# Eurohealth

**RESEARCH • DEBATE • POLICY • NEWS** 

Volume 15 Number 3, 2009

Measuring and tackling health inequalities across Europe



European Commission sets out new actions on health inequalities

Methodological issues in the analysis of survey data

How do welfare policies contribute to the reduction of health inequalities?

# Measuring and tackling health inequalities across Europe

This issue of *Eurohealth* is largely devoted to health inequalities, drawing on discussions of a seminar held in May 2009 at the London School of Economics and Political Science and organised in conjunction with the European Commission Directorate General for Employment, Social Affairs and Equal Opportunities.

Many concerns over the extent and consequences of health inequalities between and within Member States have been raised by EU institutions, national governments and other stakeholders. We are delighted that Ana Xavier, Charles Price and Fritz von Nordheim provide a Commission perspective on the proposed actions and support for Member States that are set out in a new Commission Communication *Solidarity in Health: Reducing Health Inequalities in the EU*.

One critical way of strengthening the knowledge base is through routine collection of data on inequalities. This is far from straightforward: Masseria notes that the choice of measure used will influence results. Articles by Allin and Masseria and O'Donnell do suggest that methodological research is rising to meet the opportunities and challenges created by increasingly rich European survey datasets. These are not however universal developments: Bobak warns that large data gaps remain in central and eastern Europe. In the meantime, another area of limited knowledge, Hennell argues, is in understanding of variation in the social construction of illness across countries and the implications for the use of health care services.

Another challenge is to improve our understanding of how EU and national policies actually impact on health inequalities. Examples of national strategic approaches now being developed to address inequalities in France, Hungary and the Netherlands are featured in this issue. Actions are of course not confined to the health system alone: Lundberg reports that social welfare programmes can promote health, but empirical analysis is needed to look at their impact on inequalities in health status.

Keeping health inequalities high on European and Member State agendas at a time of great economic strain will be no mean feat, but this challenge needs to be met if both population health and social solidarity across Europe are to be protected.

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# Solidarity in health

# The European Commission sets out new actions on health inequalities

Ana Xavier, Charles Price and Fritz von Nordheim

Summary: Following concerns about an increase in the level of health inequalities across the EU, the European Commission (EC) has recently adopted a Communication announcing what it will do to address this issue, which includes actions to help Member States and other actors. This article provides an overview of actions set out in the Communication.

Keywords: health inequalities, Europe, European Commission

Concerns over the extent and the consequences of health inequalities - both between and within Member States - have been expressed by EU institutions and many stakeholders, including through consultation on the recently published Communication Solidarity in Health: Reducing Health Inequalities in the EU.<sup>1</sup> Previously, the European Council of June 2008 underlined the importance of closing the gap in health and in life expectancy between and within Member States. In 2007 the EU Health Strategy set out the Commission's intention to carry out further work to reduce inequities in health. This was reiterated in the 2008 Commission Communication on a Renewed Social Agenda which restated the fundamental social objectives of Europe through equal opportunities, access and solidarity and announced a Commission Communication on health inequalities.

The new Commission Communication sees the extent of the health inequalities between people living in different parts of the EU and between socially advantaged and disadvantaged EU citizens as a challenge to the EU's commitments to solidarity, social and economic cohesion, human rights and equality of opportunity. Moreover, reducing avoidable and unnecessary ill health and premature death is important in the context of an ageing population to allow longer working lives, productivity and employment levels. Avoidable poor health for those more vulnerable further enhances social exclusion and socioeconomic inequalities. Avoidable ill-health also means large costs for health systems and puts unnecessary pressure on public budgets. As identified in a study funded by the EC the economic costs associated with large inequalities in health may be considerable.<sup>2</sup> Health inequalities thus represent a loss of human and economic potential across the EU. Reducing them can make a contribution to achieving Europe's full potential for prosperity.

Since 2006, through both the Open Method of Coordination on social pro-

tection and social inclusion (social OMC) and the EU health strategy, the EC has been working together with Member States and other stakeholders on the commonly agreed objective to "address inequities in health outcomes" and "improving equity in health". Through a number of funding programmes (for example, PROGRESS, Community Health Programme, Framework Programmes for Research) it has supported studies and networks which have highlighted the issue and promoted the exchange of good practice (for example, Closing the Gap; Determine; Roma-Health; Eurothine; European Network for Workplace Health Promotion). Work in collaboration with several EU presidencies has helped to create political support for action (for example, PT 2000, BE 2001, UK 2005, FI 2006, PT 2007).

The extent of health inequalities in the EU – what has been identified at EU level Drawing on joint EC and Member States analysis, as well as a wide range of research, the Communication and its

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<sup>\*</sup> See amongst others the 2003 EC Social Situation Report, various joint (Commission – Council) reports on social protection and social inclusion, the 2006 Social Protection Committee in-depth review of National Strategy Reports on social protection and social inclusion, the 2007 peer review on access to care and health inequalities in EU, the 2008 EC Monitoring Report on social protection and social inclusion, the EC-funded Health Status & Living Conditions part of the Annual Monitoring Report from the European Observatory on Social Situation and Demography at http://ec.europa.eu/employment\_social/spsi/reports\_and\_papers\_en.htm, the EC-supported Survey of Health, Ageing and Retirement in Europe (SHARE) and related reports at http://www.share-project.org/ and the EU supported project "health inequalities, governing for health" including the 2006 paper Health Inequalities: Europe in Profile.

accompanying impact assessment<sup>3</sup> conclude that despite increased prosperity and overall improvements in health in the EU, health differences between and within EU Member States and EU regions persist and in some cases are increasing.\*

Eurostat figures for 2007 show that the gap in life expectancy at birth between EU countries for women is around eight years and over fourteen years for men.4 Infant mortality ranges from around three per 1,000 live births to more than ten per 1,000. There are also large differences (of up to twenty years) in the number of years lived in good health (Healthy Life Years), in premature deaths and in treatable and preventable mortality. In some countries (for example, BG, LV, LT, RO, SK) the gap in health in relation to the EU average and the best performers has widened in the last two decades. In general, people in Central and Eastern Europe live shorter lives and spend more years of their lives in ill health (with limitations) especially in the case of men. Infant mortality is also higher in Central and Eastern Europe. The largest differences between Member States are seen in mortality and morbidity of cardiovascular disease, injuries and violence, cancer, and alcohol-related diseases and their underlying risk factors: smoking, diet and alcohol consumption.

There are substantial differences in health between different social groups defined on the basis of income, occupation, educational level or ethnic group in all Member States. People with lower education, income or occupation tend to die at a younger age and to have a higher prevalence of most types of health problems. These differences start at a young age and persist and widen at older ages. For example, differences in life expectancy at birth between the lowest and highest socio-economic groups range from four to ten years for men and from two to six years for women. In some countries the gap has widened in recent decades.

These headline indicators are reflected in similar patterns for a very wide range of objective and subjective measures of physical and mental health. For example, for 'self-perceived general health' a clear income gradient can be observed in that those in the lowest (poorest) income quintiles more often report very bad health than those in the highest (richest) quintiles.<sup>5</sup> Data from the Survey of Health, Ageing and Retirement in Europe (SHARE) shows that individuals with lower education or lower income are more

likely to experience limitations with mobility, arm or motor functions and have a higher prevalence of eyesight, hearing and chewing problems.

Vulnerable groups (some migrant groups and ethnic minorities, people living in deprived urban and rural areas and in poverty, the long-term unemployed, those informally employed, seasonal/daily workers and subsistence farmers, those further from the labour market, jobless households, the homeless, the disabled, those living with mental or chronic illnesses, older pensioners on minimum pensions and single parents) suffer a particularly great burden of mortality and disease. For example, the Roma can expect to live ten years less than the majority population in some countries. Migrants may also face higher risks of non-communicable diseases (cardiovascular disease) and mental health problems due to a combination of the socioeconomic and environmental conditions in the origin, transit and host countries.6

There is also a gender dimension to health.<sup>7</sup> While women live longer than men, they also spent a higher proportion of their lives in ill-health. Moreover, there are diseases that affect men more than women and vice-versa, a fact that is not necessarily taken into account in health services delivery.

Importantly, there appears to be a strong association between within-country socio-economic inequalities in health and the overall population health i.e. the higher the socioeconomic inequality in health, the poorer the overall population health. Addressing health inequalities within Member States could thus contribute to reducing differences in health outcomes between Member States.<sup>3</sup>

# The determinants of health inequalities in the EU – what is known at EU level

The Commission recognises that the reasons behind these gaps in health are complex and involve a wide range of factors. These relate to inequalities in the wider social determinants of health including:

- living conditions (housing, environment);
- health-related behaviour (smoking, alcohol consumption, exercise) which are themselves influenced by socio-economic and cultural factors;<sup>8</sup>
- employment and working conditions

(exposure to physical, chemical, and biological agents at work occupational health, health and safety at work, type of contract);

- income (or its absence and thus financial distress);
- education; and
- access to social protection including access to quality health care including health promotion and disease prevention interventions.<sup>5</sup>

The 2008 European Quality of Life Survey from the European Foundation for the Improvement of Living and Working Conditions<sup>10</sup>, for example, has identified sections of the EU population which do not have access to running water, adequate washing and toilet facilities, affordable energy, appropriate housing, heating, new clothes, or a safe environment.

The European Agency for Safety and Health at Work has indicated that health risks vary significantly across sectors and not all workers are equally exposed to occupational hazards: for example, young workers are usually less informed about occupational risks, which makes them overexposed, and workers with a fixedduration or temporary employment relationship are more exposed to the risk of accidents at work and occupational diseases. The EC Impact Assessment to the Community Strategy on Health and Safety at Work 2007-2012 showed that occupational health strategy reduces work accidents and helps accident victims or the chronically ill to retain their job or return to work. It is a key platform for integrating migrant workers and can reduce stressful and monotonous working conditions that cause early deterioration of health, and hence, an early exit from working life.

The 2008 EC Monitoring Report on social protection and social inclusion indicates that income distribution policies (for example, social transfers) may reduce the risk of poverty in the EU by 38% on average, but the extent of redistribution and social protection vary significantly across Member States.<sup>5</sup>

Differences in access to quality care between and within EU Member States also contribute to differences in mortality. There are large differences between EU Member States in terms of unmet need for health care and there is a clear income gradient in unmet need for medical care for all EU Member States: those in the lowest income quintiles more often report an

unmet need due to waiting, the direct financial costs of care and the distance to care.<sup>2</sup> Several Joint Reports on Social Protection and Social Inclusion have identified barriers to access (lack of health insurance coverage, direct financial costs of care, geographical disparities in service availability, waiting times, lack of information, discrimination and language barriers, health literacy and socio-cultural expectations in relation to life and care services) while the First European Communicable Disease Epidemiological Report by the European Centre for Disease Prevention and Control concluded that every year three million patients experience health care associated infections; 50,000 will die from them. This may be particularly acute in some regions of new Member States which lack high quality health facilities with upto-date equipment and well trained staff. In general, inequitable access to care appears to be associated with higher health inequalities [5].

Looking at this set of determinants a possible consequence of the current financial crisis is that health gaps may further increase in the groups most hit by the recession such as the unemployed and those facing financial distress.

#### Background to action

Differences in the determinants of health and health inequalities are thus strongly influenced by the actions of governments, stakeholders, and communities and can be addressed by public policy, which itself can be influenced by EU policy.

Through its work, notably under the social OMC and the EU expert group on social determinants of health and health inequalities, the EC has identified three broad areas which pose obstacles to taking effective action to address health inequalities. These are areas where the EU can support and complement Member States actions and include:

- Lack of awareness and insufficient policy priority and commitment by Member States and other stakeholders and insufficient exchange of good practice.
- Gaps in information and knowledge.
   There is an absence of comparable and regular data, monitoring and reporting.
   Lack of knowledge on the determinants of health inequalities and the effective policies to implement and difficulties in creating an inter-sectoral policy approach.

 An insufficiently concerted EU approach to health inequalities (lack of mainstreaming at the EU level).

Principal responsibility for action to address health inequalities rests with Member States, but EU policies can also have a role both through their direct (e.g. health and safety at work, consumer protection, public health policies) or indirect (e.g. economic, regional, equal opportunities policies) impacts on health and by helping to overcome some of the current obstacles to the actions just identified.

For example, EU-wide data collection and monitoring is an economical way of improving the knowledge base for national policymaking and allows countries to learn from each other. Financial support to Member States under the European Cohesion policy can be used to invest in key determinants of health inequalities, such as living conditions, training and employment services, and more recently health care (promotion, prevention and treatment). The EC can raise awareness on the scope, consequences and determinants of health inequalities and reinforce the policy focus to address them. It can enhance the research and knowledge base through various tools (research programmes and EU agencies), provide the means for Member States and relevant stakeholders to share experiences and good practices and improve Member States' capacity building. Finally, it can strive to improve the linkages between EU policies (e.g. economic, social, health and environmental policies) so that these ensure a high level of health protection of all citizens.

#### EU action on health inequalities

Broadly the actions proposed by the Commission in its Communication include:

- Enhancing collaboration with national authorities, regions and other bodies to identify what works best and how to put this into practice.
- Better assessing the impact of EU policies on health inequalities to ensure that they help reduce them where possible.
- Ensuring more regular statistics and reporting on the size of inequalities in the EU and improving existing knowledge on successful strategies to reduce them.
- Improving information on EU funding to help national authorities and other bodies to use EU funds to address

inequalities by improving, for example, primary care facilities, water and sanitation and housing renewal.

More specific EC actions include:

- Developing headline indicators to monitor health inequalities, supporting further development and collection of data by age, sex, socio-economic status and geographic dimension and stimulating a reflection on target development in the Social Protection Committee.
- Providing funding under PROGRESS, including for peer reviews between Member States, and a call for proposals in 2010 to assist Member States in developing relevant strategies.
- Developing health inequality audit approaches through the Health Programme in joint action with Member States willing to participate.
- Developing ways to engage relevant stakeholders at European level to promote the uptake and dissemination of good practice.
- Including health inequalities as one of the priority areas within the ongoing cooperation arrangements on health between the European regions and the Commission.
- Reviewing the possibilities to assist Member States to make better use of EU structural funds to support activities to address factors contributing to health inequalities
- Developing actions and tools on professional training to address health inequalities using the health programme, European Social Fund (ESF) and other mechanisms.
- Launching initiatives in collaboration with Member States to raise awareness and promote actions to improve access and appropriateness of health services, health promotion and preventive care for migrants and ethnic minorities and other vulnerable groups.
- Encouraging Member States to further use the existing options under the EU Rural Development Policy and Common Agricultural Policy (school milk, food for deprived individuals, school fruit scheme) to support vulnerable groups and rural areas with high needs.

The aim is to support and complement the efforts of Member States and stakeholders

and to mobilise EU policies towards reducing health inequalities. As far as possible, the health protection provided by EU policies should extend to all citizens irrespective of where they live or their social background. EU actions should support improvements in the health of the whole population, but with an emphasis on reducing avoidable and unfair gradients in health between social groups and EU regions – i.e. a 'levelling-up' approach. In fulfilling these aims EU actions can make a contribution towards a reduction in health inequalities in the EU. A first report on progress will be produced in 2012.

#### REFERENCES

- 1. Commission of the European Communities. *Solidarity in Health: Reducing Health Inequalities in the EU*. Brussels: Commission of the European Communities, COM(2009)567. Available at <a href="http://ec.europa.eu/health/ph\_determinants/socio\_economics/documents/com20">http://ec.europa.eu/health/ph\_determinants/socio\_economics/documents/com20</a> 09\_en.pdf
- 2. EUROTHINE Group. *Tackling Health Inequalities in Europe: An Integrated Approach*. Rotterdam: Erasmus University, 2007. Available at http://ec.europa.eu/health/ph\_projects/2003/action1/docs/2003\_1\_16\_frep\_en.pdf
- 3. Commission of the European Communities. Commission Staff Working Document: Impact Assessment Accompanying Communication from the Commission COM(2009)567. Brussels: Commission of the European Communities, SEC(2009) 1396 final. Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2009:1396:FIN:EN:PDF
- 4. Eurostat. *Healthy Life Years at Birth by Gender*. Luxembourg: Eurostat, 2009. Available at http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plu-gin=0&language=en&pcode=tsien180
- 5. Council of the European Union. *Joint Report on Social Protection and Social Inclusion 2008*. Brussels: Council of the European Union, 2008. Available at http://register.consilium.europa.eu/pdf/en/08/st07/st07274.en08.pdf
- 6. Council of the European Union. Conclusions on Health and Migration in the EU. Brussels: Council of the European Union, 2007. Available at http://register.consilium.europa.eu/pdf/en/07/st15/st15609.en07.pdf
- 7. Council of the European Union. Council Conclusions on Women's Health. Brussels: Council of the European Union, 2006. Available at http://eur-lex.europa.eu/

#### LexUriServ/LexUriServ.do?uri=OJ:C:2006 :146:0004:0005:EN:PDF

- 8. Börsch-Supan A, Brugiavini A, Jürges H et al (eds). *Health, Ageing and Retirement in Europe (2004–2007). Starting the Longitudinal Dimension*. Mannheim: MEA, 2008. Available at http://www.share-project.org/t3/share/index.php?id=98
- 9. European Observatory on Social Situation Demography Network. *Demographic Trends, Socioeconomic Impacts and*

Policy Implications in the European Union – 2008. Brussels: Commission of the European Communities, 2009. Available at http://www.nidi.knaw.nl/en/output/2009/demography-monitor-2008.pdf/demography-monitor-2008.pdf

10. European Foundation for the Improvement of Living and Working Conditions. Second European Quality of Life Survey: Overview. Luxembourg: Office for Official Publications of the European Communities, 2009.

# Health inequality

# Why is it important and can we actually measure it?

#### Cristina Masseria

Summary: Health inequalities are present in most European countries and evidence of widening inequalities is shown in a number of national and international studies. However, the measurement and monitoring of health inequalities over time and across countries is not straightforward since the choice of measure will influence the results. Numerous measurement tools have been developed for measuring health. Results can be affected by not only the choice of indicator but also by the social group for analysis. The focus of the paper is mainly on the relationship between relative and absolute inequalities discussing the role of the statistical artefact.

Keywords: health inequality, absolute versus relative inequality, statistical artefact

"Health is a universal human aspiration and a basic human need. The development of society, rich or poor, can be judged by the quality of its population's health, how fairly health is distributed across the social spectrum, and the degree of protection provided from disadvantage as a result of ill-health". 1 Health inequalities can be defined as 'the systematic and avoidable differences in health outcomes between social groups such that poorer and/or more disadvantaged people are more likely to have illnesses and disabilities and shorter lives than those who are more affluent'2. Evidence of socioeconomic inequalities in health can be found as early

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as the 19th century. In recent decades there have been a large number of national and international studies on health inequalities, given the increasing evidence of widening inequalities in Europe.<sup>3</sup>

However, the measurement and monitoring of inequalities in health over time and across countries is not straightforward since the choice of the measure will influence the results. No consensus has been reached on the best and most meaningful measure. Numerous measurement tools have been developed for measuring health. These can be differentiated into macro- and micro-level health indicators. Population summary measures such as life expectancy and infant mortality are extremely useful for estimating changes in overall population health and the global burden of disease across countries or within a country over time, but may

provide minimal indication of the underlying factors (such as education, housing, income, geographical allocation of resources) that may be influencing health attainment. Efforts are under way at an EU level to collect macro-indicators by educational or income level and also at the regional level within the I2SARE project (Health Inequalities Indicators in the Regions of Europe – www.i2sare.eu).

In recent years, various summary measures of population health have been developed to encapsulate information on both mortality and morbidity within a single indicator, for example healthy- and disability-adjusted life expectancy. Avoidable mortality, or causes of death that should be avoided in the presence of timely and effective health care, represents an alternative measure of population health and allows us to identify improvements in health attributable to the health system, broader public health policies and also changes in lifestyles.

At a micro-level, objective health measures such as blood pressure and body mass index are important both clinically and from a health systems perspective, but data are often expensive to collect and may be subject to measurement error. Conversely, self-assessed measures such as general health (usually ranging from excellent to poor) and limitations in daily activities are found to be good predictors of mortality and are commonly available, although they may be sensitive to variations in socioeconomic conditions and individual expectations, as well as the wording and meaning of assessment questions. Developing an index of health on the basis of several indicators, or including vignettes in surveys, are two possible methods of reducing systematic bias associated with general measures of self-assessed health. Various indicators of health status (objective and subjective) are collected in the Survey of Health, Aging, and Retirement in Europe (SHARE) and the European Core Health Interview Survey (ECHIS).

When the researcher has decided which health indicator to use, the appropriate socioeconomic determinant should be chosen from individual income, income inequality, education, and employment. The curvilinear relationship between GDP per capita and life expectancy is well known and implies that above a certain threshold the association between absolute income and health weakens or even disappears. Thus, in richer countries, income

distribution rather than income per se is a determinant of health. Although there is a large body of literature on the negative relationship between income inequality and average population health, still no agreement has been reached. Indeed, it is plausible that the association between health indicators such as life expectancy, infant mortality and income inequality simply reflects the non-linear relationship between health and income at the individual level, known as a statistical artefact or the absolute income hypothesis.<sup>4</sup> It is widely accepted that at the individual level higher income individuals enjoy better health. This curvilinear relationship between income and health at the individual level creates an artefactual relationship between income inequality and health at the population level. A curvilinear relationship implies that if there are hypothetically only two individuals A and B with incomes Ya and Yb, with Ya>Yb, and health status Ha and Hb, with Ha>Hb, then a reduction in income inequality (reallocating money from A to B) would result in an increase in average health, although average income remains unchanged. However, is it plausible that all of the association between income inequality and health is explained by this statistical artifact alone?

Systematic reviews were performed by Deaton,<sup>5</sup> Lynch et al<sup>6</sup> and Wilkinson & Pickett.<sup>7</sup> Overall, Lynch finds that income inequality is not associated with average population health across rich countries, with the exception of studies performed within the US (local and regional studies). On the contrary, according to Wilkinson & Pickett there is strong evidence of a relationship between income inequality and health. Only a minority of the 168 studies they analysed failed to identify an association between income distribution and health. They grouped studies with 'unsupportive evidence' into three broad categories. First, some studies measured inequality in an area too small to properly measure any relevant income inequality. Although it is believed that individuals compare themselves to those perceived to be their equals,8 this does not mean that they are not aware of their rank within society. The authors argue that the health of individuals living in poor neighbourhoods is bad not because of inequalities within the neighbourhood but because of inequalities in all of society. People living in more unequal societies have higher rates of crime, violence, teenage pregnancy and obesity and are less likely to be involved in

community life and hold less trust in the government. Second, some studies with 'unsupportive evidence' controlled for factors such as education and ethnicity, assuming them to be mediating variables for social class stratification rather that genuine confounders. Indeed, the authors conclude that relative income, not absolute income, is the main determinant of health, and that individual income, as well as education and ethnicity, is a proxy for social position and therefore should not be controlled for. Third, during the 1980s and early 1990s the relationship between income inequality and health, in particular life expectancy, temporarily disappeared although income inequalities increased. Wilkinson & Pickett give three different explanations for this effect. Firstly, there was a rapid decline in the mortality of older people, in particular cardiovascular mortality, due to improvements in primary and secondary preventive care. Secondly, the distribution of poverty in society changed. Young families with children, as well as older people, were also likely to be poor. Thirdly, that an income inequality lagged effect on health, in particular for older people, is plausible and this would explain why the relationship between income inequality and infant mortality did not disappear.

Should we therefore believe that the relationship between income inequality and health is fully explained by a statistical artefact (or absolute income inequality theory) or should we instead believe that only relative income matters and therefore individual income should not be included in the analysis as this will bias the results? Clearly not all the evidence in favour of income inequality can be explained with the statistical artefact theory.<sup>7,9</sup> In rich countries the absolute income hypothesis does not hold and income inequalities are the main determinants of health, however in poor countries an average increase in income is positively associated with average health.

So far we have only discussed the role of income on health, however many papers use education or employment status as an indicator of socioeconomic status. The choice of social group might affect results. For example, the use of income, employment status or educational level as indicators of socioeconomic position might bring us to different conclusions simply because the social structure of a country might change over time. If between two time periods, educational

inequalities decrease (the number of people with a lower level of education halves while the number of people with higher education increases) – everything else remaining constant – then health inequalities by educational level measured in relative terms will be larger than by income or employment level.

Moreover, much confusion surrounds the measurement of inequalities in absolute versus relative terms. Relative inequalities, generally believed to be of most analytic interest, describe the extent to which a health event is distributed unequally across the population (comparing the worse-off with either the better-off or the average population). However, caution is needed when interpreting the results of relative inequalities since they increase (decrease) as a consequence of a decrease (increase) in the overall level of mortality (survival).<sup>10</sup> Nonetheless, absolute inequalities or differences are argued to have some practical value because they indicate the absolute levels of the health event in population groups.<sup>11</sup> For absolute inequalities it is thought that when the overall level of an outcome, such as mortality falls, absolute inequalities inevitably fall too, although the relationship between absolute indicators and the outcome might be quite complex, with many believing trends to be shaped as an inverse-U.<sup>12</sup>

However, Houweling et al<sup>12</sup> have shown that low levels of mortality can be achieved together with low levels of health disparities. Indeed, a recent US study shows that there is no clear relationship between level of health and relative inequalities.<sup>13</sup> From 1960 to 2002 premature mortality and infant death declined in the US for all income quintiles; however socioeconomic and racial inequalities decreased in the period 1960-1980, then increased, while absolute inequalities remained quite stable. Therefore the pattern of relative inequalities is more related with historical circumstances, social context, public health and economic priorities rather than the overall level of health.

To conclude, although the measurement of health is essential for evaluating and comparing changes within and across societies, both in a specific time period and over time, no agreement has been reached on the best health indicator. In fact the choice of indicator and outcome largely affect the results. Therefore, a systematic strategy is necessary when monitoring inequalities in health. <sup>14</sup> Policy makers and researchers should firstly evaluate the data available,

and assess its quality, and if necessary collect additional data. Ideally analyses of health interview surveys (with different indicators of self-morbidity and possibly also objective indicators of health) should be accompanied by analyses of mortality registries. Moreover, all three indicators of socioeconomic status – income, education and employment – should be used whenever possible. Finally, both relative and absolute indicators of health inequalities should be tested. An accurate analysis of the data and an appropriate interpretation of the results are essential to formulate ad hoc policy responses.

#### REFERENCES

- 1. Commission on the Social Determinants of Health. *Achieving Health Equity: From Root Causes to Fair Outcomes*. Interim report. Geneva: World Health Organization, 2007.
- 2. Whitehead M. *The Concepts and Principles of Equity and Health*. Copenhagen: WHO Regional Office for Europe, 1990.
- 3. Mackenbach J P. *Health Inequalities: Europe in Profile*. Rotterdam: Erasmus MC, 2006.
- 4. Gravelle H. How much of the relationship between population mortality and inequality is a statistical artefact? *British Medical Journal* 1998;316:382–85.
- 5. Deaton A. Health, inequality, and economic development. *Journal of Economic Literature* 2003;41:113–58.
- 6. Lynch J, Smith GD, Harper S, Hillemeier M et al. Is income inequality a determinant of population health? Part 1.

- A Systematic Review. *Milbank Quarterly* 2004;82(1):5–99.
- 7. Wilkinson R, Pickett, K. Income inequality and population health: a review and explanation of the evidence. *Social Science and Medicine* 2006;62:1768–784.
- 8. Runciman WG. Relative Deprivation and Social Justice: A Study of Attitudes to Social Inequality in Twentieth-century England. London: Routledge, 1996.
- 9. Ellison GT. Letting the Gini out of the bottle? Challenges facing the relative income hypothesis. *Social Science & Medicine* 2002;54(4):561–76.
- 10. Scanlan JP. Can we actually measure health disparities? *American Statistical Association* 2002;19(2).
- 11. Kunst A, Bos V, Andersen O et al. Monitoring of trends in socioeconomic inequalities in mortality: experiences from a European project. *Demographic Research* 2004;2(9):229–54.
- 12. Houweling T, Kunst AE, Huisman M, Mackenback JP. Using relative and absolute measures for monitoring health inequalities: experience from cross-national analyses on maternal and child health. *International Journal for Equity in Health* 2007:6:15.
- 13. Krieger N, Rehkopf D, Chen J T, Waterman PD, Marcelli E, Kennedy M. The fall and rise of US inequities in premature mortality: 1960–2002. *PLoS Medicine* 2008;5:(2).
- 14. Kunst A, Mackenbach JP. *Measuring Socioeconomic Inequalities in Health*. Copenhagen: WHO Regional Office for Europe, 2004.

New Health Systems in Transition publication from the European Observatory on Health Systems and Policies

#### Japan: Health System Review

October 2009

Kozo Tatara, Etsuji Okamoto Japan's health system provides universal coverage for the population, with annual expenditure around 8% of Gross Domestic Product. Population health is among the best in the world, with the longest life expectancy and lowest rate of infant mortality.

Recent reforms focus on the ageing of the population including the introduction of a new system of long-term care financed through insurance and administered by municipal governments.

Available at http://www.euro.who.int/Document/E92927.pdf

# Unmet need as an indicator of health care access

#### Sara Allin and Cristina Masseria

Summary: Ensuring adequate and fair access to health care is a priority objective for European governments. This short paper discusses the measurement, distribution and policy implications of one indicator of access to health care: self-reported unmet need or foregone care. Two international surveys – EU-SILC and SHARE – include questions on unmet need and foregone care respectively, and therefore provide an opportunity for drawing comparisons on access to health care. It appears that, overall, people who report unmet need tend to be in worse health and with lower income. However, from a policy perspective, it is important to separate the causes of unmet need into those that are more relevant to policymakers from those that reflect individuals' preferences and tastes, to view this indicator alongside other access measures such as health care contacts, distance to facilities, waiting times and supply characteristics, and to examine long-term trends in reporting unmet need and health outcomes.

Key words: Access, health care, unmet need, comparative research, health inequalities

Access to safe and effective health care represents an essential determinant of health. In an effort to reduce inequalities in health, many governments have targeted the health system to improve access to health care and to more equitably distribute health services across the population.

The accessibility of health services depends on a multitude of factors that relate to the health system and also to the patients themselves. On the supply side, the design of statutory health care coverage and public benefits packages, the volume and distribution of human resources and capital, waiting times, referral patterns, booking systems, how individuals are treated within the system (continuity of care), and quality of care can affect accessibility.<sup>1–4</sup> Characteristics of patients, such

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as their age, socioeconomic status, past experiences with health care, their perceptions of the benefits and quality of care, and level of health literacy may also affect their decisions to seek care.<sup>5–7</sup> Characteristics of providers have also been identified as a determinant of access, over and above indicators of clinical need.<sup>8</sup>

There are many tools that are available to monitor the accessibility of health care, and to assess the extent of inequity in access to and use of services. One relatively simple tool is the direct questioning of individuals as to whether there was a time that they needed health care but did not receive it, or whether they had to forgo health care.

#### Measuring unmet need

Self-reported unmet need for health care in the past twelve month period is included in two international surveys: the Survey on Health, Ageing and Retirement in Europe (SHARE) of individuals aged 50 years and older, and the EU Survey of Income and Living Conditions (EU-SILC) of residents of private households aged sixteen years and older. These surveys present opportunities for cross-country comparative research on access to health care. However, the survey questions on unmet need differ,

as do the samples. The phrasing of the question in EU-SILC is as follows: "Was there any time during the last twelve months when, in your opinion, you personally needed a medical examination or treatment for a health problem but you did not receive it?" Follow-up questions include the reasons for unmet need. Among these possible reasons for 'unmet need' are those that are important from a policy perspective, such as the individual could not afford to (costs) and waiting lists, but also those that are less clearly relevant to policymakers, such as that the respondent wanted to wait to see if the problem got better on its own, didn't know any good doctor, fear of doctors, and could not take the time.

In SHARE the question focuses on care forgone either due to costs or unavailability of care. Specifically, the questions are: "During the last twelve months, did you forego any types of care because of the costs you would have to pay?" and "During the last twelve months, did you forego any types of care because they were not available or not easily accessible?" Follow-up questions then focus on the type of care (for example, physician, medicine, dental) that the individual reported to forego.

#### Prevalence of unmet need

Across Europe there is quite a wide range in the proportion of the population who report an unmet need or who report to have foregone care in the past twelve months. For any unmet need, the range is from 1.3% in Denmark to 13% in Sweden (Figure 1); reported foregone care ranges from 2.6% in the Netherlands to 16% in Israel (Figure 2). However, the diverse set of reasons for reporting unmet need (in EU-SILC) necessitates its disaggregation in order to gain meaningful information. For example, as shown in Figure 1, the prevalence of unmet need in 2004 in Sweden was 13% when all reasons are included (and 6% on average across all 15 countries surveyed), but this falls to 1.5% of the population in Sweden (and 2.4% on average across countries) when only costs and availability are included.

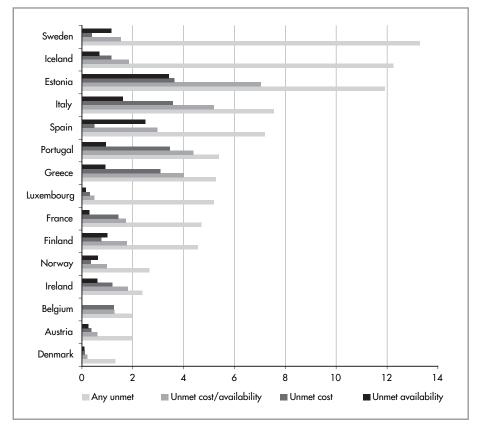
## Who reports unmet need and foregone care?

The few studies of unmet need in Europe have identified a strong association with both income and health whereby people who report unmet need tend to be in worse health and with lower income. For instance, an early study of the EU-SILC found that when reporting any unmet need (i.e. not restricted to the more policy relevant reasons), in all countries it was concentrated among those with lower income, as signaled by a negative concentration index. After adjusting for health (which tends to be worse among those with lower income), the relationship with income persists in all countries except in Luxembourg, Norway and Spain (see Figure 3).9 Analyses of SHARE also show an association between foregone care and income, whereby the authors found a higher likelihood of care foregone among individuals with lower income in all countries studied, 10 although paradoxically the highest income groups in Sweden and to a lesser extent in Greece, showed a higher prevalence than the middle-income groups.

#### Policy implications of unmet need

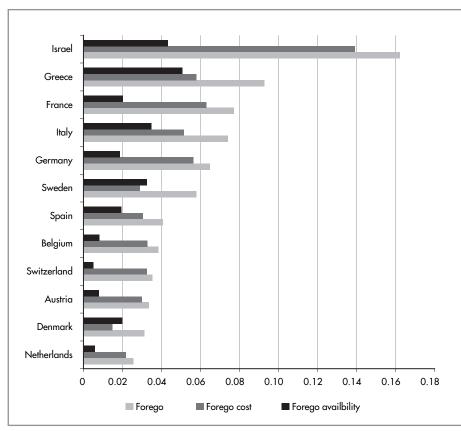
To what extent can analyses of unmet need and forgone care inform the development of policies to reduce inequalities in health and access to health care? With regards to the persistent inequalities in health that are observed between social groups in all countries in the EU, further research is needed to investigate the role that access barriers play in contributing to these inequalities. For instance, longitudinal

Figure 1: Percentage of the population who report any unmet need, unmet need due to either costs or availability, unmet need due to availability, and unmet need due to cost



Source: Survey of Income and Living Conditions, 2004

Figure 2: Self-reported foregone care, foregone care due to costs, and foregone care due to unavailable/inaccessible care



Source: Survey on Health, Ageing and Retirement in Europe, 2004

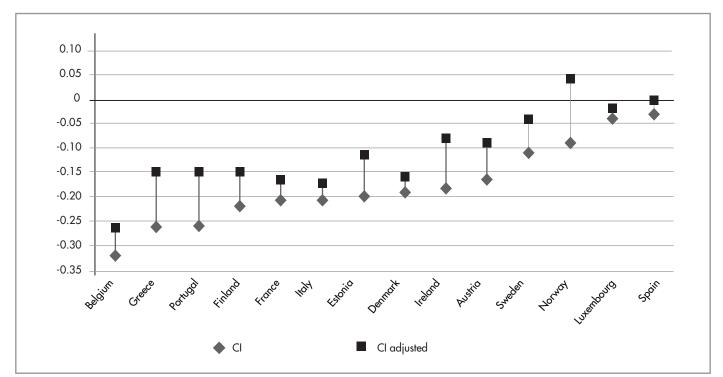


Figure 3: Concentration Indices (CI) of the concentration of unmet need by income, and the CI after adjusting for differences in health status

Source: Adapted from Koolman X, 2007.9

analyses drawing on EU-SILC and SHARE could be undertaken to examine the impact of self-reported access barriers (through reported unmet need and foregone care) on health outcomes and the gradient of social inequalities in health; however, a sufficiently long time period is needed in order to control for the many factors that affect health, such as changes in employment status, and other life events.

Further complicating the reporting of access barriers with self-reported unmet need is the finding from preliminary research from Canada that those who report an unmet need use more than the expected level of health services compared to those who do not report this access problem but have otherwise similar levels of health. This implies that unmet need may in part represent dissatisfaction with the health system; this is consistent with the education-gradient in reported unmet need that has also been found in Canada, whereby higher educated individuals are more likely to report unmet need.

Overall, self-reported unmet need and foregone care provide opportunities to examine inequalities in access to health care; however, disaggregation of unmet need by the stated reasons allow for a more meaningful interpretation of the indicator.

Moreover, long-term analyses would permit analyses that link information on access problems, actual use of health services, and health outcomes in order to better understand the meaning and impact of unmet need on health, and health inequalities.

#### REFERENCES

- 1. Gulliford M et al. What does 'access to health care' mean? *Journal of Health Services Research and Policy* 2002;7(3):186–88.
- 2. Healy J, McKee M (eds). Accessing Health Care: Responding to Diversity. Oxford: Oxford University Press, 2004.
- 3. Starfield B. *Primary Care Concept*, *Cvaluation and Policy*. Oxford: Oxford University Press, 1993.
- 4. Whitehead M. The concepts and principles of equity and health. *Health Promotion International* 1991:6:217–28.
- 5. Aday L, Andersen R. A framework for the study of access to medical care. *Health Services Research* 1974;9:208–20.
- 6. Dixon A et al. Is the British National Health Service equitable? The evidence on socio-economic differences in utilisation. *Journal of Health Services Research and Policy* 2007;12(2):104–09.

- 7. Fernandez J-L et al. Inequalities in the Use of Services Among Older People in England. A Rapid Review of the Literature for Age Concern, PSSRU Discussion Paper DP2610. Canterbury, Kent: PSSRU, 2008.
- 8. Wennberg JE. Dealing with medical practice variations: a proposal for action. *Health Affairs* 1984;3(2):6–32.
- 9. Koolman X. Unmet need for health care in Europe, in Comparative EU statistics on income and living conditions: issues and challenges. Proceedings of the EU-SILC conference. Helsinki: Eurostat, 2007.
- 10. Mielck A et al. Association between access to health care and household income among the elderly in ten western European countries. In: *Tackling health inequalities in Europe: An Integrated Approach*. Rotterdam: Erasmus MC Department of Public Health, 2007:471–82.
- 11. Allin S, Grignon M, Le Grand J. Subjective unmet need and utilization of health care services in Canada: implications for equity. *Social Science and Medicine*, in press.
- 12. Hurley J, Jamal T, Grignon M, Allin S. The Relationship Between Self-reported Unmet Need for Health Care and Health Care Utilization. Report for the Ontario Ministry of Health and Long Term Care. Hamilton: McMaster University, 2008.

# Measuring health inequalities in Europe

Methodological issues in the analysis of survey data

#### Owen O'Donnell

Summary: This article discusses methodological issues confronted in measuring health inequalities in Europe. It is presumed that the aim is to compute measures of inequality that are comparable across European countries and attention is restricted to the analysis of survey data. After identifying the main data sources, three issues are considered in relation to the analysis of these data: (i) improving the comparability of health indicators across individuals and countries; (ii) measurement of inequality suited to the properties of the health indicators; and (iii) extending health inequality analysis to a dynamic and life-cycle perspective. These issues are among the most recent methodological developments in the field.

Keywords: health inequalities, measurement, data, surveys, Europe

#### **Data sources**

The main advantage of survey data over administrative data and mortality records is that they allow health disparities to be examined in relation to a number of dimensions of socioeconomic status. Further, survey data contain indicators of general health and are not restricted to a specific health outcome, such as mortality. There are three main Europe-wide surveys suitable for analysis of health inequalities - the European Community Household Panel (ECHP), its successor the EU Survey of Income and Living Conditions (EU-SILC) and the Survey of Health, Ageing and Retirement in Europe (SHARE). Coverage of these three surveys is summarised in Table 1.

ECHP and SHARE are panels containing

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longitudinal information. EU-SILC is both an annual cross-section and a smaller rotating panel (usually over four years). The health module of EU-SILC constitutes the Minimum European Health Module (MEHM) of the European Health Survey System (EHSS). The latter is an initiative of the DG SANCO and Eurostat to improve the comparability of health

survey data within the EU. In addition to the MEHM, it will conduct periodic European Special Health Interview Surveys and is compiling a database of Health Interview Surveys and Health Examination Surveys. These will be valuable resources for future analysis of health inequalities in Europe.

Table 1: Coverage of Europe-wide surveys containing health data

Survey	Population	Countries	Years
ECHP	Non-institutionalised	Austria <sup>a</sup> , Belgium, Denmark, France, Finland <sup>b</sup> Germany <sup>c</sup> , Greece, Ireland, Italy, Luxembourg <sup>c</sup> , the Netherlands, Portugal, Spain, Sweden <sup>d</sup> , UK <sup>c</sup>	1994–2001
EU-SILC	Non-institutionalised	EU 27 plus Norway <sup>e</sup> , Iceland <sup>e</sup> , Switzerland <sup>e</sup> , Turkey <sup>f</sup>	2004–
SHARE	50+ and partners non-institutionalised in wave 1	Austria, Belgium, Denmark, France, Germany, Greece, Ireland <sup>9</sup> , Israeli, Italy, the Netherlands, Spain, Sweden, Switzerland, Czech Republic <sup>h</sup> and Poland <sup>h</sup>	2004, 2006–07, 2008–09

Notes: a 1995–2001; b 1996–2001; c Data derived from national surveys; d Cross-sectional data from national survey; e joined in 2005; f joined in 2006; g from wave 2 (2006–07); h wave 1 in 2005/6.

For an introduction to the analysis of health inequalities using survey data, see O'Donnell O, Van Doorslaer E, Wagstaff A, Lindelow M. *Analyzing Health Equity Using Household Survey Data: a Guide to Techniques and their Implementation*, Washington DC, World Bank, 2008. http://www.worldbank.org/analyzinghealthequity/

Table 2: Health indicators available from Europe-wide surveys

	Health indicator	ECHP	EU-SILC	SHARE
Most subjective	Self-assessed health (very good,very bad)	Χ	Χ	Χ
	Chronic illness/condition	Χ	Χ	Χ
	Limited activities	Х	Χ	Χ
	Symptoms			Χ
	Depression scale			Χ
	Activities of Daily Living			Χ
	Diagnosed conditions			Χ
1	Body Mass Index (reported)	Χα		Χ
•	Physical measurements (grip strength, walking speed)			Χ
Most objective	Mortality	Χ		Χ

Note: a 1998–2001 only and not for France, Germany, Luxembourg, The Netherlands and the UK.

#### Measurement of health

The health indicators available from the three datasets are listed in Table 2. SHARE is by far the richest survey with respect to information on health but it covers only the population aged 50+ and has smaller samples from each country. The health indicators are ordered in the table approximately from the most to the least subjective. The three most subjective variables that comprise the MEHM are available in all three datasets, a reflection of the ease of fielding them in large scale surveys. The advantage of these subjective indicators is that they provide a global assessment of health in general that is informative for all populations. The obvious disadvantage is that subjectivity limits interpersonal, and possibly inter-country, comparability. While more objective indicators are more readily comparable, their relevance is restricted to certain health conditions and populations. For the foreseeable future, it is likely that survey analyses of health inequalities in the population will continue to rely heavily on subjective measures of general health.

Whether the subjective nature of the health indicators biases the measurement of health inequality depends on whether the reporting of health differs systematically by socioeconomic status. For example, if there are peer effects in health reporting, then one would expect health inequalities to be underestimated. Higher socioeconomic groups may have higher expectations of what constitutes good health and so, for a given condition, rate their health more se-

verely than lower socioeconomic groups.

One method that has been used to purge subjective measures of reporting differences that may bias the measurement of health inequality is to use only the variation in these measures that is predicted from more objective indicators. 1–3 But this effectively throws away any additional information contained in the subjective measures. This is unfortunate since self-assessed health does appear to contain additional information on health. For example, it has repeatedly been proven to predict mortality even conditional on physiological measures of health. 4

A promising alternative is to anchor an individual's assessment of her own health on her rating of a vignette description of a health state that is fixed for all respondents.<sup>5</sup> Since the vignette is fixed, variation in its rating identifies reporting differences and these can then be purged from the individual's subjective assessment of her own health. The vignettes instrument is included in SHARE. Using these data, Bago d'Uva et al find that the reporting of health differs significantly by education. Higher educated older Europeans are generally more likely to rate a given health state negatively.6 Consequently, correcting for these differences generally increases health inequalities, and often makes them apparent where they were previously obscured by differences in reporting styles. This suggests that measured health inequalities by education are often underestimated, and may even go undetected, if no account is taken of reporting differences.

#### Measurement of inequality

The term 'health inequality' may refer to the total variation in health in a population, or to that part of the variation that is systematically related to socioeconomic status. Interest generally centres on the latter, which is widely considered to reflect social injustice. Measurement of socioeconomicrelated health inequality in public health has relied mostly on range measures, such as an odds ratio or relative risk ratio.7 Health economists have proposed the concentration index as an alternative measure, pointing out that this simultaneously captures the socioeconomic dimension of inequality, reflects the experiences of the entire population and is sensitive to changes in the distribution of the population across socioeconomic groups.8

The concentration index is derived from the concentration curve, two hypothetical examples of which are presented in Figure 1. Both curves plot the cumulative proportion of health against the cumulative proportion of the population ranked by socioeconomic status, starting with the lowest socioeconomic position. Curve 1 shows inequality to the advantage of the better-off, while curve 2 shows inequality that favours the worse-off. Note that the concentration curve is sensitive only to relative inequality; equi-proportionate changes in health leave socioeconomic inequality unchanged. The concentration index equals twice the area between the concentration curve and the diagonal. The bounds of this measure are -1 and 1 with a negative (positive) value representing inequality favouring the worseoff (better-off).

Applying the concentration index to the 1996 wave of the ECHP, van Doorslaer and Koolman find significant inequalities in self-assessed health favouring the rich in all 13 EU countries analysed, with inequality being particularly marked in Portugal and (to a lesser extent) in the UK and in Denmark. Inequality is estimated to be much lower in the Netherlands and Germany, and also in Italy, Belgium, Spain Austria and Ireland.<sup>9</sup> There is a positive correlation with income inequality but the relationship is much weaker than was found in an earlier analysis.<sup>10</sup>

The concentration index is often used to measure income-related health inequality but since it is derived from a ranking of the population by socioeconomic status (SES) any ordinal measure of the latter is sufficient. It could be education level, or even an occupation-based measure provided the groups can be ranked from low to high

SES. The measurement properties required of the health variable to which the concentration index is applied have only recently been identified. 11 Since it is a measure of relative inequality, the index is only strictly applicable to variables measured on a ratio scale since the scale of any other variable is identified only up to a positive linear transformation to which the concentration index is not invariant. So, while the index can be applied to life expectancy or BMI, it is not strictly suitable for any of the other variables listed in Table 2. For example, SAH has sometimes been transformed onto a cardinal scale (of utility) before applying the concentration index. 9,12 But use of an alternative (arbi-

trary) location of the scale would lead to a

different index value.

An additional problem is that health variables are often bounded to lie in a certain range. This is true of binary indicators of health outcomes, and also of life expectancy. Then, one could examine either inequality in health (for example, absence of a condition), or in ill-health (for example, presence of a condition), and one would hope that the measure of inequality would be invariant to such a choice. But this is not true of the concentration index. Fortunately, a corrected concentration index that removes these deficiencies has recently been proposed.<sup>11</sup> This amounts to transforming the concentration index by the mean and the bounds of the health variable. The fact that the transformation depends on the mean derives from the fact that without the correction the concentration index will depend on the mean, and this can confound comparisons of health inequality across time or countries. However, this is not always the case. For example, the findings of the examination of income-related inequality in SAH in 13 EU countries referred to above are robust

# Health inequality over the life cycle and time

to the correction.<sup>13</sup>

The measures of health inequality referred to above are static, reflecting the correlation between health and SES at a given age. This provides a very incomplete impression of the extent of health disparities over the life course. It does not tell us whether health declines more rapidly for some groups than others, and if so, by how much. The increasing availability of panel and repeated cross-section data makes it possible to take a life-cycle perspective to the analysis of health inequalities with potentially high pay-offs for understanding of

Figure 1: Two hypothetical concentration curves

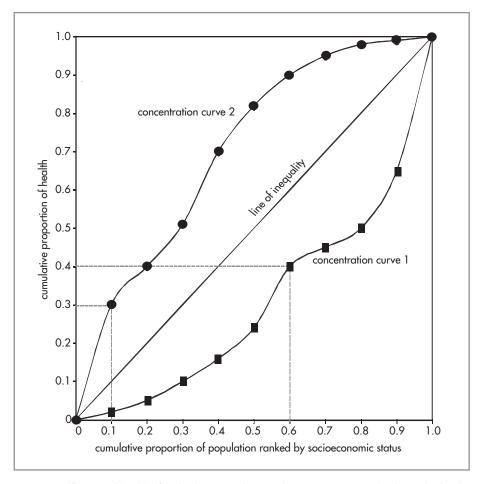
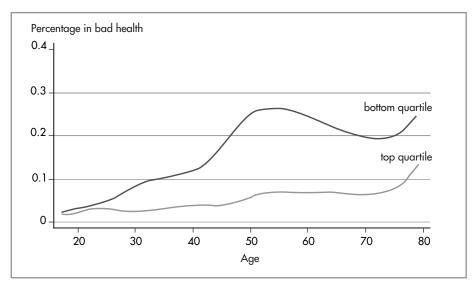


Figure 2: Self-reported health of males by age, split according to income quartile, the Netherlands



the nature and causes of those inequalities.

Van Doorslaer et al<sup>14</sup> show that in the Netherlands the income gradient in health widens until middle age and narrows thereafter (see Figure 2). This pattern is very similar that that found in the US.<sup>15–17</sup> The consistency of the evidence suggests a common mechanism, and there is at least circumstantial support for one operating through work status. In Figure 3 it is ap-

parent that health differences by work status at first rise with age, perhaps as ill-health becomes more of an impediment to work, and then fall as voluntary retirement becomes the dominant reason for stopping work. Restricting attention to employed individuals, there is next to no difference by income in the health-age profile (Figure 4), which is supportive of the hypothesis that the impact of health on work is driving the changing income gradient in health

Figure 3: Self-reported health of males by age, split according to work status, the Netherlands

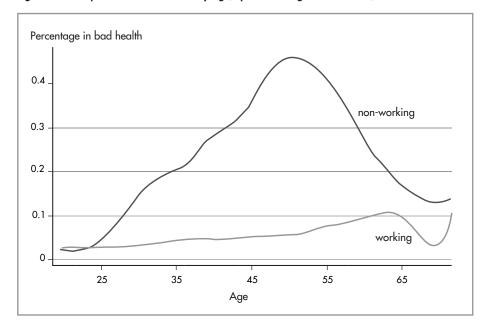


Figure 4: Self-reported health of working males by age, the Netherlands

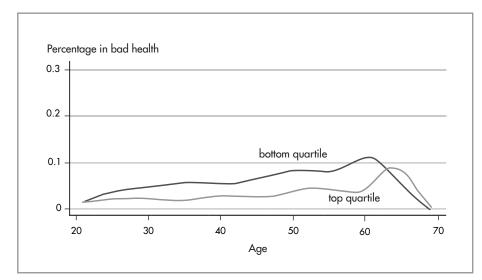
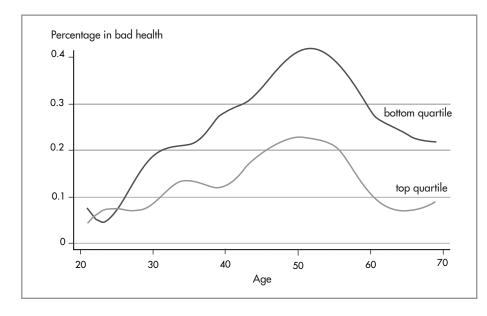


Figure 5: Self-reported health of non-working males by age, the Netherlands



by age. For non-workers (Figure 5), the widening and then narrowing gap with age persists, which is consistent with some impact of income (or a correlated socioeconomic determinant) on health for this group. But it could also be that low income non-workers are more likely to be inactive for health reasons in middle age.

With longitudinal data it is possible to examine not only how the socioeconomic gradient in health varies with age, but also how health and SES co-vary over time. Jones and López-Nicolás<sup>18</sup> show that inequalities in health assessed against longrun indicators of SES will differ from those measured against short-run indicators if individuals who are upwardly mobile in socioeconomic status differ in their initial health from those who are downwardly mobile. Health inequality measured on the basis of a long-run measure of SES will be larger (smaller) than health inequality in the short-run if upwardly (downwardly) mobile individuals are healthier. This approach has been used to compare longrun health inequality in Europe using the ECHP.<sup>19</sup> Another analysis questions the relevance of the index of 'health-related income mobility' to the formation of health policy and proposes an alternative index of 'income-related health mobility' that measures the extent to which changes in health over time are related to initial levels of income.<sup>20</sup>

#### Conclusion

Methodological research on health inequalities is rising to the opportunities and challenges created by increasingly rich survey datasets available at the European level. Instruments are being developed to improve the comparability of health indicators. Inequality measures are being refined to make them better suited to the properties of the health indicators. Analyses are being extended and indices introduced to examine the dynamics of health inequalities – how they change over the life cycle and how health and socioeconomic status move together over time.

#### REFERENCES

- 1. Lindeboom M, van Doorslaer E. Cutpoint shift and index shift in self-reported health. *Journal of Health Economics* 2004;23(6):1083–99.
- 2. Etilé F, Milcent C. Income-related reporting heterogeneity in self-assessed health: evidence from France. *Health Economics* 2006;15(9):965–81.

- 3. Jürges H. True health versus response styles: exploring cross-country differences in self-reported health. *Health Economics* 2007;16(2):163–78.
- 4. Idler E, Benyamini Y. Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behaviour* 1997;38(1):21–37.
- 5. King G et al. Enhancing the validity and cross-cultural comparability of measurement in survey research. *American Political Science Review* 2004;98(1):184–91.
- 6. Bago d'Uva T, O'Donnell O, van Doorslaer E. Differential health reporting by education level and its impact on the measurement of health inequalities among older Europeans. *International Journal of Epidemiology* 2008;37:1375–83.
- 7. Wagstaff A, van Doorslaer E. Equity in health care finance and delivery. In: Culyer AJ, Newhouse JP (eds). *Handbook of Health Economics, Volume 1*. Amsterdam: North Holland, 2002.
- 8. Wagstaff A, Paci P, van Doorslaer E. On the measurement of inequalities in health. *Social Science and Medicine* 1991;33(5):545–57.
- 9. van Doorslaer E, Koolman X. Explaining the differences in income-related health inequalities across European countries. *Health Economics* 2004;13(7):609–28.
- 10. Van Doorslaer E, Wagstaff A, Bleichrodt H et al. Income-related inequalities in health: some international comparisons. *Journal of Health Economics* 1997;16:93–112.
- 11. Erreygers G. Correcting the concentration index. *Journal of Health Economics* 2009;28(2):504–15.
- 12. van Doorslaer E, Jones AM. Inequalities in self-reported health: validation of a new approach to measurement. *Journal of Health Economics* 2003;22:61–87.
- 13. van Doorslaer E, van Ourti T. Measuring inequality and inequity in health and health care. In: Glied S, Smith PC (eds). Oxford Handbook on Health Economics. Oxford: Oxford University Press, forthcoming.
- 14. van Doorslaer E, van Kippersluis H, O'Donnell O, van Ourti T. Socioeconomic Differences in Health over the Life-cycle: Evidence and Explanations. Tilburg University, Netspar Panel, 2009.
- 15. Case A, Deaton A. Broken down by work and sex: how our health declines. In: Wise DA (ed). *Analyses in the Economics of Aging*. Chicago: Chicago University Press, 2005.
- 16. Smith J. Unraveling the SES-health

- connection. In: Aging, Health, and Public Policy: Demographic and Economic Perspectives, a Supplement to Population and Development Review 2005;30:108–32.
- 17. Smith JP. The impact of socioeconomic status on health over the life course, *Journal of Human Resources* 2007;42(4):739–64.
- 18. Jones AM, López-Nicolás A. Measurement and explanation of socioeconomic inequality in health with longitudinal data. *Health Economics* 2004;13:1015–30.
- 19. Hernandez-Quevado C at al. Socioeconomic inequalities in health: a comparative longitudinal analysis using the European Community Household Panel. *Social Science and Medicine* 2006;63:1246–61.
- 20. Allanson P, Gerdtham U, Petrie D. Longitudinal analysis of income-related health inequality' Dundee: Department of Economics, University of Dundee, *Dundee Discussion Papers in Economics no. 214*, 2008.

# **CEE** countries

### Data availability and methodological issues

#### Martin Bobak

Summary: The societal transformation in Central and Eastern Europe (CEE) and former Soviet Union (FSU) was not carried out uniformly across the region. Some countries fared better, some were less successful. However, if there is one experience common to all former communist countries, it the emergence, or increase, in income inequalities and, subsequently, in social inequalities in health after 1989. The public health importance of this phenomenon is enormous, but the investigation of social inequalities in health in CEE/FSU has been often slow and unsystematic. The reasons for the persisting incompleteness of our understanding of health inequalities in CEE/FSU are complex, as described in this article.

Keywords: Former Soviet Union, Central and Eastern Europe, health inequalities, data

The societal transformation in Central and Eastern Europe (CEE) and former Soviet Union (FSU) was not carried out uniformly across the region. Some countries fared better, some were less successful. However, if there is one experience common to all former communist countries, is the emergence, or increase, in income inequalities and, subsequently, in social inequalities in health after 1989. The increase in educational differentials in mortality was first reported from Russia by Vladimir Shkolnikov, who used unlinked data from a mini-census and vital regis-

Martin Bobak is Professor of Epidemiology, University College London. Email: m.bobak@ucl.ac.uk tration. As more data became available, a similar pattern emerged from all countries where such studies were conducted, and affected both fatal and non-fatal outcomes, and appeared in both individual-based and ecological data.

While the increase in social inequalities in health after 1989 is undisputed, there are uncertainties about the speed and magnitude of such changes. The public health importance of this phenomenon is enormous, but the investigation of social inequalities in health in CEE/FSU has been often slow and unsystematic. The reasons for the persisting incompleteness of our understanding of health inequalities in CEE/FSU are complex, with ten key factors described in more detail below.

#### 1. Measurement of socioeconomic status

In western countries, socioeconomic status (SES) has been included in routinely collected data for a long time. SES was most commonly measured by social class (which largely reflects occupation, for example, England and Wales), income (for example, United States), and education (most of Western Europe and Northern America).

In CEE/FSU before 1989, there were no explicit intentions to use routinely collected data to study social distributions of health-related phenomena, because the official position was that social differences did not exist. Before 1989, many routinely collected data did contain education, but it was difficult or impossible to obtain meaningful classification by occupational status (the occupational classifications typically grouped occupations by the sector of economy, rather than by any hierarchical system). Data on income were typically not used or reported. After 1989, modern occupational classifications emerged, and data on income became available, but they have rarely been used in studies of health based on routinely collected data. Other factors important for health, such as ethnicity, have been measured inconsistently. I am not aware of systematic efforts in CEE/FSU to conceptualise different dimensions of socioeconomic status and to propose measurement suitable for population-based studies of social inequalities in health.

# 2. Lack of information on socioeconomic status in routinely collected data.

All countries in the region routinely collect vital registration data, such as deaths and births. In most countries, the forms to report and register these events contain several socio-demographic variables, the most common of which are education and marital status. However, data on other socioeconomic characteristics of these events are typically not collected.

To calculate rates of deaths (and of other outcomes), data on the denominators are needed. These are typically taken from census data. While census data often contain other social, economic and demographic variables, data on events do not contain these other socioeconomic characteristics – rates are typically available only about education (and marital status).

#### 3. Lack of linked databases

Most studies of mortality use data from death registration for the numerator and, separately, data from a census for the denominator. There is a problem, however, with such data, because there can be a difference between self-reported information in the census and the proxy-reported information on death certificates. This can bias the results, although the extent of such bias is debatable and probably varies by country. A study in Lithuania, comparing results based on linked and unlinked data, found that unlinked data substantially overestimate mortality in the underprivileged groups and underestimate mortality in the privileged groups, therefore leading to overestimation of social inequalities in health. Moreover, the bias was found to vary by the cause of death.

#### 4. Routine data on non-fatal outcomes

Health status is more than mortality. There are sources of data on non-fatal outcome, depending on country, such as cancer registers (cancer incidence, case-fatality), birth registers (data on birth weight and gestational age), congenital malformations, diabetes etc. Most countries also collect and maintain large national data on health care utilisation (for example, health insurance databases) which often contain information that would be valuable for research. However, the usefulness of these data is limited by (a) varying amount of SE indicators in these data, (b) varying completeness of these data, and (c) limited access of researchers to these data.

# 5. Limited amount and/or scope of national health surveys

In many western countries, data on nonfatal outcomes and risk factors come from population-based and, if possible, nationally representative samples (e.g. the US National Health and Nutrition Examination Survey, Health Survey for England). However, such studies do not exist in many countries in CEE/FSU, and if they do exist, their usefulness if often limited by their small size, low response rates, questionable representativeness, and reliance on self-reported data and lack of biological measurements (for example, blood pressure, plasma lipids etc). Importantly, many sufficiently large studies in CEE/FSU do not follow up the participants. This is unfortunate, because longitudinal follow up, where baseline data exist, costs only a fraction of the baseline survey costs, and it provides invaluable alternative to unlinked analyses of routinely collected data.

## 6. Potential problems with diagnosis and/or causes of death

As in other populations, many studies in

CEE/FSU, particularly those using routinely collected data, rely on routine procedures to establish and code the diagnosis. This may result in problems, for example, with comparability of diagnoses over time and/or between countries. For example, applying standard diagnostic protocols to mental health problems is notoriously difficult. Depressive symptoms based on different questionnaires, and therefore often indicating general psychological distress, are often used as a measure of clinical depression. Apart from the fact that such studies do not measure the 'real' disease, they are hardly comparable over time, between populations and, most importantly, they may not be comparable across different socioeconomic groups. Another example relates to the diagnosis of myocardial infarction (MI). Most western countries currently include the increase in serum concentrations of troponin, a biomarker of myocardial ischaemia, as a sensitive criterion for MI. In many countries in CEE and particularly in the FSU, however, troponin measurement is simply too expensive. Since the rates of MI based on troponin are higher than rates based on older biomarkers, data on MI rates across countries are often not comparable. Similarly, if the availability of troponin differs by SES, comparing rates of MI by SES is biased.

#### 7. Research infrastructure and expertise

Prior to 1990, there were very few studies of social differentials in health in CEE/FSU. This has changed after the fall of communism but this area of research remains on the periphery of both biomedical and sociological research. Studies of health inequalities are most often conducted by epidemiologists (or other disciplines related to public health). However, given the relatively small research base, there is a shortage of expertise. For example, there is now a great interest in life-course effects of socioeconomic factors on health; this type of research, however, often requires advanced statistical techniques to deal with repeated measurements (for example, generalised linear models). Similarly, research into health inequalities often explores the hierarchy of factors, for example, upstream variables ('causes of causes') and downstream variables (mediators), and many studies of social capital require multi-level modelling. There are, however, few medical statisticians trained in appropriate techniques.

# 8. Dependence on international collaborations and funding

For a number of reasons, much of the good quality research on health inequalities in CEE/FSU comes from international collaborations which are typically funded by western partners. This is not ideal as these projects usually have a limited duration and they are normally not primarily concerned with addressing public health issues of national importance.

In addition, while much of the research on health inequalities in CEE/FSU is conducted in the frame of international collaborations, there is sometimes distrust from national bodies towards western researchers and westerner-lead research. Results from such project are often not reported nationally and are often ignored by national and local policy makers.

# 9. Bureaucracy and data protection legislations

As mentioned above, data suitable for investigating health inequalities exist in all countries in CEE/FSU. In many countries, however, the use of data, where an individual can be identified, is virtually impossible, due partly to bureaucratic difficulties and partly to data protection legislation. In Poland, for example, according to my information, even established cohort studies sometimes cannot access mortality registers to link participants' characteristics with the national mortality register. Similarly, according to my information, it has been impossible to obtain permissions to link participants' characteristics with their morbidity and health care usage data in national health insurance schemes in the Czech Republic and Poland.

#### 10. Lack of national funding

As with other areas of research in CEE/FSU, research into social inequalities in health is chronically and seriously underfunded. This not only limits the conduct of current research, but it also prevents establishment and development of stable research groups, build up of research infrastructure, and recruitment and training of young researchers.

#### Conclusions

Compared to the situation before 1989, there has been an enormous improvement in the knowledge of social differentials in health in CEE/FSU. There is now at least some information available for each country of the region, and in many coun-

tries there are active research programmes into social determinants of health. However, compared to most (but not all) western European countries, there are still large gaps in mapping the extent of the problem and particularly in understanding the mechanisms of how social inequalities in health develop and, therefore, what policy measures could be taken. This is partly due to technical issues related to data availability and data analysis.

However, the last three issues listed above are also symptomatic of the fact that, in many countries of CEE/FSU, health inequalities are not currently seen as a priority or as an important public health issue, both by policy makers and by the biomedical research mainstream. Until the perception of the importance of the subject changes, the quantity and particularly the quality of research will improve only slowly.

# Tackling health inequalities in the Netherlands

#### Mariël Droomers

Summary: This article summarises initiatives and policies to tackle health inequalities in the Netherlands since the late 1980s. Political concerns about health inequalities have again become visible following the change of government in 2007. The new plan envisions integrated actions focussing on prevention and decentralised implementation. This however is very much a work in progress and leaves room for improvement.

Key words: health inequalities, health policy, prevention, the Netherlands

#### Historical development

Policies on socioeconomic differences in health in the Netherlands developed from a broad concern about socially and economically marginalised groups in the 1980s to specific concern about socioeconomic differences in the 1990s. During the latter decade the Dutch government pursued a research-based approach to tackle socioeconomic inequalities in health. This resulted in the development of several effective interventions. Subsequently, the programme committee overseeing the research programme rec-

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ommended a combination of the implementation of promising interventions with continued evaluation efforts.<sup>2</sup>

government advisory committee developed a comprehensive and integrated strategy intended to reduce socioeconomic health inequalities, including a number of quantitative targets. The recommendations spanned the entire range between 'upstream' measures targeting socioeconomic disadvantage and 'downstream' measures targeting accessibility and quality of health care services.3-5 In response the government claimed that it was time for policy and action. The cabinet adopted a policy goal to increase the healthy life expectancy of the lowest socioeconomic group by three years by 2020.6

However, at the beginning of this millennium, government policy emphasised

individual responsibility: individuals were encourag-ed to take responsibility for their own lives. Health inequalities slipped off the agenda of the Dutch government, despite the fact that the Netherlands Court of Audit, as well as the National Health Inspectorate, requested that the government state more clearly what actions it would take to reduce health inequalities.<sup>7–9</sup> In response the Minister of Health shifted responsibility for implementing interventions to tackle health inequalities to the large cities as part of the Urban Policy Framework. These cities for their part chose to focus on excess weight in youngsters.

# 2007: Health inequalities return to the agenda

The change of government in 2007 revived political concerns about health inequalities in the Netherlands. The present Coalition Agreement states that the cabinet should employ effective prevention policies to bring about smaller discrepancies in life expectancy between different socioeconomic groups. After all, in many respects preventable ill health also represents a societal loss.<sup>10</sup> Now the Dutch cabinet is seeking to develop a national policy plan to improve the health of the lower socioeconomic groups. The government justifies its involvement in terms of the promotion of rational lifestyle choices, the prevention of social harm caused by unhealthy environments and lifestyles, and the advancement of social justice. The government stresses that individual freedom in lifestyle choice will not be affected.

A new policy plan for dealing with health inequalities related to socioeconomic background, entitled 'Towards an able-bodied society', adheres to the principles of integrated policy, prevention, and decentralisation. In the plan, the cabinet stresses that many aspects of the Coalition Agreement actually form part of the integrated approach essential for tackling inequalities. These initiatives are in different stages of development, so work to tackle the health disparities in the Netherlands is very much a 'work in progress'.

Although the social or upstream determinants of health inequalities are acknowledged, the policy plan lacks a conceptual framework that clarifies and quantifies the inter-sectoral character of health inequalities. Such a conceptual framework could serve as a common ground for all parties, justify the involvement of other sectors, and stimulate

joint action. The framework would perpetuate a truly integrated approach to tackling the social determinants of health inequalities.

Quantitative targets have not yet been formulated. The cabinet has postponed the formulation of concrete objectives until further analyses of the latest figures on socioeconomic differences in life expectancy and the publication of the recommendations of a number of advisory reports now in preparation. This fear to set targets might, however, reflect a fear to articulate political ambitions instead. The omission of targets to tackle health inequalities furthermore prevents the merger of this health policy with broader government targets that would increase the effectiveness of such a policy tremendously. For example, the health inequalities target that was adopted by the government in 2001 aimed to increase the life expectancy of lower socioeconomic groups. This health goal can, however, only be achieved by strong inter-sectoral policy and action, backed up by specific targets to achieve the necessary change in other fields.

#### An integrated approach

The Dutch cabinet intends to ensure a coordinated approach, linking the policy components of various Ministries, since most of the conditions for good health lie outside the domain of health care itself. The cabinet actively seeks collaboration between the health sector and other sectors. The policy plan though has only summarised what measures the cabinet has already taken to contribute to the reduction of socioeconomic (health) disparities and disregards potential counterproductive policies and programmes.

Stated policy initiatives can be placed in one of two camps. In the first, the policy is intended to provide a good start to life for everyone, helping to prepare most young people to face their futures. They should be resilient, motivated and have learnt some health skills, thanks to lifestyle education and participation in sport. Despite these efforts, not everyone gets this good, healthy start. A second tranche of policy is therefore directed towards the reduction of the detrimental effects of poor socioeconomic circumstances, such as prevention, spatial planning or environmental policy. This generic policy addresses the total population, if necessary with adaptations to ensure that all population sub-groups are reached.

Prevention lies at the heart of the cabinet's plans; there will be a greater number of preventive measures to reduce the demand for care in the future. In achieving this, the cabinet prefers methods, which as far as possible appeal to the individual's own sense of responsibility. The cabinet wants to encourage all individuals to take responsibility for having a healthy lifestyle.

It also wishes to promote cooperation between public health care, curative health care services and home care services, thereby creating a logical and effective chain for both selective and indicated prevention efforts. The Ministry of Health, Welfare and Sports intends to incorporate a number of preventive interventions (such as smoking-cessation or self-management) into standard health insurance coverage.

The plan states that the reduction of health inequalities is by no means the concern of local or national government alone. The efforts of other parties with an interest in health are indispensable. In 2009, the cabinet has been given advice by the Dutch Council for Public Health and Health Care, the Dutch Education Council, the Dutch Advisory Council for the Public Administration, and the Social and Economic Council of the Netherlands, on how to encourage municipalities, schools and companies to promote the health of their members.

#### Targeted initiatives

Inhabitants of deprived districts generally experience poorer health than those living elsewhere in the Netherlands. In mid 2008 the Minister of Housing, Communities and Integration launched a district approach to tackle problems in housing, employment, education, safety and integration in the forty most deprived districts in the Netherlands. The cabinet wants to transform these areas into districts where individuals have more opportunities and feel safe, with a sound infrastructure and sufficient services and amenities, such as shops and sports facilities.

In half of these districts, healthy neighbourhood experiments will try to improve the health of residents by means of an integrated approach focusing on healthy people, living conditions and the provision of coherent primary health care teamed up with prevention. The cabinet sees these experiments as tests for the parties involved to improve the health of residents, using an integrated approach under municipal direction. The health effects of the district approach, as well as the exper-

iments, will be monitored and evaluated. This Upstream Policy Research on Health and Behaviour Across Disadvantaged Neighbourhoods (URBAN40) is being carried out by the University of Amsterdam, the University of Maastricht and the National Institute of Public Health and the Environment.

Plans and interventions to reduce health inequalities will also apply to migrant groups having a low socioeconomic status. The plan acknowledges that the health problems of migrants may also have different causes which need to be addressed. The problem is that before effective interventions can be implemented more knowledge on the determinants of health and care utilisation by migrants is needed.

#### Conclusion

Health inequalities are back on the Dutch policy agenda. The recent government-wide policy plan intends to 'deal with health inequalities related to socio-economic background' by means of integrated action, prevention and decentralised implementation. The current plan is however very much a work in progress and leaves room for improvement. Clear (ambitious) targets would underline the intention to tackle health inequalities and serve as a guide for action to be developed. Although an integrated approach is advocated, the plan is inclined towards the promotion of healthy lifestyles.

Dealing with health inequalities, however, requires a coordinated integrated approach, also focussing on the social determinants of health inequalities. The current plan does not suggest any new measures, but relies on actions that were not really intended to deal with health inequalities in the first place. The persistent health inequalities in the Netherland call for a real strategy with proposed actions and interventions, backed up by a specific budget. There is a chance that these issues will be addressed by the cabinet, which as of July 2009 was progressing with work to deal with health inequalities and intending to publish a follow up to the current policy plan.

#### References

1. Droomers M, den Broeder L, Burdorf L, Mackenbach JP. The Netherlands. In: Hogstedt C, Moberg H, Lundgren B, Backhans M (eds.) *Health for All? A Critical Analysis of Public Health Policies in Eight European Countries*. Östersund: Swedish National

Institute of Public Health, 2008.

- 2. Stronks K, Hulshof J (eds). De kloof verkleinen. Theorie en praktijk van de strijd tegen sociaal-economische gezondheidsverschillen. [Diminishing the gap. Theory and Practice of the Battle Against Socioeconomic Differences in Health]. Assen: Koninklijke Van Gorcum BV, 2001.
- 3. Mackenbach JP, Stronks K. Strategy for tackling health inequalities in the Netherlands. *British Medical Journal* 2002;325:1029–32.
- 4. Mackenbach JP, Stronks K. The development of a strategy for tackling health inequalities in the Netherlands. *International Journal for Equity in Health* 2004;3:11–17.
- 5. 2nd Programme Committee on Socioeconomic Health Differences. [Sociaaleconomische gezondheidsverschilen verkleinen. Eindrapportage en beleidsaanbevelingen] To Reduce Socioeconomic Health Differences. Final Report and Policy Recommendations. The Hague: ZON, 2001.
- 6. Government stand on the final report and policy recommendations of the second Programme Committee on Socioeconomic Health Differences 'To reduce socioeconomic health differences and the Public

- Health Forecast Study Health in the cities'. The Hague: National Institute of Public Health and the Environment, 2001.
- 7. Netherlands Court of Audit. *Preventieve gezondheidszorg.* [Preventive Health Care]. The Hague: SDU, 2003, Report to Parliament, 2003–2004, 29300: 1–2.
- 8. Netherlands Court of Audit. *Preventieve gezondheidszorg.* [Preventive Health Care]. The Hague: SDU, 2006, Report to the Parliament, 2005–2006, 29300: 6.
- 9. National Health Inspectorate. Openbare gezondheidszorg; Hoe houden we het volk gezond? [Public Health Care; How do we Keep the People Healthy?] The Hague: National Health Inspectorate, 2005.
- 10. Coalition agreement. Working Together, Living Together. Coalition agreement between the Dutch House of Representatives from the Christian Democrats, Dutch Labour Party and ChristianUnion. The Hague: 2007. Available at http://www.government.nl/dsc?c=getobject&s=obj&objectid=94058
- 11. Government of the Netherlands. Towards an Able-bodied Society. A Policy Plan for Dealing with Health Inequalities Related to Socioeconomic Background. The Hague: 2008.

New Health Systems in Transition publications from the European Observatory on Health Systems and Policies

#### **Ireland: Health System Review**

October 2009

David McDaid, Miriam Wiley, Anna Maresso and Elias Mossialos The Irish health system can be characterised as having been in a process of constant review and implementation of staged initiatives since the late 1990s.

These reforms have revolved around the abolition of the former Health Boards and the creation of a single national body, the Health Service Executive. The aim is to make the system more primary and community care driven, backed up by improved access to specialist, acute and long-stay services.

Equity is a key concern. Access to the primary care system tends to be pro-poor, while in contrast, in the secondary care sector, those who can afford private health insurance can avoid waiting for treatment.

The implementation of promised reforms will be a key challenge, given the substantial economic downturn that the country is now experiencing.

Available at http://www.euro.who.int/Document/E92928.pdf

# What is the role of the health care system in reducing health inequalities in France?

#### Dominique Polton

Summary: As in other countries, there is evidence of substantial and increasing health inequalities in France, but thus far there has been no comprehensive policy aimed specifically at reducing them. Nonetheless, several policy developments have substantially improved financial accessibility to health care for the poor: universal coverage, exemption from co-payments, and subsidies to buy supplementary insurance. The strengthening of primary care and the implementation of programmes to reduce specific diseases and risk factors can also be viewed as steps in the right direction, although their impact has not been assessed in this respect. Concerns about health inequalities have also been growing in recent months, with several new reports commissioned by the Ministry of Health approaching the issue from different angles, including a newly released cancer plan. Further initiatives may also be expected following the forthcoming publication of a report of the High Committee of Public Health commissioned by the Government.

Keywords: health care, health inequalities, France, health policy

#### Extent of health inequalities in France

As in other countries, there is evidence of substantial and increasing health inequalities in France. For instance, within fifteen years from 1984 to 1999 although blue collar workers gained 3.5 years in life expectancy at age 35, white collar workers gained 4.5 years. Overall therefore the life expectancy gap between the two categories increased from six to seven years (see Table 1).<sup>1</sup>

Initial attempts at international comparisons covering data collected early in the 1990s indicated that France, along with Finland, was an outlier in terms of differences in standardised mortality rates, but was at the average when health status was measured using self-assessment.<sup>2</sup> This somewhat ambiguous result remains consistent with recent evidence confirmed by more recent evidence from the Eurothine project.<sup>3</sup>

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Table 1: Social inequalities in health in France

Occupational class	Life expectancy at 35			
	1976-1984	1983-1991	1991–1999	
High officials, professionals	41.50	43.50	46.00	
Intermediate non-manual	40.50	41.50	43.00	
Agricultural workers	40.50	41.50	43.50	
Independent workers	39.50	41.00	43.00	
Lower officials	37.00	38.50	40.00	
Manual workers	35.50	37.50	39.00	
Non-active	27.50	27.50	28.50	
Total	38.00	39.00	41.00	

Source: Monteil C, Robert-Bobée I, 2005. 1

#### Growing concern

Health inequalities are a growing concern in France, but thus far there has been no global strategy and no comprehensive policy specifically aimed at reducing them. While academic research and empirical evidence continues to mount, these data have tended to remain solely in the academic domain. They have not been translated into clear recommendations to policy makers in terms of the strategy to reduce health inequalities.

Moreover, in France as in other countries, most of the research in the fields of social

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epidemiology, public health or health economics is of the view that health care plays a minor role in the shaping of health inequalities. The community of public health scientists shares the view that health inequalities are rooted in global social inequalities, adverse living or working conditions and the life course accumulation of disadvantage. These adverse factors lead to greater exposure to material, psychosocial and behavioural risk factors in lower socioeconomic groups. As a result, there is little scientific debate on the contribution that the health care system could make to address this issue.

Several official reports on the issue of health inequalities have been published by a national advisory body, the High Committee on Public Health (*Haut Comité de la Santé Publique*), in the last fifteen years. In 1994, this newly created committee proposed the reduction of social inequalities in health as one of four major mediumterm objectives. There were also two intermediate objectives: first to improve living conditions and promote the social inclusion of very disadvantaged individuals, and second to improve their access to medical and social care.

The same committee published a report on the impact of poverty and precarious living conditions on health in 1998. The recommendations mainly focused on upstream policies to enhance social cohesion and reduce inequality in income, education or occupation but included also the extension of health insurance to achieve universality (which was not the case at that time), with easy access (to avoid non take up), a higher rate of reimbursement for the poorest part of the population (exemption of copayments), and the organisation of the health care system with primary care at its cornerstone. The promotion of local initiatives and specific policies targeted at sub-populations, such as prisoners, pregnant women in deprived areas and children at risk in school-based settings were also advocated. Some of these recommendations were subsequently implemented.

This concern about health inequalities has again been growing in recent months and several new reports commissioned by the Ministry of Health have investigated this issue from different angles, such as looking at geographical inequalities in prevention<sup>4</sup> or inequalities in cancer.<sup>5</sup> The latter has already been translated into the cancer plan for 2009–2013. A new report advocating a broad and global strategy to tackle health

inequalities should also be published imminently by the High Committee on Public Health.

# Implementation of policies related to the issue of health inequalities

In the last decade, policies directly targeting health inequalities have focused on the poorest part of the population living in the most precarious conditions (i.e. the gradient dimension of the health inequalities issue is not considered globally as a target of policies), and have been directed mainly at facilitating access to health care.

However, other policies targeting the organisation of the delivery of care or specific risk factors or diseases are worthy of mention, since they may indirectly impact on health inequalities. In addition, some of these programmes now include a specific goal on health inequalities, as in the case of the cancer plan.

Financial accessibility to health care for the poor: free supplementary coverage and subsidies to buy health insurance

Universal coverage for all legal residents was achieved in 2000. Previously the basis of entitlement was employment status, but since January 2000, as part of the Universal Health Coverage Act (CMU), the small proportion of the population who previously had been excluded (and thus covered through social assistance provided by local communities) became entitled to public coverage on the basis of legal residence in France.

In addition to universal public health insurance by 2000 85% of the population had voluntary additional coverage. These voluntary health insurance (VHI) policies can be purchased through employers or on an individual basis and cover user charges that are not reimbursed by the public health insurance system (co-insurance, co-payments, difference between actual prices charged and official tariffs for dental prostheses and glasses). In total, VHI accounts for 13% of current expenditure on health care.

The CMU Act also addressed these copayments, by implementing free, means tested complementary coverage, covering an additional 7% (approximately four million) of the population. In practice, this means that the low income population is exempted from co-payments. The maximum income for entitlement was set at about €600 per month, adjusted for household composition.

In 2004 the Act on Health Insurance Reform created an additional benefit: households whose income exceeded the ceiling by less than 20% became entitled to a subsidy to buy supplementary health insurance. The amount of the subsidy varies with age ranging from €100 for those individuals aged under twenty-five to €400 for individuals aged sixty or more. It is estimated that a further two million people could benefit from this scheme although the actual uptake rate has been much lower: in 2008 only 600,000 got the voucher while 450,000 effectively bought insurance.

#### Assessment of these policies

There is no doubt that the CMU has indeed improved financial accessibility to health care. Recent studies comparing CMU beneficiaries and the rest of the population for some specific conditions (for instance cardiovascular disease) show no difference in health care utilisation and no difference in quality of care (measured by the respect of clinical guidelines).

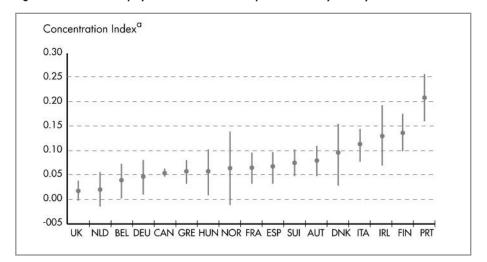
However if one considers the socio-economic gradient more globally, there is evidence of pro-rich inequity in access to specialist services. Even if this is true in all countries regardless of the organisation of the health care system, the differences are higher in France than in some other comparable countries (albeit less high for dental services) (See Figure 1).<sup>6</sup> Moreover, there is a growing concern about the reluctance of some health care professionals to accept CMU beneficiaries.

It is not clear why the voucher system for those above the CMU income threshold has not achieved a high level of take up. It may be the case that the level of subsidy offered may be insufficient to attract individuals to join the scheme. However, surveys show that a significant portion of this population already have a supplemental insurance contract and could benefit from the subsidy at no cost.

The organisation of the health care system and the role of general practitioners

The French system has always been characterised by very easy access to health care (GP or specialists), total freedom of choice, and thus far no real rationing. The price paid for this is that it is an expensive system, probably less efficient than it could be, (albeit global comparisons are difficult: recent work for instance still puts France in first position when it comes to success in tackling avoidable mortality<sup>7</sup>)

Figure 1: Horizontal Inequity indices for number of specialist visits by country



Note: the concentration index of need-standardised use measures the degree of horizontal inequity. When it equals zero, it indicates equity; when it is positive, it indicates pro-rich inequity; and when it is negative, it indicates pro-poor inequity.

Source: Van Doorslaer E et al, 2004.6

and paying less attention to inequalities in access or health care use.

Nonetheless, compared to many other countries, the French system is weakly organised: until recently there was no need to be registered with a GP, while direct access to office-based specialists without referral was permitted. The 2004 Act on Health Insurance Reform implemented a new system of 'soft' voluntary gatekeeping: registration is non-compulsory but encouraged through financial incentives; the referring physician may be any physician (GP or specialist); direct access to specialists is still possible (but more costly); and the referring doctor is seen more as a record keeper rather than a gatekeeper.

90% of the eligible population has now registered, with 99% registering with a GP. This reform strengthens primary care and gives GPs explicit responsibility for the health of a population and for the global process of care. It is a foundation stone on which to build tools and incentives, including feedback of information on prescribing patterns, and the establishment of individual targets for screening, immunisation and efficient drug prescription. 2009 has seen the linking of financial incentives to the quality and efficiency of the process of care. It is still too soon to assess the impact of this reform. However, one result is the fact that differences in the quality of care (for the follow up of chronic patients or for screening) are now reported. Thus there is much more visibility allowing for public debate.

Public health plans and targeted interventions towards specific health problems

Some risk factors are more prevalent among lower socio-economic groups and thus contribute to inequalities in health outcomes. Although it does not guarantee a reduction of health inequalities, tackling these risk factors may improve the situation for the socioeconomic groups who are at most risk.

In this area quantitative targets have been formulated by the 2004 Public Health Act and different public health programmes have been implemented. Progress has been made for some indicators (tobbaco use, average alcohol consumption) but in other areas the situation has not improved or in some cases even deteriorated (excessive alcohol consumption, obesity).

The recently published cancer plan for the period 2009–2013 explicitly includes the reduction of inequalities in cancer screening as one of its major targets.<sup>8</sup> It is relevant, since in France cancer mortality is a driving force in the widening of health inequalities.

#### Conclusion

Health inequalities are a growing concern in France, but thus far there has been no comprehensive policy aimed specifically at reducing them. However, several policy developments have substantially improved financial accessibility to health care for the poor: universal coverage, exemption from co-payments, and subsidies to buy supplementary insurance. The strengthening of

primary care and the implementation of programmes to reduce specific diseases and risk factors can also be viewed as steps in the right direction, although their impact has not been assessed in this respect.

Thus the issue of health inequalities appears to be gaining importance on the policy agenda at this time, as illustrated by the newly released cancer plan. Further initiatives may be taken following the forthcoming publication of a report of the High Committee of Public Health commissioned by the Government.

#### References

- 1. Monteil C, Robert-Bobée I. Les différences sociales de mortalité: en augmentation chez les hommes, stables chez les femmes. [Societal differences in mortality: increasing in men, stable in women] *INSEE Première* 2005;1025:1–4. Available at www.insee.fr/fr/ffc/docs\_ffc/ip1025.pdf
- 2. Mackenbach JP, Kunst AE, Cavelaars AE, Groenhof F, Geurts JJ. Socioeconomic nequalities in morbidity and mortality in Western Europe. The EU Working Group on Socioeconomics Inequalities in Health. *The Lancet* 1997;349:1655–59.
- 3. Mackenbach JP, Stirbu I, Roskam AJ et al. Socio-economic inequalities in health in 22 European Countries. *New England Journal of Medicine* 2008;358:2468–81.
- 4. Flajolet A. *Peut-on réduire les disparités de santé?* [Can we reduce health inequalities?]. Paris: Prime Minister's Office, May 2008. Available at http://lesrapports.ladocumentationfrancaise.fr/BRP/0840002 57/0000.pdf
- 5. Grunfeld JP. Rapport au Président de la République. Recommandations pour le Plan Cancer 2009–2013. [Report to the President of the Republic. Recommendations for the Cancer Plan 2009–2013. Paris: 2009. Available at http://tinyurl.com/ylowu88
- 6. Van Doorslaer E, Masseria C, and the OECD Health Equity Research Group. Income-related inequality in the use of medical care in 21 OECD countries. OECD Health Working Papers 2004;4. Available at http://www.oecd.org/dataoecd/14/0/31743034.pdf
- 7. Nolte E, McKee M. Measuring the health of nations: updating an earlier analysis. *Heath Affairs* 2008; 27(1):58–71.
- 8. *Plan Cancer 2009–2013* [Cancer plan 2009–2013]. Ministry of Health and Sports. http://www.sante-sports.gouv.fr/dossiers/sante/cancer/plan-cancer-2009-2013/plan-cancer-2009-2013.html

# Resource allocation policies to reduce avoidable health inequalities between Primary Care Trusts in England

#### Tom Hennell

Summary: Modelling of expressed demand for health care services rests on a presumption that illness and healthiness align along a common linear dimension. Hence conventional modelling has divided the population into two categories; the 'well not ill', and the 'unwell ill'. However, if we take seriously the objective to be a health service rather than an illness service then this implies that 'being well' is not the same as 'not becoming ill'. Hence there are two further population categories; the 'well ill', and the 'unwell not ill'. This brief article first looks at whether 'wellness' can be identified as a distinct dimension from 'illness'. Drawing on data from the Health Survey for England it then considers whether it is possible to demonstrate systematically higher health and mortality risk in the 'unwell not ill', and lower health and mortality risk in the 'well ill'.

Keywords: health inequalities, resource allocation, wellness, unmet need, England

The task of sharing national revenue resources among successive operational health areas (Health Authorities, Primary Care Groups, Primary Care Trusts) has since 1996/97 been guided by the application of a series of target allocation formulae: the York Formula (1994), the AREA (Allocation of Resources to English Areas) formula (2002)<sup>2</sup> and the CARAN (Combining Age-Related and Additional Needs) formula (2008).3 These formulae are not translated directly into resource shares, instead each area's current allocation is compared against its formula target; and a differential growth is assessed on the basis of 'distance from target', with most growth going to areas most under target, and least to those most over target.

Successive formulae have had the explicit objective of seeking to achieve equal access to health care for equal need, and as such continued from a series of previous formulae with the same objective, but which

had been applied at the regional, rather than the operational area level, including the RAWP (Resource Allocation Working Party) formula.<sup>4</sup> The calibration of these formulae relied on modelling measures of expressed demand (chiefly hospital treatments) against population counts, age and socio-demographic characteristics.

With the introduction of the AREA model formula, Ministers added an additional explicit objective; to help reduce avoidable health inequalities. The AREA formula sought to fulfil this objective through the incorporation of terms relating to a locality assessment of 'unmet need'; and in consequence, the AREA formula was more redistributive in favour of areas with a high degree of deprivation than had been the case with previous formulae. The consultants for the CARAN formula, however, recommended that the calibration of these integral 'unmet need' terms could not be regarded as robust at the local level,

a view accepted by Ministers, who determined to apply a distinct health inequalities adjustment to formula targets.

Consequently the elements of the current formula fall into two distinct categories; a local expressed demand model, derived from past service utilisation rates; and a health inequalities term, derived from a measure of differential local population morbidity and mortality (Disability Free Life Expectancy).

## Why not simply apply expressed demand?

But why not simply apply an expressed demand formula as it stands? Those concerned about health inequalities have advanced two reasons for not doing so.

'The inverse care law': the belief that more affluent populations are differentially better able to obtain access to and derive benefit from health resources.

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The views contained in this snapshot are entirely those of the author Tom Hennell, and do not represent the policy of the Department of Health, nor the views of the Technical Advisory Group on Resource Allocation.

'Unmet need': the belief that less affluent populations are differentially less likely to present early with illness, or are otherwise systematically more likely to face inhibitions on achieving hospital treatment due to resource constraints (for example, if under-served by primary care facilities).

Modelling of expressed demand rests on a presumption that illness and healthiness align along a common linear dimension (or otherwise that the duty of health services is overwhelmingly to treat illness; and that the commonly asserted additional task of promoting positive health is of minimal significance). Hence conventional modelling has divided the population into two categories; the 'well not ill', and the 'unwell ill', and we have calibrated resource targets in proportion to the predicted ratio of the second category to the total.

However, if we take seriously the objective to be a health service rather than an illness service then this implies that 'being well' is not the same as 'not becoming ill'; and hence that there will be two further population categories; the 'well ill', and the 'unwell not ill'. The category 'well ill' provides a more systematic expression of the phenomena asserted above as the 'inverse care law', while the category 'unwell not ill' provides a more systematic expression of 'unmet need'.

#### **Identifying wellness**

This generates a conceptual framework for health inequalities, but can we empirically identify 'wellness' as a distinct dimension from 'illness'; and if we can, can we demonstrate systematically higher health and mortality risk in the 'unwell not ill', and lower health and mortality risk in the 'well ill'?

Inherently, such a task requires a population dataset, rather than a health user dataset, and accordingly we used the 14,142 anonymised records of adults in the 2006 Health Survey for England (HSE).5 This defines 'becoming ill' as having reported any 'limiting longstanding illness.' A summary score on 'being well' for each person is estimated using Categorical Principal Component Analysis reducing 46 characteristics in the HSE data to two summary dimensions. One extracted dimension is clearly 'ageing'. We have taken the second dimension as being a proxy for 'being well'. This dimension of 'wellness' aligns exactly with characteristics of household material affluence and disadvantage (equivalised income quintiles, socioeconomic classification of household),

Figure 1: High blood pressure (excluding pregnancy) – reported dignosis and illness (adults in the Health Survey for England, 2006)

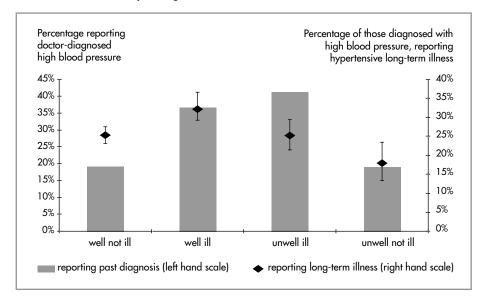
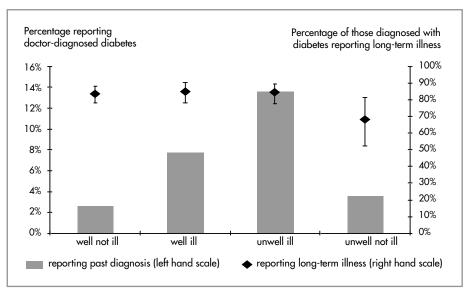


Figure 2: Diabetes (excluding pregnancy) – reported dignosis and ilness (adults in the Health Survey for England, 2006)



but also with individual scores on the General Health Questionnaire (GHQ) scale (which is an indicator of poor mental wellbeing).<sup>6</sup>

We then cross-tabulated illness and wellness. The illness dimension is binary, whereas the wellness dimension is a continuous score. For simplicity therefore, we converted wellness into a binary characteristic (well – unwell) with the threshold at 20% unwell, 80% well. Applying this to the adults in the HSE, 64% are classified well not ill; 16% are classified well ill; 10% are classified unwell ill; and 10% are classified unwell not ill.

In the 2006 Health Survey, adults were also asked to report past doctor diagnoses of certain specific conditions related to cardiovascular risk (for example, angina, heart attack, stroke, high blood pressure, diabetes), and their recorded answers can be compared with the same respondents' assessments of any long-term illnesses. Analysing the reported prevalence of hypertensive illness according to our four categories - we found that, of those who have previously been diagnosed with high blood pressure, the 'unwell not ill' are the least likely subsequently to report hypertension as a long-term illness (18%), as compared to the sample average of 26% (Figure 1). We repeated the exercise for diabetes. 83% of those reporting a past diabetes diagnosis also reported diabetes as a current long-term illness but the rate for the 'unwell not ill' was only 68%. In both cases, the highest levels of reported illness were in the 'well ill' (33% and 85% respectively) (Figure 2).

#### Significant and systematic differences

This demonstrates significant and systematic differences in the propensity to become ill for two common clinical conditions: one associated with higher risk of early mortality, the other also with a high risk of preventable disability. This suggests that this may be a general rule. If so, what we understand as health inequalities may be due - to a substantial degree - to a differential inhibition against becoming ill. If health resources follow expressed demand, then the benefits of health investment will tend to accrue differentially to the 'well ill', whereas premature mortality and preventable disability will concentrate amongst the 'unwell not ill'.

There is an unexamined question in our current understanding of health service provision - in that we have not explored whether there may be systematic differences in the construction of illness. Being diagnosed with a pathological condition does not make you ill - you are only ill if you, in your social context, make the choice to become ill; albeit an individual's physical or mental state may make the choice pretty one-sided. With many health risks, like blood pressure and diabetes however, the choice is real; the choice to become ill requires a degree of confidence that there will be more benefit than disadvantage in doing so. The 'well ill' show signs of having more of this confidence and resilience than do the 'unwell not ill'. Delaying becoming ill can be a catastrophic choice, especially if, as seems to be indicated in the Health Survey, not becoming ill tends to be associated with other health risk behaviours, such as continued smoking. I see this as possibly the main mechanism underlying the persistence of health inequalities in the face of increasing real levels of health funding.

#### References

- 1. Carr-Hill R, Hardman G, Martin S, Peacock S, Sheldon T, Smith P. A Formula for Distributing NHS Revenues Based on Small Area Use of Hospital Beds. York: University of York, 1994. Available at www.york.ac.uk/inst/che/pdf/op22.pdf
- 2. Sutton M, Gravelle H, Morris S et al. Allocation of Resources to English Areas; Individual and Small Area Determinants of Morbidity and Use of Healthcare Resources. Report to the Department of Health. Edinburgh: Information and Statistics Division, 2002. Available at www.dh.gov.uk/en/Managingyour

#### organisation/Financeandplanning/ Allocations/DH\_4137767

- 3. Morris S, Carr-Hill R, Dixon P et al. Combining Age Related and Additional Needs (Caran) Report: 2007 Review of the Needs Formulae for Hospital Services and Prescribing Activity in England. London: Department of Health, 2007. Available at http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/documents/digitalasset/dh\_093169.pdf
- 4. Department of Health and Social Security Resource Allocation Working Party.
- Sharing Resources for Health in England. London: Her Majesty's Stationery Office, 1976. Available at http://www.dh.gov.uk /en/Publicationsandstatistics/ Publications/PublicationsPolicyAnd Guidance/DH\_4121873
- 5. The Information Centre. *Health Survey* for England 2006. London: The Information Centre, 2008. Available at http://tinyurl.com/66aeq5
- 6. Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. *Psychological Medicine* 1979;9(1):139–45.

# How do welfare policies contribute to the reduction of health inequalities?

#### Olle Lundberg

Summary: While the provision of health care is important for public health, public health policies are much more than health care policies. Since a range of social factors and living conditions throughout the life course are of importance for health and survival, welfare policies that aim at improving such conditions and tackling social problems are of importance for health as well. It is important to consider both macro- and micro-level policies when we try to assess what works; the fact that micro level interventions are easier to evaluate should not stop us from trying to understand the health impacts of macro level welfare policies.

Key words: welfare policy, health inequalities, social protection

#### Welfare policies and public health

One may ask why we should be interested in welfare policies as a way to improve public health and reduce health inequalities. A fundamental reason is that while the provision of health care is important for public health, public health policies are much more than health care policies. Since a range of social factors and living conditions throughout the life course are of importance for health and survival, policies

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that aim at improving such conditions and tackling social problems are of importance for health as well.

One can also observe that many welfare policies and programmes are in fact motivated by health problems, disabilities and their economic consequences. Pensions, sickness insurance or work injuries insurance schemes are basically implemented to reduce or eliminate the risk of poverty associated with illnesses due to the loss of opportunity to generate a market income. In addition, it is important that we consider both macro- and micro-level policies when we try to assess what works; the fact that micro-level interventions are

easier to evaluate should not stop us from trying to understand the health impacts of macro-level welfare policies.

### Welfare states, welfare resources and social determinants of health

A very fruitful approach is to define welfare as "the resources ... by which the individual can control and consciously direct her conditions of life." These resources include economic resources, working conditions, housing conditions, education and knowledge. In short therefore, the welfare resources necessary to lead a good life also constitute the key social determinants of health.

Many welfare resources are generated within families or in the market. In addition to such individual resources there are also collective resources generated through welfare state institutions. These resources are intended to assist citizens with "the collective matters that arise from the demands and possibilities that all individuals in all societies are facing during the life cycle".2 In other words, in all societies individuals will be faced with the challenge of getting an education and the means to support themselves, to find a job and somewhere to live, to raise and support a family, to care for their children and older relatives and so on.

The collective resources can thus be divided in two major groups, 'cash' and 'care', where the former include social insurance covering income loss, for example due to illness, unemployment and old age. More recent programmes also include family policies. The latter category comprises welfare services provided free of charge or heavily subsidised, for example child care, health care and care for older people or those with disabilities.

From a public health point of view it is reasonable to believe that the supply and quality of collective resources provided through welfare policies is important in helping individuals sustain their health and wellbeing. Moreover, these resources are likely to be more important for people lower incomes and unfavourable living conditions. The less you have in terms of individual resources, the more important it will be that you are able to draw on collective resources, and that means that welfare policies that provide more generous transfers and better quality services are likely to improve public health and reduce health inequalities. But is there any evidence supporting this logical argument?

Figure 1: Family policy generosity and child poverty

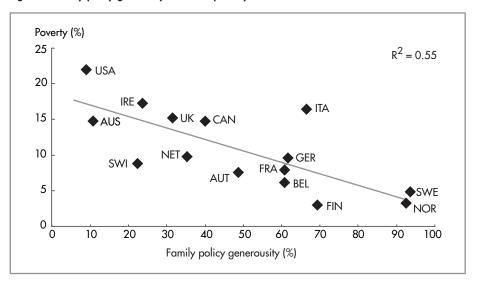


Figure 2a: Family policy generosity and infant mortality

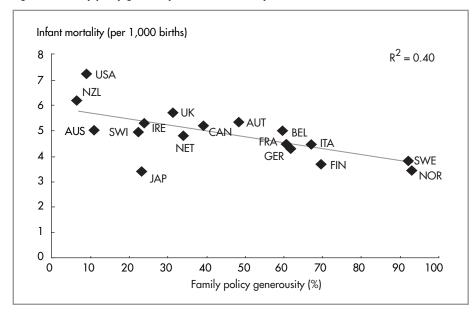
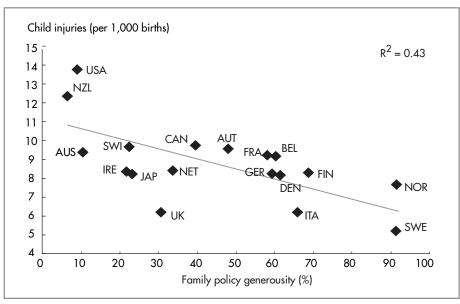


Figure 2b: Family policy generosity and child injury mortality



Source Figures 1, 2a and 2b: Adapted from Ferrarini and Sjöberg, forthcoming.<sup>6</sup>

# Welfare policies and public health – the case of family policies

Childhood and the child rearing years are traditionally periods of high poverty risks, as for instance identified by Seebohm Rowntree in his famous poverty cycles. Welfare policies aiming to provide children and their families with a decent standard of living and schools of good quality, among other things, should contribute to child health and wellbeing. Our knowledge on the importance of the early years for health throughout the life course suggests that such welfare policies could also have health beneficial consequences in the longer term.

As a part of the NEWS-project,<sup>3</sup> analyses of family policy generosity and infant mortality across eighteen OECD countries were performed.<sup>3,4</sup> The basis for the analysis is that not only might family policy generosity be of importance, but also the institutional characteristics of family policies. These characteristics include the type of family behaviours that different policies tend to sustain, such as more traditional family types with a male breadwinner as opposed to dual-earner families.<sup>5</sup> The measure of family policy generosity used refers to the legal entitlement to benefits, calculated for different family types, expressed as a percentage of the average production worker's wage.4

A simple plot of family policy generosity against the child poverty rate (Figure 1) shows a clear relationship: countries with more generous family policies tend to have substantially lower child poverty rates. This association is mainly due to policies that support dual earner families. The relationship is partly caused by a direct contribution through the amount of benefits paid, but also indirectly because policies that support two earners will increase families' market incomes.

We also find clear relationships between family policy generosity and infant mortality (Figure 2a) and child injuries (Figure 2b), despite the fact that the graphs neither take into account institutional arrangements, nor the design of family policies.

When separating dual earner support and more traditional (or general) types of family policies (Table 1) we find that it is the generosity in dual earner types of family policies that is linked to lower infant mortality, even when controlled for differences in Gross Domestic Product (GDP). The general finding from the analysis (performed by means of pooled cross-sectional times-series analysis for the

period 1970–2000 in eighteen OECD countries) are robust for changes in model specifications – the analysis presented is based on de-trended series where change rather than levels in independent and dependent time-series are analysed.

#### But what about health inequalities?

The analyses presented here suggest that the institutional design of welfare policies (whether to have support that stimulates dual-earner families or more traditional families), as well as the levels of generosity, may be related to public health outcomes also in rich western countries post 1970. But what about health inequalities – will countries with more generous welfare policies, like Sweden and Norway for example, also have smaller inequalities in health and mortality?

While that question has attracted some interest from the Black report and onwards, it has not often been systematically addressed, albeit with some exceptions.<sup>7</sup> Comparative research on health inequalities has so far to a large extent been highly descriptive, basically

Table 1. Family policy and infant mortality

	Crude	Adjusted	Adjusted	Adjusted
Gross Domestic Product (GDP)	0.345 (0.272)	-0.008 (0.306)	-0.105 (0.298)	0.064 (0.300)
Total family policy generosity	-2.840 (1.705)	-2.573 (1.441)		
Dual earner support	-4.256** (1.811)		-3.772* (1.865)	
General family support	-0.129 (2.755)			-0.106 (2.366)
No of observations	108	108	108	108
R squared		0.31	0.32	0.30

Source: Lundberg O et al, 2008.<sup>4</sup> Table 2, p. 1637.

Table 2: Relative inequalities, absolute inequalities and levels of mortality among blue collar workers (men 45–65, in the 1980s)

Panel A		Panel B		Panel C		
Country	Relative	,	Absolute risk difference	Country	Absolute probability of death	
					blue collar	white collar
Denmark	1.33	Norway	5.2	Sweden	19.7	14.5
Norway	1.33	Sweden	5.6	Norway	20.9	
Italy	1.33	Spain	5.9	Spain	21.1	
Portugal	1.37	Italy	6.1	Portugal	22.5	
Spain	1.39	Portugal	6.1	England & Wales	24.0	
Ireland	1.39	Denmark	6.3	Italy	24.6	
Sweden	1.40	England & Wales	7.5	Denmark	25.4	
England & Wales	1.45	Ireland	8.1	France	27.6	
Finland	1.52	Finland	9.9	Finland	28.8	
France	1.70	France	11.4	Ireland	29.1	21.0

Source: Lundberg O, 2008<sup>9</sup> adapted from Kunst A et al, 1998<sup>10</sup>

because of the fundamental lack of even descriptive data on inequalities in health and mortality. What we do know, however, is that relative health inequalities appear to persist irrespective of social polices or welfare state regimes (although they are probably much larger in Eastern Europe<sup>8</sup>). However, absolute inequalities, and in particular the levels of mortality among the lower strata (blue collar workers) may be linked to the type of welfare policies adopted, or at least follow the pattern one would expect on the basis of theoretical reasoning and the results presented above.

An illustration of this point is given in Table 2, where countries have been ranked on the basis of relative mortality inequalities, absolute inequalities and finally by the levels of mortality experienced by blue collar workers. The cases of Sweden and Ireland are of particular interest. While they come out very similar in terms of relative inequalities (men who are blue collar workers have a 40% higher risk of dying between 45 and 65), the absolute differences between white and blue collar men are clearly larger in Ireland. Most strikingly, the mortality risk among blue collar workers is 50% higher in Ireland than in Sweden! If one were presented with the choice to be born in Sweden or Ireland one would clearly choose Sweden, despite the fact that the relative inequalities are equally large in the two countries.

The remaining inequalities in Sweden are driven by the exceptionally low mortality risks among white collar employees, a fact that is hardly a public health problem. If Swedish welfare policies have contributed to lower mortality risks among blue collar workers (which we don't really know, however) they must be regarded as a success, despite the fact that there are still health inequalities that need our attention. If we judge welfare policies or welfare regimes on basis of relative inequalities alone we clearly run the risk of throwing out the baby with the bathwater.

#### **Concluding remarks**

Do welfare policies contribute to the reduction of health inequalities? It is a good question that needs more scientific attention. However, it is safe to say that the sum of welfare policies is highly likely to affect both average public health and health inequalities – simply imagine the poverty and poor health conditions we would have in Europe without any social protection. Furthermore, the recently conducted NEWS-project<sup>3,4</sup> suggested that

universal welfare policies are linked to better public health. Whether that conclusion is valid for inequalities in health as well is still unclear; welfare policy and health inequality is an area in great need of more systematic empirical analysis. However, our conclusions will be highly dependent on how we define health inequalities and their consequences in terms of survival and health among different social groups and measures of relative inequalities are likely to be of little relevance for conclusions regarding welfare policies. But while welfare policies have the potential of being important for health inequalities there are also many other factors that affect health and inequalities. Hence there are also different roads to success in improving public health and combating health inequalities.

#### References

- 1. Johansson S. *Om levnadsnivåunder-sökningen* [On the level of living survey]. Stockholm: Allmänna förlaget, 1970
- 2. Johansson S. *Mot en teori för social rapportering* [Towards a theory of social reporting] Stockholm: Swedish Institute for Social Research, 1979.
- 3. Lundberg O, Åberg Yngwe M, Kölegård Stjärne M, Björk L, Fritzell, J. The Nordic Experience: Welfare States and Public Health (NEWS). *Health Equity Studies* No 12. Stockholm: CHESS, 2008.
- 4. Lundberg O, Åberg Yngwe M, Stjärne M, et al. The role of welfare state principles and generosity in social policy programmes

- for public health: an international comparative study. *The Lancet* 2008;372:1633–40.
- 5. Ferrarini T. Families, States and Labour Markets. Institutions, Causes and Consequences of Family Policy in Post-war Welfare States. Cheltenham: Edward Elgar, 2006.
- 6. Ferrarini T, Sjöberg O. Social policy and health: transition countries in a comparative perspective. In: Åberg Yngwe M, et al (eds). Social policy and Public Health Throughout the Life Course. *International Journal of Social Welfare* 2010;19:Supplement, forthcoming.
- 7. Dahl E, Fritzell J, Lahelma E, Martikainen P, Kunst A, Mackenbach J. Welfare state regimes and health inequalities. In: Siegrist J, Marmot M (eds). *Social inequalities in health*. Oxford: Oxford University Press, 2006.
- 8. Mackenbach JP, Stirbu I, Roskam AJ, et al. Socioeconomic inequalities in health in twenty-two European countries. *New England Journal of Medicine* 2008;358(23):2468–81.
- 9. Lundberg O. Commentary: Politics and public health some conceptual considerations concerning welfare state characteristics and public health outcomes. *International Journal of Epidemiology* 2008;37(5):1105–8.
- 10. Kunst A, Groenhof F, Mackenbach J and the EU Working Group on Socioeconomic Inequalities in Health. Mortality by occupational class among men 30–64 years in 11 European countries. *Social Science and Medicine* 1998;46:1459–76.

New Health Systems in Transition publication from the European Observatory on Health Systems and Policies

#### Czech Republic: Health System Review

November 2009

Lucie Bryndová Kateřina Pavloková Tomáš Roubal Martina Rokosová Matthew Gaskins Many of the recent reforms to the Czech health system have attempted to address the chronic financial instability that has marked the system since its inception. Others have focused on the issue of hospital ownership and management structures, or on improving purchaser—provider relationships, compliance with EU law, and coordination between the systems of health and social care.

The key challenge in the coming decades will be to keep high-quality care accessible to all inhabitants while taking into account economic development, demographic ageing and the capacity of the social health insurance system.

Available at http://www.euro.who.int/Document/E92968.pdf

# Policy actions to tackle health inequalities in Hungary arising from the economic crisis

#### Peter Makara

In 2009 the main challenge facing the public health community (decision makers, researchers and practicioners) has been to find innovative ways to reduce the toll of the economic and financial crisis whilst protecting and promoting the health of the Hungarian population. A number of impacts of the economic recession on the social and economic determinants of health have been identified by public health experts. Increasing inequities in health status are occurring at a time of labour market change characterised by increasing unemployment and job insecurity. Mental health can be affected as a result of any loss of social status, the triggering of depression and increased harmful escapist activities. There are risks due to changing patterns of nutrition and more limited options for leisure time. Another key challenge to be faced is the poor and fragile health of those already socially excluded groups now also contending with the economic downturn, including the Roma community.

#### **Policy dilemmas**

Public health is often an early victim of public spending cuts during an economic recession. There is less room for manoeuvre to consider health promoting options within the decision making system. Short term crisis management also marginalises long term values of equity, universality and solidarity, while health equity advocacy does not garner public attention.

However the budgetary deficit is not an excuse for moral deficit; the economic crisis will not last forever. To reduce the

Peter Makara is Head, Master School of Health Policy, Centre of Health Sciences, University of Debrecen, Hungary. Email: peter@makara.eu impact of the economic crisis on the most vulnerable particular attention in using the EU Structural Funds must be dedicated to public health issues: the 'New Hungary National Development Plan' with a robust health component and explicit concerns for equity might be one example of good practice.<sup>1</sup>

# Reducing social inequalities through health policy

It is clear that there is a rapidly growing awareness in Hungary of the need to tackle socioeconomic inequalities in health and to increase the accessibility of health care services. Most notably in EU and World Health Organization (WHO) programmes standardised and comparable data for measuring socioeconomic inequalities in health are being developed. Guidance and examples of good practice are now available for decision makers and research agencies to ensure that regularly compiled data consider socioeconomic inequalities.

The work of the WHO Commission on Social Determinants of Health is being utilised. It has further clarified some of the policy pathways for tackling inequalities and is now being translated into Hungarian. This could usefully be disseminated among those responsible for health policy at both the national and local levels. It is also important to take gender differentials into account. Non-communicable diseases and their risks can affect men and women differently and their needs for support may also differ. Yet these gender aspects of health policy and programmes have not always been given sufficient attention.

## Addressing the needs of disadvantaged groups

In developing health policy it is essential to assess the impact on disadvantaged and/or high risk groups of the economic crisis. One critical step is to ensure that health programmes and messages are targeted to different audiences; the least affluent in society are far less quick to pick up health messages compared to the more affluent. Health communication tools for health promotion and health care, must therefore be tailored to reach and meet the specific needs and cultural situation of vulnerable groups, including for example, those with low education, the poor and unemployed, migrants, older people and ethnic minorities.

The development of comprehensive policies to tackle health threats in specific social groups such as older people, adolescents, the Roma, or migrants could also prove effective, albeit they are unlikely to be sufficient to reduce inequities in health status at the population level. It is also helpful to make use of programmes to tackle poverty and social exclusion. In Hungary the Roma Decade and Child Poverty for instance has offered opportunities to highlight and develop synergies between health and development, indithe potential benefits of cating collaboration in both health and economic

#### Monitoring changes in inequalities

Health might also be made an indicator of development. Reporting on changes in inequalities in health during annual Budget discussions could help ensure that health is included in the concept of crisis management and development. Health can contribute to poverty reduction and economic development. Health impact assessments could also be made more equity oriented. The WHO definition of Health Impact Assessment (HIA) clarifies that, in assessing the impact of policies in sectors other than health, their "potential effects on the health of a population and the distribution of those effects within the population" needs to be judged. This

equity orientation is rarely implemented in Hungarian HIA practice; a broader health and equity impact study could be a major advocacy tool for a more equity oriented public policy in Hungary.

#### Improved care management

Not only the distribution but also the management of care for non communicable diseases must be improved if access to high quality and appropriate care is to be ensured, at the right time, and in the right place. Better understanding of the drivers of health inequalities as well as modelling of the specific interventions needed to reduce them has also shown that greater access to cheap and effective treatment, for example the management of hypertension, could have significant impact in narrowing the gap between those living in the most deprived and least deprived areas. Such activities might be contained within a compilation of wellevaluated examples of good practice. Quality-development oriented financing would also enable communities and regions to consider innovative action and different options for tackling inequalities in health as a priority even in times of economic crisis.

#### **Urgent tasks**

The most urgent tasks for the research and policy making communities in Hungary include the collection of evidence on the impact of the economic crisis on socioeconomic determinants and health. There is also a need to develop taylor-made innovative health programmes for the victims of the crisis. Research and information on the relationship between the economy and health status can be strengthened, including some focus on the difficult questions of effectiveness and efficiency and their often conflicting relationship with equity. Public health strategies will need to be rethought after analysis of the new economic, social and political circumstances emerging from crisis management in the post recession period. This will also mean that it is vital to reinvent our language of advocacy in light of the new situation.

#### Reference

1. The New Hungary Development Plan. National Strategic Reference Framework of Hungary 2007–2013. Budapest, Government of Hungary 2007. Available at http://www.nfu.hu/new\_hungary\_development\_plan

# Morbidity-based risk adjustment in Germany

## Long in coming, but worth the wait?

#### Matthew Gaskins and Reinhard Busse

Summary: Risk adjustment is nothing new to the German system of social health insurance (SHI). The key change introduced in January 2009 was the shift from a retrospective system based on sociodemographic criteria to a prospective regression scheme that employs direct measures of morbidity. This article summarises the history of risk adjustment in the German SHI system, explains the basic workings of the new scheme and touches upon some of the concerns voiced about its implementation.

Keywords: Germany, morbidity, Morbi-RSA, risk adjustment, sickness funds, social health insurance

The idea of adjusting for differences in the revenue and risk portfolios of sickness funds is nothing new to the German system of social health insurance (SHI). The key change introduced in January 2009 was the shift from a retrospective system of risk adjustment based on sociodemographic criteria to a prospective regression scheme that employs direct measures of morbidity. With much of the media attention focused, however, on the new central reallocation pool dubbed the Gesundheitsfonds (literally, 'health fund'), the many years of research and careful preparation that preceded the introduction of the morbidity-based scheme went largely unnoticed by the general public.

Indeed, with the negative press surrounding the 2007 Act to Strengthen Competition in the Statutory Health Insurance System and related legislation, it almost seems as if people had forgotten the early 1990s in Germany, when the contribution rates paid by insured individuals

Matthew Gaskins is a Research Fellow and Reinhard Busse is Professor and Department Head at the Department of Health Care Management, Berlin University of Technology, Germany. Email: matthew.gaskins@tu-berlin.de varied by some 8% and the ability to choose between (at least some) sickness funds was reserved principally for white-collar workers.<sup>1,2</sup> It was mainly for these reasons – none of which were in keeping with the principle of solidarity so fundamental to Germany's conception of itself as a social market economy – that the first risk-adjustment scheme was introduced in 1994, followed by an open enrolment requirement in 1996.<sup>3</sup>

#### The 1994 risk-adjustment scheme

The 1994 scheme used gender, age, and invalidity status as risk adjusters. It was also retrospective, relying upon actual expenditure from the previous year to estimate which sickness funds had a net surplus and which had a net deficit during the current year according to a nominal, SHI-wide contribution rate.<sup>4,5</sup>

Unfortunately, the 1994 risk-adjustment scheme was far from perfect. To begin with, the sociodemographic risk adjusters were poor proxies for morbidity, leaving a number of incentives for sickness funds to seek good risks. This also meant that the chronically ill were no better off than they had been before 1994, as any sickness fund that gained a reputation for providing these patients with excellent service would have risked financial ruin. Another of the

scheme's many shortcomings was its inability to take account of comorbidities due to its actuarial cell-based approach and lack of regression analysis.

In the first four years following the introduction of the open enrolment requirement, the differences in the sickness funds' revenue and risk portfolios continued to grow, as evidenced by the increasing proportion of SHI revenues reallocated through the risk-adjustment scheme.2 Data indicate that it was predominantly healthier, younger, higherearning individuals who were switching to sickness funds with lower contribution rates; at the same time, however, risk adjustment was able to compensate for much of these growing discrepancies, as reflected by a considerable narrowing in the range of contribution rates among the sickness funds.<sup>2</sup> In other words, risk adjustment was failing to prevent risk selection in the wake of the open enrolment requirement, but was succeeding in preventing even larger differences in contribution rates.

# Planting the seeds for morbidity-based risk adjustment

The Risk-Adjustment Scheme Reform Act of 2001 introduced three measures to address the situation: a risk pool for highdisease management cases; programmes (DMPs) for patients with common chronic illnesses and the use of DMP enrolment as a risk adjuster;7 and preparations for the introduction in 2007 of a morbidity-based risk adjustment scheme, which is known in German as the morbiditätsorientierter Risikostrukturausgleich, or Morbi- RSA (literally, 'morbidity-oriented risk structure compensation'). To this effect, the German Ministry of Health commissioned an expert group to conduct an international comparison of morbidity-based riskadjustment models.5

Out of the six models ultimately included in its empirical analysis, the expert group determined that the combined Inpatient Hierarchical Condition Categories (IPHCC) and RxGroups model, which was developed in the United States and relied on inpatient diagnoses and pharmacy claims, had the highest predictive accuracy and was well-suited for adaptation to the German context. The expert group proposed applying the model prospectively, dropping the use of DMP enrolment as a risk adjustor, and eliminating the risk pool altogether.<sup>8</sup>

# Political gridlock and a difficult compromise

Although the expert report was supposed to be completed by the end of 2003, it was delayed by half a year due to poor data availability. By then, political gridlock in the Bundesrat and, subsequently, the vagaries of the 2005 election season precluded any further progress in implementing the third measure of the 2001 Reform Act.<sup>9</sup>

After the September 2005 elections, political realities left the Christian Democratic Union and Social Democratic Party with little choice but to form a so-called grand coalition. In terms of health care reform, this was a particularly awkward situation, since the parties had advocated fundamentally different approaches during their election campaigns.<sup>10</sup>

Ultimately, the two coalition partners decided that contributions would be gathered in a central reallocation pool called the Gesundheitsfonds to be introduced in January 2009 and administered by the German Federal Insurance Authority (GFIA). For each of its insured members, a sickness fund now receives from the pool a lump-sum amount that has been adjusted for risk using sociodemographic and morbidity-based criteria. In addition, lawmakers agreed that the sickness funds would no longer have the authority to determine their own contribution rates and that the government would set a uniform contribution rate as of January 2009.

As part of this political compromise, the introduction of morbidity-based risk adjustment was postponed from 2007 to 2009 to coincide with the introduction of the central reallocation pool, and a Scientific Advisory Board was appointed in May 2007 to aid in choosing an appropriate risk-adjustment model based on the proposals made by the earlier expert group.9 The board was also assigned the task of limiting the spectrum of morbidity considered by the new model to fifty to eighty cost-intensive chronic or severe diseases to ensure, according to the relevant act, 'a smooth introduction of direct measures of morbidity in the riskadjustment scheme' and to provide 'the sickness funds with reliable basis for calculations and planning'.12

By the time these and other compromises had been reached as part of the 2007 Act to Strengthen Competition in the Statutory Health Insurance System and related legislation, the recommendations made by the expert group in 2004 were several years old. It was thus unclear whether the proposed IPHCC+RxGroups model was still the best choice, especially considering lawmakers' new fifty-to-eighty-disease requirement.<sup>11</sup>

In December 2007 the Scientific Advisory Board submitted its report, recommending an all-encounter hierarchical condition categories (HCC) model, <sup>13</sup> which was also one of the six models tested by the original expert group. As its name implies, the allencounter HCC model\* relies on both inpatient and ambulatory-care diagnoses and belongs to the same family of proprietary models as the IPHCC component of the IPHCC+RxGroups model mentioned above. <sup>4,18</sup> The Board also presented in the report its selection of 80 diseases for the new scheme. <sup>14</sup>

The Board's choice of diseases proved to be highly controversial, leading the representatives of the sickness funds and other key players in the SHI system to jockey for position in the months that followed. The GFIA's ultimate decision to give greater weight to disease prevalence and thus include several highly prevalent, but low-cost or preventable diseases, led to the resignation of the Board in March 2008. The Board's choice of the all-encounter HCC model was less contentious, however, and after performing a variety of simulations, the GFIA adopted it while adding a pharmacy-claim component to validate certain diagnoses under certain circumstances.11

# How the morbidity-based risk-adjustment scheme works

The GFIA first calculates a notional lumpsum payment, which is the same for all insured persons and equal to the average per capita expenditure of all sickness funds.<sup>15</sup> This lump-sum payment is subsequently adjusted upwards or downwards for each insured person depending on his or her individual risk profile.

The first risk adjusters to be applied are gender and age. Based on these adjusters, a quantity is either added to or subtracted

<sup>\*</sup> The all-encounter HCC model is sometimes referred to in the literature and by its developers as the DCG/HCC model, presumably to emphasise its kinship with the DCG family of models, first developed in the 1980s by researchers from Boston University and Harvard Medical School.

from the lump-sum payment. With the exception of newborns and the very elderly, this step in the risk-adjustment scheme results in a subtraction from the lump-sum payment.

The second set of risk adjusters are based directly on morbidity. For insured persons with any of the eighty selected diseases, a quantity is added to the lump-sum payment. Because of the prospective nature of the scheme, the quantity added is not meant to cover current treatment expenses, but rather the average expenses caused by the disease during the subsequent year. Regression analysis is used to ensure that only those expenses are considered that are caused by the disease in question. Importantly, this also allows the scheme to take comorbidities into account, which had been impossible with the previous risk-adjustment mechanism.

In addition to the upward adjustments for insured persons with one or more of the eighty selected diseases, additional upward adjustments are made for insured persons receiving invalidity benefits. These individuals are divided into six groups according to age and gender. To be included in one of these groups, the insured person must have received invalidity benefits for more than 183 days during the previous year.

Altogether there are forty groups for age and gender (in five-year age brackets), 106 hierarchical morbidity groups (some of the eighty diseases are broken down into separate groups based on their severity, whereas others are grouped together because they require a similar level of care), and six groups for insured persons with invalidity benefits, leading to a total of 152 risk groups. It is important to note that the upward adjustment for patients assigned to several morbidity groups within the same hierarchy - i.e. who have more than one manifestation of the same disease - is based on the group that is highest in that particular hierarchy.15

#### Criticism of the new scheme

As can be expected, a major change like the switch to morbidity-based risk-adjustment has not been without its critics. Examining the many concerns voiced about the new scheme would go beyond the scope of this review; nevertheless, it may be helpful for the international reader to touch upon several of these concerns below.

The decision to limit the number of diseases considered by the scheme to eighty

has been criticised frequently in the literature. Because this number clearly cannot reflect the full spectrum of morbidity in Germany, it also seems realistic to assume that the new scheme will be unable to neutralise the differences in the risk portfolios of the various sickness funds and thus prevent risk selection.

The eighty-disease limit is also problematic from the perspective of patients. Individuals who happen to have a chronic disease that is not included in the new scheme are still a bad risk for their sickness fund. Although they are legally entitled to coverage and to all of the benefits defined in the statutory health benefits package, their sickness fund will nevertheless have little incentive to improve the quality of their care. <sup>13</sup>

Finally, it is unclear why an arbitrary limit placed on the spectrum of disease considered by the model should, in and of itself, provide the sickness funds with a more reliable basis for calculations and planning, especially if this limit has the potential to reduce the model's predictive accuracy.

Another concern is related to the potential susceptibility of the scheme to manipulation, in particular to the practice of upcoding. There have already been sporadic reports in the German press of ambulatory-care physicians receiving visits from sickness fund representatives offering to help them review their coding practices. 16,17 Because the total funding amount for the central reallocation pool is set in advance for the year, it may be true that a general trend towards upcoding would lead to lower lump-sum payments for sickness funds participating in this type of practice.<sup>15</sup> However, the payments they receive would still be higher than those made to the lone sickness funds that choose not to jump on the upcoding bandwagon.

A third, more fundamental, concern with the scheme is that incentives to attract young and healthy individuals will always remain because attracting people with diseases is, by its nature, a risky business. Indeed, the true risks of morbidity are notoriously difficult to predict, as are developments in medical treatment. Attracting young, healthy, low-risk individuals will likely always be the safest bet from the insurer's point of view.<sup>13</sup>

#### Concluding remarks

The new risk-adjustment scheme represents a major reorganisation of the

financial flows in the Germany SHI system, with almost half of the 168 billion euros gathered in the central reallocation pool in 2009 to be redistributed according to morbidity-based criteria. 13,18 Although it is much too early to determine whether the new scheme will be more effective than its predecessor at preventing risk selection, the concerns voiced by critics, especially related to the eighty-disease limit, must be taken seriously. Nevertheless, there is little doubt among health economists that some form of morbidity-based risk-adjustment is necessary in SHI systems with multiple sickness funds and an open enrolment requirement. Even if the implementation of the new morbidity-based riskadjustment scheme in Germany is disputed, evidence from past experience in this country's SHI system indicates that the fundamental switch from indirect to direct measures of morbidity was the best option available.

#### References

- 1. Wysong J, Abel T. Risk equalisation, competition, and choice: A preliminary assessment of the 1993 German health reforms. *Sozial- und Präventativmedizin* 1996;41:212–23.
- 2. Busse R, Riesberg A. *Health Care Systems in Transition: Germany*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2004.
- 3. Buchner F, Wasem J. Needs for further improvement: risk adjustment in the German health insurance system. *Health Policy* 2003;65: 21–35.
- 4. Busse R. Risk structure compensation in Germany's statutory health insurance. European *Journal of Public Health* 2001;11(2):174–77.
- 5. Göpffarth D. Reforming Germany's risk structure equalization scheme taking stock at the halfway point. *Journal of Public Health* 2005;13:248–56.
- 6. Van de Ven W, Beck K, Buchner F, et al. Risk adjustment and risk selection on the sickness fund insurance market in five European Countries. *Health Policy* 2003;65:75–98.
- 7. Busse R. Disease Management Programs in Germany's Statutory Health Insurance System. *Health Affairs* 2004;23:56–67
- 8. Reschke P, Sehlen S, Schiffhorst G, Schräder WF, Lauterbach KW, Wasem J. Klassifikationsmodelle für Versicherte im

Risikostrukturausgleich [Models for classifying insured persons within the risk-adjustment scheme]. Bonn:
Bundesministerium für Gesundheit und Soziale Sicherung, Referat Information Publikation, Redaktion, 2005.

- 9. Göpffarth D. Der Risikostrukturausgleich auf dem Weg zur direkten Morbiditätsorientierung [Towards the use of direct measures of morbidity in the riskadjustment scheme]. GGW 2007;(7)3:23–30.
- 10. Ognyanova D, Busse R. Health Fund now operational. *Health Policy Monitor* 2009;13.
- 11. Göpffarth D, Greß S, Jacobs K, Wasem J (eds). Jahrbuch Risikostrukturausgleich 2008: Morbi-RSA [Risk-adjustment scheme yearbook 2008: the morbidity-based risk-adjustment scheme]. St. Augustin: Asgard-Verlag, 2009.
- 12. BT-Drs. 16/3100, Gesetzentwurf der Fraktionen der CDU/CSU und SPD, Entwurf eines Gesetzes zur Stärkung des Wettbewerbs in der gesetzlichen Krankenversicherung [Draft bill prepared by the parliamentary parties CDU/CSU and SPD to strengthen competition in the statutory health insurance system], 24 October 2006.
- 13. Schang L. Morbidity-based risk structure compensation. *Health Policy Monitor* 2009;13.
- 14. Busse R, Drösler S, Glaeske G, Greiner W, Schäfer T, Schrappe M. Wissenschaftliches Gutachten für die Auswahl von 50 bis 80 Krankheiten zur Berücksichtigung im morbiditätsorientierten Risikostrukturausgleich [Expert report on the selection of 50 to 80 diseases to be considered in the morbidity-based risk-adjustment scheme]. Bonn: Bundesversicherungsamt [German Federal Insurance Authority], 2007.
- 15. Bundesversicherungsamt [German Federal Insurance Authority]. So funktioniert der neue Risikostrukturausgleich im Gesundheitsfonds [How the new riskadjustment scheme works [in conjunction with] the central reallocation pool], 2008, www.bundesversicherungsamt.de/cln\_100/nn\_1046668/DE/Risikostrukturausgleich/Wie\_funktioniert\_Morbi\_RSA, templateId=raw,property=publicationFile .pdf/Wie\_funktioniert\_Morbi\_RSA.pdf (accessed on 20 June 2009).
- 16. Ärzte Zeitung, Kassen geben Ärzten weiter "Kodierhilfe" [Sickness funds continue to provide physicians with 'coding assistance'], 26 May 2009.
- 17. Ärztliche Praxis, Morbi-RSA: Köhler

rüffelt Kassen wegen Bestechung [The morbidity-based risk adjustment scheme: Köhler rebukes sickness funds over bribes], 22 January 2009, http://www.aerztliche praxis.de/artikel\_politik\_kv\_upcoding\_123 262994068.htm (accessed on 1 July 2009).

18. Bundesversicherungsamt. Press release

no. 16/2008. Erklärung des Präsidenten des Bundesversicherungsamtes, Josef Hecken, zum Start des Gesundheitsfonds am 01. Januar 2009 [Statement by the President of the [German] Federal Insurance Authority, Josef Hecken, on the launch of the central reallocation pool on 1 January 2009].

# Improving New Zealand's health system performance:

### Challenges for the way forward

#### Robin Gauld

Summary: This article discusses New Zealand's present health system of publicly-funded District Health Boards, created in 2000. The system has a number of features that place it at the forefront of developed world nations. Yet, at the outset, there were suggestions that it could be too unwieldy for a country of four million people. Unfortunately, these suggestions have been borne out, with an increasingly complex set of structures that have failed to perform well. Compounding the complexity have been parallel developments such as introduction, from 2002, of new Primary Health Organisations. A new centre-right coalition government, elected in late-2008, faces several health policy challenges including health system performance, quality, information technology and workforce sustainability.

Keywords: New Zealand, health policy, decentralisation, primary care

New Zealand's health care system has several commonalities with selected European and Organisation for Economic Co-operation and Development (OECD) countries. Access to most services is universal and underwritten by government funding drawn from general taxes. This funding contributes almost 80% of total health care expenditure. Public hospitals dominate and are free of any patient charges. Private hospitals provide mainly elective procedures, occasionally on contract to the public system. Public hospital specialists are salaried, but most also work in private practice. In contrast, general

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practitioners (GPs), who serve as gate-keepers within the system, are almost entirely in private practice. Since the 1930s, GPs have received substantial government subsidies to reduce direct patient charges. In 2008, health expenditure was around 9.2% of Gross Domestic Product (GDP). Over the past decade, real expenditure grew at 4.3% per annum, above the OECD average of 4%.<sup>1</sup>

As discussed elsewhere, New Zealand's health system endured a succession of reforms commencing in the late-1980s. An unsuccessful attempt in the early-1990s to create a market-based system of competing purchasers and providers was followed, after the 1996 election, by installation of a single national purchaser. In 1999, a new Labour-led coalition government sought to distance itself from the market and

corporate hospital management structures of the 1990s. In 2000, it created twenty-one District Health Boards (DHBs), which are devolved planning and purchasing bodies and the nucleus of the present health system. Each is governed by seven elected and up to four appointed members and has a chief executive and supporting staff. DHB core funding is based on population characteristics with adjustments for age, ethnicity, disease prevalence and so forth. Within this funding, each DHB is responsible for planning and purchasing the full range of services for their respective local populations, from primary and disability support services through to hospital care (mostly from public hospitals which DHBs own). Thus, DHBs must prioritise expenditure. Underpinning DHB planning is a series of national health goals set out in the New Zealand Health Strategy.<sup>2</sup>

The DHB system, in many ways, sets New Zealand apart from developed world counterparts. First, it represents a genuine attempt to plan and develop services aimed to improve population health and reduce inequalities in both service access and outcomes. Second, concepts of local participation and involvement are central to the system, from the predominantly elected boards through to requirements that DHB meetings are open to the public and that DHBs consult widely in planning and decision making. Third, DHBs are expected to collaborate with one other and other sectors to improve community health.

From the outset, there were questions about the design of the DHB system, particularly the large number, for a small country, of separate planning and purchasing bodies.3 To reduce the impact of restructuring, the DHBs were built around existing hospital governance structures. As such, they differ considerably in shape and size. The largest serve populations of over 350,000, the smallest 30,000. Yet each is required to maintain the same administrative structures, perform a common task set and respond to national policy goals. Due to this, and requirements for collaboration, the DHBs swiftly created four inter-regional 'shared services' agencies as well as a national coordinating organisation, District Health Boards New Zealand (DHBNZ).

In 2001, compounding questions about health system design, which are discussed below, the Labour-led government introduced its Primary Health Care Strategy.<sup>4</sup> Key aims of this were to create new

Primary Health Organisations (PHOs) designed to coordinate ongoing patient care, plan for population health care needs and reduce financial and other primary care access barriers, particularly for the most disadvantaged. Created between 2002-2006, and based on WHO Alma Ata principles of 'comprehensive primary care', PHOs are not-for-profit, multi-disciplinary organisations serving an enrolled population. Creation followed a 'let all the flowers bloom' model, whereby any entity that fulfilled a set of minimum standards was permitted to become a PHO. PHO funding is capitation-based, although many continue to reimburse general practitioners (GPs) on fee-for-service basis. Additional PHO funding is available for developing 'care plus' programmes for management of chronic disease patients, for 'services to improve access', and for health promotion. There are presently some eighty PHOs with 97% of New Zealanders enrolled.5

The primary care reforms were, in many ways, a lost opportunity.6 They were an attempt by a government, suspicious of private medicine and medical dominance of primary care, to subsume GPs and their Independent Practitioner Associations (IPAs) under PHOs rather than to work with them. IPAs are GP groups that developed through the 1990s and achieved considerable clinical and organisational gains. The IPAs vowed not to be undone, but also had the infrastructural capacity required by many PHOs and so grew in power. Consequently, rather than resulting in a uniform set of organisations, the primary care landscape has become increasingly complex. Like the DHB sector there are large and small PHOs with varying capacity, each required to fulfill the same administrative and service development functions. Reflecting this, and again requirements for collaboration, at least a half-dozen 'representative' bodies have emerged in addition to sixteen IPAs that provide management support services.

#### Performance of the health system

With the DHB system and PHO structures now well-established, questions are mounting about how well the New Zealand health system is functioning and whether it is capable of performing at a higher level.

The core planning, purchasing and service delivery structures have failed to perform well. Despite considerable funding increases through the 2000s (70% in real

terms), the DHBs continue to struggle. Deficits (or insufficient funding for services delivered) have been an ongoing problem for various DHBs, creating considerable challenges during funding negotiations with the government. Some DHBs have been placed under 'intensive monitoring' by the government while they have worked to reduce expenditure and balance their budgets. This, of course, has meant government intervention in DHB activities. A cost control ethos has surrounded the DHBs, restricting potential for broadening the scope of activities to include other sectors or new services;8 they have remained mostly focused on maintaining crucial hospital services. Some DHBs have sought to contract out services such as laboratory testing, or revoked a tradition of providing free laboratory services for private patients.

The funding problems have been reflected in elective service waiting lists. New Zealand was among the first to implement a scoring and booking system for nonurgent treatments, which has remained troubled. Elective service access has been static since 2000 in spite of funding and staff increases. Under government pressure to meet treatment time targets, DHBs have resorted to 'dumping' booked patients from their lists. A 2008 investigation found that eight patients had died due to 'avoidable delays' in heart surgery at one DHB.9 Another showed vast regional inequities in cardiac service access, declining rates of intervention (37% below England, 75% below Canada and 85% below Australia) and inconsistent use of prioritisation assessment tools and the booking system.<sup>10</sup>

A 2005 Treasury analysis indicated that DHB hospital efficiency had declined by 2.6% per annum from 2000/01 to 2003/04 but had increased by 1.1% percent per annum in the prior three years when the single purchasing agency (the former Health Funding Authority) was in place. <sup>11</sup> In its 2008 brief to the new government, the Ministry of Health gave little reason to believe DHB efficiency had improved. Indeed, its advice was that better integration and planning of services was needed, especially across the 'four regions' that represent the purchasing districts in place in the early-1990s. <sup>12</sup>

The DHBs have produced mixed performances in other areas. Performance, as measured against population health targets introduced in 2007, has improved. Life expectancy, infant and cardiovascular mor-

tality rates have improved in the 2000s, although economic advancement may have contributed to this. Inequalities between Maori and other New Zealanders are reducing, along with smoking rates and incidence of obesity. This said, several DHBs have failed to perform across various population health indicators.<sup>13</sup>

As already indicated, PHOs were something of an afterthought. PHO implementation was hasty and driven largely by financial incentives, with detail worked out through the implementation process. The arrival of PHOs means there are now two sets of organisations – PHOs and DHBs – at different levels within the New Zealand health system planning for a common population. Probably only a third of DHBs appreciate the potential contribution of primary care to health systems and public health and so in many regions PHOs lack crucial support from their funders.

Patient fees have come down and access to GPs has improved,5 although a quarter of New Zealanders continue to experience cost-related access difficulties.14 Furthermore, it remains unclear how much the government expects patients to pay to see a GP (ideally, there should be no fee as with public hospitals) or how it intends to regulate fees in the longer-term. Similarly, there is no clarity over whether PHOs should manage extended patient care and budgets; whether they might take on some DHB purchasing functions; whether there should be fewer, larger PHOs; and whether or not these should be territorial monopolies.

The DHB performances point to questions about whether the governance model is adequate. As noted, public involvement was one of the rationales for the present structures. Yet voter turnout at DHB elections has routinely been under 50%, while the quality of elected board members has sometimes been questionable. Furthermore, DHB boards are required under legislation to be accountable not to voters but to the Minister of Health.

#### Issues for the new government

Late-2008 saw the election of a new centre-right National-Party led coalition government, which faces multiple health policy challenges. The new government has shifted the political focus from population health to hospital waiting lists, 'value for money', and clinical leadership concepts as outlined in England's 'Darzi report'. At the time of writing (August

2009), there have been a number of post-election developments.

Most importantly, the financial situation for DHBs has deteriorated with only six not in deficit. A third are considered 'at risk', meaning remedial action has been required to justify continued deficit financing. This, of course, has added to suspicions that the DHB system is unwieldy, and underscores suggestions that the DHBs might be more efficient if some functions were centralised.<sup>17</sup> The new government's initial response has not only been to allocate to health an additional \$750 million per annum (an extra 6% or so to the health budget) for the next three years, 18 but also to ask serious questions about the health system, with a Ministerial Review Group commissioned for this task. Other developments include a pledge to build twenty elective surgery 'super centres', intended specifically to improve access; suggestions that DHBs could be sacked if they fail to improve cancer waiting times; and that they should work more closely together, e.g. for 'back office' functions such as information technology and with shared clinical services, especially in regions where access to specialist services is problematic. Many DHBs had already been pursuing shared arrangements.

Beyond this, various other challenges, sidelined over the years by the focus on structural change, demand the new government's attention. First, there has been inadequate attention to quality, problems with which are estimated to account for around 30% of expenditure.<sup>19</sup> A 2007 study highlighted widespread variations in DHB capacity to ensure safe services and a lack of a quality focus across public hospitals.<sup>20</sup> In 2007, the government created a Quality Improvement Committee which has since produced two sentinel event reports. However, there remains no national infrastructure for quality improvement and a dire need for the government to bolster efforts.

Second, there is a need to sort out electronic information systems, the foundations of which were developed in the 1990s in the era of competition. While New Zealand has comparatively high levels of computerisation, <sup>21</sup> PHO and DHB systems lack interoperability. Similarly, electronic patient records are widely used by GPs, but portability is limited. In late-2008, seven DHBs announced a joint initiative to develop an 'integrated, personcentred' system. Such developments need

to be emulated across the health sector and there is a demand for central leadership in this

Third, New Zealand has a workforce crisis induced partially by neglect for workforce development in the 1990s and insufficient attention since. Understaffing and the requirement for hospitals to hire locums is frequently cited as a reason for DHB overspending. New Zealand has the highest proportion of foreign-born and foreigntrained doctors in the OECD, similarly high levels of nurses and some of the highest expatriation rates. Meanwhile, New Zealand is below the OECD average when it comes to producing medical and nursing graduates,<sup>22</sup> and comparatively low pay rates mean it is difficult to compete in the international labour market. The situation has not been assisted by the fact that salary arrangements are an individual DHB responsibility. Under financial duress, they have routinely resisted health professional requests for salary increases, leading to a series of unprecedented strikes. To be fair, public hospital nurses received a 19% salary increase in 2006 (supplied by additional government funding). There has been a gradual increase in the intake of medical students, and a Medical Training Board has been created to address shortages of senior and junior doctors.<sup>23</sup> The new government has introduced a voluntary 'bonding' scheme for a range of health professionals, with student loan write-offs for those agreeing to work in under-served locations. There is a strong argument that public hospital employees should be treated in the same way as New Zealand's police and teachers, with national pay scales and negotiations under direct central government responsibility.

Finally, there is the question of whether New Zealand's present devolved health system structures have the capacity to deliver coordinated care. Efforts to improve efficiency, quality and electronic systems could alleviate some of the long-standing gaps between primary and hospital-based care, and public and private providers. Building clinical networks that traverse institutional boundaries could also help.

Each of these issues was canvassed by the Ministerial Review Group.<sup>24</sup> Their report is likely to induce a range of new structural changes to the New Zealand health system. Recommendations include:

- Creating a new independent National

Health Board to take over various DHB and Ministry of Health purchasing responsibilities, monitor the performances of DHBs and PHOs, and drive national approaches to issues such as information technology development.

- Transforming the Quality Improvement Committee into a new national quality agency with increased capacity.
- Creating a new health technology assessment agency (possibly out of the long-lived National Health Committee).
- Promoting a higher-level regional approach to DHB planning, and reducing the number of PHOs.

These recommendations are not, in themselves, unreasonable. Yet, if implemented, they could be just as unwieldy as the present situation: a smaller number of regional planning bodies and PHOs could be interacting with a larger number of central agencies. The challenge for the government is to look beyond the one-agency, one-function model that has dominated contemporary administrative thought and seek to integrate the inevitably intertwined functions of finance, quality and health technology assessment within a single body.

#### REFERENCES

- 1. Organisation for Economic Co-operation and Development. *OECD Health Data 2008*. Paris: OECD, 2008.
- 2. King A. *The New Zealand Health Strategy*. Wellington: Ministry of Health, 2000.
- 3. Gauld R. Revolving Doors: *New Zealand's Health Reforms*. Wellington: Institute of Policy Studies and Health Services Research Centre, 2001.
- 4. King A. *The Primary Health Care Strategy*. Wellington: Ministry of Health, 2001.
- 5. Cumming J, Mays N, Gribben B. Reforming primary health care: is New Zealand's primary health care strategy achieving its early goals? *Australia and New Zealand Health Policy* 2008;5(24):1–11.
- 6. Gauld R. The unintended consequences of New Zealand's primary care reforms. *Journal of Health Politics, Policy and Law* 2008;33(1):93–17.
- 7. Gauld R, Mays N. Reforming primary care: Are New Zealand's new primary health organisations fit for purpose? *British Medical Journal* 2006;333:1216–18.
- 8. Tenbensel T et al. Where there's a will, is

- there a way? Is New Zealand's publicly funded health sector able to steer towards population health? *Social Science & Medicine* 2008;67(7):1143–52.
- 9. Elliott J, Crozier I. Report on Patients Awaiting Cardiac Surgery: Capital and Coast District Health Board. 1st October 2008. Wellington: Ministry of Health, 2008.
- 10. Cardiac Surgery Service Development Working Group. *Cardiac Surgery Services* in New Zealand. Wellington: Ministry of Health, 2008.
- 11. *Value for Money in Health The DHB Sector*. Wellington: The Treasury, 2005.
- 12. Briefing for the Incoming Minister of Health. Wellington: Ministry of Health, 2008.
- 13. 2007/08 Annual Report on Indicators of DHB Performance (IDP). Wellington: Ministry of Health, 2008.
- 14. Schoen C et al. Toward higher-performance health systems: health care experiences in seven countries, 2007. *Health Affairs* 2007;26(6):717–34.
- 15. Gauld R. Delivering democracy? An analysis of New Zealand's District Health Board elections, 2001 and 2004. *Australian Health Review* 2005;29(3):245–352.
- 16. Department of Health. *High Quality Care for All: NHS Next Stage Review Final Report.* London: Department of

Health, 2008.

- 17. Scott G. After the reforms: some questions about the state of the state in New Zealand. *Policy Quarterly* 2008;4(2):3–14.
- 18. Ryall T. *DHB Deficit Blowouts Greet New Minister*. Wellington: Ministry of Health, 2008.
- 19. Health Committee. 2006/07 Estimates Vote Health. Wellington: House of Representatives, 2006.
- 20. Seddon M. Safety of Patients in New Zealand Hospitals: A Progress Report.
  Auckland: Office of the Health and Disability Commissioner, 2007.
- 21. Anderson GF et al. Health care spending and use of information technology in OECD countries. *Health Affairs* 2006;25(3):819–31.
- 22. Zurn P, Dumont J-C. Health Workforce and International Migration: Can New Zealand Compete? Paris: OECD, 2008.
- 23. Medical Training Board. *The Future of the Medical Workforce: Discussion Paper*. Wellington: Ministry of Health, 2008.
- 24. Ministerial Review Group. Meeting the Challenge: Enhancing Sustainability and the Patient and Consumer Experience within the Current Legislative Framework for Health and Disability Services in New Zealand. Wellington: Ministry of Health, 2009.

#### **Call for Abstracts**

## International Conference on Evidence-Based Policy in Long-term Care

8–11th September 2010 London, UK

The submission of abstracts on evaluative research in LTC policy is now welcome.

Where possible, highlight the international relevance of the research, either in terms of the evidence used in the analysis and/or of the topics and implications of the work.

An international conference on long-term care (LTC) policy organised by the Personal Social Services Research Unit and LSE Health and Social Care will be held at the London School of Economics and Political Science.

The conference aims to provide a forum for exchanging the latest international evidence on key long-term care policy topics such as how to organise, deliver, fund and regulate services.

The emphasis is therefore on evaluative research with clear impact on policy. Topics covered will include: long-term care economics; service commissioning; regulation; institutional dynamics and politics; workforce and informal carers; analysis methods.

Further details on the themes and requirements for submission can be accessed through the conference website:

www.lse.ac.uk/collections/PSSRU/events/ltc2010conf/ltc2010default.htm



Please contact Azusa Sato at a.sato@lse.ac.uk to suggest web sites for potential inclusion in future issues.

European Forum for Good **Clinical Practice** 

www.efgcp.be/

The EFGCP is a non profit organisation which promotes good clinical practice and encourages the use of common, high quality standards in biomedical research throughout Europe. The homepage gives details of forthcoming conferences and workshops, and EFGCP's background, vision, missions and policies. Its structure, membership and current working parties are also outlined. There are detailed reports on various European level biomedical studies available for free download and links to external publications and contacts. A photo gallery of EFGCP's annual conference is available for perusal and a dedicated member's area is offered.

EU level consultation on Migration Health

www.migrant-healtheurope.org/

This web site provides information on an EU level consultation on migration health, 'Better, Health for All', which took place in Lisbon on 24 and 25 September 2009. Organised by the Office of the Portuguese High Commissioner for Health and the International Organisation for Migration (IOM), the consultation's programme of events, donors and partners and contact details can be found online. Furthermore, presentations and background papers can be downloaded, on topics including 'research on migration health'; 'capacity building'; 'legal and policy framework'; 'undocumented migrants'; 'mental health'; 'maternal and child care' and 'health of adolescent migrants'. Briefings on current IOM projects are available and a search box allows users to navigate the site with ease.

Ageing at Work

www.ageingatwork.eu/

Ageing at Work is a project funded by the Leonardo da Vinci programme of the European Commission and aims to develop, test and promote a training concept for human resource professionals on age management. Specifically, it encourages integrated workplace health management to help retain workers in the workforce for longer. The web site provides links to literature and information within the resource centre, as well as a feed for current news and a members-only area. E-learning is encouraged via courses, presentations and assignments upon registration.

Monitoring Unit

www.ehemu.eu/

European Health Expectancy EHEMU is a web site designed to provide European life and health expectancies by using a database and information system and statistical software. An interpretation and calculation guide direct users on methods to work out health expectancies, supplemented by presentations and reports, a bibliography with a search engine, glossary and external links to related sites. Background information about EHEMU, its team members, country reports and training material are all provided free of charge, whereas the database requires a login. Further contacts and search boxes are also found on the site.

European Public Health Outcome Research and Indicators Collection (Euphoric)

www.euphoric-project.eu/

Funded by the European Commission under the Public Health Programme, EUPHORIC aimed to define a common set of outcome indicators in clinically relevant areas and test them within Europe (Austria, Bulgaria, Finland, France, Germany, Greece, Israel, Italy, Slovak Republic, Spain and Sweden). The results of the project are outlined on the web site through a video, virtual table of discussion, a report, a brochure and other information leaflets. Links to key partners and beneficiaries are provided, in addition to details about the research. A list of disease indicators and project dissemination material can be freely downloaded. The majority of the web site is written in English, but one report is available in Italian.

Swiss Health Observatory, Observatoire Suisse de la santé (Obsan)

www.obsan.admin.ch/bfs/ obsan/en/index/01.html

Obsan monitors and reports on health related information in Switzerland. Five areas of competence are focused upon: costs, financing and competition; demography and demand; health professions and the supply of health care; mental health, illness and disability; and health promotion and prevention. Further information on services offered and indicators are available, with links to free downloads of health reports and databases given. An advanced search function and site map provide for a user-friendly web site. Most content is available in English, German, French and Italian.



**NEW PUBLICATIONS** 

Eurohealth aims to provide information on new publications that may be of interest to readers. Contact Azusa Sato at a.sato@lse.ac.uk if you wish to submit a publication for potential inclusion in a future issue.

## Projecting the impact of demographic change on the demand for and delivery of health care in Ireland

Richard Layte et al



Dublin: Economic and Social Research Institute, 2009

178 pages

ISBN 978 0 7070 0289 7

Freely available online at: http://www.esri.ie/UserFiles/ publications/20091023164031/RS013.pdf This report provides an overview of Irish demographic changes in the past two decades and their impact on health care demand and delivery. Significant increases in life expectancy, coupled with an influx of migration have challenged policymakers who must deal with an ageing and increasingly heterogeneous population. In conjunction, the downturns in the economic climate have added pressure to already constrained resources. The report concedes that whilst the Irish health system is unlikely to see an increase in investment in the medium term, policymakers will be - or rather, must be involved in strategic planning and reorganisation to maintain an effective delivery of services. Figures and hard facts are presented on key indicators and trends to 2021, including fertility and birth; mortality and death; migration; projected overall population change; day case activity in acute public hospitals; GP utilisation; pharmaceutical prescribing and long term care. Finally, policy recommendations are outlined for all sectors of the health system.

Contents:

Foreword

Executive summary

The complex task of projecting the demand for and delivery of health care

Acute public hospital services: challenges for reform in the context of the 'Preferred Health System'

General practitioner care

Outpatient services

Pharmaceuticals

Long-term health and social care

Conclusions and implications

# Transforming pensions and health care in a rapidly ageing world: opportunities and collaborative strategies

Chiemi Hayashi, Heli Olkkonen, Bernd Jan Sikken and Juan Yermo



Geneva: World Economic Forum, 2009

76 pages

Freely available online at http://www.weforum.org/pdf/scenarios/ Transforming-Pensions-Healthcare.pdf This report was written as part of the World Scenarios Series published by the World Economic Forum, and seeks to outline the challenges and opportunities of ageing. It is recognised that there must be immediate collective action to turn a 'greying society' into a 'silver society', and as such, the report provides details for eleven strategic options for stakeholders. Specifically, the report tries to answer the question 'how can stakeholders strengthen the financial sustainability of, access to, and quality of retirement and health care provisioning in a rapidly ageing world'? The authors argue that by engaging effective multi-stakeholder collaboration, adapting a transformational change in thinking and employing retirement and health care solutions, there are viable solutions to the ageing issue.

The eleven strategic options are categorised into six objectives, which include 'control and transform demand'; 'stimulate consumer empowerment'; 'strengthen funding and savings'; 'optimise capital allocation'; 'improve efficiency and cost effectiveness' and 'enhance risk management and risk sharing'. The report systematically summarises the definition of each option, its importance, key barriers to its implementation and the role of each stakeholder, provided alongside facts and figures in a user-friendly format. As such, this optimistic report sets out practical solutions for policymakers, challenging them to collaborate in new and innovative ways.

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Executive summary

Section 1: Shaping the silver society: challenges and opportunities

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**Appendices** 

### NEWS FROM THE INSTITUTIONS

#### Outcomes of EU council meeting

The Council of the European Union on Employment, Social Policy, Health and Consumer Affairs was held in Brussels on 30 November and 1 December. Conclusions and updates were provided on a number of different issues.

#### Healthy and dignified ageing

The Council adopted conclusions highlighting the importance of improved cooperation between the member states to enhance dignity in the care of older people in the EU. By adopting the conclusions, the Council invited member states to make the issue of healthy and dignified ageing one of their priorities in coming years and to shift their focus towards preventive measures in order to reduce the burden of chronic diseases, frailty and disability.

They also noted that healthier ageing would also allow the costs of care to be reduced and could partially offset the financial impact of demography in the health and social sectors. The Commission will be invited to consider coming forward with an action plan for further activities in 2011 to promote dignity, health and quality of life for older people.

Patients' rights in cross-border health care

Despite substantial progress, the Council did not reach political agreement on a draft directive concerning the application of patients' rights in cross-border health care. The discussions at the Council meeting focused mainly on the reimbursement of costs with regard to non-contractual health care providers. In the search for a compromise, the intention was to fully respect the case law of the European Court of Justice while preserving member states' rights to organise their health care systems. The incoming Spanish Presidency

undertook to continue the work and try to reach an agreement.

Innovative incentives for effective antibiotics

Recognising that the spread of antibiotic resistance is a major threat to public health security worldwide, Council conclusions recall the possible consequences which a lack of effective antibiotics could have. In fact, without access to effective antibiotics, common infectious diseases may again become lethal threats and many medical and therapeutic procedures, such as cancer treatments and transplantations, will carry high risks.

The conclusions include calls on the member states and the Commission to adopt measures to diminish the development and spread of antibiotic resistance and to create incentives for the research and development of new effective antibiotics. In particular, the Commission is asked to develop a comprehensive action plan with concrete proposals concerning incentives to develop new effective antibiotics within 24 months.

Safe and efficient health care through eHealth

eHealth is considered to be no longer merely a technical tool in the hands of the healthcare operators, but a political instrument to develop health policy. Council conclusions aimed essentially to recognise the need for further political leadership and to integrate eHealth into health policy; invite the member states to improve eHealth services and develop their use; and invite the member states and the Commission to empower a high-level mechanism of governance at EU level which would coordinate eHealth activities.

Pharmaceuticals package

On the basis of progress reports, the Presidency informed the Council of the state of play in negotiations on two parts of the 'pharmaceutical package': preventing falsified medicines from entering into the legal supply chain of medicinal products and the strengthening and rationalising of the current pharmacovigilance system.

Under the Swedish Presidency, the preparatory bodies of the Council pursued their work with high priority on these two parts of the package. Concerning the draft directive on preventing the entry into the legal supply chain of falsified medicinal products, the working group reached tentative agreement on a number of technical aspects, including the definition of 'falsified medicinal products' and the relationship between the new provisions and EU rules on intellectual property rights. Other elements of the proposal still need further discussion, notably with regard to the strengthening of controls of non-active substances used in pharmaceuticals and the proposed safety features aiming to render falsification more difficult.

Concerning the proposals for a regulation and a directive on strengthening the EU system for safety monitoring of medicinal products ('pharmacovigilance'), the working group tentatively agreed notably on strengthening the role of the Pharmacovigilance Risk Assessment Committee and its composition. A number of issues still require further examination, such as the recording and reporting of adverse reactions and the proposed list of medicinal products for human use under intensive monitoring.

With regard to the third part of the 'pharmaceutical package', the proposals for a regulation and a directive concerning information for the general public on medicinal products, the Presidency recalled the strong concerns of many member states. The Commission made it clear that it is prepared to show flexibility in order to find a common basis for the future negotiations.

All five proposals are based on Article 95 of the Treaty (on the internal market); qualified majority required for a Council

Press releases and other suggested information for future inclusion can be emailed to the editor David McDaid d.mcdaid@lse.ac.uk decision; and a co-decision procedure with the vote of the European Parliament's committee in charge of environment, public health and food safety expected for early April 2010.

#### Alcohol and Health

Council conclusions are designed to recall the commitment the member states and the Commission have made within the EU alcohol strategy adopted in 2006 and to invite them to increase their efforts to reduce alcohol-related harm. Member states and the Commission are, for example, encouraged to engage actors in the alcohol beverage chain to work proactively in enforcing regulatory measures so that their products are produced, distributed and marketed in a responsible manner. The protection of unborn children, children, adolescents and young people is one of the main concerns of the conclusions.

#### Pandemic A/H1/N1 influenza

The Council held an exchange of views on recent developments in the EU and its neighbouring countries on the current situation regarding the A/H1/N1 influenza outbreak. In general, ministers shared the view that the coordinated approach taken so far with regard to pandemic A/H1/N1 has proved highly successful. They called, however, for further efforts to act against widespread disinformation and to strengthen the coherence of communication policy.

Ministers particularly underlined the importance of vaccination. Authorised vaccines were safe and effective, as they had no unexpected side effects so far and they offered protection even against mutated viruses. Ministers broadly welcomed the Commission's suggestion that a virtual stockpile of vaccines and antiviral products be created, in order to be prepared for emergencies in member states or third countries. They asked the Commission to clarify the practical and legal aspects of such a virtual stockpile.

Ministers supported the idea of sharing surplus vaccines with each other, subject to legal clarification. They called for a reinforced global cooperation through the World Health Organization (WHO) and the United Nations. Furthermore, ministers asked for work on multi-sectoral issues to be stepped up. They also wanted preparedness to address similar threats in the future to be strengthened.

Council conclusions can be accessed at

www.consilium.europa.eu/uedocs/cms\_data/docs/pressdata/en/lsa/111599.pdf

### New study: 70% of deaths on European roads occur in poorer countries.

Two out of three road traffic deaths are in low- and middle-income countries, according to a new study from the WHO Regional Office for Europe published on 19 November. Furthermore, the first comprehensive assessment of road safety in the WHO European Region finds that, of 120,000 people who die in road traffic crashes every year, almost 50,000 are pedestrians, motorcyclists and cyclists.

The European Status Report on Road Safety offers the first thorough analysis of the road safety situation in 49 of 53 European countries, accounting for 99% of the Region's population. Complementing the recent Global Status Report on Road Safety, the study shows that many European countries, especially in the western part of Europe, have applied effective inter-sectoral measures and reduced the number of lives lost over time. Yet achievements are uneven across the Region.

Speaking at the launch of the report, Dr Nata Menabde, Deputy Regional Director, WHO Regional Office for Europe, said that "whereas only 26% of the Region's vehicles are in low- and middle-income countries, their death rate is double that of high-income countries. This situation is even less acceptable, now we have compelling evidence that road traffic injuries can be prevented. Countries need to make a stronger effort to make roads safer for their citizens, and international collaboration can help address this challenge. Tackling road safety is investing in a healthier and more equitable future. By taking stock of what has already been done, this new publication aims to step up efforts and action in the whole Region."

The report finds that up to 3% of a country's Gross Domestic Product (GDP) is lost every year, through health care costs, premature loss of life and time off work. This is especially related to the fact that many of the victims are young and that 2.4 million non-fatal injuries are a major cause of disability every year. Yet the amount that countries spend on safety is far less than the economic loss incurred by road crashes.

One third of countries do not have effective speed control in urban areas,

while one in seven countries do not set adequate blood alcohol concentration limits as a measure to reduce drink-driving or have laws for child car restraints. Moreover there is no law for compulsory rear-seat belts in 10% of countries and under a third of countries report seat-belt wearing rates over 90%. A quarter of all countries do not have any multi-sectoral strategy to address road traffic injuries.

Pedestrians, motorcyclists and cyclists are most at risk

The needs of vulnerable road users have been ignored for too long, and this is reflected in the statistic that 40% of victims are pedestrians, motorcyclists and cyclists. Measures such as building raised crossings, pavements, and cycle lanes; reducing drink-driving and excessive speed; and increasing the use of helmets and child car restraints could save tens of thousands of lives every year. The report finds that only a third of European countries assess their laws as adequate; and even well designed legislation has no effect if it is not properly enforced. For example, only 19% of countries rate their enforcement of speed limits as adequate; for enforcement of drink-driving laws the rating is 34%.

political commitment to Greater addressing the needs of all road users is needed, with well publicised enforcement campaigns to raise people's perceived certainty of being apprehended and severely punished for violations. Investments in public transport, as well as safer roads that encourage walking and cycling, are critical to creating the incentive for people to choose healthy transport modes. The report shows that 41% of countries have national policies that promote walking and/or cycling, and 63% for public transport, indicating that this remains an area where more progress could be made.

Sustainable transport policies are key to public health and environment goals

More countries could reap the benefits of investing in sustainable transport and making roads safer. Policies that encourage public transport use, walking and cycling provide multiple health gains: reducing injuries, decreasing respiratory illness, preventing non-communicable disease through physical activity and mitigating the negative effects of climate change.

European countries can benefit from a

unique instrument to integrate road safety with environment and health concerns. The Transport, Health and Environment Pan-European Programme (THE PEP), jointly managed by the WHO Regional Office for Europe and the United Nations Economic Commission for Europe, is a platform to help countries pursue sustainable and healthy transport. THE PEP is one of the main achievements of the European environment and health process, which will be marked by the next ministerial conference on environment and health in Parma, Italy, on 10–12 March 2010.

The report is available at www.euro. who.int/Document/E92789.pdf

#### Russia: First Global Ministerial Conference on Road Safety

On 19-20 November 2009 the Government of the Russian Federation hosted the First Global Ministerial Conference on Road Safety in Moscow. Requested by the UN General Assembly, the event represented a historic opportunity to assess progress in tackling a leading cause of death and disability. As many as 1,500 government ministers, representatives of UN agencies, officials from civil society organisations and leaders of private companies attended the conference, which was opened by President Dmitry Medvedev. Participants called for action to address the large and growing global impact of road traffic crashes; reviewed progress on implementation of the World Report on Road Traffic Injury Prevention; and shared information and good practices on road safety.

Chairman of the Commission for Global Road Safety, Lord George Robertson said that the "Moscow summit provides an opportunity to rethink the links between transport policy and development. We need to reject the business model that measures a nation's progress in terms of kilometres of road while turning a blind eye to avoidable human suffering. And we need to put road safety at the heart of the international development agenda."

At the close of the conference, the ministers of transport and health adopted the Moscow declaration, expressing their strong commitment to reinforce governmental leadership and guidance in road safety by setting ambitious yet feasible national road traffic casualty reduction targets and mobilising the necessary resources to enable effective and sustainable implementation to achieve these

targets in the framework of a safe systems approach.

They also agreed to make particular efforts to develop and implement policies and infrastructure solutions to protect all road users, in particular those who are most vulnerable such as pedestrians, cyclists, motorcyclists and users of unsafe public transport, as well as children, older people and those living with disabilities.

The Moscow Declaration also invites the UN General Assembly to declare a Decade of Action for Road Safety 2011-2020, with a goal to stabilise and then reduce the forecast level of global road deaths by 2020.

More information on the conference and the Moscow declaration is available at http://www.who.int/roadsafety/ ministerial\_conference/en/index.html

#### First European conference on Mental Health and Well-being held

As a follow up to the launch of the European Pact on Mental Health and Well-being, the European Commission is organising, in cooperation with Presidencies and the member states, thematic conferences on the five priority themes: mental health in youth and education; prevention of depression and suicide; mental health in older people; combating stigma and social exclusion; mental health in workplace settings.

On 29–30 September the first thematic conference on mental health in youth and education was held in Stockholm. It was organised by the European Commission and the Swedish Ministry of Health and Social Affairs under the auspices of the Swedish Presidency of the Council of the European Union.

Opening the conference, Swedish Minister For Care of Older People and Public Health, Maria Larsson, spoke of the stigma and difficulties faced by young people in talking about mental health problems. Androulla Vassiliou, European Commissioner for Health, in a video message to the conference reminded participants that children and young people are our most precious assets. She also highlighted the fact that suicide remains the second most common cause of death for young people.

The sub-themes discussed at the conference were based on the factors which can have an influence on mental health in young people: Parents, family and early

years; the role of health services in promoting mental health and preventing mental disorders; the role of the community environment; the role of new media technologies and the internet and educational settings and learning.

Among the key messages of the conference were the importance of supporting parenting through adequate parental leave and benefits packages, ensuring access to high quality child care, as well as targeted interventions for high risk groups and families. There are also opportunities for intervention, including social and emotional learning programmes and life skill education in pre-school and school settings. Incorporating mental health promotion in educational settings into national action plans can also act as a catalyst for action.

More information at http://ec.europa. eu/health/ph\_determinants/life\_style/ mental/ev\_20090929\_en.htm

#### Enhanced responsibility for pharmaceutical products/medical devices under Health and Consumer Policy portfolio

On 27 November Commission President José Manuel Barroso announced the portfolio responsibilities for the next Commission. The new Health and Consumer Policy portfolio will now include responsibility for pharmaceutical products and medical devices. These changes will be reflected at the level of the directorate generals, with the Pharmaceutical Products and Cosmetics and Medical Devices Units F.2 and F.3, and consequently the European Medicines Agency, moving from DG Enterprise and Industry (ENTR) to DG Health and Consumers (SANCO). This will give responsibility for pharmaceuticals to the incoming health commissioner, Malta's Iohn Dalli.

The pharmaceutical industry have argued against such a move and to date medicines have been controlled by the enterprise and industry wing of the EU executive, even though medicines policy is the responsibility of health departments in almost all member states. Commenting on the move Monika Kosinska, European Public Health Alliance secretary-general, said that "we are certain that this governance change puts public interests and the health of Europeans at the centre of vital decisions affecting our health. With the responsibility for pharmaceutical and medical devices policies and for the European Medicines Agency too, the

health and consumer policy commissioner is now better equipped to lead a consistent and coherent approach to public health policy and more specifically to ensure protection of patients and safety of medicines throughout the European Union".

## WHO introduces guidelines to protect people's health from night noise pollution

On October 8, the WHO Regional Office for Europe launched its night noise guidelines for Europe. The book provides ground-breaking evidence on how exposure to night noise can damage people's health, and recommends guideline levels to protect health. The guidelines complement the recent EU environmental noise directive; it requires countries to map noise hotspots and reduce human exposure, but stops short of setting limits.

The new limit is an annual average night exposure not exceeding 40 decibels (dB), corresponding to the sound from a quiet street in a residential area.

Some groups are more vulnerable to noise. As children spend more time in bed than adults, they are more exposed to night noise. Chronically ill and older people are more sensitive to disturbance. Shift workers are at increased risk because their sleep structure is under stress. In addition, the less affluent, who cannot afford to live in quiet residential areas or have adequately insulated homes, are likely to suffer disproportionately.

Interventions combining reductions in both noise events and sound levels are most effective in reducing exposure to excessive noise. Zoning can assist planning authorities in keeping noise away from sensitive areas through, for example, routing traffic away from hospitals and schools and erecting noise barriers. Exposed areas could be good sites for offices, where no people would be present at night. Placing bedrooms on the quiet side of a dwelling is a simple measure. Sound insulation of bedroom windows is another option, but care must be taken to avoid reducing indoor air quality.

The guidelines are available at www.euro.who.int/InformationSources/Publications/Catalogue/20090904\_12

#### Europeans exposed to dangerous noise levels

The European Environment Agency (EEA) has launched the most comprehensive map of noise exposure to date, revealing the extent to which European citizens are exposed to excessive acoustic pollution. Noise is ubiquitous but its role as a key form of pollution with serious human health consequences is still underestimated. Prolonged exposure to even low levels of noise can trigger hypertension and disrupt sleep.

Lden is an indicator of the overall noise level during the day, evening and night, which is used to convey the annoyance caused by noise exposure. It is estimated than half of the population in urban areas with more than 250, 000 inhabitants endure levels above 55 dB Lden (the lower EU benchmark for an average 24-hour period) as a result of ambient road noise. Just over forty-one million Europeans are exposed to excessive noise from road traffic alone in the largest cities.

Compiling information from nineteen of the thirty-two EEA member countries, the NOISE database represents a major step towards a comprehensive pan-European service. Following the adoption of the Environmental Noise Directive (END), Member States were given until December 2007 to deliver relevant data. Users of the NOISE database can view the extent of data reported in accordance with the directive on a colour-coded map.

Adopted in 2002, the END aims to moderate noise exposure in built-up areas. The Directive also covers noise in public parks or other quiet areas in an agglomeration, in quiet areas in open country, and near schools, hospitals and other noise-sensitive buildings and areas. It does not apply to noise caused by residents or noise from domestic activities, noise at work places or inside means of transport.

The NOISE database can be accessed at http://noise.eionet.europa.eu/

## EU acts to limit health risks from exposure to noise from personal music players

In recent years sales of personal music players have soared, in particular those of MP3 players. Overall, in the EU it is estimated that roughly 50 to 100 million people may be listening to portable music players on a daily basis. In the last four years, estimated unit sales range between 184–246 million for all portable audio

devices and between 124–165 million for MP3 players. If individuals use music players inappropriately they put themselves at risk of hearing damage.

Consumers will now benefit from new default settings on personal music players set at safe exposure levels, as well as clear warnings on the adverse effects of excessive exposure to high sound levels, following a decision by the European Commission on 28 September. In October 2008, the EU Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) warned that listening to personal music players at a high volume over a sustained period can lead to permanent hearing damage. 5-10% of listeners risk permanent hearing loss. These are people typically listening to music for over one hour a day at high volume control settings. It is estimated that up to ten million people in the EU may be at risk.

Existing EU standards do not set a maximum sound limit but require that a statement be put in the instruction manual to warn of the adverse effects of exposure to excessive sound level. The European Commission has now sent a mandate to CENELEC (the EU standardisation body) requiring new technical safety standards to be drawn up. Safe exposure levels shall be the 'default' settings on products. The mandate does not prescribe specific technical solutions in order not to stifle the capacity of industry to innovate. Instead it requires manufacturers to provide that the default settings for normal usage meet safety requirements. The mandate also makes it clear that safe use depends on exposure time and volume levels. At 80 dB(A), exposure should be limited to forty hours/week. At 89 dB(A) exposure should not exceed five hours/week.

Higher exposure levels can be permitted, provided that they have been intentionally selected by the user and the product incorporates a reliable means to inform the user of the risks. Adequate warnings for consumers on the risks involved and on ways to avoid them should be provided, including the situation when the original set of earphones is replaced with another type and this causes higher unsafe sound levels. The mandate is not prescriptive in terms of how this is done. Industry solutions could include, for example, labels or digital information on the screen.

EU Consumer Affairs Commissioner Meglena Kuneva, said, "it's easy to push up the sound levels on your MP3 player to damagingly loud levels, especially on busy streets or public transport. And the evidence is that particularly young people - who are listening to music at high volumes sometimes for hours each week - have no idea they can be putting their hearing at risk. It can take years for the hearing damage to show, and then it is simply too late. These standards make small technical changes to players so that by default, normal use is safe. If consumers chose to override the default settings they can, but there will be clear warnings so they know the risks they are taking."

Bridget Cosgrave, Director General of DIGITALEUROPE, said, "consumers' safety has the highest priority for the digital technology industry. DIGITALEUROPE welcomes the approach of the European Commission by using a science-driven process for development of standards. It is important that users have accurate information in order to make informed choices about how they enjoy personal music. DIGITALEUROPE looks forward to working with the European Commission and standards bodies to serve consumer interests."

EU standards can take up to two years to be drawn up by CENELEC, and while not mandatory, if the new standard is approved by the European Commission and published in the Official Journal of the European Union, it *de facto* becomes the industry norm. Products meeting those standards are presumed safe – otherwise manufacturers have to go through costly independent testing for products. The new safety standards will apply only to future products.

More information at http://ec.europa.eu/ health/opinions/en/hearing-losspersonal-music-player-mp3/index.htm

### NEWS FROM THE EUROPEAN COURT OF JUSTICE

#### Judgment in GSK parallel trade case

On 6 October 2009, the ECJ issued its judgment on joined cases C-501/06, 513/06, 515/06 and 519/06 better known as GlaxoSmithKline Services (GSK) v European Commission. The case referred to an agreement between GSK and its

Spanish wholesalers in relation to the sale of 82 medicines, eight of which were prime targets for parallel trade. The agreement provided lower prices for wholesalers selling reimbursable drugs to hospitals and pharmacies in Spain and higher prices for those exporting the drugs to other Member States.

GSK sought a negative clearance from the Commission or an exemption pursuant to Article 81(1) of the EC Treaty. The Commission refused to grant an exemption on the basis that the agreement had the prevention of competition as its object. The refusal was upheld by the Court of First Instance (CFI). Both GSK and the Commission, and several interveners, appealed to the ECJ in relation to certain aspects of the decision.

Article 81(1) prohibits agreements which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which... 'apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage'.

Any agreements or decisions prohibited by article 81(1) are automatically void except in the case of article 81(3). This covers agreements between undertakings that contribute to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not (a) impose on the undertakings... restrictions which are not indispensable to the attainment of these objectives; or (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

In its judgment, the Court found that the Court of First Instance (CFI) committed an error of law in its assessment of the anti-competitive object of the agreement. The CFI had said that, although the agreement was by its "object" anti-competitive, the Commission had to go on to look at the effect. As expected, the Commission's appeal on this ground succeeded – an agreement may be anti-competitive by object or effect. The conditions are not cumulative but alternative in nature.

With respect to parallel trade, agreements aimed at prohibiting or limiting parallel trade have as their object the prevention of competition. This remains the case for the pharmaceutical sector. However, the judgment of the CFI was well founded on other grounds, namely relating to Article 81(3).

In this regard, the ECJ found that the Commission had indeed failed to properly assess the agreement under Article 81(3) and that the CFI had made no error in its assessment of the Commission's decision, including where it said that it is sufficient for the Commission, on the basis of the arguments and evidence in its possession to arrive at the conviction that the occurrence of an appreciable objective advantage is "sufficiently likely" in order to presume that the agreement entails such an advantage, including in relation to encouraging innovation. Moreover, the CFI had not erred in requiring the Commission to consider the specific nature of the pharmaceutical sector - this did not entail, as the Commission argued, the reversing of the burden of proof.

#### Ruling on generic product market authorisations

On 18 June 2009, the European Court of Justice (ECJ) issued a judgment on case C-527/07, the proceedings concerning a preliminary ruling on the interpretation of the provisions of Directive 2001/83/EC relating to market authorisations (MAs) for generic products.

The UK licensing authority, the Medicines and Healthcare Products Regulatory Agency (MHRA) rejected an application submitted by a pharmaceutical company, Generics (UK) Ltd, for a UK MA for a generic product, as the reference medicinal product was authorised in Austria in 1963 and its dossiers had never been updated to comply with the requirements of EC law that had become applicable in Austria following the accession of Austria to the EC.

The company challenged the MHRA's decision to reject its application before the High Court of England and Wales, which decided to stay proceedings and to refer to the ECJ for a preliminary ruling on the interpretation of EC rules concerning MAs for generics in cases where the reference medicinal product has been authorised according to local laws and not updated for compliance with EC applicable legislation.

In coming to its judgement, as a general rule, the ECJ noted that applications for

MAs should be accompanied by physicochemical and biological test data, as well as pre-clinical and clinical trial results. By way of derogation to this general rule, an applicant will not be required to provide the results of pre-clinical tests and clinical trials if it can demonstrate that the medicinal product in question is a generic version of a reference medicinal product which is, or has been, authorised according to EC law for at least eight years in a Member State or in the EU.

Based on the above principles, the ECJ clarified that the abridged procedure related to generics aims to avoid the repetition of tests on humans or animals where they are not absolutely necessary. However, these rules cannot be interpreted in such a way that the abridged procedure overrides the requirements of safety and efficacy that medicinal products must meet.

Therefore, the ECJ held that only those medicinal products benefiting from an MA issued in accordance with the Directive could be considered to be reference medicinal products. Therefore, in order to benefit from the abridged procedure, an applicant must demonstrate that the reference medicinal product was authorised in accordance with the applicable EC law in force at the time the MA application was made for the reference medicinal product.

Consequently, in the case in question, the MA for the generic product could not be issued since (i) the reference medicinal product was not authorised in accordance with EC law before being placed on the market and (ii) its MA has never been updated according to EC rules. Thus following the ruling of the ECJ on the interpretation of the provision of the Directive, EU Member States are not allowed to grant an MA for a generic product if the reference medicinal product was not authorised in accordance with EC law before being placed on the market and its MA has never been updated according to EC rules.

More information at http://eurlex. europa.eu/LexUriServ/LexUriServ.do? uri=CELEX:62007J0527:EN:HTML

### Commission takes action to guarantee UK benefits for citizens residing abroad

The European Commission has decided to take legal action against the United Kingdom for not paying certain benefits to EU citizens residing abroad. Under EU

rules, Disability Living Allowance, Attendance Allowance and Carer's Allowance are considered 'sickness cash benefits', meaning people covered by the UK system residing in another EU country are also entitled to receive them. On 9 October 2009, the Commission addressed a Letter of Formal Notice to the UK authorities. The British authorities have two months to respond. This is the first stage of an infringement procedure.

In the UK system, these three benefits are provided to people who need help with personal care and to the people who look after them. The ECJ has ruled (in case C-299/05 on 18 October 2007) that these benefits count as 'sickness cash benefits'. They are therefore exportable according to EU provisions on coordination of social security (Regulation 1408/71). In other words, according to EU rules, people covered by the UK social security system are entitled to receive these benefits even if they live in another EU country.

Now, to receive these benefits, the UK authorities require the claimant to have spent twenty-six of the previous fifty-two weeks in the UK (past presence test). This requirement goes against the European rules coordinating social security benefits and justifies the Commission's decision to start an infringement procedure.

### NEWS FROM THE EUROPEAN COURT OF HUMAN RIGHTS

#### Challenge to Irish law on abortion

Three women living in the Irish Republic challenged the country's strict abortion law at the European Court of Human Rights on 9 December, claiming that their rights had been violated. The three, two Irish nationals and a Lithuanian, all left their homes in Ireland to have abortions in Great Britain (restrictions on abortion also apply in Northern Ireland). Identified only by the letters A, B and C because of the risk of imprisonment in Ireland, they are supported in their case by the British Pregnancy Advisory Service and the Irish Family Planning Association.

Ireland's abortion law dates from 1861, and bans the procedure except where there is a risk to the life of the mother, including that of suicide. The Irish constitution was also amended in 1983 to include a pro-life clause, which asserted

that the unborn child had an explicit right to life from conception. An estimated 140,000 women have crossed the Irish Sea for abortions in the past thirty years, with the number presently running at an average of 6,000 a year

The case is the first challenge to Ireland's abortion laws in more than fifteen years. The Irish Family Planning Association welcomed the challenge to the laws, which it described as "draconian". It said they violated international human rights norms "because they inflict such grievous harm to women's health and well-being".

But Johanna Higgins, co-founder of the Association of Catholic Lawyers of Ireland, speaking to the BBC's World Today programme argued that a ruling against Ireland would be an infringement of its ability to decide its own laws. "Whatever the human rights aspects are of this, abortion is illegal in Ireland because it is a criminal offence," she said."

The Irish government has engaged a strong eight member legal team, including two leading constitutional lawyers, to argue its case that the country has a sovereign right to protect the life of the unborn. Addressing the court, Irish Attorney General Paul Gallagher said the protection of the right to life of the unborn was based on moral values deeply embedded in Irish society and democratically endorsed over three separate referenda. He said that in 1992 it was recognised by the EU in a protocol attached to the Maastricht Treaty, and later in 2008 and 2009 by twenty-six EU member states as part of the guarantees offered Ireland in order to re-run the Lisbon Treaty referendum. He also stated that the European Convention on Human Rights recognised over sixty years the diversity of traditions and values of the contracting states, and that Article 2 of the Convention also extended protections to foetal life.

Mr Gallagher said that since the last major court challenge (the X case) in 1992, the Government had not let matters rest. There had been a constitutional review, a Parliamentary Committee and a referendum, all charged with trying to identify the issues raised by the X Case and to look at the options. He said the suggestion that the women's health and human rights under Article 8 of the Convention were denied was 'a significant attack' on the Irish health system and its treatment, advice and support. He also

contended that the claims made by the individual women over how they were treated when they became pregnant were not substantiated by evidence from doctors.

Julie Kay, representing the three women, said that they had to borrow money from friends or a money lender to travel to Great Britain, something which conflicted with the minimum protection afforded under Articles 8 and 14 of the European Convention on Human Rights. Ms Kay said none of the committees and green papers had changed the legal status of abortion in Ireland since the X Case. She said the Government's claim that abortion was technically available in Ireland in extreme life-saving cases was bogus when it was realised that a doctor would lose his licence or face potential life imprisonment if a termination was later found to be unnecessary.

Moreover she argued that there was no effective remedy in the Irish courts since the requirement for a losing party to pay the State's costs was prohibitive and that the Government's reference to the Lisbon Treaty was irrelevant. All three women had faced indignity, stigmatisation and illhealth as a result of having to travel abroad for their abortions. The court is expected to deliver a verdict within a few months. In 2007, it ordered Poland to pay compensation to a woman who nearly went blind after being denied an abortion.

### European Court of Human Rights hears social care institution case

On 10 November 2009 two cases concerning applications by two Bulgarian nationals, Roussi Stanev and the late Mr Dimitar Ivanov Mitev were brought before the Court. By court orders and at the request of certain members of their respective families, the first applicant was placed under trusteeship, the second under guardianship. Both were subsequently placed in social care homes for individuals with psychiatric problems, Mr Stanev in the Pastra care home and Mr Mitev in a care home in Pravda. They requested the lifting of the measures imposed on them, but without success.

Under Article 3 (prohibition of inhuman and degrading treatment) of the European Convention on Human Rights, Mr Stanev is complaining about living conditions in the Pastra care home. Both applicants rely on Article 5 §§ 1, 4 and 5 (right to liberty and security) in complaining of the unlawful and arbitrary deprivation of

liberty on account of their placement in care homes against their will, the impossibility under Bulgarian law of having the lawfulness of those measures examined and the absence of a judicial procedure to seek compensation. Relying on Article 6 (right to a fair hearing) they further complain that they did not have access to a court to request the restoration of their legal capacity. Under Article 8 (right to respect for private and family life) they complain about the trusteeship and guardianship systems and allege that those measures were not subject to any periodic review. Finally, they complain that no effective remedy exists under Bulgarian law to complain of the alleged violations, as required by Article 13 (right to an effective remedy).

The two applications were lodged with the European Court of Human Rights on 8 September 2006 and 19 September 2007 respectively. Mr Stanev's trip to Strasbourg was the first time he had left Bulgaria. His travel was funded through legal aid from the European Court. The Court's judgment is expected in several months.

More information at http://tinyurl.com/yflrxdp

#### **COUNTRY NEWS**

## Sweden: sales of some over-the-counter pharmaceuticals to be permitted outside pharmacies

In Sweden, it is in principle prohibited to sell pharmaceutical products to consumers outside of pharmacies. However, the Swedish parliament adopted new legislation which made it possible, from 1 November 2009, to sell certain over-the-counter pharmaceutical products in regular stores. The aim is to increase customer accessibility to pharmaceutical products and thus improve service.

The Medical Products Agency (Sw. Läkemedelsverket) has been commissioned to decide exactly which products will be allowed to be sold in this way. The basic requirements are that the pharmaceutical products are: (a) suitable for self-care; (b) rarely associated with serious side effects; (c) appropriate, taking into account the safety of the patients and the protection of the public health. The Medical Products Agency was not able to decide exactly which products would be

allowed to be sold outside of pharmacies prior to the new legislation entering into force on 1 November. However a preliminary list including painkillers and nasal sprays was published. It was also confirmed that only those over eighteen would be able to purchase these products outside pharmacies.

The new legislation regarding over-the-counter pharmaceutical products is the last of four steps in the full re-regulation procedure of the Swedish pharmacy market. The three previous steps were: permission for nicotine replacement products to be sold outside pharmacies (March 2008); altered provisions on the supply of medicinal products to hospitals (September 2008); and the establishment of private pharmacies on the Swedish market (July 2009).

### England: NHS Strategy 2010–2015 published

On 10 December Minister of Health in England Andy Burnham set out his strategy for the NHS to put patients first and improve the quality of care as it enters an unprecedented era of reform. The strategy, NHS 2010–2015: from good to great. Preventative, people-centred, productive, explains the need to accelerate the pace of NHS reform to make the system more productive and hasten improvements in quality of care – protecting patients, supporting staff, shifting resources to the frontline and slashing back office waste and bureaucracy.

Minister Burnham said that "for the NHS to become truly great, it must become more preventative and people-centred. This means top quality care is our goal and patient safety our top priority. This is right for our times. Quality care is not always about spending more money, but about spending it in the right places. Moving care from hospitals into homes and communities is better for patients and more efficient".

He added that "with an ageing population and the increased prevalence of lifestyle diseases, preventing illness and keeping people healthy is our best long term insurance policy for the nation's health and managing the financial challenges ahead. The NHS should intervene earlier to help people lead healthier lives and prevent more disease."

Measures outlined in the strategy include a new payment system, which puts patients first - hospital income will increasingly be linked to patient satisfaction, rising to 10% of their payments over time, meaning hospitals will work harder for their patients. Primary care practice boundaries will also be abolished thus improving access to a GP in the evenings and weekends and more services at home or in the community.

New rights to high quality care including consulting on the right for patients nearing the end of their life to choose where they wish to spend their final days and new rights to high quality standards of service and care that will be clearly set out in the new NHS Constitution.

There are also plans for more access to personal care plans that allow patients to choose the right care tailored to their individual needs, while greater focus on personal health budgets will give millions of patients the right to more control over their care and the services they can ask for, as well as more options to receive care at or closer to home.

The strategy confirms that from 1 April 2010 patients will have a legal right to maximum waiting times to start treatment by a consultant and to being seen by a cancer specialist. In addition, the Prime Minister Gordon Brown announced in September plans to offer all patients in England access to tests that can confirm or exclude cancer within one week to help save thousands of lives every year.

From April 2012, the government also want everyone between 40 and 74 to have the legal right to an NHS Health Check every five years to assess their risk of heart disease, stroke, diabetes and kidney disease. Regular free health checks they estimate could prevent up to 1,600 heart attacks and strokes each year.

The strategy is available at http://www.dh.gov.uk/en/Publications and statistics/Publications/Publications PolicyAndGuidance/DH\_109876

### England: Recession sparks mental health crisis

Demand for mental health services has increased over the past twelve months as people struggle to cope with unemployment, debt, home repossession and threat of redundancy, according to a new study. The report by the London School of Economics, the Royal College of Psychiatrists in the UK and the NHS Confederation's Mental Health Network says the psychological impact of the recession is heaping pressure on health

services at a time when public spending is being cut.

Experts warn that stress means more people are seeking help, but health and social service waiting lists are growing. Cutbacks in social care are causing delays in discharge from psychiatric hospitals, according to the report, meaning doctors cannot see new patients.

The tension between the need to curb public spending and respond to rising demand for services is likely to become ever more of an issue as governments struggle to balance budgets in the wake of the financial crisis. In October EU Health Commissioner Androulla Vassiliou warned governments against cutting health services and urged them to step up investment in new health technologies instead.

Martin Knapp, professor of social policy at LSE and co-author of the report, said slashing health spending now might be attractive in the short-term but will lead to problems in the long-term. "Unemployment, debt and poverty cause enormous stress. This would be absolutely the worst time to cut prevention budgets or treatment services," he said.

Knapp called on public health services to find ways to prevent, as well as to treat, growing needs. The report suggests that mental health services can be made more efficient by a radical redesign of care services led by health care staff and managers. Avoiding situations where individuals are repeatedly assessed by different professionals is one area that could be addressed, it says. The authors also call on governments to provide support for employers to keep people with mental health problems in work.

The report is available at www.lse.ac.uk/collections/PSSRU/pdf/mental\_health\_downturn121109.pdf

### England: Hospital patients' right to private medical care

In order to reduce patient waiting times from referral to treatment, new rules will allow patients to opt to switch to private care if the National Health System (NHS) cannot see them within a given time period. The new policy, announced on 10 November, gives patients the legal right to obtain treatment within eighteen weeks of referral by their general practitioner and to be seen by a specialist within two weeks if they have suspected cancer. It is

one of several new rights enshrined in the NHS constitution which comes into force in April 2010.

Prime Minister Gordon Brown said: "every single person who has to go into hospital or go through the difficulty of cancer will have clear rights and real power guaranteeing them quick access to care, or the offer of going private or to another NHS provider if these standards are not met." The Labour government believes that this will empower patients to hold the health service to the shorter waiting times which have now been achieved for some forms of care.

The Liberal Democrat party agree with "the right to private treatment, paid for by the NHS" if a local hospital is unable to provide treatment within the target time period. However, they draw attention to a "gaping hole" in the policy for those patients whose condition does not have a designated target, such as mental health patients.

Concerns have also been raised by the largest opposition party, the Conservatives, who would rather focus on outcomes, such as deaths, and would do away with targets (and waiting times) altogether. Moreover, the shadow health secretary, Andrew Lansley, has called the new plans an "unaffordable and uncosted" pledge.

### France: National vigilance system for food supplements launched

The French Act on Hospitals, Patients, Health and Territories, or Loi Bachelot, was adopted on 21 July 2009 and entrusts the French Food Safety Agency (Agence Française de Sécurité Sanitaire des Ali*ments* – *AFSSA*) with the implementation of a vigilance plan to cover new foods, foods containing additives for nutritional or physiological purposes and food products intended for special uses. A Decree regarding the conditions of implementation is expected to be published in the course of the first quarter of 2010. The AFSSA's first task for this mission is to undertake a pilot phase on food supplement vigilance, in order to better identify any possible adverse effects due to their consumption. The plan will then be extended in 2010 to all foodstuffs covered by the Act.

The national vigilance system, officially launched on 29 October 2009, may be accessed on AFSSA's website. It requires that health care professionals send decla-

rations to AFSSA of any adverse effects observed in people who have taken food supplements. These declarations, which will protect consumer anonymity, can be addressed to AFSSA via the Internet or regular mail. Members of the public wishing to make a declaration of adverse effects individually are invited to contact a health care professional. The system will be based on cooperation with health care professionals and will enable the clear communication and identification of adverse reactions reported to be related to the consumption of certain food supplements, fortified foods or novel foods.

More information at www.afssa.fr/

## Germany: IQWiG publishes method for assessing relationship between costs and benefits

On 30 November 2009, after nearly two years of development and extensive discussion in the scientific community, the Institute for Quality and Efficiency in Health Care (IQWiG) published its methods for evaluating the relationship between costs and benefits. The Institute can now apply these methods when working on certain commissions awarded by the Federal Joint Committee (G-BA). The method developed by IQWiG is suitable for passing on recommendations to the GKV-Spitzenverband [National Association of Health Insurance Funds] for establishing maximum reimbursable prices. Moreover, in line with legislation, it ensures that medically necessary interventions will not be withheld from patients for financial reasons.

As the Institute's director, Peter Sawicki, explained, "the 'analysis of the efficiency frontier' is the most suitable method for the German system. During the various submissions of comments on procedures, no participants came up with a better alternative proposal. Contrary to what some critics maintain, we are not following a different course to other countries. While our procedure is quite different to that in the UK, there are a lot of similarities with Australia."

In Australia the Pharmaceutical Benefits Advisory Committee (PBAC), has been recommending maximum reimbursable prices for drugs based on the relation between cost and benefit since 1993. Similarly IQWiG will present the costs of achieving a particular additional benefit from a new therapy compared to existing alternatives. Like IQWiG, PBAC also uses clinical outcomes such as mortality

or quality of life rather than relying solely on QALYs (Quality Adjusted Life Years).

Unlike the situation with the National Institute of Health and Clinical Excellence in England and Wales, there is no general use of thresholds above which an intervention is less likely to be deemed cost effective. Such a threshold would not be in keeping with the German Social Code Book. Moreover, in IQWiG's view there is a fundamental cultural difference between the two countries.

#### Benefit always comes before cost

The method selected by IQWiG should enable the GKV-Spitzenverband in particular to establish a maximum reimbursable price, up to which the health insurance funds can reimburse the cost of new drugs. In order to avoid a situation where patients are burdened with additional costs for actual improvements in therapies, these maximum reimbursable prices may only be set under two conditions in accordance with the legislation:

- (1) The drugs must have an additional benefit compared to other therapies;
- (2) Drugs that have no real alternative are excluded from the assessment.

In order to ensure that these conditions are met, IQWiG selected a two-step procedure. The first stage is the analysis of the medical benefit of a drug compared to therapy alternatives using evidence-based medicine (EBM) methods. Only when an additional benefit is identified in this benefit assessment, should a health economic evaluation be carried out, comparing costs and benefits. IQWiG provides recommendations for appropriate maximum reimbursable prices. It is however up to GKV-Spitzenverband to set the actual maximum reimbursable price. In doing so, it must also take into consideration the manufacturer's research and development costs. In addition, it can include other aspects such as the severity or frequency of the disease.

Even if the price for a new health technology is 'appropriate', this does not mean that it can be paid by the social health insurance (SHI) community and thus be considered reasonable. Consequently, IQWiG will also carry out a budget impact analysis to estimate the impact that a given maximum reimbursable price might have on the total expenditure of the SHI community.

The methods document can be down-loaded at http://tinyurl.com/ya6aaev

#### Georgia publishes health system performance assessment

On 17 November 2009 Georgia marked an important milestone in the development of its health care system: the publication of its first Health System Performance Assessment (HSPA). The HSPA has been developed to help the Government set strategic priorities for the health system. It is part of Georgia's commitment to the Tallinn Charter on Health Systems, adopted by countries in the WHO European Region in 2008.

The report summarises the main findings of the WHO assessment of the performance of the health system according to key dimensions, including the health of the population, equity and financial protection, and the effective allocation of resources. It was carried out between July and September 2009 by the Ministry of Labour, Health and Social Affairs of Georgia, with technical and financial support from the WHO Regional Office for Europe and the World Bank.

Georgia's health system faces many challenges including the significant underuse of health care services, with only around 40% of beds occupied at any one time. The government is introducing strategies to address this, including the '100 new hospitals' policy – which aims to streamline the country's hospital system. 'Catastrophic' private spending on healthcare is also a major concern. In 2009, only one in three people were covered by any form of health insurance.

Attending the publication launch, Georgia's Minister of Health, Mr Aleksandre Kvitashvili, said the information provided in the HSPA is vital for the development and proper functioning of Georgia's health care system. He added that the government plans to implement its recommendations as soon as possible.

The report is available at www.euro. who.int/document/E92960.pdf

## Russian Federation: Restrictions on the advertising of medicines and interaction with health care professionals

Amendments have been introduced into the Russian Parliament with regards to the Federal Law on Advertising. These suggest a new version of the provision that governs the advertising of medicines (Article 24). The proposal is to extend the regulatory regime currently applicable only to prescription medicines to all medicines. This would prohibit the advertising of medicines with the exception of specialised printed publications (intended for medical and pharmaceutical professionals only) and places where medical or pharmaceutical events (exhibitions, seminars and conferences) take place.

Further draft amendments to Russian legislation have been distributed by the Russian Federal Antimonopoly Service (FAS). The FAS intends to significantly restrict the interaction between pharmaceutical companies and Russian health care professionals through new regulations. They propose providing detailed rules regarding conflicts of interest of health care professionals; prohibiting pharmaceutical reps to visit medical professionals at their workplaces during working hours; creating further restrictions on events, gifts and donations from pharmaceutical companies; and implementing new rules regulating 'post-clinical' trials of medicines (occurring after market authorisation). These amendments are currently the subject of extensive discussion between FAS and representatives of the pharmaceutical industry in Russia.

### Kiev Resolution on intellectual property and access to medicines

Access to medicine, in particular for people living with HIV, is one of the latest casualties of the global economic crisis. At a time of shrinking national health budgets, declining grant funding and high prices for medicine, the number of individuals in the WHO European region in need of treatment remains large. The issue has both a human and long-term development dimension.

In response, representatives from the United Nations Development Programme and the Open Society Institute organised a two-day meeting in Kiev on September 21-22 bringing together govnon-governmental ernment and representatives from six countries, Armenia, Georgia, Kazakhstan, Russia, Tajikistan and Ukraine, as well as international experts. The meeting centred on how countries in Eastern Europe and Central Asia can apply the flexibilities contained in multilateral trade agreements to reduce the prices of essential medicines for people living with HIV.

Antiretroviral (ARV) therapy is typically a combination of drugs used in the treatment of HIV to interfere with the virus' ability to replicate itself and therefore slow down the progression of the disease. The costs of medicines, however, can be prohibitive, particularly when production is restricted by international patents. In Russia for instance, six months of treatment can cost as much as \$12,500. On the other hand, it is important to ensure access to ARV therapy since it provides people living with HIV with the option of longer and healthier lives. ARV therapy is considered a lifetime commitment whereby each failure to provide that treatment and care is a matter of life and death.

As of 2008, only 17% of the 320,000 in need of ARV therapy in Eastern Europe and Central Asia received treatment. The coverage is half the global rate. At the same time, the number of people living with HIV in the region has doubled in seven years. Eastern Europe and Central Asia are home to approximately 1.5 million people living with HIV and 90% of all new cases are from Russia and Ukraine. Globally, for every three people who receive treatment five become infected, joining the 33 million people living with HIV worldwide.

In addition to human and health concerns related to HIV, countries with larger numbers of people living with HIV also face economic concerns. Higher need for health services can further strain health care systems. The envisaged impact of the crisis leading to budget cuts for HIV could result in the collapse of health care systems and availability of ARV treatment. Cuts in treatment can also prove dangerous since those who stop treatment became far more infectious and disrupted treatment diminishes drug effectiveness, requiring use of costly second-line drugs, placing additional demands on health systems.

Finally, one of the key outcomes of the meeting was the development of a resolution by participants highlighting issues to be considered during the negotiation and implementation of trade agreements, especially those involving intellectual property rights.

More on the meeting and the Kiev Resolution can be downloaded at http://tinyurl.com/ybghqbw

### Ireland: Multi-annual capital programme for mental health announced

In severe economic circumstances the Irish Budget for 2010, published on 9 December, has provided for a multiannual programme of capital investment in high priority mental health projects consistent with the national strategy for mental health reform *A Vision for Change*.

The value of mental health assets significantly counterbalances the cost of the new mental health infrastructure requirement as outlined in A Vision for Change. In 2010 the Health Service Executive (HSE) will proceed to dispose of such assets and invest an initial sum of €43m in the mental health capital programme. Provision for continued funding of the programme will be made in the 2011 Budget estimates and subsequent years, in the light of the previous year's programme of asset sales. The mental health capital programme will provide a range of facilities across the entire spectrum of mental health care facilities including acute psychiatric units, child and adolescent units, day hospitals, community nursing units and high support hostels, and will provide the infrastructure necessary to enable its transformation into a patient-centred, flexible and community based mental health service, where the need for hospital admission is greatly reduced, whilst still providing in-patient care when appropriate.

Innovation Funding of €3m has also been provided in the 2010 HSE Vote in respect of disability and mental health. This funding will be allocated to The Person Centre, a non-profit organisation which has established a fund with support from The Atlantic Philanthropies to support transition from institutional to personcentred models of care in disability and mental health services. This allocation is a reflection of the important partnership which has developed in recent years between government and philanthropy in driving the reform of disability and mental health services. The service reforms which will be facilitated by this fund are fully in line with the objectives of government policy as set out in A Vision for Change and with the objectives of the National Disability Strategy. Proposals will be invited jointly by The Person Centre and the HSE from service providers who can deliver a quantified transition of service users from institutional to community settings on a cost-neutral basis, after the initial transitional period. All projects selected for funding will be subject to a full evaluation at the end of the transition period, thus maximising the learning for the system as a whole.

More information at http://www.dohc.ie/press/releases/2009/20091209b.html

## News in Brief

### MEPs want joint EU action on neurodegenerative diseases

On 13 November the European Parliament adopted a resolution calling for pan-European coordination of research on neurodegenerative diseases including Alzheimer's and Parkinson's. MEPs called on national governments to establish a common research agenda in the field of neurodegenerative diseases and to strengthen epidemiological data on Alzheimer's and related dementia disorders. Required actions include a need to carry out early diagnostic tests, conduct research into risk factors (for example, environment) and identify criteria for early diagnosis.

More information at http://tinyurl.com/yaza55h

### New report highlights danger of second-hand tobacco smoke

Exposure to second-hand tobacco smoke is estimated to kill about 600,000 people every year. Smoke-free environments are the only way to prevent these deaths. A new WHO report launched on 9 December in Istanbul provides a comprehensive overview of the evidence base for protecting people from the harms of second-hand tobacco smoke through legislation and enforcement. There is a special focus on the status of implementation of smoke-free policies, with detailed data collected for the first time on a global basis at both the national level and for large sub-national jurisdictions. Additional analyses of smoke-free legislation were performed, allowing a more detailed understanding of progress and future challenges in this area.

The report is available at www.who.int/tobacco/mpower/2009/en/

#### Scotland adds data to WHO European Health for All Database

NHS Scotland has produced a 2009 update to the European Health for All Database. The database allows time trend and international comparisons for 600 health and health-related indicators, from 1970 to 2007 (where available) across the 53 Member States of the WHO European Region, plus averages such as the EU.

The database can be accessed at http://www.euro.who.int/HFADB

### Call for abstracts for EHMA annual conference 2010

The European Health Management Association (EHMA) has issued a call for proposals for papers at its annual conference, taking place in Lahti, Finland from June 30 to July 2 2010, that explore managing radical change in health with a particular focus on raising quality, improving efficiency and safeguarding equity. In particular EHMA is hoping to tackle these issues in more depth through both research papers presenting the findings and evaluation studies and practice papers presenting the results of management projects and initiatives.

More information at http://www.ehma. org/index.php?q=node/285

### Examining eating habits among Europeans

Food and nutrition policies across the EU have been collected in the European Nutrition and Health Report (ENHR) 2009, produced by the University of Vienna with support from the European Commission. The report describes trends in food supply across different regions, and compares average daily individual food availability at household level as well as looking at data on dietrelated health indicators and status. The findings emphasise the importance of food and nutrition policies and their potential impact on the nutritional and health status of European citizens, as well as drawing attention to the related socioeconomic components of overweight and obesity, both of which remain major health threats.

The report is available at http://www.univie.ac.at/enhr/

### Connecting climate change and social justice

The King Baudouin Foundation in Belgium has launched a project which brings together European stakeholders in climate change and social justice to consider how to develop a joint approach to these issues. A series of recommendations, based on the links between social justice and climate change mitigation policies, are to be submitted by the Foundation to the Belgian Government in the framework of the Belgian EU Presidency in 2010 and to a

number of EU authorities, including the Parliamentary Committee on the Environment, Public Health and Food Safety. These recommendations will now go through a consultation process via an online interactive platform which will be live from 18 January 2010.

More information at http://tinyurl.com/ybjhv2h

## NICE launches new database to inform the prioritisation of European cancer research

On 3 December the National Institute for Health and Clinical Excellence (NICE) in England and Wales launched a Database of Cancer Uncertainties to help in the identification and prioritisation of future cancer research across Europe. Hosted by NICE, the database has been developed through the 16 partner, 11 country Coordination of Cancer Clinical Practice Guidelines in Europe CoCanCPG) initiative and is funded by the European Commission.

Uncertainties around the evidence base used in guideline development are common; it is rare that all aspects of the management of a condition are supported by high-quality research evidence. In some circumstances, the research has not been done and even where it has been done it may be methodologically flawed or inconclusive. The new database will provide a tool to bring these uncertainties together. Prioritised uncertainties can then be promoted to research funders and researchers across the EU. Tracking mechanisms will be developed to avoid duplication of effort and highlight relevant clinical trials that patients can participate in. Coordination will help to ensure that available research funds are spent against identified priorities.

More information at http://www.nice. org.uk/aboutnice/howwework/researcha nddevelopment/cocancpg.jsp

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