

## POLICY BRIEF 2 OF 4

# Drivers of change to the skills and competences of the future health workforce in the European Union Populations

Horizon scanning for the Joint Action on Health Workforce Planning and Forecasting has carried out research into the driving forces influencing the skills and competences of the health workforce in the EU out to 2035. This briefing is part of a series aimed at policy makers and workforce planners across Europe; it summarises the key drivers acting at a population level and their potential skills and competence implications.

The key drivers include an ageing population with an increased life expectancy and expected increases in patient empowerment (Economist Intelligence Unit, 2009; EMPATHiE, 2014). Beyond this segmentation of the population into groups and appropriate measures are required to more fully understand changes in chronic morbidity (Eurostat, 2015), multimorbidity, health inequalities and shifts in the distribution of health conditions across Europe (Barnett et al, 2012; van Oostrom et al, 2012; WHO, 2013).

## Driving forces

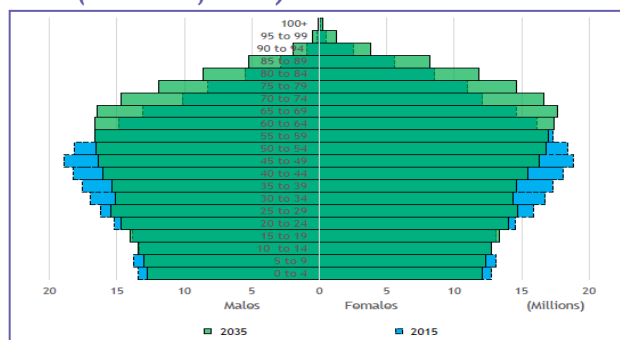
### Population size and age structure

Projecting the population for the EU-28 countries to 2035 shows a change in the age-structure that is increasingly weighted towards the older age bands for both genders (figure 1). The overall growth of the total population from 2015 to 2035 is projected at 2.5%, with those aged 65 and over comprising 19% of the population in 2015 and 25% in 2035 (CfWI analysis of Eurostat, 2015).

These projections are important indicators of future health workforce demand (recognising that projections will vary by country) - paying particular reference to the types of health conditions that are currently prevalent in those

higher age bands, and therefore the type of demand for health services which may be reasonably anticipated.

*Figure 1: EU-28 Population structure 2015 and 2035 (Eurostat, 2015)*



### Long-term care and unpaid carers

A large source of uncertainty in future workforce projections is the possible impact of a change in population structure towards the older age bands on long-term care - packages of care that are delivered by a mixture of health and social care services (UCL European Institute, 2012).

The availability of family members to provide informal care to relatives also presents uncertainty for the potential size of the



workforce demand where the pressure to provide informal care outstrips the availability of family members to provide it.

### Types and distribution of health conditions

Looking at the current distribution of health conditions within populations gives an incomplete picture of future demand due to factors such as cohort effects across generations. However, the current types and distribution of health conditions assist in building a picture of future demand for workforce skills and competences, as these are long-term sources of demand which are highly likely to continue into the next twenty years.

In figure 2 we can see the increasing self-reporting of long-term conditions by age (Eurostat, 2015). Considering the distribution of disability-adjusted life years or years of healthy life lost across the WHO European region, it is apparent that the majority of current disease burden is caused by non-communicable disease (81%), with the remaining comprised of injuries (10%) and communicable, maternal, perinatal and nutritional conditions (9%) (CfWI analysis of WHO, 2014).

### Multimorbidity

The presence of two or more long-term morbidities present a population-level challenge to health services and health workforces and may act as a driver to changes in the single-disease framework of health care and health research (Barnett et al, 2012).

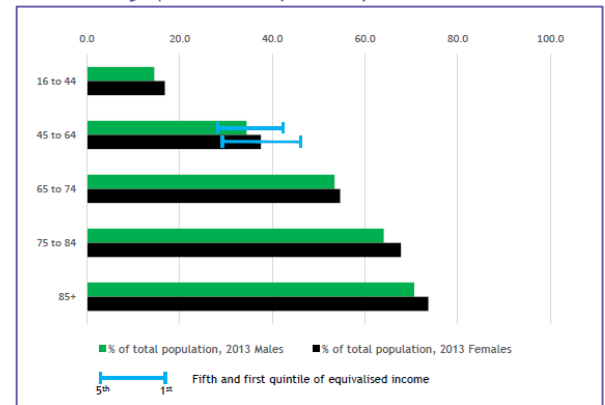
Data on the type of multimorbidity and the size of the populations affected are present for a limited number of health systems (for example, Barnett et al, 2012; van Oostrom et al, 2012) and their results show increasing multimorbidity, and increasing physical-mental health comorbidity with age and significant relationships with health inequalities (Barnett et al, 2012).

### Health inequalities

As an example, chronic morbidity is not evenly distributed across populations. The fifth quintile, or the 20% of the population with the highest income, self-report less chronic morbidity than the first quintile, the 20% of the population with the lowest income, consistently across age bands 16-74 (CfWI analysis of Eurostat, 2015). From a horizon scanning perspective it is important to consider how external drivers of change, such as global financial conditions and income inequality,

may impact on the quantity and type of future skills and competences required in the health workforce.

**Figure 2: EU-28 self-reported chronic morbidity (Eurostat, 2015)**



### Health literacy

The competence of service users to access, understand, appraise and apply health-related information to their specific circumstances (Sorenson et al, 2012) has an impact on the way that they access health care and the skills and competence required from health workforces in the subsequent interactions.

Health literacy may impact on wider factors, such as health-related behaviour and health services-seeking behaviour. Over long timescales it is an important factor on the types of health conditions that present on demand for health services and future workforce requirements.

### Patient mobility

Although the current mobility of health professionals in the EU is greater than that of patients (Glinos, 2012), it is also important to consider those factors where there are interactions across national health systems which may alter in the future; and the combination of factors such as health literacy and availability of information on health services may make patient mobility a driving force to further consider.

### Patient empowerment

At the micro level, empowered patients may increasingly act as self-determining agents with control over their own health care to achieve optimal well-being (EMPATHiE, 2014), where their treatment goals are increasingly taken into account and acted on.



## Skills and competence implications

Health workforce planning typically involves long timescales, for example between health workforces beginning and completing education and training programmes.

Whilst a role of workforce planners is to consider the aggregate effects of these driving forces on their health workforces over long timescales here we consider some of the skills and competence implications that emerged from the horizon scanning exercise.

### Overview

- ▶ **Prevention** - the 'ability to reduce the instance or incidence of ill health' (CfWI, 2014a). The horizon scanning exercise demonstrated that improvements are expected in the understanding of the risk factors which affect the development of ill health in specific parts of the population and how behavioural and lifestyle factors can be influenced specifically for individuals. The health workforce may therefore have an increasingly targeted effect over the primary prevention of ill health.
- ▶ **Coaching and enabling** - once people have contact with health workforces for conditions that involve levels of self-management then there is expected to be an increasing focus on joint planning around the person's treatment goals. This type of 'person-centred co-ordinated care' (National Voices, 2013) involves further 'engaging and empowering individuals' (WHO, 2015) and the effective alignment of patient and system goals.

### Skills and competence implications

Increases in the following areas of competence and skill were identified as part of horizon scanning:

#### Prevention

Prevention can be categorised into three types which broadly align with the progression of disease:

1. **Primary prevention** - This aims to reduce (as far as possible) the risk of new cases appearing.
2. **Secondary prevention** - This concerns the early detection of disease and includes pre-symptomatic or predictive testing or screening.
3. **Tertiary prevention** - This aims to reduce the impact or 'recurrence' (King's Fund, 2010) of disease or social ill health.

The horizon scanning showed that all types of prevention competence and skills are expected to be demanded and delivered in more targeted ways in the future. Secondary and tertiary prevention may see larger shifts in light of the key drivers from an increasingly older population living with multiple co-morbidities at risk of injuries - such as falls - as well as managing chronic conditions.

#### Coaching and enabling

In the future the ability to target populations and coach those most likely to be affected by diseases and conditions such as hypertension, stroke, diabetes, obesity, chronic obstructive pulmonary disease (COPD) and Alzheimer's will be highly important. Expert patient and empowerment programmes such as those seen emerging in many health economies (All Party Parliamentary Group on Global Health, 2014) will be increasingly common as they seek to increase patients' self-management of their chronic conditions.

Whilst the style of how health professionals support patients has changed considerably over time, away from a paternalistic style, there is expected to be continued change and increased demand for competence to engage and guide patients as they deal with an increased mix of health factors in combination.



## Workforce planning, education and training considerations and workforce examples from horizon scanning

<p><b>Examples of possible impacts to the workforce as shared by respondents</b></p>	<ul style="list-style-type: none"> <li>▶ <b>Dentists</b> may require top-up education and continuing professional development in geriatric dentistry or gerodontology in order to better provide for the needs of an increasingly older population as well as wider health promotion and preventative skillsets for the young and middle age bands.</li> <li>▶ <b>Doctors</b> will need to have an increasingly social role and provide guidance and coaching on public health and social aspects of people’s lives that affect their health.</li> <li>▶ <b>Midwives</b> may see changes in activity as a result of an ageing population and the potential additional support that older women may require during pregnancy and childbirth.</li> <li>▶ <b>Nurses</b> as well as health and care professions are thought likely to require an increased breadth of clinical and caring competence for increasingly prevalent diseases such as Alzheimer’s and other long term conditions in the population.</li> <li>▶ <b>Pharmacists’</b> roles are already expanding in many EU health systems to medications management, vaccinations and provision of prevention and health promotion activities.</li> <li>▶ <b>All workforces</b> may require increases in geriatric knowledge, risk stratification to consider frailty and health status, and the application of monitoring (in for example phlebotomy, blood pressure assessment and monitoring) across a wider range of care settings.</li> <li>▶ <b>All workforces</b> seem likely to be increasingly required to work collaboratively as part of multidisciplinary teams as well as consider how they involve and communicate with patients. For example, as part of a recent review of primary care in the UK, new guidance recommends greater use of pharmacists, physician associates and healthcare assistants in general practice (Primary Care Workforce Commission, 2015).</li> </ul>
<p><b>Education and training considerations</b></p>	<ul style="list-style-type: none"> <li>▶ Broader general and specialist knowledge for all workforces in prevention, self-care and self-management for a range of chronic conditions in combination with each other.</li> <li>▶ Increased need for further knowledge and training in disability, dependency strategies and strengthening the overall prevention and self-care ability of the population.</li> <li>▶ Promotion of health and well-being through participatory approaches between patients and health professionals.</li> <li>▶ Critical aspects of multidisciplinary team working such as: leadership, communication, quality and innovation.</li> </ul>
<p><b>Workforce planning considerations</b></p>	<ul style="list-style-type: none"> <li>▶ Changes in existing workforce professions (supply increases or decreases) may not sufficiently match the future population health needs and demands. Competence and skill mix will need to be considered carefully so as to include a wider definition of workforce that includes the goals of patients, relatives, carers and other health and care workforces - such as allied health professionals and social workers.</li> <li>▶ This wider consideration of skills and competence will need to consider mapping supply and demand as well as quantification and projections for the future.</li> <li>▶ Implications of changing models of care (such as more ‘joined up’ or integrated</li> </ul>



	<p>care), care being located closer to people's homes and revised primary care systems design will likely accelerate the need for areas of competence such as prevention, self-care, multidisciplinary team working and communication.</p> <ul style="list-style-type: none"> <li>▶ Matching the distribution of ageing populations and the required workforce will require a clearer understanding of demand at a more granular level. Simple population ratios and overall health consumption rates will not be sufficient. Other factors (such as geography, age band, wellbeing, cohort effects, disease profiles, economic and social aspects) must increasingly be considered in health workforce planning.</li> </ul>
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## Key references

**Barnett et al, 2012** 'Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet*, 6736(12) 60482-86.

**CfWI, 2014a** *H2035 progress update*. [Accessed online April 2015]  
<http://www.horizonscanning.org.uk/app/web1/files/download/cfwi-hs2035-progress-update-july-2014.pdf>

**EMPATHiE, 2014** *Empowering patients in the management of chronic diseases: Final summary report*. [Accessed online September 2015]  
[http://ec.europa.eu/health/patient\\_safety/docs/empathie\\_frep\\_en.pdf](http://ec.europa.eu/health/patient_safety/docs/empathie_frep_en.pdf)

**Eurostat, 2015**. Database [Accessed online April 2015]  
<http://ec.europa.eu/eurostat/tgm/graph.do?tab=graph&plugin=1&pcode=tps00025&language=en&toolbox=data>

**Glinos, 2012** 'Worrying about the wrong thing: patient mobility versus mobility of health care professionals' in *J Health Serv Res Policy*, 17(4), 254-6. [Accessed online May 2016]  
<http://hsr.sagepub.com/content/17/4/254.full.pdf+html>

**Marmot et al, 2012** 'WHO European review of social determinants of health and the health divide' *The Lancet*, vol 380. [Accessed online May 2016]  
[http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(12\)61228-8.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(12)61228-8.pdf)

**National Voices, 2015** A narrative for person-centred co-ordinated care. [Accessed online February 2016] <https://www.england.nhs.uk/wp-content/uploads/2013/05/nv-narrative-cc.pdf>

**Sorenson et al, 2012** 'Health literacy and public health: A systematic review and integration of evidence and models.' *BMC Public Health*, 12:80. [Accessed online September 2015]  
<http://www.ncbi.nlm.nih.gov/pubmed/22276600>

**UCL European Institute, 2012** *The future of health care in Europe*. [Accessed online September 2015]  
[http://www.ucl.ac.uk/european-institute/events/view/reviews/health\\_care/FHE\\_FINAL\\_online.pdf](http://www.ucl.ac.uk/european-institute/events/view/reviews/health_care/FHE_FINAL_online.pdf)

**Van Oostrom et al, 2012** 'Multimorbidity and comorbidity in the Dutch population - data from general practices'. *BMC Public Health* 12715

**Vester, 2012** *The art of interconnected thinking: tools and concepts for a new approach to tackling complexity*. Munich: MCB Publishing House.

Full report and references available at [www.healthworkforce.eu](http://www.healthworkforce.eu)



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