trío.be

HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 15

How to create an attractive and supportive working environment for health professionals

Christiane Wiskow, Tit Albreht and Carlo de Pietro

WORLD HEALTH ORGANIZATION EUROPE

European Observatory on Health Systems and Policies

HEN Health Evidence Network
EVIDENCE FOR DECISION-MAKERS

Keywords:

HEALTH PERSONNEL

PERSONNEL MANAGEMENT

JOB SATISFACTION

WORKPLACE - organization and administration - standards

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
Scherfigsvej 8
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (http://www.euro.who.int/pubrequest).

This policy brief is one of a new series to meet the needs of policy-makers and health system managers.

The aim is to develop key messages to support evidence-informed policy-making, and the editors will continue to strengthen the series by working with authors to improve the consideration given to policy options and implementation.

How to create an attractive and supportive working environment for health professionals

Contents

Authors

Christiane Wiskow, Independent Health Services Specialist, Switzerland

Tit Albreht, Centre for Health System Analyses, Institute of Public Health of the Republic of Slovenia, Slovenia

Carlo de Pietro, Centre for Research on Health and Social Care Management, Bocconi University, Italy

The authors and editors are grateful to the reviewers who commented on this publication and contributed their expertise.

No: 15

ISSN 1997-8073

Key messages

Policy issue and context: poor work environments compromise health-workforce supply and quality of care

- Health policy-makers face the challenge of matching increasing demand for health care with a sufficient supply of health professionals in times of existing and projected health-workforce shortages.
- The work environment constitutes an important factor in the recruitment and retention of health professionals, and the characteristics of the work environment affect the quality of care both directly and indirectly. Addressing the work environment, therefore, plays a critical role in ensuring both the supply of a health workforce and the enhancement, effectiveness and motivation of that workforce.
- The purpose of providing attractive and supportive work environments is to create incentives for entering – and remaining in – the health professions, and to provide conditions that enable health workers to perform effectively (to achieve high-quality health services).

Policy options

- Given the complexity of the work-environment issues to be addressed, policy responses need to be multidimensional, cross-cutting and inclusive. For coherent policies, policy action has to be considered at four levels: international/regional level; national level; sectoral level; and local/organizational level. Effective solutions are context-related and therefore priority has to be given to the local and organizational level. The other levels provide the legislative and regulatory framework and provide guidance and support for the development of workplace policies.
- Two examples of what can be done to improve the quality of the work environment in the health professions include policy approaches to promote a healthy balance between family life and work, and the enhancement of the protection of workers' health.
- In order to encourage health-sector employers to make a commitment to positive work environments, the development of workplace assessment/recognition programmes could be considered.

Implementation considerations

- As many factors influencing the work environment operate outwith the health sector, intersectoral collaboration is required. In particular, the interface between labour and health-policy mandates needs to be strengthened.
- Here, the use of social dialogue can help to ensure sustainable and cross-sectional implementation with multiple stakeholders.

Executive summary

Policy issue: poor work environments compromise health-workforce supply and quality of care

European countries face common challenges in ensuring a well-performing health workforce in times of existing and projected shortages. One of the multiple aspects that determine the supply and performance of health workers is the work environment, which plays a critical role.

Given the demographic changes expected in the coming decades, labour markets will experience increased competition for talent. Recruitment and retention of health professionals are priorities in the health sector. Evidence suggests that the work environment is an important factor in the recruitment and retention of health workers.

Furthermore, the work environment can influence the quality of care. Its characteristics affect organizational functionality, individual satisfaction, the balance between work and family life, continuous development, and the organizational culture. Poor work environments contribute to medical errors, stress and "burn-out", absenteeism and high levels of staff turnover, which, in turn, compromise the quality of care.

As a working definition, an attractive and supportive workplace can be described as an environment that attracts individuals into the health professions, encourages them to remain in the health workforce and enables them to perform effectively.

In order to develop coherent policies to ensure a work environment that attracts and retains health professionals, policy responses have to be considered at four levels: international/regional level; national level; sectoral level; and local/organizational level. Improvement of the work environment will require the use of measures that are relevant to (and applicable in) the specific context of a given health system. These measures should also observe international standards and take account of regional harmonization efforts.

Effective solutions are context-related and therefore priority has to be given to the local and organizational level; the other levels provide the legislative and regulatory framework, guidance and support for the development of workplace policies.

Policy options

One main trend observed in the health workforce is the drive towards an improved work–life balance. A family-friendly work environment is of particular concern in the health sector because of the gender dimension of this issue. The majority of the health workforce is female, and an increasing

feminization of traditionally male-dominated professions can be observed. Work arrangements that allow a reconciling of family and work needs can enhance equal employment and career opportunities at times when family responsibilities are largely borne by women. Similarly, maternity protection is highly relevant with regard to the mainly female health workforce and the potential exposure to health risks in this workplace sector. Thus, the promotion of "family-friendly" workplace options and the enhancement of workers' health protection are domains in which concerted policy approaches can be pursued.

More-specific policy responses here include the use of flexible working-time arrangements, specific protection from exposure to occupational risks, job security, compensation for reduced employment, maternity/parental leave and the provision of child-care opportunities. These areas primarily require action at organizational level, with support from national policies and legislation.

Additionally, health workers are exposed to a broad range of occupational health risks because of the nature of their work: one-third of health workers perceive their health to be at risk because of their work. Thus it is crucial to implement policies to ensure that the health work environment is as safe as possible. The following areas are of particular relevance to the health workplace: exposure to biological risks, including infections caused by "sharps" injuries; and psychosocial risks, including stress and violence at work. Consequences at the organizational level include absenteeism, reduced productivity, accidents and errors.

There is a consensus that comprehensive occupational safety and health management systems are a solid way of establishing sustainable health protection at organizational level. Central to such systems are the prevention and control of health risks.

In terms of helping to advance work-environment issues, a promising approach lies in the development and adoption of processes and tools capable of assessing work environments at organization level, comparing them, recognizing best practice and applying them across the system. This approach ideally combines elements that address the attractiveness of an organization for recruitment and retention of health staff with elements of quality assurance for better health outcomes.

More specifically, the use of workplace assessment and certification programmes could be considered. While some existing schemes may demonstrate certain limitations regarding their application within the health sector (such as focusing on a single professional group, lacking a quality-of-care aspect or emphasizing health promotion in hospital settings), the development of a new framework for assessment and certification programmes that could be used in the health

sector in different European countries might be useful. The role of national- and sectoral level measures is to encourage commitment (by health-sector employers) to improvements in work environments, for example through the support of benchmark studies and recognition programmes.

Implementation considerations

Many factors influencing the work environment operate outwith the health sector. Intersectoral collaboration is therefore indispensible for approaches that are effective at improving the working environment for the health workforce. In particular, the interface between labour and health-policy mandates should be strengthened. Health policy-makers need to ensure that a systematic capacity for addressing labour issues is available at all levels of the health system.

Social dialogue is a major means of achieving sustainable improvements in health services, and it is positively associated with improvement in working conditions at the organizational level. At the European level, the Social Dialogue Committee for Hospitals of the European Union (EU) aims to improve the quality of employment and the quality of services in the hospital sector by means of constructive social dialogue. There is a need to build the capacity of the social partners at national, sectoral and organizational levels in a number of European countries.

Policy brief

Policy issue: poor work environments compromise health-workforce supply and quality of care

European countries face common challenges in ensuring a well-performing health workforce in times of existing and projected shortages *(1)*. Among the multiple aspects that determine the supply and performance of health workers, the work environment plays a critical role.

This Policy Brief considers policy approaches that can be employed to help create positive work environments, thus improving the recruitment and retention of health professionals and contributing to the achievement of high-quality health services. Work-environment issues generally apply to all health workers in all types of health services – with variations according to the characteristics of professional functions or work settings. Without excluding their relevance for other professional groups in the health sector, this Policy Brief focuses on approaches for physicians and nurses, as they represent the largest constituents of the health workforce.

Recruitment and retention

The recruitment and retention of health professionals are priorities in the health sector. In particular, the global debate on the international migration of health professionals has triggered an increased interrogation of the reasons why health workers leave or stay. Related research has shown that the work environment is an important factor in the recruitment and retention of health workers.

The main drivers for departure, the so-called "push factors", are related to the work environment, and include low pay, poor working conditions, limited educational and career opportunities, unsafe workplaces and a lack of resources for effective working. Also, elements of the wider socioeconomic environment – such as political and economic instability, the impact of the human immunodeficiency virus, or security issues – influence decisions to move. Health workers move to where they can find better conditions for work and life, so the "pull factors" mirror the push factors, and include higher pay, better-resourced health systems, and opportunities for professional development *(2,3)*.

Shortages in the health workforce induced research into the determinants of early exits from the health professions and the reasons why young people do not choose a health career. While dissatisfaction with pay levels is particularly pronounced in the nursing professions (58–90% in several European countries), other factors such as low esteem, limited work control and dissatisfaction with working conditions appear to be even more-decisive reasons for leaving the profession. With regard to physicians, a study from Germany found that

decision-making, recognition, job security, continuous education and collegial relationships directly affected the level of job satisfaction *(4)*.

The demographic changes (ageing populations and the decline of young cohorts) in many countries in Europe *(3,4)* suggest that European labour markets will experience increased competition for talent in the coming decades. Health sectors are vital parts of national economies and constitute an important labour market in Europe: health-sector employment accounts for 10% of overall employment *(5)*. Health professionals can compete well in the labour market and are much sought after. Moreover, the health labour market will have to compete with other employers for the younger generations taking decisions about their careers. As the health sector cannot change some of the unfavourable working conditions that characterize it, such as night work and work during weekends and holidays, it will have to provide other incentives that will encourage young people to consider it.

Attracting more young candidates is also important in view of the fact that the health workforce is ageing in tandem with the overall population. This is necessary partly because of the differences in age cohorts and partly because of the oscillating numbers of students across different periods *(6)*. In most countries, more restrictions were introduced for admission to health studies at the end of the twentieth century. These factors may affect developments within individual professional groups and could further complicate planning for human resources in health.

Health services also face the paradoxical challenge of having to meet increasing demand with reduced or limited resources. Demographic and epidemiological transitions have an important impact on the development of health needs. Health care systems are still largely adjusted to the needs and expectations of the patterns commonly seen in acute patients with slow responsiveness and difficult logistics. An alternative approach will have to be provided, not only in integrating different aspects of medical and health care, but also in offering integration across the different sectors, relevant for the needs of such patients.

At present, the health workforce in Europe is not structured to meet health needs and demands together with the challenges of the current and (short-term) projected epidemiological situations. It appears that the following needs will require consideration: more skills (predominantly in nursing care) for dealing with patients with chronic conditions; specialization of key health professionals (medical doctors, nurses, physiotherapists) to deal with new demands; and long-term care services (human resources as well as skills). These, in turn, should offer greater flexibility in organizing working time and, in particular, regarding working in different environments (such as patients' homes, homes for the elderly and nursing homes).

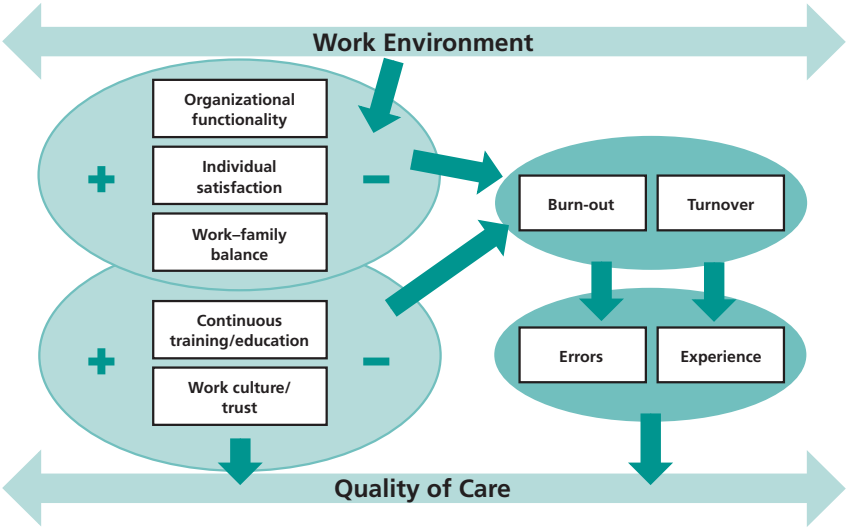
In Europe, approximately 70% of the health budget is allocated to salaries and employment-related costs *(7)*. Consequently, the focus on cost containment has marked many health-sector reforms with direct implications for the health workforce, such as increased employment insecurity (accompanying the more flexible employment practices) and increased workloads (because of staff cuts or greater performance pressures) (*WHO unpublished document* 2005). Recent examples of responses to a loss of public funding include measures such as increased working hours for Estonian clinical staff, freezing of salaries in Bulgarian and Hungarian public hospitals, and cuts announced for public-service salaries in Ireland (with 14% losses in income expected for mid-level cadre nurses and midwives) *(8)*.

The costs associated with improvements in work environments need to be balanced against the costs arising from turnover, absenteeism and medical errors caused by poor work environments. It has been estimated that the direct and indirect costs of turnover, per nurse, accounted for US$ 16 600 in Australia, US$ 10 100 in Canada, US$ 10 200 in New Zealand and US$ 33 000 in the United States *(4)*.

Work environment and quality of care

It is generally acknowledged that work environments influence the quality of care provided. Despite the intuitive nature of this link, assessing it requires measurable concepts and indicators. Figure 1 illustrates, as a rough model, the

Fig. 1. Links between the work environment and quality of care



links between some of the main elements associated with work-environment issues and quality of care. While most of the available literature relates to the nursing profession, the data seem to be relevant for the general workforce in health care organizations.

The links shown in Fig. 1 highlight the major relationships analysed in the literature. However, the true dynamics are more complex, involving various other links between the elements shown in the figure. For example, there are intuitive links between turnover and the concept of trust, and burn-out is a predictor of turnover *(9)*.

Apart from the link (established in the literature) between nurse staffing levels and the quality of care *(9,10,11,12)*, the characteristics of the working environment affect, and are partly affected by:

- *organizational functionality*, e.g. internal communication systems able to give the right information to the right people at the right time;
- *individual satisfaction*, e.g. support of professionals by the management, and appreciation from patients or society at large;
- *family–work balance*, e.g. provision of kindergarten services and reduction of work recalls;
- *staff development (professional and educational)*, e.g. giving staff the opportunity to attend courses; and
- *organizational culture*, e.g. engendering trust as a key element for work effectiveness, and competent leadership.

The first three dimensions have consequences for the various dimensions of quality of care via errors, burn-out and turnover. This has been demonstrated by several studies in which the quality of care was usually measured in terms of mortality rates, failure to rescue, readmissions, quality (as perceived by patients), patient satisfaction, quality (as perceived by nurses), length of stay, etc. *(13,14,15,16)*. Positive effects can also been supposed for continuous development and – despite weaker evidence – for trust.

How can attractive and supportive work environments be described?

There are no agreed definitions of the terms "working environment" or "working conditions". For the most part, both terms are used synonymously. Intuitively, one imagines that "working conditions" concern issues directly related to employment and work, whereas the "working environment" seems to embrace a broader approach including aspects that influence life and work. Furthermore, both terms commonly encompass sets of elements in combinations that may vary in focus and scope. Aspects frequently referred to in the literature

include terms of employment (e.g. types of contracts), income (payment and benefits), working time, safety and health at work, professional development (including education and training) and work organization (including staffing and division of work). Nevertheless, the work environment generally could be described as the place, conditions and surrounding influences in which people carry out an activity *(17,18)*.

An "attractive and supportive work environment" refers to the quality dimension of work. In this regard, an attractive and supportive work environment can be described as an environment that attracts individuals into the health professions, encourages them to remain in the health workforce and enables them to perform effectively. The purpose of providing attractive work environments is to create incentives for entering the health professions (recruitment) and for remaining in the health workforce (retention). In addition, supportive work environments provide conditions that enable health workers to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality health services. This is the interface of the work environment and quality of care.

In the EU, improvement of the quality of work has been an integrative part of the European Social Agenda and the European Employment Guidelines since 2000, as illustrated in the strategy motto "more and better jobs" *(19,20)*. Since then there has been debate as to what "quality of work" encompasses and how it could be measured, reflecting the changes in socioeconomic realities and developments in the world of work *(21)*.

In this context, a recent review of quality indicators proposed a general model for the quality of work *(22)*. The authors distinguished two main dimensions: "work quality" – the material characteristics of the task performed and the environment within which it is performed; and "employment quality", referring to the contractual relationship between employer and employee. Both areas influence the overall quality of the work environment or, as the authors called it, "job quality". Table 1 captures the main dimensions and elements of work-environment quality.

With regard to the health sector, different approaches for describing the quality of work can be used. They may tackle the subject from different angles according to the viewpoints from which they are derived; for example, in the case of the Magnet hospitals concept, the emphasis is on aspects that are particularly important from the perspective of nursing professionals.

The Positive Practice Campaign, jointly launched by world health-professional associations in 2008, describes characteristics of work environments that ensure the health, safety and well-being of staff, while simultaneously supporting high-quality patient care (23). These characteristics mainly reflect the elements

Table 1. Quality of work environment: dimensions and elements

Dimension	Elements
Employment quality	Wages Type of contract Working hours, including work schedules and family–work balance Social benefits Participation Professional development (training and skill development)
Work quality	Work autonomy Work organization (including division of work and staffing) Organizational culture and trust Safety and health Pace of work Social work environment

Source: adapted from the job-quality model of Muñoz de Bustillo et al. *(22)*.

of work-environment quality described above, albeit complemented by professional recognition, effective management practices, fair workloads and safe staffing levels.

What can be done to improve the health-sector work environment?

Overall framework: integrative approaches for policy coherence

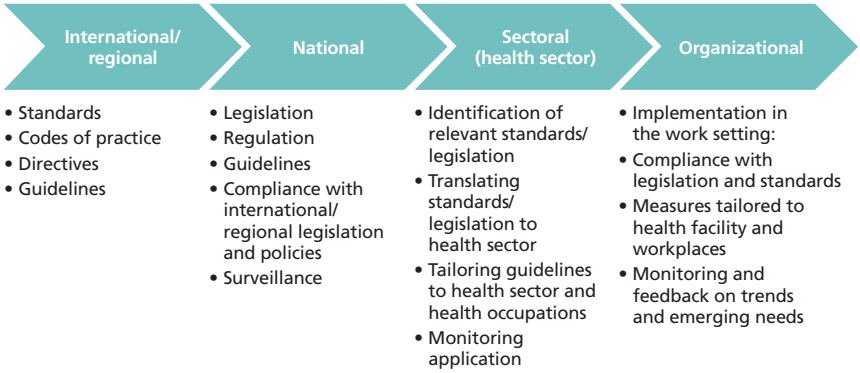
Improving the work environment requires measures that are relevant and applicable in the specific context of a given health system while observing international standards and considering relevant regional harmonization efforts. Policy responses should therefore be considered at four levels: international/regional; national; sectoral; and local/organizational level, in order to ensure policy coherence and enhance the sustainability of interventions.

Policies and instruments intended to improve the work environment are available in the form of standards, legislation, resolutions and framework agreements. International standards, in conjunction with regional and national legislation, are instruments for enforcing the application of set standards in quality care and for safeguarding workers' rights. However, standards and legislation in themselves are not sufficient to address the challenges of attracting and retaining health professionals associated with the work environment. With regard to occupational safety and health, for instance, the European Commission

observed shortcomings in the application of Community legislation, especially in sectors at risk and for vulnerable workers *(24)*. As many instruments at international and national levels are general in their scope, the role of the sectoral level is to identify relevant standards and policies and adapt them to the specificities of a given health-sector work environment.

In view of the pace of socioeconomic and technological changes and their considerable impact on employment and working conditions, policy responses need to reflect emerging challenges on a continuous basis. It is the organizational level that faces the challenge of translating policies into practice and adapting interventions (in a timely manner) to trends and changes in the work realities. Effective solutions are context-related and so priority has to be given to the local and organizational level; the other levels provide the legislative and regulatory framework, guidance and support for the development of workplace policies. The organizational level is concerned with monitoring trends and providing feedback on emerging new challenges that require action at other levels. Figure 2 summarizes examples of interventions and issues relating to each of the four levels.

Fig. 2. Levels of policies and interventions



There are a multitude of challenges concerning the work environment and they can be responded to using a variety of policies. Improving remuneration is one of the obvious policy options that are usually discussed. However, pay increases alone are not the solution, as other factors appear to be even more important *(4)*. Indeed, the factors influencing the work environment are multidimensional and often interrelated, so strategies should include different sets of combined interventions – perhaps including remuneration – and might imply action at different policy levels at the same time. Box 1 illustrates two examples of national policies intended to improve the supply of nurses.

Box 1. Examples of national policies designed to improve nurse recruitment and retention

Czech Republic

To address a serious shortage of nurses, the Czech Republic launched a programme of "stabilization measures" in 2008. The mix of interventions included the following:

- financial measures – grading nurses into higher salary grades and improving benefits in public-health facilities;
- professional development – better access to nurse-specialist education, with subsidies from government; support of modern continuous professional development programmes;
- professional autonomy – negotiations and legislative changes to broaden nurse competences;
- family–work balance – support to assist return from maternity leave, including provision of child-care facilities, flexible working hours and part-time contracts; and
- workforce data – monitoring of workforce and student numbers via a register of health care professionals.

By 2009, the shortage was reduced by half, partly as a result of these measures, but probably also because of the economic situation (increased unemployment).

Belgium

With the aim to improving the attractiveness of the nursing profession and the quality of care, a four-year national plan was launched in 2008, supported by significant public investment. A combination of interventions are being implemented in the following four main action areas.

- Workloads and stress levels of nurses are being eased (via more staff, supportive action for upgrading auxiliary qualifications, and provision of information technology systems for reducing administrative work).
- Qualifications are being addressed (using more continuous training, more specialization, and the introduction of master's degrees).
- Remuneration is being changed (i.e. bonuses were paid for work done during "unsocial hours", and pay was increased for recognized specialties and nurse-executive positions).
- Social recognition and participation in decision-making are being addressed (through support of nurse representation within health authorities and bodies).

Sources: presentations by national experts at the Policy Dialogues, Leuven, April 2010 (unpublished); (Safrankova A, Di Cara V, Czech Republic; Lardennois M, Belgium).

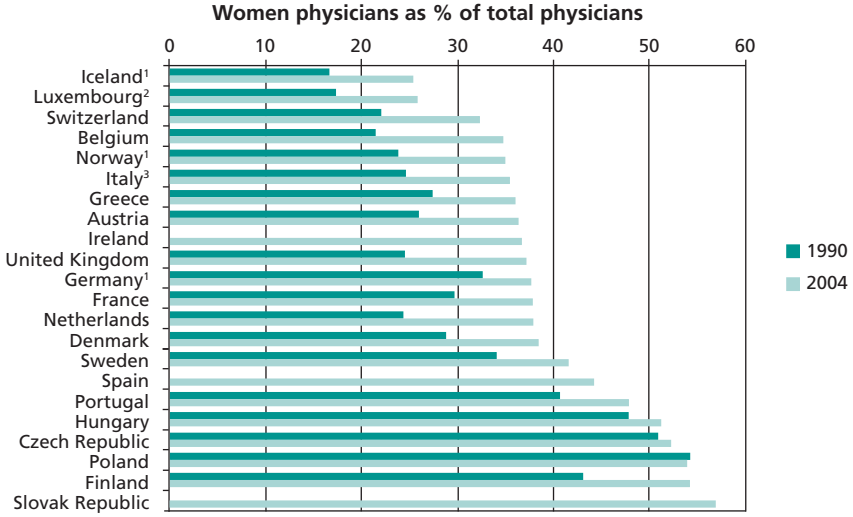
This section explores two policy approaches designed to address specific work-environment issues. It focuses on selective examples of issues illustrating the possibilities at a pragmatic level, i.e. in terms of the work/family-life balance and health and safety at work.

The aspiration towards work–life balance models is one of the main trends observed in the literature, and it has been noted that family-friendly policies improve the retention of health professionals *(25)*. Safety/health concerns are major reasons for early exit from the health professions, and can result in considerable costs in relation to ill-health, absenteeism and staff turnover. These two examples are relevant for all professional groups and work settings and also offer a low-threshold entry point with possibilities for action at the organizational level.

Promotion of family-friendly workplace options to improve the work environment

The health workforce is characterized by the large proportion of women involved in it. Apart from nursing, which has traditionally been a profession predominantly consisting of women, now more professions, such as physicians, have experienced an increasing feminization of the workforce (Fig. 3). The

Fig. 3. Female physicians, as a percentage of total physicians, in selected countries belonging to the Organisation for Economic Co-operation and Development, 1990 and 2004



Source: Organisation for Economic Co-operation and Development, 2008 (health data for 2007). [1] data for 1991; [2] data for 1992; [3] data for 1993) *(4)*.

majority of medical students in most European countries are women: women constitute 70% of the medical school intake in the United Kingdom and represent 59.5% of new graduates in Belgium *(26,27)*. This is a result of more equal opportunities in career choice. Such a development, however, brings new challenges, as it requires the consideration of the specific needs of women and men at work. Indeed, women participate in the health workforce differently in comparison with men. Female physicians tend to work fewer hours, to leave practice completely (or practice at low levels), particularly during childbearing age, and are more likely to leave early for retirement *(28)*.

As women carry the major part of family responsibilities, they often face more obstacles in their career development compared to their male colleagues. This is often evidenced by the expectations that a career-oriented person should work longer hours, not be absent due to various family obligations, and so on. Such attitudes can cause major disadvantages for professionals with family responsibilities, notably women. An equal-opportunity approach is therefore necessary in order not to discriminate against female health professionals, especially in the early phases of their careers. The conflict between the demands of work and those of family life is also affecting men where they share child-care and other family duties. The pressure for change towards a more equitable and gender-balanced workplace is increasing, not just because of the growing numbers of women pursuing careers, but also because many of them are now taking up management roles.

A specific element here is that of maternity-related issues. The work environment needs to accommodate pregnancy as a normal event in the career of a female health professional, and offer adequate workplace arrangements to support the needs of pregnant women. Only such an organizational culture can provide an environment in which female health professionals will feel that they are equal to their male counterparts and that they have an incentive to combine their family and work lives. Supporting these needs may become an important incentive for young people seeking to pursue careers in health care.

Failure to address the conflict between the demands of work and those of family life may lead to adverse consequences, such as stress and burn-out syndrome *(29)*, increased absenteeism, the need to leave employment in order to take care of family responsibilities, and reduced interest in the health professions among young people deciding on their careers. Such developments have already been described and are relevant to almost any country in Europe, especially where failure to reconcile family life and professional life ends in "non employment" *(30)*.

By building on existing instruments, positive approaches and experiences, different interventions can be developed at each of the four different levels, as follows.

International level

Various international conventions are available that provide frameworks and standards for family-friendly workplace policies. Besides various conventions on maternity protection, the 1981 International Labour Organization Convention on Workers with Family Responsibilities provides for equal opportunities for – and treatment of – women and men with family responsibilities. This Convention has been ratified by a number of European countries *(31)*. At EU level, the 2008 guidelines for employment policies of the Member States suggested, for example, the use of benchmarks for child-care provision at national level, to promote reconciliation between work life and family life *(20)*.

National level

Maternity protection differs from country to country, but the most important features of the social state policies with respect to pregnancy include job security, protection at the workplace, maternity leave and financial compensation for reduced employment *(32)*. Regulation may include flexible-hours arrangements, possibilities for reduced working hours, restrictions on work during night shifts, less exposure to risky work conditions, and protection of pregnant women at the workplace. Box 2 provides an example of how national legislation can influence gender equality in the context of parenthood.

Box 2. Family–work balance and equal opportunities

Iceland, which is a country with a female labour participation level of 90% and high birth rates, introduced new legislation in 2000 that structured maternity/paternity leave in a way that was designed to ensure gender equality. Upon the birth or adoption of a child, both parents are entitled to three months of paid leave, which is not transferable. Should one of them decide not to take this leave, then it is lost. Both parents have a joint entitlement to an additional three months of leave at 80% pay, which they can share and use flexibly. After three years, there has been a significant increase in the proportions of men taking paternal leave (92% of fathers using the first three months of paternal leave).

Sources: presentation by a national expert at the Policy dialogues, Leuven, April 2010 (unpublished); Ministry of Social Affairs and Social Security *(33)*.

Health-sector level

Regulations should be adapted to the specific requirements of a health workplace, with support being provided to organizations that seek to implement family-friendly workplace policies. For example, additional requirements could be provided to regulate the certification of health care providers with respect to family-friendly workplaces, such as incentives for solutions that support employment of parents with small children.

Organizational level

With regard to maternity protection measures at organizational level, the following areas can be covered:

- seamless passage from "regular" workplace loads to "adapted" workloads, whenever necessary and required by pregnancy;
- securing of workplaces so that exposure to harmful agents is minimized to reduce danger for both the mother and the baby; and
- allowing flexible working hours.

Arrangements that encourage a balance between family and work can include:

- parental leave;
- company leave because of a sick child;
- the right to reduced working hours for a period of time; and
- support for, or the offer of, child-care facilities.

Box 3 provides examples of family-friendly policies in practice in various German hospitals.

Box 3. Elements of family-friendly policies in German hospitals

Lutherhaus Protestant Hospital, Essen, introduced a scheme of 50 different part-time models, including:

- qualified part-time employment (15–93% of full-time employment);
- job-sharing, particularly for managerial functions;
- coordination of duty rosters of couples across different departments;
- establishment of time accounts (plus and minus hours); and
- flexible working hours ("flexitime"), with family-oriented core times.

The University Hospital Charité, Berlin, established a "fathers representative", who advises men on questions concerning family–work balance.

The Medical University, Hannover, provides financial incentives for departments that attract female doctors back to work from parental leave within one year.

Northwest Hospital Sanderbusch, Sande, is a member of the network "Success Factor Family" and attracts qualified professionals to its remote area with its "family and children service department", supporting child-care solutions, including the option of partly working from home.

Sources: Bundesministerium für Familie, Senioren, Frauen und Jugend, 2009 *(34)*; Müller B, 2005 *(35)*.

Enhancing the protection of health workers' health to ensure a safer work environment

Working in health care is hazardous: the health sector has been identified, in particular, as one of the dangerous employment sectors *(36)*. In 2000, one in three health and social workers (32%) in the EU15 perceived that their health at risk because of their work *(37)*, and in 2005, nearly 40% of health workers in the EU27 felt that their work had an impact on their health *(38)*.

Health workers are exposed to a broad range of occupational health risks because of the nature of their work, including:

- biological risks, such as infections caused by sharps injuries or other contact with pathogens;
- chemical risks, such as disinfectants or certain types of drugs;
- physical risks, such as ionizing radiation;
- ergonomic risks, arising from patient handling or extensive standing and walking; and
- psychosocial risks, such as stress, violence and shift work. *(39)*

Without negating the importance of other hazards, such as ergonomic risks *(40, 37)*, we focus here on two risk categories of particular concern – biological and psychosocial risks.

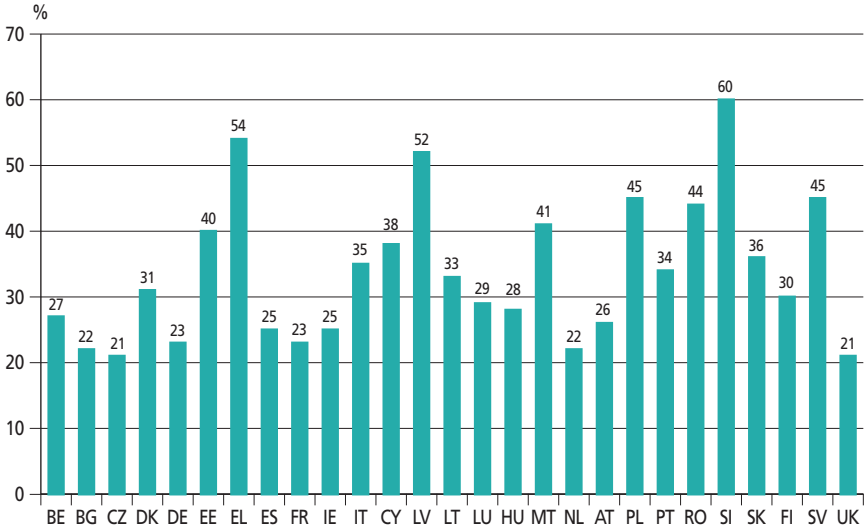
Exposure to biological risks is substantially higher in the health sector compared to the mean exposure in other EU employment sectors *(38)*, the following issues being particularly relevant to health workers.

- Re-emerging and drug-resistant types of infectious diseases, such as tuberculosis or malaria, pose potential risks.
- Newly emergent infectious diseases pose a threat where transmission pathways are unknown and protective equipment is inadequate *(41)* – e.g. the outbreak of SARS (severe acute respiratory syndrome), during which health care workers representing up to 50% of reported cases *(42)*.
- Injuries can be sustained from handling contaminated waste, particularly needlesticks and other sharps. It has been estimated that one million needlestick injuries occur annually in Europe, each of which has the potential to transmit more than 20 dangerous blood-borne pathogens, including hepatitis B, hepatitis C and human immunodeficiency virus. Most at risk are nurses and doctors. However, other staff members that handle waste must also be considered, for example auxiliaries, cleaners and laundry staff *(43)*. A study in Germany found that 500 000 sharps injuries occurred in hospitals annually; in the United Kingdom,

100 000 incidents per year were estimated to occur. The Scottish National Health Service estimated the costs associated with needlestick injuries as ranging from several thousand Euros per case (for post-exposure prophylaxis) up to one million Euros (for an injury resulting in transfer of a serious blood-borne virus) *(44)*.

Exposure to psychosocial risks is particularly high in health care compared to the overall workforce. In 2005, the health sector featured prominently on the list of sectors with the highest prevalence of stress at work (28.5%, compared with 22% for all EU workers). Across the EU, at least one in five health and education workers reported work-related stress, with the highest rates occurring in Slovenia, Greece and Latvia (60, 54 and 52%, respectively); see Fig. 4.

Fig. 4. Stress levels in health and education workforces, by country (2005)



Source: European Agency for Occupational Safety and Health, 2009 (45).

Work-related stress is experienced when the demands of the work environment exceed the workers' ability to cope with (or control) them, as defined by the European Agency for Occupational Safety and Health. Ongoing or intense stress at work can result in symptoms such as chronic fatigue, burn-out, depression, insomnia, anxiety, headaches, emotional upsets, stomach ulcers and allergies *(46)*. Furthermore, it is associated with cardiovascular and musculoskeletal diseases and immunological problems *(45)*. At organizational

level, the consequences include absenteeism, high staff turnover, reduced productivity, accidents and errors *(47)*.

The job characteristics that contribute to stress are mostly related to the way in which the work is organized (e.g. long hours and irregular work, high workloads, tight time constraints, lack of control, job insecurity). In Switzerland, for example, one-third of primary care doctors in a representative survey reported experiencing excessive stress due to overall workload, patients' expectations, difficulties in balancing professional and private life, economic constraints in relation to the practice, medical care uncertainty and difficult work relations *(48)*. According to one model, stress levels are mitigated where workers are supported by their colleagues and supervisors, but are increased where social support is missing *(45,46)*.

Work strain can also result from organizational change – such as socioeconomic transformation – in the health-sector context. A Bulgarian survey explored stress at work in the context of transition, where differing paces in the implementation of financing reforms led to conflicts between various health units, provoked by significant differences in the salaries of health workers. Tension between patients and health staff emerged when a number of free services were abolished *(49)*.

It has been highlighted that of all the work sectors in the EU27 Member States, the health sector has the highest level of incidents involving violence and harassment at work (15.2%). Health workers have been shown to be eight times more likely to experience the threat of physical violence than workers in the manufacturing sector *(38)*. The most-affected health professionals include ambulance staff, nurses and doctors. Recognized risk factors – including working with the public, working with people in distress, and working alone – are all prevalent in the health sector. Most incidents of aggressive behaviour experienced by staff were at the hands of patients, while psychological abuse was associated with supervisors and colleagues. Psychological violence was more prevalent than physical violence as shown in a synthesis of several country case studies *(50)*. In Portugal, for example, a survey of a health-centre complex and a large hospital found that 51% and 27% of staff, respectively, had experienced verbal abuse, 23% and 16%, respectively, had experienced bullying/mobbing, while the experience of physical violence was limited to 3% at both study sites

The negative impact on affected staff (as confirmed by case studies in several countries) include post-traumatic stress symptoms, such as disturbing memories and thoughts, and a tendency to become highly vigilant. At the organizational level, the impact is similar to that of stress, causing absenteeism, high staff turnover and reduced productivity *(50)*.

Policy responses to occupational health challenges

Protecting the health of workers at work is a legal, if not moral, responsibility of employers. Workers, too, have their own responsibilities here in complying with safety regulations and taking care of their health in their own scope of influence. There is a consensus that comprehensive occupational safety and health management systems are a solid way of establishing sustainable health protection at organizational level. Central to this system is the prevention or control of health risks using a widely applied hierarchy of priorities: elimination of the risk; control of the risk; minimization of the risk; and provision of protective equipment *(51)*.

While priority has to be given to action at organizational level, international and regional policies are important for encouraging initiatives in countries. In 2007, the World Health Assembly adopted a resolution on the World Health Organization's Global Plan of Action on Workers' Health, 2008–2017. This provides for the establishment of specific programmes for the occupational health and safety of health care workers *(52)*. With regard to health workers, WHO's own programme of work for 2009–2012 focuses on six areas, including:

- needlestick/sharps-injury prevention
- musculoskeletal injuries/ergonomics
- stress/work organization
- pharmaceutical-associated risks
- respiratory risks
- risk assessment/risk-management tools and information dissemination.

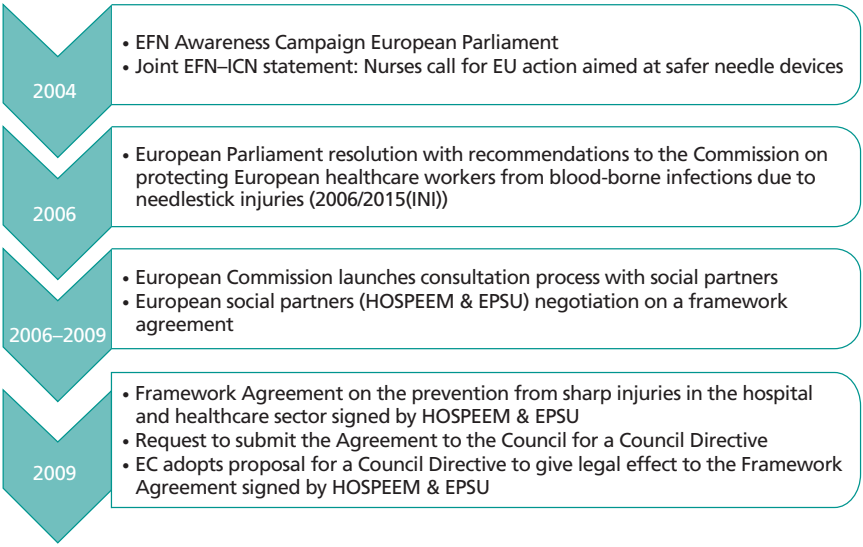
Examples of projects that have been initiated under this programme in the European region are listed in Table 2.

The initiatives taken to address the insufficient prevention of sharps injuries are an example of advocacy by health professional associations in influencing policies at European level. Following a campaign, a consultation process was launched which resulted in negotiation and signature of the Framework Agreement on the Prevention from Sharp Injuries in the Hospital and Healthcare Sector. The signatories were the following European social partners: the European Hospital and Healthcare Employers' Association (HOSPEEM) the European Federation of Public Service Unions (EPSU). With the recent adoption of a European Commission proposal for a Council Directive, it is expected that the Framework Agreement will be given legal status, making it binding for Member States *(54,55)*. Figure 5 plots the chronology of this prospective EU legislation.

Table 2. WHO projects on occupational health for health workers in Europe, 2009–2012 *(53)*

Projects	Countries
Countries in transition: how to promote health at work in health organizations Main objective: to raise awareness and improve knowledge and skills of health care workers in tackling work-related stress.	Croatia, Macedonia, Montenegro, Serbia
How to maintain health care workers' workability and quality of life Main objective: to produce a guidance document that includes a range of successful initiatives adopted by the Croatian Ministry of Health and Social Welfare in order to improve health care workers' work ability and quality of life.	Croatia
Assessment of exposure to antineoplastic agents in pharmacy and hospital personnel Objective: examination of safe working conditions related to the handling of antineoplastic drugs during drug preparation or administration in hospitals.	Germany

Fig. 5. Advocacy initiative and process for introduction of European binding measures for protection from needlestick injuries and other medical sharps injuries



Source: based on De Raeve, 2010 *(56)*, and EU Issue Tracker, 2009 *(54)*.

WHO suggests that a combination of measures using a hierarchy of controls is the most effective way of reducing the number of needlestick injuries. Core elements include the use of safer instruments, regular training and instruction, and established safe working procedures *(57)*. Accordingly, the Framework Agreement recommends establishing an integrative approach at the workplace, consisting of risk assessment, risk prevention, training, information, awareness-raising and monitoring. Both risk assessment and risk prevention should cover the following areas: technology; organization of work; working conditions; level of qualification; work-related psychosocial factors; and the influence of factors on the work environment. Furthermore, the Framework Agreement provides for the vaccination of health workers according to national practice *(58)*.

Interventions addressing the complexity of psychosocial risk factors and their causes are grouped into the following three categories.

- Organizational level interventions aim to reduce the risk of stress, addressing organizational structure, infrastructure or work processes.
- Interventions at the interface between organizational and individual levels may include improving collegial relationships at work, or training individuals to adapt better to the work-environment measures for optimal professional autonomy.
- Individual-level interventions aim to reduce the stress and disease risk of those who have already symptoms, by strengthening the capacity to cope with stress *(45)*.

Box 4 presents an example of an approach designed to prevent burn-out among hospital staff.

In many jurisdictions, violence and harassment continue to be perceived by health workers as "part of the job". Therefore, awareness and recognition of violence as a risk at the health workplace are necessary first steps on the way to violence prevention and the protection of staff. The specific societal and cultural context of the work environment needs to be considered, as well as the gender dimension, in reaching a shared understanding of the phenomenon. Any approach intended to address workplace violence should be integrated, participative, culture- and gender-sensitive, non-discriminatory and systematic.

The main areas of action include the prevention and control of workplace violence and the management and mitigation of its impact, with an emphasis on the support of workers affected by workplace violence *(60)*. As Box 5 highlights, research initiatives have the potential to raise awareness and act as a trigger for processes of policy development.

Box 4. "Take Care" – a team-based burn-out intervention programme in the Netherlands

The Take Care intervention project was carried out in 1997–1998 in order to prevent burn-out among oncology care workers, through a team-based stress-management approach. The programme consisted of six training sessions of three hours each, one per month, which were supervised by counsellors.

During the first session, the focuses of action were determined. During the training, small problem-solving teams were formed that collectively designed, implemented, evaluated and reformulated plans of action for coping with the most important stressors at work. Counsellors also provided training in more general communication and collaboration skills, and participants were their own "agents of change", with the counsellors as their "coaches".

The problems that were most frequently addressed were those concerned with coping with high emotional demands in relationships with cancer patients, and those involving dealing with communication problems between members of different professional disciplines.

The results of a qualitative evaluation showed that participants considered the approach to be very instructive and useful for charting work stressors and for formulating and evaluating plans of action designed to tackle these stressors. The most appreciated part of the activity was the building of a network of (social) support among colleagues.

Source: European Agency for Occupational Safety and Health, 2002 *(59)*.

Box 5. From lack of awareness to the development of measures as part of the national collective agreement

As part of the ILO/ICN/WHO/PSI Joint Programme (involving the International Labour Organization, the International Council of Nurses, WHO and Public Services International) on Workplace Violence in the Health Sector, Bulgaria's first survey in 2001 revealed that health workers and the public were unaware of the problem. Results showed that its significance was largely underestimated and was interpreted rather as a hardship facing people in their daily life, and stress due to the negative consequences of Bulgaria's then reform process.

In 2003, a tripartite national workshop was organized by the Federation of Health Trade Unions affiliated to the Confederation of Independent Trade Unions in Bulgaria and the Medical Federation of the Confederation of Labour Podkrepa. The main findings of the country study were discussed, and the Bulgarian version of the ILO/ICN/WHO/PSI Framework Guidelines on workplace violence was launched. The delegates adopted a 2003–2005 action plan, with a commitment to further action.

One of the most important achievements at national level was the inclusion of the issue of workplace violence in the health-sector collective agreement for 2004. Other activities were aimed at awareness-raising, capacity-building and prevention of violence, and included seminars on security measures, reporting procedures and victim support.

Source: Kokalov, 2006 *(61)*.

Advancing work-environment issues among employers, though workplace screening and certification

A third policy approach, this time focusing on the process aspects of how work-environment issues can be taken forward at organizational level, considers programmes for workplace assessment and certification. These may provide incentives encouraging employers to commit to the concept of positive work environments. The role of national- and sectoral-level actions here could be to provide a framework, as well as political and financial support. This approach can be illustrated by the following two examples. The first example involves ranking initiatives, with lists of the best companies, such as those generated by the Great Place to Work Institute. The second example – the Health Promoting Hospitals Network – represents an integrative approach that provides possibilities for self-assessment.

The Great Place To Work® model

The Great Place To Work® model is a method for assessing and optimizing organizational culture, and was developed by the Great Place To Work Institute, an American consultancy firm. The Institute uses a questionnaire survey for employees and interviews with the management in order to assess the organizational culture. Two-thirds of the evaluation is based on the employee-survey results.

The German branch of the Great Place To Work Institute, in collaboration with the Ministry of Labour and other partners, has carried out an annual benchmarking survey specifically addressing the health sector. Participating health-service organizations are ranked and the best are awarded the "Best Health Sector Employer" Certificate (Beste Arbeitgeber im Gesundheitswesen). Sixty-three health-service organizations participated in the 2010 survey on workplace culture, and the results show that health and well-being, recognition and work–life balance are critical issues, with remuneration as a key (but less important) element (Great Place to Work Institute Germany, unpublished document 2010).

This model is based on the conviction that organizational culture is a decisive factor in the productivity of a company. The value-based approach emphasizes trust as a core component of a positive workplace environment. Trustful relationships at work, specifically between management and staff, are critical for successful operations. Values include credibility, respect, fairness, pride and team spirit. In this approach, a positive work environment is characterized by trust in the leadership of an organization, pride in the work carried out, and cooperation with the people in the workplace.

The model applies to all industries and, above all, to manufacturing, information and communication technologies and financial institutions. The strengths of the model include the following features.

- Its key concept/element, i.e. trust, is fundamental in a working environment involving information asymmetries and professionals (e.g. health care organizations).
- The questionnaires are easy to use but they do not involve self-assessment, as the survey and evaluation are carried out by the Institute.

A weakness of the model is that it does not link to quality of health care or patient outcomes. However, some health facilities have been using the assessment as a complementary instrument in combination with the regular quality-management system, sometimes also alternating with patient-satisfaction surveys.

Box 6 profiles the "Magnet hospital" model in the United States, which aims to improve the work environment for nurses.

Box 6. "Magnet" hospitals and the Magnet Recognition Program

The concept of the Magnet hospital was developed initially in the 1980s in the United States by the American Academy of Nursing *(62)*. The initial focus was to identify the human-resource practices and organizational characteristics that enabled some hospitals to attract and retain staff in a context of acute shortages (see Annex 1). The basic features of Magnet hospitals involve investment in staff development, quality management, front-line management supervisory ability, and good relationships with physicians *(63)*. The characteristics of "magnetism" have been summarized in a Nursing Work Index, measured using questionnaires filled out by nurses *(64)*. This idea has been developed over successive decades through research and the implementation of a voluntary programme of hospital accreditation, the Magnet Recognition Program, undertaken by the American Nurses Credentialing Center (a subsidiary of the American Nurses Association) *(63)*.

The nursing practice environment characteristics of Magnet hospitals refer to nurses' participation in hospital affairs, nursing foundations for quality of care (e.g. written, up-to-date nursing care plans for all patients), nurse-manager ability, leadership and support of nurses, staffing and resource adequacy, and collegial nurse–physician relationships *(65)*. Despite some lack of clarity in study results, along with some counter-intuitive evidence *(15)*, general hospitals possessing the organizational traits of "magnetism" show lower mortality rates *(13)*, lower rates of 30-day mortality, fewer complications, and reduced "failure to rescue" (death following a complication *(14)*). The Magnet hospital approach also appears to be able to reduce the likelihood of burn-out and to minimize staff turnover, having a positive impact on the quality of care *(66)*.

The main limits of this programme are its focus on the nursing profession, its concentration almost exclusively on the United States (340 accredited hospitals out of 344 were based in the US; http://www.nursecredentialing.org/MagnetOrg/searchmagnet.cfm) and the sometimes weak evidence of impacts on quality of care. The first Magnet hospital outside the United States was in England, but it was not supported by the United Kingdom National Health Service and was terminated. Western Europe does not currently have any Magnet hospitals.

Health Promoting Hospitals network

Health promotion is a core dimension of quality in hospital services, along with patient safety and clinical effectiveness. With the rise in chronic diseases, the provision of health-promotion services has become an important factor for sustained health, good quality of life and efficiency. The Health Promoting Hospitals approach therefore combines specific quality-of-care concerns with aspects of a healthy work environment in hospitals.

The objectives of this network coordinated by the WHO Regional Office for Europe are to:

- change the culture of hospital care towards interdisciplinary working, transparent decision-making and the active involvement of patients, staff and partners;
- evaluate health-promotion activities in the health care setting and build an evidence base in this area; and
- incorporate standards and indicators for health promotion in existing quality-management systems at hospital level and national level *(67)*.

For quality assurance, a self-assessment manual that formulates five standards and related indicators is available *(68)*. With regard to the work environment, one of the standards requires that "the management establishes conditions for the development of the hospital as a healthy workplace" (see Annex 2). This includes:

- the development and implementation of a healthy and safe workplace;
- the development and implementation of a comprehensive human-resources strategy that includes training and development of the health-promotion skills of the staff; and
- the availability of procedures for developing and maintaining staff awareness about health issues.

For the assessment of the work environment, the manual suggests some complementary indicators, including:

- the score from the survey of staff members' experience of the working conditions;
- the percentage of short-term absence;
- the percentage of work-related injuries; and
- the score on a burn-out scale.

These standards and indicators are meaningful in terms of improving the working environment and, in conjunction with those for patient outcomes, are elements of a broader health-promoting function of hospitals. This framework, developed over more than ten years, can represent an effective basis for benchmarking and organizational development of European hospitals and health services.

These two examples of accreditation schemes designed to improve work-environment issues have their own particular strengths and limits. It may be worth considering whether the development of a common framework for workplace assessments and certification for organizations in the health sector would be a helpful option. Such a framework could be based on the aforementioned quality-of-work elements in combination with quality-of-care standards.

Implementation considerations

It is often the case that issues concerning working conditions lie within the mandates of ministries of labour and associated authorities, such as labour inspectorates. Intersectoral collaboration is, therefore, indispensible for implementing and sustaining effective approaches towards improving the work environment in the health sector. This is not evident everywhere. Creating attractive and supportive work environments is challenging, not only because of the complexity of the issues to be considered, but also because implementation needs to operate at the interface of health and labour policy mandates with multiple stakeholders that do not always speak a common language. Usually, labour policies do not take account of the specific needs of particular sectors, such as health, so relevant legislation and regulation need to be adapted to fit the characteristics of the health sector. At the same time, a lack of awareness and systematic knowledge of labour issues in the health sector can be observed in many countries. Health policy-makers need to ensure that a systematic capacity for addressing labour issues is available at all levels of the health system. Moreover, labour-related policy action requires the involvement of the core social partners – the employers and workers. One approach, here, concerns the concept of social dialogue.

Social dialogue is a means of achieving sustainable improvements in health services, including the work environment, because it aims to involve the key stakeholders. Social dialogue in the health services has been described as involving all types of negotiation and consultation, starting with the exchange of information between and among representatives of governments, employers and workers on issues of common interest relating to economic and social policy *(69)*. Social dialogue requires strong and independent social partners, but this is not available in the health sectors of a number of countries *(70)*.

While social dialogue has a long tradition in the EU, this has not always been the case in the health sector, which may reflect the difficulty of organizing this highly fragmented sector. At the EU level, the establishment of the Social Dialogue Committee for Hospitals was formalized in September 2006. It aims to improve the quality of employment and the quality of services in the hospital sector and has proven successful in advancing issues of concern to both employers and workers. The recognized social partners are HOSPEEM and EPSU.

Evidence confirms that social dialogue is positively associated with improving working conditions at the organizational level *(21)*. Yet, against the background of different traditions of industrial relations in Europe, there is considerable variety in the role of social dialogue in the context of working conditions across countries. Bargaining, for example, takes place principally at the sector level in north and centre-west European countries (e.g. Sweden, Germany, Austria) and at company level in centre-east countries (e.g. the Czech Republic); it varies in southern European countries (e.g. Spain, France). The bargaining style has been characterized as being conflict-oriented in southern countries, acquiescent in centre-eastern countries and integrating in northern and centre-west countries. While industrial relations are based on social partnership in some countries, others have more state-centred, polarized or fragmented regimes. All these characteristics shape the practice and scope of social dialogue and its impact on working conditions at enterprise level.

A number of case studies in various health facilities in different countries have testified to the importance of social dialogue processes in management and for employees. For management, the priority interest is on improving the working environment to achieve high-quality care and enhanced competitiveness – for which a qualified and motivated workforce is indispensible. For health workers' representatives, engaging in social dialogue and bargaining serves to counter the worsening of working conditions from the viewpoint of the individual worker. Lessons learnt from these case studies point to certain factors that make social dialogue successful:

- a participatory organizational culture and a cooperative mode of decision-making;
- mutual trust of the stakeholders involved;
- institutionalized dialogue and binding outcomes;
- defined priorities, targets and tasks; and
- the active commitment and competence of employee representatives.

The concrete achievements in terms of improved working conditions covered a broad range of areas, including better occupational health and safety, better

working-time schemes, the introduction of conflict-mediation practices and social-support initiatives, family-friendly work policies and improved communication *(21)*.

Summary

This Policy Brief looked into the question of why a good work environment for health professionals matters for policy-makers, and explored options regarding how to create attractive, supportive, positive work environments. Importantly, it has also pointed to the importance of the work environment for the recruitment and retention of health professionals as well as for the quality of care.

There are a multitude of challenges concerning the work environment, and these can be tackled using a variety of policies. This, together with the diversity of the European health systems and socioeconomic situations of countries, make it difficult to formulate an off-the-shelf list of actionable policy items. However, a rough framework can be sketched out, with the following "cornerstones".

- Whatever issue is identified as a priority concern, it is important to consider policies that operate at different levels, to ensure a coherent and sustainable approach. Improving the work environment will require measures that are relevant and applicable in the specific context of a given health system while observing international standards and considering regional harmonization efforts. Effective solutions are context-related and therefore priority has to be given to the local/organizational level.
- Policy responses need to be designed with two layers: one layer would relate to the content (what issues need to be addressed), and one would relate to the process (how issues should be tackled).
- Many factors impacting on the work environment of health professionals are beyond the scope of influence of health policy-makers. Therefore intersectoral collaboration and social dialogue are core means of developing effective and sustainable responses.

The aim is to provide a work environment that attracts individuals into the health professions, encourages them to remain in the health workforce and enables health workers to perform effectively.

References

1. WHO Regional Office for Europe. *Health workforce policies in the European Region*. (Report to the Regional Committee, Fifty-seventh session, Belgrade, Serbia, 17–20 September 2007; EUR/RC57/9 + EUR/RC57/Conf.Doc./3; http://www.euro.who.int/__data/assets/pdf_file/0020/74540/RC57_edoc09.pdf, accessed 3 April 2010).

2. Buchan J. *How can the migration of health service professionals be managed so as to reduce any negative effects on supply?* Copenhagen, WHO Regional Office for Europe, 2008.

3. Wiskow C, ed. *Health worker migration flows in Europe: overview and case studies in selected SEE countries – Romania, Czech Republic, Serbia and Croatia*. Geneva, International Labour Office, 2006.

4. Organisation for Economic Co-operation and Development. *The looming crisis in the health workforce- how can OECD countries respond?* Paris, Organisation for Economic Co-operation and Development, 2008.

5. WHO Regional Office for Europe. *Health workforce policies in the WHO European Region*. (Report to the Regional Committee, Fifty-ninth session, Copenhagen, Denmark, 14–17 September 2009; EUR/RC59/9 + EUR/RC59/Conf.Doc./3; http://www.euro.who.int/__data/assets/pdf_file/0008/66977/RC59_edoc09.pdf, accessed 16 July 2010).

6. Wells JS, Norman LJ. The 'greying' of Europe – reflections on the state of nursing and nurse education in Europe. *Nurse Education Today*, 2009, 29(8):811–815.

7. Commission of the European Communities. *Green Paper on the European Workforce for Health (COM(2008) 725 final)*. Brussels, Commission of the European Communities, 2008 (http://ec.europa.eu/health/ph_systems/docs/workforce_gp_en.pdf , accessed 16 July 2010).

8. International Labour Office. *The sectoral dimension of the ILO's work – update of sectoral aspects regarding the global economic crisis: tourism, public services, education and health (GB.307/STM/1; ILO Governing Body 307th Session, March 2010)*. Geneva, International Labour Office, 2010 (http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_123768.pdf, accessed 10 April 2010).

9. Aiken LH et al. 2002, Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA: The Journal of the American Medical Association* 2002, 288(16):1987–1993.

10. Needleman J et al. Nurse-staffing levels and the quality of care in hospitals. *New England Journal of Medicine*, 2002, 346(22):1715–1722.

11. Rafferty AM et al. Outcomes of variation in hospital nurse staffing in English hospitals: cross-sectional analysis of survey data and discharge records. *International Journal of Nursing Studies*, 2007, 44(2):175–182.

12. Dawson J. *Does the experience of staff working in the NHS link to the patient experience of care? An analysis of links between the 2007 acute trust inpatient and NHS staff surveys*. Birmingham, Aston School of Business, 2009.

13. Aiken LH, Smith H, Lake ET. Lower Medicare mortality among a set of hospitals known for good nursing care. *Medical Care*, 1994, 32(8):771–787.

14. Friese CR et al. Nurse practice environments and outcomes for surgical oncology patients. *Health Services Research*, 2008, 43:1145–1163.

15. Tourangeau AE et al. Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of Advanced Nursing*, 2007, 57(1):32–44.

16. Unruh L. Licensed nurse staffing and adverse events in hospitals. *Medical Care*, 2003, 47(1):142–152.

17. *Macmillan Dictionary* (http://www.macmillandictionary.com, accessed 16 June 2010).

18. *Compact Oxford English Dictionary* (http://www.askoxford.com, accessed 16 June 2010).

19. Commission of the European Communities. *Employment and social policies: a framework for investing in quality. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions (COM(2001) 313 final, 20 June 2001)*. Brussels, Commission of the European Communities, 2001.

20. Council of the European Union. Guidelines for the employment policies of the Member States (integrated guidelines 17–24). In: *Council Decision on guidelines for the employment policies of the Member States. Legislative Acts and other Instruments (10614/2/08 REV 2)*. Brussels, Council of the European Union, 2008 (http://register.consilium.europa.eu/pdf/en/08/st10/st10614-re02.en08.pdf, accessed 2 July 2010).

21. Voss E. *Working conditions and social dialogue – national frameworks, empirical findings and experience of good practice at enterprise level in six European countries (Draft Report). European Foundation for the Improvement of Living and Working Conditions*, 2009 (http://www.eurofound.europa.eu/docs/events/confworkcond09/draftreport.pdf, accessed 8 April 2010).

22. Muñoz de Bustillo M et al. *Indicators of job quality in the European Union*. Brussels, European Parliament, 2009 (http://www.europarl.europa.eu/activities/committees/studies.do?language=EN, accessed 17 April 2010).

23. Positive Practice Campaign. *Positive practice environments for health care professionals [factsheet]*. Geneva, International Council of Nurses, International Hospital Federation, International Pharmaceutical Federation, World Confederation for Physical Therapy, World Dental Federation, World Medical Association, 2008.

24. Commission of the European Communities. *Improving quality and productivity at work: Community strategy 2007–2012 on health and safety at work*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (21.2.2007, COM (2007) 62 final). Brussels, Commission of the European Communities, 2007.

25. WHO. *Increasing access to health workers in remote and rural areas through improved retention. Background paper for the first expert meeting to develop evidence-based recommendations to increase access to health workers in remote and rural areas through improved retention; Geneva, 2–4 February 2009. Geneva, WHO, 2009* (http://www.who.int/hrh/migration/background_paper.pdf, accessed 20 April 2010).

26. WHO. *Working together for health (World Health Report 2006)*. Geneva, WHO, 2006;

27. Roberfroid D et al. *Physician workforce supply in Belgium: current situation and challenges*. Health Services Research (HSR). Brussels, Belgian Health Care Knowledge Centre (KCE), 2008.

28. Simoens S, Hurst J. *The supply of physician services in OECD countries (OECD Health Working Paper, No. 21)*. Paris, Organisation for Economic Co-operation and Development, 2006.

29. Hansen N, Sverke M, Naswall K. Predicting nurse burnout from demands and resources in three acute care hospitals under different forms of ownership: a cross-sectional questionnaire survey. *Nursing Studies*, 2009, 46(1):96–107.

30. Lombardo E, Sangiuliano M. 'Gender and employment' in the Italian policy debates: the construction of 'non employed' gendered subjects. *Women's Studies International Forum*, 2009, 32(6):445–452.

31. International Labour Organization. ILOLEX Database (http://www.ilo.org/ilolex/, accessed 14 June 2010).

32. Peus C. *Work–family balance: the case of Germany* (WPC #0025). Cambridge (Massachusetts), MIT Workplace Center, Sloane School of Management, 2006 (http://web.mit.edu/workplacecenter/docs/wpc0025.pdf, accessed 19 July 2010).

33. Ministry of Social Affairs and Social Security. *Act on Maternity/Paternity Leave and Parental Leave, No. 95/2000*. Reykjavik, Ministry of Social Affairs and Social Security, 2000 (http://eng.felagsmalaraduneyti.is/legislation/nr/3697, accessed 20 July 2010).

34. Bundesministerium für Familie, Senioren, Frauen und Jugend. *Vereinbarkeit von Beruf und Familie im Krankenhaus. Aus der Praxis für die Praxis*. Berlin, Bundesministerium für Familie, Senioren, Frauen und Jugend, 2009.

35. Müller B. *Good solutions in nursing and care. Models of good practice of healthy and quality-promoting work design of nursing and care jobs in hospitals, inpatient care facilities and home care services*. Dortmund, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, 2005.

36. Commission of the European Communities. *Improving quality and productivity at work: Community strategy 2007–2012 on health and safety at work*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (21.2.2007, COM (2007) 62 final). Brussels, Commission of the European Communities, 2007.

37. Gunnarsdottir S, Rafferty AM. Enhancing working conditions. In: Dubois CA, McKee M, Nolte E, eds. *Human resources for health in Europe* [Chapter 9]. Copenhagen, WHO Regional Office for Europe, 2006 (European Observatory on Health Systems and Policies Series).

38. European Foundation for the Improvement of Working and Living Conditions. *Fourth European working conditions survey*. Luxembourg, Office for Official Publications of the European Communities, 2007 (http://www.eurofound.europa.eu, accessed 22 March 2010).

39. European Agency on Safety and Health at Work (OSHA). *Health and safety of healthcare staff* (http://osha.europa.eu/en/sector/healthcare, accessed 4 April 2010).

40. Hasselhorn HM, Müller BH, Tackenberg P. *Sustaining working ability in the nursing profession – investigation of premature departure from work (Nurses Early Exit Study (NEXT) Scientific Report)*. Wuppertal, University of Wuppertal, 2005 (http://www.next-study.net, accessed 11 July 2010).

41. International Labour Organization. *2010 World Day for Safety and Health at Work: emerging risks and new patterns of prevention in a changing world of work* [booklet]. Geneva, International Labour Office, 2010 (http://www.ilo.org/safework/info/publications/lang--en/docName--WCMS_123653/index.htm, accessed 15 April 2010).

42. Wiskow C. *The impact of SARS on health personnel*. (Sectoral Working Paper, No. 206.) Geneva, International Labour Office, 2003.

43. European Parliament, Committee on Employment and Social Affairs. *Report with recommendations to the Commission on protecting European healthcare workers from blood borne infections due to needlestick injuries (2006/2015(INI))*. European Parliament, A6-0137/2006, final, 25.4, 2006.

44. *PCN, EUROFEDOP, EDTNA/ERCA, IAPO, EUCOMED, EOM, EMA resolution calling for EU action to prevent medical sharps injuries: Protecting European healthcare workers from medical sharps injury* (RTB, April 2004 Discussion Document), 2004. (http://www.efnweb.org/version1/en/documents/EuHealthcareWorkers.pdf , accessed 11 April 2010).

45. European Agency for Occupational Safety and Health. *OSH in figures: stress at work – facts and figures*. Luxembourg, Office for Official Publications of the European Communities, 2009 (European Risk Observatory Report, EN 9; http://osha.europa.eu/en/riskobservatory, accessed 8 April 2010).

46. Di Martino V. *Relationship between work stress and workplace violence in the health sector*. Geneva, ILO/ICN/WHO/PSI Joint Programme on Workplace Violence in the Health Sector, 2003 (http://www.ilo.org/public/english/dialogue/sector/sectors/health/publ.htm, accessed 13 April 2010).

47. European Agency for Occupational Safety and Health. *Stress – definition and symptoms*. http://osha.europa.eu/en/topics/stress/index_html/definitions_and_causes, accessed 16 July 2010).

48. Goehring C et al. Psychosocial and professional characteristics of burnout in Swiss primary care practitioners: a cross-sectional survey (http://www.smw.ch/docs/pdf200x/2005/07/smw-10841.pdf, accessed 16 July 2010). *Swiss Medical Weekly*, 2005, 135:101–108.

49. Hristov Z et al. *Work stress in the context of transition. A case study of education, health and public administration in Bulgaria*. (Report No. 26). Budapest, International Labour Office, Subregional Office for Central and Eastern Europe, 2003.

50. Di Martino V. *Workplace violence in the health sector: Country case studies Brazil, Bulgaria, Lebanon, Portugal, South Africa, Thailand and an additional Australian study–Synthesis report*. ILO/ICN/WHO/ICN Joint Programme on Workplace Violence in the Health Sector, 2002 (http://www.who.int/violence_injury_prevention/injury/work9/en/index2.html, accessed 15 April 2010).

51. International Labour Office. *Guidelines on occupational safety and health management systems, ILO-OSH 2001*. Geneva, International Labour Office, 2001.

52. *WHO Resolution WHA60.26 on workers' health: global plan of action*. Geneva, Sixtieth World Health Assembly (Agenda Item 12.13, 23 May 2007, A60/VR/11, Paragraph 9; http://apps.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf, accessed 11 April 2010).

53. WHO. *Work plan of the Global Network of WHO Collaborating Centres for Occupational Health for the period 2009–2012: Compendium*. Geneva: WHO, 2009 (http://www.who.int/occupational_health/cc_compendium.pdf, accessed 19 July 2010).

54. EU Issue Tracker. *Sharp objects in health care. EU Issue Tracker – the regulatory radar*, 14 December 2009; http://www.euissuetracker.com/en/focus/Pages/Sharp-Objects-in-Health-Care.aspx, accessed 10 April 2010).

55. European Parliament. *Motion for a Resolution pursuant to Rule 84(3) of the Rules of Procedure by Liz Lynne, Pervenche Berès on behalf of the Committee on Employment and Social Affairs on the proposal for a Council directive implementing the Framework Agreement on prevention from sharp injuries in the hospital and healthcare sector concluded by HOSPEEM and EPSU (COM(2009)0577)*. European Parliament 2009–2014, Session Document B7-0063/2010, 1.2.2010 (RE\803453EN.doc; PE432.911v01-00). Strasbourg, European Parliament, 2010.

56. De Raeve, P. *Sharps injuries – stepping up to the challenge in Europe*. Brussels, European Federation of Nurses Associations, 2010 (http://www.efnweb.org/version1/en/networks_articles.html, accessed 6 April 2010).

57. WHO. *WHO best practices for injections and related procedures toolkit*. Geneva, WHO, 2010 (http://whqlibdoc.who.int/publications/2010/9789241599252_eng.pdf, accessed 2 July 2010).

58. HOSPEEM and EPSU. *Framework agreement on prevention from sharp injuries in the hospital and health care sector*. Brussels, HOSPEEM and EPSU, 2009 (http://www.epsu.org/a/5581, accessed 4 April 2010).

59. European Agency for Safety and Health at Work. *How to tackle psychosocial issues and reduce work-related stress*. Luxembourg, Office for Official Publications of the European Communities, 2002.

60. ILO/ICN/WHO/PSI. *Framework Guidelines on addressing workplace violence in the health sector*. ILO/ICN/WHO/PSI Joint Programme on Workplace Violence in the Health Sector. Geneva, International Labour Office, 2002.

61. Kokalov I. *Tackling violence at work in the health sector – unions make a difference in Bulgaria (Focus on Health, No. 1, August 2006)*. Public Services International, 2006 (http://www.world-psi.org, accessed 19 April 2010).

62. McClure M et al. *Magnet hospitals; attraction and retention of professional nurses*. Kansas City, American Academy of Nursing, 1983.

63. Aiken LH et al. Transformative impact of Magnet designation: England case study. *Journal of Clinical Nursing*, 2008, 17(2):3330–3337.

64. Aiken LH, Patrician P. Measuring organizational traits of hospitals: the revised Nursing Work Index. *Nursing Research*, 2000, 49(3):146–153.

65. Lake ET. Development of the Practice Environment Scale of the Nursing Work Index. *Research in Nursing and Health*, 2002, 25(3):176–188.

66. O´Brien-Pallas L, Tomblin Murphy G, Shamias J. *Final Report: Understanding the Costs and Outcomes of Nurses´Turnover in Canadian Hospitals*. Toronto, University of Toronto, Nursing Health Services Research Unit, 2008. (http://www.hhrchair.ch/research.cfm, accessed 16 July 2010)

67. WHO Regional Office for Europe. Health Promoting Hospitals Network (HPH). Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/public-health-services/activities/health-promoting-hospitals-network-hph, accessed 4 June 2010).

68. Groene O, ed. 2006, *Implementing health promotion in hospitals: manual and self-assessment forms*. Copenhagen, WHO Regional Office for Europe, 2006:47–50.

69. International Labour Office. Social Dialogue in the health services: a tool for practical guidance. Geneva, International Labour Office, Sectoral Activities Programme, 2004.

70. EPSU and HOSPEEM. *Strengthening social dialogue in the hospital sector in the new Member States and candidate countries*. EPSU and HOSPEEM, 2007 (http://www.hospitalsocialdialogue.eu, last update 9 July 2007).

Annexes

Annex 1. Magnet hospitals and the 14 "Forces of Magnetism"

The original Magnet study from 1983 identified 14 characteristics that differentiated organizations able to recruit and retain nurses. These characteristics became the American Nurses Credentialing Center (ANCC) Forces of Magnetism, the conceptual framework for the Magnet appraisal process.

1	Quality of nursing leadership	Knowledgeable, strong, risk-taking nurse leaders follow a well-articulated, strategic and visionary philosophy in the day-to-day operations of the nursing services. Nursing leaders, at all levels of the organization, convey a strong sense of advocacy and support for the staff and for the patient. (The results of quality leadership are evident in nursing practice at the patient's side.)
2	Organizational structure	Organizational structures are generally flat, rather than tall, and decentralized decision-making prevails. The organizational structure is dynamic and responsive to change. Strong nursing representation is evident in the organizational committee structure. Executive-level nursing leaders serve at the executive level of the organization. The Chief Nursing Officer typically reports directly to the Chief Executive Officer. The organization has a functioning and productive system of shared decision-making.
3	Management style	Health care organization and nursing leaders create an environment supporting participation. Feedback is encouraged and valued and is incorporated from the staff at all levels of the organization. Nurses serving in leadership positions are visible, accessible and committed to communicating effectively with staff.
4	Personnel policies and programmes	Salaries and benefits are competitive. Creative and flexible staffing models that support a safe and healthy work environment are used. Personnel policies are created with direct-care nurse involvement. Significant opportunities for professional growth exist in administrative and clinical tracks. Personnel policies and programmes support professional nursing practice, work–life balance and the delivery of quality care.
5	Professional models of care	There are models of care that give nurses the responsibility and authority for the provision of direct patient care. Nurses are accountable for their own practice as well as the coordination of care. The models of care (i.e. primary nursing, case management, family-centred, district, and holistic) provide for the continuity of care across the continuum. The models take into consideration patients' unique needs, and provide skilled nurses and adequate resources to accomplish desired outcomes.

6	Quality of care	Quality is the systematic driving force for nursing and the organization. Nurses serving in leadership positions are responsible for providing an environment that positively influences patient outcomes. There is a pervasive perception among nurses that they provide high-quality care to patients.
7	Quality improvement	The organization has structures and processes for the measurement of quality and programmes for improving the quality of care and services within the organization.
8	Consultation and resources	The health care organization provides adequate resources, support and opportunities for the utilization of experts, particularly advanced practice nurses. In addition, the organization promotes involvement of nurses in professional organizations and among peers in the community.
9	Autonomy	Autonomous nursing care is the ability of a nurse to assess and provide nursing actions as appropriate for patient care, based on competence, professional expertise and knowledge. The nurse is expected to practice autonomously, consistent with professional standards. Independent judgement is expected to be exercised within the context of interdisciplinary and multidisciplinary approaches to patient/resident/client care.
10	Community and the health care organization	Relationships are established within and among all types of health care organizations and other community organizations, to develop strong partnerships that support improved client outcomes and the health of the communities they serve.
11	Nurses as teachers	Professional nurses are involved in educational activities within the organization and community. Students from a variety of academic programmes are welcomed and supported in the organization; contractual arrangements are mutually beneficial. There is a development and mentoring programme for staff preceptors for all levels of students (including students, new graduates, experienced nurses, etc.). Staff in all positions serve as faculty and preceptors for students from a variety of academic programmes. There is a patient-education programme that meets the diverse needs of patients in all of the care settings of the organization.
12	Image of nursing	The services provided by nurses are characterized as essential by other members of the health care team. Nurses are viewed as integral to the health care organization's ability to provide patient care. Nursing effectively influences system-wide processes.

13	Interdisciplinary relationships	Collaborative working relationships within and among the disciplines are valued. Mutual respect is based on the premise that all members of the health care team make essential and meaningful contributions in the achievement of clinical outcomes. Conflict-management strategies are in place and are used effectively, when indicated.
14	Professional development	The health care organization values and supports the personal and professional growth and development of staff. In addition to quality orientation and in-service education (addressed earlier in Force 11 –Nurses as teachers), career-development services are emphasized. Programmes that promote formal education, professional certification and career development are evident. Competency-based clinical and leadership/management development is promoted and adequate human and fiscal resources for all professional development programmes are provided.

Source: http://www.nursecredentialing.org/Magnet/ProgramOverview/ForcesofMagnetism.aspx (accessed 8 April 2010).

Annex 2. Health Promoting Hospitals and Health Services network – self-assessment standards

Standard 4: promoting a healthy workplace

The management establishes conditions for the development of the hospital as a healthy workplace.

Objective

To support the development of a healthy and safe workplace, and to support health-promotion activities by staff.

Sub-standard 4.1
The organization ensures the development and implementation of a healthy and safe workplace.

- 4.1.1. Working conditions comply with national/regional directives and indicators (evidence: e.g. national and international (EU) regulations are recognized).
- 4.1.2. Staff comply with health and safety requirements, and all workplace risks are identified (evidence: e.g. check data on occupational injuries).

Sub-standard 4.2
The organization ensures the development and implementation of a comprehensive human-resources strategy that includes training and the development of the health-promotion skills of staff.

- 4.2.1. New staff receive an induction training that addresses the hospital's health-promotion policy (evidence: e.g. interviews with new staff).
- 4.2.2. Staff in all departments are aware of the content of the organization's health-promotion policy (evidence: e.g. annual performance evaluation or staff participation in the health-promotion programme).
- 4.2.3. A performance appraisal system and continuing professional development including health promotion exists (evidence: e.g. documented by review of staff files or interview).
- 4.2.4. Working practices (procedures and guidelines) are developed by multidisciplinary teams (evidence: e.g. check procedures, check with staff).
- 4.2.5. Staff are involved in hospital policy-making, audit and review (evidence: check with staff; check minutes of working groups for participation of staff representatives).

Sub-standard 4.3
The organization ensures the availability of procedures to develop and maintain staff awareness about health issues.

- 4.3.1. Policies for awareness about health issues are available for staff (evidence: e.g. check for policies on smoking, alcohol, substance misuse and physical activity).
- 4.3.2. Smoking-cessation programmes are offered (e.g. evidence on availability of programmes).
- 4.3.3. Annual staff surveys are carried out: these include an assessment of individual behaviour, knowledge of supportive services/policies, and use of supportive seminars (evidence: check questionnaire used for – and results of – staff survey).

Source: Groene O, ed. 2006, *Implementing health promotion in hospitals: manual and self-assessment forms*. Copenhagen, WHO Regional Office for Europe, 2006:47–50.

Joint policy briefs

1. How can European health systems support investment in and the implementation of population health strategies?
   David McDaid, Michael Drummond, Marc Suhrcke
2. How can the impact of health technology assessments be enhanced?
   Corinna Sorenson, Michael Drummond, Finn Børlum Kristensen, Reinhard Busse
3. Where are the patients in decision-making about their own care?
   Angela Coulter, Suzanne Parsons, Janet Askham
4. How can the settings used to provide care to older people be balanced?
   Peter C. Coyte, Nick Goodwin, Audrey Laporte
5. When do vertical (stand-alone) programmes have a place in health systems?
   Rifat A. Atun, Sara Bennett, Antonio Duran
6. How can chronic disease management programmes operate across care settings and providers?
   Debbie Singh
7. How can the migration of health service professionals be managed so as to reduce any negative effects on supply?
   James Buchan
8. How can optimal skill mix be effectively implemented and why?
   Ivy Lynn Bourgeault, Ellen Kuhlmann, Elena Neiterman, Sirpa Wrede
9. Do lifelong learning and revalidation ensure that physicians are fit to practise?
   Sherry Merkur, Philipa Mladovsky, Elias Mossialos, Martin McKee
10. How can health systems respond to population ageing?
    Bernd Rechel, Yvonne Doyle, Emily Grundy, Martin McKee
11. How can European states design efficient, equitable and sustainable funding systems for long-term care for older people?
    José-Luis Fernández, Julien Forder, Birgit Trukeschitz, Martina Rokosová, David McDaid
12. How can gender equity be addressed through health systems?
    Sarah Payne
13. How can telehealth help in the provision of integrated care?
    Karl A. Stroetmann, Lutz Kubitschke, Simon Robinson, Veli Stroetmann, Kevin Cullen, David McDaid
14. How to create conditions for adapting physicians' skills to new needs and lifelong learning
    Tanya Horsley, Jeremy Grimshaw, Craig Campbell
15. How to create an attractive and supportive working environment for health professionals
    Christiane Wiskow, Tit Albreht, Carlo de Pietro

The European Observatory has an independent programme of policy briefs (see http://www.euro.who.int/en/home/projects/observatory/ publications/policy-briefs/joint-hen-obs-policy-briefs).

HEN produces synthesis reports and summaries (available at http://www.euro.who.int/en/what-we-do/data-and-evidence-network-hen).

World Health Organization
Regional Office for Europe
Scherfigsvej 8,
DK-2100 Copenhagen Ø,
Denmark
Tel.: +45 39 17 17 17.
Fax: +45 39 17 18 18.
E-mail: postmaster@euro.who.int
Web site: www.euro.who.int

This Policy brief was prepared for the Belgian EU Presidency Conference on Investing in Europe's health workforce of tomorrow: scope for innovation and collaboration (La Hulpe, 9–10 September 2010).

This publication is part of the joint policy brief series of the Health Evidence Network and the European Observatory on Health Systems and Policies. Aimed primarily at policy-makers who want actionable messages, the series addresses questions relating to: whether and why something is an issue, what is known about the likely consequences of adopting particular strategies for addressing the issue and how, taking due account of considerations relating to policy implementation, these strategies can be combined into viable policy options.

Building on the Network's synthesis reports and the Observatory's policy briefs, this series is grounded in a rigorous review and appraisal of the available research evidence and an assessment of its relevance for European contexts. The policy briefs do not aim to provide ideal models or recommended approaches. But, by synthesizing key research evidence and interpreting it for its relevance to policy, the series aims to deliver messages on potential policy options.

The **Health Evidence Network** (HEN) of the WHO Regional Office for Europe is a trustworthy source of evidence for policy-makers in the 53 Member States in the WHO European Region. HEN provides timely answers to questions on policy issues in public health, health care and health systems through evidence-based reports or policy briefs, summaries or notes, and easy access to evidence and information from a number of web sites, databases and documents on its web site (http://www.euro.who.int/en/what-we-do/data-and-evidence/health-evidence-network-hen).

The **European Observatory on Health Systems and Policies** is a partnership that supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in the European Region. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues. The Observatory's products are available on its web site (http://www.healthobservatory.eu).

ISSN 1997-8073