

# Making the link: Using Health and Social Data to monitor Health Inequalities

POLICY  
PRÉCIS

How can health information systems be used to monitor health inequalities? What EU and international policies, programmes and systems are in place? Looking at good practices and how progress can be made.

## The Situation

There are large differences between EU member states in how long people live (i.e. life expectancy) and how many years they live in good health (healthy life years).

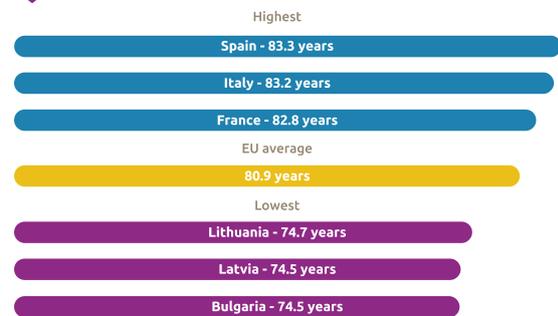
**Health Inequalities:** the avoidable differences in health outcomes between groups and individuals.

**Social Determinants of Health:** The conditions in which we are born, live, play, work, and age.

Europeans that experience social and economic disadvantage are more likely to be in worse health and die prematurely than those in more favourable socio-economic circumstances<sup>1</sup>.

To identify trends in health inequalities, as well as health outcomes and risk factor exposure in vulnerable groups, we need comprehensive health information systems<sup>2</sup>. They should enable the analysis of population health outcomes disaggregated by

## Life expectancy between EU Member States

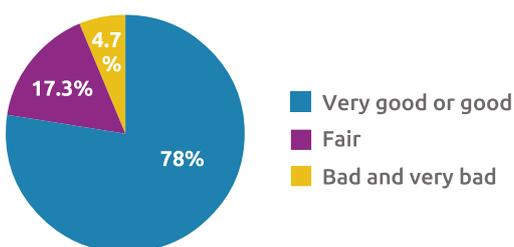


OECD/EU (2016), *Health at a Glance: Europe 2016 – State of Health in the EU Cycle*, OECD Publishing, Paris.

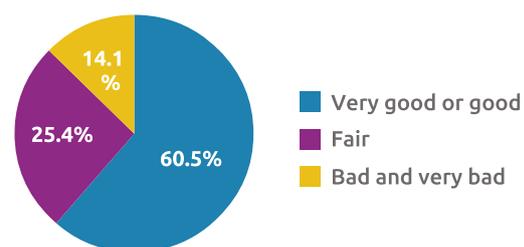
factors like socio-economic status, gender, ethnicity and education. National or regional health monitoring systems should deliver the information to help plan and evaluate targeted and cost-effective policies on health inequalities and its determinants.

To what extent do current information systems allow us to quantify health inequalities and risk factors? The availability and comparability of health data varies between EU member states, but there is an ongoing drive to develop better systems<sup>3</sup>.

## Self-perceived health, 20% of the richest population, in the EU



## Self-perceived health, 20% of the poorest population, in the EU



EUROSTAT (2016), *Self-perceived health by sex, age and income quintile, 2014*



THE PUBLICATION OF EUROHEALTHNET POLICY PRÉCIS IS SUPPORTED BY THE EUROPEAN COMMISSION, THROUGH THE PROGRAMME FOR EMPLOYMENT AND SOCIAL INNOVATION (EASI 2014-2020). THIS PUBLICATION DOES NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE EUROPEAN COMMISSION

## Existing European Systems

The current EU Health Information System comprises several frameworks which were developed over time. A recent analysis by the European Commission on the costs/benefits of such systems shows that these frameworks, together with other existing health databases and initiatives (e.g. OECD, WHO–EURO) create a burden and duplicate work for national data providers<sup>4</sup>.

Harmonised and comparable data between Member States has not yet been achieved, however trends over time can be analysed for some countries. Recommendations include better coordination and enhanced policy-related use of indicators, a reduced the time-lag for publication, flexible indicators responding to emerging policy challenges, a filter of ad-hoc initiatives based on actual needs, the potential of big-data and (semi-) automated systems for data gathering, and a link with developments in e-health.

**The following measures, surveys and initiatives can provide information related to the prevalence and trends in health inequalities:**

### European Core Health Indicators (ECHI)

The *European Core Health Indicators* (ECHI)<sup>5</sup> are sets of data (tables, graphs, maps) on health status, determinants, and care in European countries. Where appropriate, figures are given by gender and age as well as by socio-economic status and region. It includes indicators like ‘life expectancy by educational attainment’, however only a few countries are able to provide mortality information by such socio-economic characteristics<sup>6</sup>.

### Regulation 1338/2008 on Community statistics on public health and health and safety at work

*Regulation 1338/2008* instructs member states to collect statistics on health status, determinants, causes of death, occupational health and safety, and access to health and social care.

## Surveys

**European Health Interview Survey (EHIS)** statistics cover health status, health care, and health determinants as well as socio-demographic characteristics of the population aged 15 and over.

**The European Social Survey (ESS)** is an academically driven cross-national survey conducted since 2001. The 2014 edition had a health inequality module, including morbidity indicators and social determinants of health, e.g. behavioural and psychosocial factors, housing conditions, access to healthcare and employment conditions<sup>7</sup>.

### European Union Statistics on Income and Living Conditions (EU-SILC)

The *European Union Statistics on Income and Living Conditions* (EU-SILC)<sup>8</sup> collects timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social inclusion, and living conditions. It covers the EU28, FYROM (test implementation), Iceland, Turkey, Norway, and Switzerland. The EU-SILC survey contains a small module on health, comprising three variables on health status and four on unmet needs for healthcare. Breakdowns by gender, age, labour status, educational attainment level, and income quintile group are given for all indicators.

### State of Health in the EU

The State of Health in the EU initiative (2016-2018) provides comparable data and consists of four parts: (i) A ‘Health at a glance’ analysis of the state of health of EU citizens and the performance of EU health systems (ii) 28 country profiles (iii) a companion report on cross-cutting issues (iv) a voluntary exchanges between Member States and experts<sup>9</sup>.

## Proposed EU Measures

In August 2016 the European Commission adopted a proposal for a Regulation<sup>10</sup> to promote better integration of data collected through seven social surveys (including the three mentioned here), creating a comprehensive data set and more timely publication of results. It will include data on inequalities, employment, social welfare, and health.

### The proposed EU Social Scoreboard

The European Pillar of Social Rights includes the online ‘Social Scoreboard’<sup>11</sup> which will be used to track trends and performances across EU countries in 12 areas. Indicators like income inequality measured by quintile share ratio, people at risk of poverty and social

exclusion, real gross household disposable income, and impact of social transfers on poverty reduction are included. In relation with healthcare, the indicators are: self-reported unmet need for medical care, healthy life years (at the age of 65), and out-of-pocket expenditure on health care.<sup>12</sup>

### The EU SDGs indicator set

In 2017 the European Commission developed the EU indicator set for measuring progress on the UN Sustainable Development Goals and Agenda2030. For Goal 3 on health and well-being, six indicators were selected (life expectancy by educational level, self-perceived health, death rate, suicide, smoking, unmet need). Many other SDG targets and indicators are also relevant for measuring health equity. The European Commission will evaluate progress towards the agreed goals in a yearly report on SDG monitoring.

### Other international initiatives

**The European Health Information Initiative (EHII)** is a collaboration between WHO Europe, the European Commission and OECD, in order to develop a single, integrated health information system for Europe<sup>13</sup>. The EHII includes the WHO European Health Information Gateway and mobile application, the

Evidence-informed Policy Network (EVIPNet), networks (including EuroHealthNet), and support tools.

**The WHO European ‘Health for All’ databases (HFA-DB)** cover basic demographics, health status, health determinants and risk factors, and health care resources expenditures in the WHO European Region since the mid-1980s. Data can be extracted at regional and national levels<sup>14</sup>.

**The WHO Europe Action plan to strengthen the use of evidence, information, and research for policy-making** focuses on generating and using multidisciplinary and inter-sectoral sources of evidence for health policy making, in order to reduce health inequalities and to improve health and well-being in Europe<sup>15</sup>.

**Organisation for Economic Cooperation and Development (OECD) Monitoring** collects data on life expectancy by education level, and perceived health status and access/utilisation of healthcare by income. The **OECD Better Life**<sup>17</sup> Index compares national well-being based on material living conditions and quality of life. **‘Understanding the socio-economic divide in Europe’** (2017)<sup>16</sup> reports on economic, social, and health inequalities, their interlinkages, and importance for societies.

## Making It Happen

### Scotland

Established in 1995, The Scottish Health Survey (SHeS) identifies how lifestyle factors are associated with health, focusing on cardiovascular disease and related risk factors<sup>17</sup>. The data allows for comparisons between regions and population groups in terms of health conditions and risk factors, and with the rest of Britain.

The SHeS survey measures participants’ income which shows, for example, alcohol use by income group. With The Scottish Index of Multiple Deprivation, a measure of relative area deprivation across Scotland, it is possible to assess the prevalence of multiple conditions in least or most deprived areas. [www.gov.scot/ScottishHealthSurvey](http://www.gov.scot/ScottishHealthSurvey)



# Making It Happen

## The Netherlands

The national web portal 'VolksGezondheidEnZorg.info' (public health and care) shows recent data on socio-economic disparities and a number of diseases, perceived health status, daily functioning, lifestyle, (healthy) life expectancy, and health determinants. It focuses different levels of education.

Every four years RIVM publishes a national Public Health Status and Forecast report. The 2018 edition looks at health inequalities and forecast how they may develop over generations. It also considers wider health determinants such as employment. Figures are regularly updated with data from Statistics Netherlands (CBS). [www.volksgezondheidenzorg.info](http://www.volksgezondheidenzorg.info).

## Sweden

In Sweden the development and social distribution of major health outcomes, health related behaviours, and social determinants has been studied since 1987. Short

descriptive reports as well as detailed thematic reports have been published annually since then. These reports are now being transformed into an online monitoring system<sup>18</sup>.

The aim is to present health outcomes and their social determinants along socioeconomic strata, in order to support policy development at national, regional, and local levels. The Public Health Agency of Sweden is currently responsible for these activities.

## Joint Actions

Joint actions are EU-lead initiatives which bring together member states to work on a particular issue. Member States have been invited to work on two joint actions, on Health Inequalities (€2.5 million EU co-funding) including a work package on monitoring and on 'Health Information towards a sustainable EU health information system that supports country knowledge, health research and policymaking' (€4 million EU co-funding).

## Pathways To Progress

- Increase efforts to obtain data on health inequalities to enable conclusions on trends between and within countries as well as between groups.
- Correlate health data with social, economic and environmental data, and strengthen the equity elements of existing health monitoring systems. This will support development of evidence-based and targeted policies and interventions for improved health equity.
- Improve the EU health information system through cooperation with WHO and OECD.
- Ensure comparability of data between EU countries and regions, while acting towards better use and uptake in policy and communication.
- Integrate monitoring of social progress in macro-economic systems, like the Social Progress Index and include health equity indicators.<sup>20</sup>
- Integrate equity indicators into the recommendations concerning fiscal, investment, and sectoral policy in the EU Semester process.

[www.eurohealthnet.eu](http://www.eurohealthnet.eu) for all source information and links to our work in these fields.

**Footnotes:** [www.eurohealthnet.eu/publications/policy-precis](http://www.eurohealthnet.eu/publications/policy-precis) • Published 2018

## FOOTNOTES

1. OECD (2017) Understanding the socio-economic divide in Europe, available at <http://www.oecd.org/els/soc/cope-divide-europe-2017-background-report.pdf>
2. Hosseinpoor, A. R., Bergen, N., and Schlottheuber, A. (2015) Promoting health equity: WHO health inequality monitoring at global and national levels, available at <http://nccd.hhs.gov/resources/entry/promoting-health-equity-who-health-inequality-monitoring-at-global-and-national-levels>
3. WHO Europe (2015) Promoting better integration of health information systems: best practices and challenges, available at [http://www.euro.who.int/\\_data/assets/pdf\\_file/0003/270813/Promoting-better-integration-of-HIS-best-practices-and-challenges.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0003/270813/Promoting-better-integration-of-HIS-best-practices-and-challenges.pdf?ua=1)
4. European Commission (2017) Cost-benefit analysis of a sustainable EU Health Information System, available at <https://euroalert.net/publication/537/cost-benefit-analysis-of-a-sustainable-eu-health-information-system>
5. European Commission (2017) ECHI - European Core Health Indicators, available at [http://ec.europa.eu/health/indicators/echi/list/index\\_en.htm](http://ec.europa.eu/health/indicators/echi/list/index_en.htm)
6. EuroStat (2010) Highly educated men and women likely to live longer, available at <http://ec.europa.eu/eurostat/documents/3433488/5565012/KS-SF-10-024-EN.PDF/f2ca9d2-3810-4088-bdbe-2f636e6ecc48>
7. European Social Survey (2016) Social Inequalities in Health and their determinants, Top line results from Round 7 of the European Social Survey, available at [http://www.europeansocialsurvey.org/docs/findings/ESS7\\_toplines\\_issue\\_6\\_health.pdf](http://www.europeansocialsurvey.org/docs/findings/ESS7_toplines_issue_6_health.pdf)
8. EuroStat (2017) European Union Statistics On Income And Living Conditions (Eu-Silc), available at <http://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>
9. European Commission (2017) State of Health in the EU available at [https://ec.europa.eu/health/state/summary\\_en](https://ec.europa.eu/health/state/summary_en)
10. European Commission (2016) Towards better social statistics for a social Europe, available at [http://europa.eu/rapid/press-release-IP-16-2867\\_en.htm](http://europa.eu/rapid/press-release-IP-16-2867_en.htm)
11. European Commission (2017) A Social Scoreboard for the European Pillar of Social Rights, available at <https://composite-indicators.jrc.ec.europa.eu/social-scoreboard/>
12. European Commission (2017) Staff Working Document Methodology Behind Social Scoreboard, available at [https://ec.europa.eu/commission/publications/staff-working-document-methodology-behind-social-scoreboard\\_en](https://ec.europa.eu/commission/publications/staff-working-document-methodology-behind-social-scoreboard_en)
13. WHO Europe (2017) European Health Information Initiative (EHII), available at <http://www.euro.who.int/en/data-and-evidence/european-health-information-initiative-ehii>
14. WHO Europe (2016) European health for all database (HFA-DB) WHO/ Europe July 2016, available at: <http://data.euro.who.int/hfad/>
15. WHO Europe (2016) Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region, available at [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/314727/66wd12e\\_EIPActionPlan\\_160528.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/314727/66wd12e_EIPActionPlan_160528.pdf?ua=1)
16. OECD (2017) Health Inequalities, available at <http://www.oecd.org/health/inequalities-in-health.htm>
17. OECD Better Life Index (2017) How's life, available at <http://www.oecdbetterlifeindex.org/#/111111111111>
18. Scottish Government (2016) Scottish Health Survey 2015, available at <http://www.gov.scot/Publications/2016/09/3878/1>
19. Folkhälsomyndigheten (2017) Public Health Development, available at [https://www.folkhalsomyndigheten.se/folkhalsans-utveckling](https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/folkhalsans-utveckling), <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/statistikdatabaser-och-visualisering/folkhalsostudio/>
20. Social Progress Index (2017) 2017 Social Progress Index, available at <http://www.socialprogressimperative.org/global-index/data-definitions/>