of economic interest within the EU internal market.   The promotion of small and medium businesses, within the health sector, appears as an indirect way of drawing health services into the internal market.

1.9.   Cohesion policy

The Green paper makes a link between the development of the health workforce and the cohesion policy, through the use of structural funds. The Community Strategic Guidelines for Cohesion, which set priorities for the 2007-13 period, include a section on 'Help maintain a healthy labour force'.

Comments on areas for action
The possible areas of action include making more use of support from structural funds to train and re-skill health professionals, as well as using these funds for health infrastructure. These will provide some extra funds for training. It also places the health sector within wider economic and social development policies.

2. Relevant literature and other research

The topics of the health workforce and '*human resources for health*' are becoming recognised as an important part of health systems planning. The 2006 World Health Report '*Human Resources for Health*' was launched at the beginning of a decade of action by WHO and partner agencies. The Global Health Workforce Alliance (GHWA) was set up and launched during the Fifty-ninth World Health Assembly in May 2006, as a way of taking action forward actions through the decade.

The World Health Organization (WHO) commissioned papers to inform the 2006 World Health Report, which cover a wide range of health workforce issues. The WHO European Office has commissioned a number of reports on the health workforce. They include *Human resources for health in the WHO European Region*, *Health worker migration in the European Region: country case studies and policy implications*, as well as two publications from the European Observatory on health systems and policies: *The health care workforce in Europe learning from experience* and *Human resources for health in Europe*.

The following pages set out short summaries of the key reports on issues raised within the Green Paper, under the following themes:
- Workforce profiles
- Pay/ expenditure on health workers
- Supply and demand for health workers
- Migration
- Workforce planning

Workforce profiles
Rechel B. DuBois C-A. McKee M. (eds.) (2006) The Healthcare Workforce in Europe – Learning from experience WHO European Observatory on Health Systems and Policies http://www.euro.who.int/document/e89156.pdf
The first chapter is an overview of issues facing the health workforce in Europe, including workforce supply, training, working conditions, regulation. This book provides a series of national profiles of the health care workforce: France, Germany, Lithuania, Malta, Norway, Poland, Russia, Spain, and United Kingdom. It discusses the influence of the marketisation of health care workforces in public health care systems.

DuBois C-A. McKee M. Nolte E. (2006) Human resources in Europe – collection of papers on aspects of the health workforce WHO European Observatory on Health Systems and Policies Open University Press http://www.euro.who.int/Document/E87923.pdf
This collection of papers focuses on a more thematic approach to the health workforce. The issues covered include: migration; changing professional boundaries; health professional education; managing performance in the health care sector; incentives for health care workers; improving working conditions, regulation; impact of EU law.

Regional Committee for Europe (2007) Health workforce policies in the European Region Meeting of the Fifty-seventh session Belgrade, Serbia, 17–20 September 2007 Provisional agenda item 6(a) EUR/RC57/9 http://www.euro.who.int/document/rc57/edoc09.pdf
The health workforce in Europe is estimated to be over 16.6 million workers, an

average of 18.9 per 1000 population. Health service providers account for 69% of these (11.5 million), and health management and support workers represent 31% (5.1 million) of the total health workforce.

The distribution of health care workers across Europe varies considerably. The ratio of nurses to doctors ranges from nearly 7.2:1 in Ireland to 0.7:1 in Italy and Greece. There is wide variation in density of health professionals per 1000 population: ratios between the countries with the lowest and highest numbers are 1:6 for physicians; 1:10 for dentists; 1:50 for pharmacists; 1:8 for nurses; and 1:12 for midwives (Regional Committee for Europe, 2007).

This report argues that health worker education "*needs to become one of the key building blocks in health system reforms, and an activity strongly connected to the other functions of the health system*". More research is needed to understand health worker motivation and effective incentives.

The Human Resources for Health Action Framework developed by the Global Health Workforce Alliance is recommended as a useful point of reference. It can be found at http://www.capacityproject.org/framework/ .

Pay/ expenditure on health workers
International Council of Nurses (2007) Nurse wages and their context Database summary
http://www.icn.ch/sew_awff_data_sum07.htm
This report provides an analysis of a Nurse Wage Questionnaire that was sent to 10 National Nurses Associations, all members of the ICN International Workforce Forum. Responses were received from Canada, Germany, Ireland, Japan, Sweden, UK, and USA. The results are presented in Purchasing Power Parity which standardises currency to facilitate international comparison.

Drager S. Dal Poz M.R. Evans D.B.(2006) Health workers wages: an overview from selected countries Background paper prepared for the World Health Report 2006 Working together for health Geneva: World Health Organization
This paper examines variations in health worker wages across countries. Data has been taken from three sources: Occupational Wages around the world (ILO); Luxembourg Income and Employment Study and; OECD Health Data correspondents.
The study showed large wages gaps between workers in high and low income countries, raising questions about how to address the pressure to migrate that these differences result in.

Hernandez P. Drager S. Evans D.B. Tan-Torres Edejer T. & Dal Poz M.R. (2006) Measuring expenditure for the health workforce: evidence and challenges Background paper prepared for the World Health Report 2006 Working together for health Geneva: World Health Organization
http://www.who.int/hrh/documents/measuring_expenditure.pdf
This study starts to measure the amount that is spent on national health workforces. Remuneration is considered as a share of government expenditure on health. For Europe, there was data for 18 countries, showing that 42.3% of government expenditure on health is made up of wages, salaries and allowances to employees.   Expenditure on human resources for health as share of total expenditure on health in 29 countries in Europe was 73.4%.

WHO European Office (2007) Investing in the health workforce enables stronger health systems Fact sheet 06/07 Copenhagen: WHO European Office 17 September 2007
http://www.euro.who.int/Document/Mediacentre/fs0607e.pdf

This fact sheet argues that the health workforce is *"central to managing and delivering health services in all countries".* There are variations in the numbers of health workers, both between countries and within countries, across Europe. Ageing and migration are seen as the two most critical issues in Europe.

Demand for health workers/ Supply of health workers
Matthews Z. Channon A. Van Lerberghe W. (2006) Will there be enough people to care? Notes on workforce implications of demographic change 2005-2050
Background paper prepared for the World Health Report 2006 Working together for health Geneva: World Health Organization
http://www.who.int/hrh/resources/workforce_implications.pdf
The health workforce has been one of the fastest growing sectors in Europe. The EU expects a 16% growth over 5 years in e-health, private medical insurance, outsourcing of services and cross border health care (Accenture & Lisbon Council, 2006). The report argues that developments in technology and a more assertive and affluent older population will lead to an increased demand for health workers.

The report calculates the number of health workers needed from 2005, 2015, 2025 and 2050. The report concludes that new entrants into the health workforce will have to be recruited, because the existing health workforce is ageing and due to retire and the overall the active population will grow slowly or not at all.

Migration of health workers
Buchan J. Perfilieva G. (2006) <u>**Health worker migration in the European Region: country case studies and policy implications**</u> **Copenhagen: WHO- European Office**
http://www.euro.who.int/document/e88366.pdf
This report, commissioned by WHO European Office, consists of 5 country case studies. It found that none of the five countries could provide accurate and complete data on international flows of health professionals.

Garcia-Perez M.A. Amaya C. & Otero A. (2007) Physicians' migration in Europe: an overview of the current situation <u>**BMC Health Services Research**</u> **7:201 doi:10.1186/1472-6963 -7-201**
http://www.biomedcentral.com/1472-6963/7/201/abstract
This study addresses the question of whether the expansion of the EU has led to increased migration of doctors throughout Europe. There are considerable problems with lack of information.

Workforce planning
Shared Solutions Consulting (2004) <u>**Long-term Conditions: Key Issues for Workforce Planning**</u> **Avon and Wiltshire SHA Workforce Development Confederation**
http://www.hrhresourcecenter.org/node/2372
There is increasing recognition that people with long term conditions increase the demand for health and social services and that the existing resources need to be used differently. These resources consist of patients and their families, existing NHS, voluntary sector and local authority staff: their knowledge, experience, ideas and energy. The report discusses some initiatives that have been successful – illustrating different ways of doing things. Recommendations/ questions cover: beliefs and culture, knowledge management, training & mentoring, recruitment and retention, safety & risk management.

Chaloff J. (2008) Mismatches in the formal sector, expansion of the informal sector: immigration of health professionals to Italy OECD Health Working Paper No.34 Directorate for Employment, Labour and Social Affairs OECD JT03256211
http://www.hrhresourcecenter.org/node/2241
This paper examines the situation in Italy where there is an ageing population, an excess of doctors and a shortage of nurses. Italian doctors often migrate to other countries to practice. The demand for nurses has been met by the migration of unskilled care workers to Italy. Most registered nurses work in the public sector but there are shortages of nurses in emergency care and in hospitals. There are an estimated 500,000 unregistered care workers, often with no background in care work.

HRH Resource Center
http://www.hrhresourcecenter.org/trip_search?keys=europe#

Davies C. (2004) Political leadership and the politics of nursing Journal of Nursing Management 12: 235-241
Why are nurses considered in need of leadership skills? Why does the position of nurses needs strengthening? Davies argues that nursing skills occupy a "*complex and ambiguous position*" in health care. There are increasing opportunities for nurses but nursing care can still be devalued. Effective nurse leaders will need supporting political analysis and will have to work with patients on a partnership rather than advocacy basis.

Traynor M. et al (2006) The Contribution of Nurse, Midwife and Health Visitor Entrepreneurs to Patient Choice: A scoping exercise A report to the National Co-ordinating Centre for NHS Service Delivery and Organisation Revised version October 2006
http://www.sdo.nihr.ac.uk/files/project/90-final-report.pdf
This report, commissioned as a scoping exercise by the national Coordinating centre for NHS Services delivery and Organisation (SDO) explored the concept of the term '*nurse midwife and health visitor entrepreneurship*'. Doing an extensive literature search and analysing the policy context, there was evidence of new opportunities for health entrepreneurs working closely with the NHS. However, the research team found little evidence of effectiveness of the outcomes of entrepreneurial activity.

3. Report of Skills expert panel workshop – health and social work 5/6 March 2009

3.1.   Introduction

This section will report on a consultation meeting held on the 5/6 March 2009 in Brussels. The purpose of the meeting was "*to corroborate, to amend and to complement the results of the study on jobs and skills in the health and social services sectors*".   It was the last stage in a project that aimed to identify future skills needed in the health and social services sector.

The European Commission (DG Employment, Social Affairs, and Equal Opportunities) commissioned a study '*Comprehensive sectoral analysis of emerging competences and economic activities in the European Union*'.   The study has been undertaken by a consortium of TNO (Delft, the Netherlands), SEOR Erasmus University (Rotterdam, the Netherlands) and ZSI (Vienna, Austria).

Set in the context of the EU Lisbon strategy and the '*New Skills for New Jobs Initiative*', the study has looked at 16 sectors, ranging from car manufacturing to health and social services. The project used a common methodological framework for all the different sectors.

Methodology
1. Identification of economic activities to be studied
2. Identify economic and employment trends and occupational structures
3. Identify drivers of change
4. Construct scenarios
5. Identify implications for employment –changes by job function
6. Identify implications for skills –emerging needs by job function
7. Develop strategic choices to meet the skills needs
8. Apply strategic choices to emerging skills needed
9. Identify implications for education and training
10. Define key recommendations for the future

Although this methodology has been developed for use in analysing many different sectors, there are some problems with using, what is a predominantly economic methodology, for the health and social services sector. It does not provide enough opportunities for considering issues such as the type of delivery of public services. As it takes a market focused supply and demand approach to future services, it does not acknowledge that population needs might be better served with a more planned approach to health and social care. The skills required could then be defined as part of the planning process.

Health and social services sector
The term health and social services covers hospitals, medical and dental practices, residential care activities, social services activities without accommodation, and veterinary activities. The health and social care sector covers 70% of jobs in Europe, with 20 million people employed. It contributes between 5% and 13% of GDP for most countries in the EU and this contribution is rising.   The majority of the 20 million health and social services workers are employed in 15 EU

countries. The new member states employ about 2.3 million health and social services workers. Although all countries show some growth in employment there are differences in rates of growth across Europe.

Table 1: Rates of growth in employment in health and social services sector

Rates of growth	2.6% increasing	4.4% increasing	1.4% declining	1.2% declining
Countries	Belgium Germany Netherlands Ireland	Luxembourg Greece Slovenia	UK France Denmark Sweden Finland	CEE Italy Spain

Concept of employment, production and value added

The concept of '*value added*' is an economic concept that is applied to industry. It tries to explain how products increase in value as they move through the production chain, which may include different stages of processing and packaging a product.

Industry '*value added*' is defined as the contribution that an industry makes to the economy. Health and social services are considered to have a high total '*value added*', payable as wages and salaries. However, whether the concept of '*value added*', only considered in an economic sense, is helpful for the health and social services sector is questionable. Methodologies that try and capture the '*social value*' of a product would be more appropriate for the health and social services sector.

Table 2: Rates of value added in health and social services sector

Rates of growth	Increasing value added with high levels of economic growth and value added	Upcoming valued added with low levels of economic growth	Retreating value added with higher levels economic growth	Declining value added with higher levels economic growth
Countries	Germany	Italy Austria Hungary	Belgium France Netherlands Denmark Sweden Finland	UK Spain Poland

The report highlights three conclusions in relation to employment and value added. All countries are showing increases in employment and valued added. The health and social services sector has a major impact on household and government budgets. Some countries have both growth in employment and increase in value added e.g. Germany. Many CEE countries show lower increases in both employment and valued added. The report argues that it is the countries with highest value added and employment rates that face the biggest challenges in relation to maintaining a skilled labour force that will be able to support these rates.

Sector profile
The sector is dominated by women, who have 78% of the jobs in the majority of countries. Only in new Member states has the proportion of women workers dropped slightly.

43% of workers are younger than 40 but this proportion has dropped since 2000. The overall health and social services workforce is ageing. The majority of workers are educated to medium and high levels.

The health and social services sector is labour intensive. It is difficult to obtain information on the cost and volume increases in the sector. The costs of employment are 2.8% and this rate is increasing. The share of employment of total costs is about 65% and this rate is found across the European Union.

3.2.   Strengths, weaknesses, opportunities and threats (SWOT) to the sector

The project undertook an analysis of the strengths, weaknesses, opportunities and threats facing the sector. The results are set out in table 3.

Table 3: Strengths, weaknesses, opportunities and threats (SWOT) to the sector

STRENGTHS	WEAKNESSES
Very strong demand Predictable demand Public trust in health care Accessibility of health care	Organisational change difficult to achieve Inefficiencies (cost and labour) Limited transparency of quality of services, costs and prices/ fees Complexity of processes and products Bureaucracy and lengthy procedures Vested interests of powerful groups Supply driven rather than demand driven

OPPORTUNITIES	THREATS
Technology (pharma, micro, medical devices and ICT) Stable, transparent and predictable regulation Immigration Attractive labour market for professionals Improving balance of power between different stakeholders (providers, patients, insurance and government)	Government budget constraints Adverse selection Shortage labour supply Inflexible labour market Emigration

Workshop discussion
The SWOT analysis was felt to lack a disease prevention/ health promotion approach, probably because these policies are not '*vote catching*'.   If health promotion/ disease prevention strategies are adopted, then in the medium term this could be expected to have an impact on the levels of disease and overall demand for curative health care services.   There was also no acknowledgement of a social model of health or the important role that public services play in these sectors.

Patients had not been presented as playing a positive role in the analysis. Empowered patients, who have been educated about the right to health care services, would demand appropriate access. There is often unequal access to services in relation to some urban and many rural areas. The SWOT analysis did not reflect this.

Migration was seen as a threat to the future of health services but cross border movement of patients and health workers could be seen as an opportunity.

Predictable demand for health care should be considered carefully because people may feel that they can never have enough health. Also, strong demand for health care is not always a strength. In Greece, demand for high technology treatments is a weakness of the health system. Speed of innovation can be both a strength and a weakness.

3.3.   Development of four scenarios

The core of the project was the development of four future scenarios, which take a medium range time perspective, with 2020 as the focus. The report defines scenarios as "*plausible future paths of development rather than predictions or forecasts*". They are "*based in existing data and trends and derived in a logical and deductive way*". The goal of the scenarios is to assess the implications for jobs and skill needs by function.

The development of the scenarios are influenced by endogenous factors, which are '*drivers*' that can be influenced by government and so be subject to public policy. These include the labour market, trade and market regulation and the 'quality of institutions'. Exogenous factors can not be influenced by government. These include ageing, technology, life style and income. The application of these '*driver*' led to the creation of three scenarios: care central; care gap; flex care. The matrix is set out below.

Table 4: Matrix development of four scenarios

	Trade and market regulation: efficiency Labour market regulation: flexible labour market regulation Quality of institutions: high quality***		
1. Ageing 2. Technology Not so demand-inducing Much substitution	Considered not plausible	Flex care	1.Ageing 2. Technology Demand inducing Not much substitution
3. Lifestyle Social, informal 4. Income Low	Care central	Care Gap	3.Lifestyle Individual, formal 4. Income High

	Trade and market regulation: not much efficiency Labour market regulation: inflexible Labour market regulation Quality of institutions: low quality***	

Table 5: Characteristics of three scenarios – Care central, Care gap, Flex care

Scenario	Characteristics
Care central	Ageing is influential but technological development helps to accommodate pressure on services. Technologies substitute labour and are available on a large scale. Limited income growth results in small demands for care. Informal care is stimulated through 'social culture' and formal care is only used when informal care is not available. The labour force is inflexible, regulation is weak and 'quality of institutions' is low. The system is supply driven.
Care gap	Demand for care increases as a result of the ageing population and rising income levels increase the demand for care. Formal care is preferred to informal care. Rising income levels and technological developments stimulate a demand in care. Budgets and demand for labour increase. Regulation is considered 'sub-optimal' and cannot address the imbalance between demand and supply. The labour market is inflexible and not enough people work in the health and social services sector. The supply of labour and budgets are unable to deal with the demand for care. Institutions do not create policies that are able to solve these problems.
Flex care	The external drivers are the same as for **Care gap** but the factors subject to government policies are different. The labour market is flexible. Trade and market regulation is used to regulate demand. The system is now demand driven and the supply of services can be adapted to changes in demand. The quality of institutions is high which means that policies are developed to solve outstanding problems.

As with the concept of '*value added*', these scenarios are based on a number of assumptions that assume a primarily economic approach to services.   This is particularly inappropriate when researching the skills and competencies needed for public services.   There are several expressions used that reflect this set of values, such as:

- Regulation is '*sub-optimal*';
- Labour is '*inflexible*';
- Institutions are '*poor quality*'.

There is no mention of public policies, which support a collective approach to providing universal services that share risks across the population. Health and social services are not retail services, subject only to market forces.

3.4.   Main emergent occupations

The table below sets out the main job functions in the health and social service sector, across Europe. The project identified the job functions from the health and social services sector drawing from existing statistical data, which drew from the European Labour Force Survey, from 1986 to 2006 (Column 1). This was adapted and presented to the consultation workshop (Column 2). In the ensuing discussions there were two key issues emerging.

1) Whether health professionals (excluding nursing but including medical doctors, dentists, pharmacists and veterinarians) should be grouped with health associate professionals (medical assistants, hygienists, dieticians, opticians, dental assistants, physiotherapists, …_). It was decided that these two groups were significantly different in relation to future skills and competencies.
2) What was the definition of '*social science professionals*'. There was no shared understanding of what this term meant among workshop participants so that a new category of '*social protection*' professionals, which would include social workers, psychologists, mental health workers, community workers… was agreed. The project team would revisit the definitions of a range of social care professionals in the formal International Labour Organization guidelines and classifications (NACE85).

Table 6: Adaptation of function structure

Classification in statistical data (1)	Adapted classification, names in tables (2)	Following consultation discussions (3)
Managers	Managers	Managers
Health professionals excluding nursing	Medical professionals	Medical professionals
Health associate professionals		Health associate professionals and technicians
Social science professionals	Paramedical professionals	Social protection professionals
Other professionals & technicians		
Nursing & Midwifery professionals	Nursing & Midwifery	Nursing & Midwifery
Personal care and related	Personal care workers	Personal care workers
Clerks	Low educated workers	
Other services		
Craft trades		
Helpers, cleaners, launderers		
Elementary occupations		

3.5.   Emerging competencies

Identification of future competencies was one of the aims of the project. The consultation workshop was asked to identify the '*critical*' skills and knowledge for each functional group.   The definitions of the competencies were drawn from the European Qualification Framework (EQF) and the European Credit System for Vocational Education (ECVET).

Definitions
Knowledge is defined as the "*outcome of the assimilation of information through learning*"
Skills means the "*ability to apply knowledge and use know-how to complete tasks and solve problems*"
Competence means "*proven ability to use knowledge, skills and personal, social and methodological abilities, in work or study situation and in personal and professional development*".

Table 7: Overview of skills and competencies

Skills	Skills clusters / competencies
Knowledge	Legislation and regulation, e-skills, technical knowledge
Social skills	Team working, social perceptiveness, communication, networking, language, intercultural
Problem solving skills	Analytical skills, interdisciplinary, initiative, multi-skilling, creativity
Self management	Planning, stress & time management, flexibility, multi-tasking
Entrepreneurial skills	Understanding supplier and customer relationships, business understanding, trend setting/ spotting
Management skills	Strategic and visionary, coaching & teambuilding, collegial management style, change management,

The discussion focused on the skills that were of '*critical importance*' to the sector.

Managers
The discussion covered some fundamental issues about how managers were expected to operate in the future. Although in the initial draft report, a collegiate management style was not included, workshop participants felt that it was important. This reflected a view of the future, which depends on shared decision-making.

Medical professionals
Doctors were expected to have high levels of e-skills and technical knowledge. It would also be important for them to have strategy/ visionary skills in order to play a leadership role.

There was also a discussion about whether doctors will require entrepreneurship skills. It was recommended that doctors should be divided into those who are employees of a hospital/ medical service and those who are managers of their own business. It was felt that the latter group would need entrepreneurial skills but not doctors who were employees.

Doctors also needed to have good delegation skills if there were to work effectively with health associate professionals. An example given was how doctors work with nurse professionals who have prescribing rights. It was felt that delegation skills should be included as a management skill.

Allied health professionals
E-skills were also considered important but technical knowledge would be at lower level than for medical doctors.

There was extensive debate about the level of knowledge of legislation that this group will need. It was felt that they should be aware of the legal basis of the service in which they work, rather than have knowledge of all legal arrangements within the health services.

Flexibility was felt to be an important skill.

Entrepreneurial skills was not considered a priority unless an associate health professionals was already self employed.

Social protection professionals
Legislative and regulatory knowledge was considered very important for this group.

Social perceptiveness and intercultural skills were considered important social skills. Coaching and team building as well as change management skills were also emphasized.

3.6.   Strategic choices

Another essential part of the project was the refining of strategic choices for each functional group. Eight key actors were considered by the project.

Table 8: Key actors

C Companies	U Trade unions
E Education	G Local governments
I Intermediary organisations	G Regional and national governments
S Sector organisations and chambers of commerce	EU

A series of strategic choices were defined for each functional occupational group.   They are set out below.

Table 9: Strategic choices

	Option
A	Recruiting workers from other sectors
B	Recruiting workers from Members states
C	Recruiting workers from Non-members states
D	Recruiting unemployed with or without retraining
E	Recruiting young people from the

	educational system
F	Training and retraining employed workers
G	Changing work organisation
H	Outsourcing and offshoring
I	Changing vocational education
J	Designing and offering new courses
K	Providing information about emerging skills
L	Improve image of sector
M	Stronger cooperation between stakeholders

These were applied to all the main functional groups. The workshop considered whether these options were viable.

Table 10: Medical doctors

	Option	Is this option viable?	Actors
A	Recruiting workers from other sectors	NO	
B	Recruiting workers from Members states	YES but culture, language & ethics to be considered	C I G
C	Recruiting workers from Non-members states	YES	C I G
D	Recruiting unemployed with or without retraining	NO	
E	Recruiting young people from the educational system	YES essential	G
F	Training and retraining employed workers	Limited	C E S U
G	Changing work organisation	YES	
H	Outsourcing and offshoring	Limited	C U
I	Changing vocational education	YES	G S E U
J	Designing and offering new courses	YES	G S E U
K	Providing information about emerging skills	YES	G S E U
L	Improve image of sector	YES	
M	Stronger cooperation between stakeholders	YES	All

Patient organisations need to be involved in some of these choices.

Table 11: Allied Health Professionals

	Option	Is this option viable?	Actors

A	Recruiting workers from other sectors	NO	
B	Recruiting workers from Members states	YES but culture, language & ethics to be considered	C I G
C	Recruiting workers from Non-members states	YES	C I G
D	Recruiting unemployed with or without retraining	NO	
E	Recruiting young people from the educational system	YES essential	G
F	Training and retraining employed workers	Limited	C E S U
G	Changing work organisation	YES	
H	Outsourcing and offshoring	Limited	C U
I	Changing vocational education	YES	G S E U
J	Designing and offering new courses	YES	G S E U
K	Providing information about emerging skills	YES	G S E U
L	Improve image of sector	YES – raise awareness of existence of all these professionals groups	ALL
M	Stronger cooperation between stakeholders	YES	All

Table 12: Social Protection Professionals

		Option	Is this option viable	Actors
A		Recruiting workers from other sectors	Limited	C S I G U
B		Recruiting workers from Members states	Limited as culture, language & ethics to be considered	C I G U
C		Recruiting workers from Non-members states	Limited as culture, language & ethics to be considered	C I G U
D		Recruiting unemployed with or without retraining	Limited	C I G U
E		Recruiting young people from the educational system	YES essential	C S E G
F		Training and retraining employed workers	YES	C S E I U
G		Changing work organisation	YES some scope	C S G
H		Outsourcing and offshoring	NO	
I		Changing vocational education	YES	C G S E U
J		Designing and offering new courses	YES	C G S E U
K		Providing information about emerging skills	YES	C G S E U
L		Improve image of sector	YES Public authorities must recognise value of these groups	CG S E U
M		Stronger cooperation between stakeholders	YES	All

Table 13: Nursing and midwifery

		Option	Is this option viable	Actors
A		Recruiting workers from other sectors	Very lImited	C
B		Recruiting workers from Members states	Limited as culture, language & ethics to be considered	C I G U
C		Recruiting workers from Non-members states	Limited as culture, language &	C I G U

		ethics to be considered	
D	Recruiting unemployed with or without retraining	Limited	C I G U
E	Recruiting young people from the educational system	YES essential	C S E G
F	Training and retraining employed workers	YES	C S E I U
G	Changing work organisation	YES some scope	C S G
H	Outsourcing and offshoring	YES use of temporary workers and patients paying directly	C G U
I	Changing vocational education	YES	C G S E U
J	Designing and offering new courses	YES	C G S E U
K	Providing information about emerging skills	YES	C G S E U
L	Improve image of sector	YES Public authorities must recognise value of these groups	CG S E U
M	Stronger cooperation between stakeholders	YES	All

The main issues raised in discussion of strategic choices for different occupational groups were:
- The ethics of recruitment from EU member and non-member states and the role of government in this process;
- The implications of recruitment of employed workers for the health and social services sector;
- The need to improve the images of the health and social services sectors was significant for almost all occupational groups, even doctors;
- How to influence vocational training;
- The role of governments in setting quotas for doctor training.

3.7.   Recommendations

The project recommendations were discussed by the workshop. The main discussion points are recorded in the comments column.

Table 14: General recommendations and comments

	Recommendation	Comments
1	Intensify cooperation between stakeholders	Agreed
2	Invest strongly in human capital – to address needs of an ageing society, promote life long learning through tax incentives and other measures	Agreed
3	Invest in e-skills and technological knowledge	Agreed
4	Invest in social skills – to deal with demand for personalised services from a diverse population	Agreed
5	Distinguish between managerial and contextual from medical treatment Allow doctors to concentrate on core tasks	Different views about whether doctors should take on management tasks so that management is informed by clinical understanding. Develop flexible career pathways
6	More entrepreneurship training needed – for benefit of self-employed and small practices	Only for specific groups. Inappropriate for many health professionals
7	Take into account market and institutional specificities	
8	Take effects on volume and skills into account when regulation is designed – regulation increasing flexibility and efficiency helps to overcome volume shortages but demand more skills	Government role in setting quotas for training of doctors
9.	Evaluate effect of income and working conditions – low income and working conditions affect supply of labour	Include effect of low skills on workers who are low paid with poor working conditions. Explore social policies that provide housing, childcare/ caring provision rather than only wage increases
10.	Keep older people in employment or recruit them	Recognise caring responsibilities may include older parents/ family members as well as children. Caring support will need to be flexible.

Table 15: Recommendations education and training

	Recommendation	Comment
1	Improve the information systems on skill needs and job opportunities	Government can play important role in this process
2	Collaborate with all relevant stakeholders	Include universities
3	Enhance flexibility – adjust to changing sector requirements through flexible forms of 'blended' learning	Agreed
4	Include multi-skilling and multi-professionalism – address patient requirement in an integrated way. Health professionals need to combine multiple skills	Develop more specific roles
5	Supply special courses dedicated to sector characteristics – to address emerging needs. Specialisation versus integrated solutions for patients	Agreed. Look at relationship between training for doctors and nurses
6	Supply special courses for older workers	Agreed
7	Increase international and intersectoral acknowledgement of certificates, qualifications and degrees	Also greater recognition of pension rights across countries
8	Provide career guidance for labour market entrants	Role of government in this process

4. Conclusions/ Recommendations

The Green Paper *On the European Workforce for Health*' highlights some issues that trade unions will have to deal with in the future. The Green Paper is recommending that the EU should be self-sufficient in health workers. This would be achieved by using a model of supply and demand for health workers to encourage the movement of health workers within Europe. This has great implications for health workers. Trade unions will need to play a role in any negotiations that encourage greater mobility.   Mobility should be initiated by the health worker for professional or personal reasons.

Within the Green Paper there is a great emphasis on new technologies in the health care sector. Modern health care is dependent on the use of many new technologies, which provide effective treatments. However, good quality health care also depends on individual care. New health technologies should not be seen as a way of solving shortages of health care workers. There should be a greater focus on developing ways of training health workers to be multi-skilled and able to work with a range of different professionals.

Trade unions should be actively involved in assessing the need for new and different skills. These will have a fundamental impact on the way in which future health services are delivered and the working conditions of staff.   The different type of management approaches and the roles that groups of health professionals are given will all be shaped by specific skills and competencies.

Health leadership to achieve improved health outcomes is perceived as a solution by international agencies, such as the World Health Organization. The role of health workers in this process is significant but health leadership alone will not solve the problems of health systems. More fundamental changes, which lead to a greater valuing of the role that health workers can play in future reforms, are needed.

The proposal to encourage health entrepreneurs shows how wider EU policies, in this case, employment, impact on the health sector. The application of a small and medium sized business strategy to the health sector has the potential to fragment public health care systems.   The UK Department of Health is already encouraging community health practitioners to set up new ways of delivering services. Existing heath systems should be able to develop new forms of service delivery without changing the employment arrangements of health care practitioners.

Jane Lethbridge
17 March 2009

5. References

Davies C. (2004) Political leadership and the politics of nursing <u>Journal of Nursing Management</u> 12: 235-241

Department of Health (2005) Healthcare professionals crossing borders

Department of Health (2006)   Dept of Health needs help from social entrepreneurs to improve services <u>Press release</u> 23 June 2006

Department of Health (2006) <u>Our health, our care, our say: A new direction for community services</u> London, UK: Stationery Office.

Department of Health (2007) News: Flying Start Programme for Social Entrepreneurs in Health <u>Press release</u> 11 January 2007

Dijkgraaf E. (ed.) Gijsbers G. Sanders J. Treutlein D. De Vos E. Van de Zoo F. (2009) <u>Jobs and competencies in the health and social services sector in the EU: future scenarios and implications Final Report, Part II</u> 20 January 2009 DG EMPL project Comprehensive Sectoral Analysis of Emerging Competencies and Economic Activities in the European Union Lot 16, DG EMPL project VC/2007/0866

Dijkgraaf E. Gijsbers G. de Jong M. Jonkhoff W. Zandvliet K. Maier D. Van der Zee F. (2009) <u>Final Interim Report Trends, Developments and State of Play in the Health and Social Services Sectors in the EU</u> Comprehensive Sectoral Analysis of Emerging Competencies and Economic Activities in the European Union Lot 16, DG EMPL project VC/2007/0866

Drucker P. (1999) <u>Innovation and Entrepreneurship: Practice and Principles</u> London: Butterworth Heinemann Ltd

European Commission (2008) "*Think Small First*" A "*Small Business Act*" for Europe   Commission Communication COM (2008)394 <u>http://ec.europa.eu/enterprise/entrepreneurship/docs/sba/com_2008_394_sba.pdf</u>

European Commission (2007) White Paper Together for Health: A Strategic Approach for the EU 2008-2013 (presented by the Commission) Brussels, 23.10.2007 COM(2007) 630 final <u>http://ec.europa.eu/health/ph_overview/Documents/strategy_wp_en.pdf</u>

European Commission (2008) Green Paper 'On the European Workforce for Health' Brussels, 10.12.2008 COM(2008) 725 final <u>http://ec.europa.eu/health/ph_systems/docs/workforce_gp_en.pdf</u>

European Parliament (2005) DIRECTIVE 2005/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on the recognition of professional qualifications <u>Official Journal of the European Union</u> <u>http://eur- lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:255:0022:0142:EN:PDF</u>

Healthcare Professionals Crossing Borders (2009) <u>http://www.hpcb.eu/</u>

Hewison A. and Griffiths M. (2004) Leadership development in health care: a word of caution <u>Journal of Health Organization and Management</u> 18(6): 464-473

Ieong S L J (2005) Clinical Nurse Specialist Entrepreneurship <u>The Internet Journal of Advanced Nursing Practice</u> 7:1

http://www.ispub.com/journal/the_internet_journal_of_advanced_nursing_practice/volume_7_number_1_2/article/clinical_nurse_specialist_entrepreneurship/page/1.html

International Labour Organization (ILO) (2003) Global Strategy on Occupational Safety and Health - conclusions adopted in 2003 91st ILO conference Geneva: ILO

Mooney H. (2009) Nurses in the North West are being encouraged to become 'clinical entrepreneurs' to help make a difference to health outcomes Nursing Times http://www.nursingtimes.net/news/breakingnews/2009/02/nurses_urged_to_become_clinical_entrepreneurs_to_improve_care.html

Traynor M. et al (2006) The Contribution of Nurse, Midwife and Health Visitor Entrepreneurs to Patient Choice: A scoping exercise A report to the National Co-ordinating Centre for NHS Service Delivery and Organisation Revised version October 2006 http://www.sdo.nihr.ac.uk/files/project/90-final-report.pdf

Woolfson C. (2007) New European Community Strategy for health and safety: The elephant in the room International Journal of Occupational & Environmental Health 13:342-355

World Health Organization (WHO) European Region (2008) Stewardship/Governance of health systems in the WHO European Region Regional Committee for Europe Fifty-eighth session Tbilisi, Georgia, 15–18 September 2008