Federal Health Reporting: Objectives, Tasks and Uses

Introduction
Federal Health Reporting (GBE) continuously supplies up-to-date data and information on the German population’s state of health and the country’s healthcare services. It covers a broad spectrum of topics, ranging from diseases, symptoms and risk factors to subjective well-being and health-related quality of life, utilization of preventive and healthcare services as well as the structures and costs of healthcare system.

Complementary to established GBE publications such as the RKI’s booklets and the Contributions on Federal Health Reporting, GBE kompakt will provide up-to-date data and information on health. It presents its content in a concise, clear and easily understandable way. It targets a wide audience and aims to support GBE’s press and public-relations work.

GBE kompakt will be published at least once a quarter. Additional issues may also be released on topical subjects or to mark special occasions. This first edition describes the aims, tasks and organizational structure of Federal Health Reporting. It also gives an overview of GBE’s various forms of publication, its sources of data and information, and its links with health policy. Starting with the second issue, GBE kompakt will deal with specific subjects that are under discussion. The surveys of the RKI’s health monitoring will be its key sources of data in this context.

Objectives, tasks and organizational structure
One objective of Federal Health Reporting is to provide a comprehensive and up-to-date information base for health policy. In addition to compiling GBE’s publications, it also answers requests of the Federal Government or the federal ministries in order to gather the specific information needed for certain decision-making processes.

Among other things, GBE contributes towards the development of health targets and action strategies and to the planning and implementation of concrete measures and programmes. Particularly important is the provision of data as a basis for identifying trends that are relevant to health policy and for assessing the success of already implemented interventions.

Policy-makers are an important target group for GBE, but not the only one (Figure 1). GBE also addresses scientific experts and provides basic information and references for epidemiology and public-health research, which is also important for students and teachers in these fields. GBE also targets the professional public, including journalists who want to base their health-related articles on scientific facts. Other target groups include public health departments, health insurance companies, charities, self-help organizations, and other social players who need up-to-date data and information on health for their work. Last, but not least, the aim is to give citizens easy and direct access to scientifically sound information on health.
Federal Health Reporting is carried out by the Robert Koch Institute (RKI) and the Federal Statistical Office, each focusing on different tasks in close consultation. RKI is responsible for the content, conceptual design and further development of reporting, as well as for compiling and publishing the health reports. Federal Statistical Office focuses on the collection, processing and provision of data and makes the “Information System of the Federal Health Monitoring (IS-GBE)” available to the public as an online database (www.gbe-bund.de). Federal Ministry of Health is politically responsible for GBE. Scientific experts, the players in the healthcare sector, and the federal states are consulted via the Health Reporting and Health Monitoring commission, whose currently 16 members have an advisory function. Conversely, GBE representatives collaborate with numerous political and scientific working groups and committees at the national and international level, thus ensuring a constant exchange of information with policy-makers, researchers and practitioners.

**Forms of publication**

In addition to GBE kompakt, Federal Health Reporting produces four other forms of publication: booklets, Contributions on Federal Health Reporting, Health Reports for Germany and the Information System of the Federal Health Monitoring (IS-GBE). There are differences of emphasis among GBE’s various forms of publication with respect to the breadth and depth of presentation and analysis. They also target different user groups. Even so, they relate to each other, complement each other and are further developed together.

The **booklets** (www.rki.de/gbe) deal with specific topics and issues that are given a high priority by health policy. They target health policy-makers, healthcare professionals and scientific experts, but also give the general public an opportunity to learn about health issues. The data and information in the booklets is presented in a scientifically well-founded, action-oriented and clear way. In terms of content, the booklets are structured according to GBE’s key themes (Table 1), thus ensuring that the relevant aspects of each topic are given comprehensive and coherent consideration. For example, the booklets on disease-related themes cover not only the distribution and risk factors of each disease, but also the medical healthcare services and prevention potential, including the related costs to the healthcare system. The booklets are compiled by the Robert Koch Institute in collaboration with external experts. They are subject to internal and external review. These GBE publications are available as a free of charge printed version with a circulation of 20,000 copies and an online version that can be downloaded from RKI’s website or from the IS-GBE. Some 50 booklets and four focus reports have been published since 2000. The latter have the same status as the booklets, but go into much greater detail.

**Table 1**

*Selected booklets on the key GBE themes*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Booklets (examples)</th>
<th>Cross-cutting subjects (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health situation</td>
<td>Coronary heart disease and acute myocardial infarction, diabetes mellitus, breast cancer, skin cancer, hepatitis C, HIV and AIDS, chronic pain, senile dementia</td>
<td>Health of children and adolescents</td>
</tr>
<tr>
<td>Determinants of health</td>
<td>Physical activity, overweight and obesity, alcohol consumption and alcohol-related diseases, unemployment and health, poverty among children and adolescents</td>
<td>Health of middle-aged women and men</td>
</tr>
<tr>
<td>Prevention and health promotion</td>
<td>Immunization, self-help in health</td>
<td>Migration and health</td>
</tr>
<tr>
<td>Healthcare/healthcare system</td>
<td>Nursing, psychotherapeutic care, expenditure and financing of the healthcare system, employees in the healthcare system</td>
<td>Citizen and patient orientation in the healthcare system</td>
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</table>
The **Contributions on Federal Health Reporting** cover their topics in detail and in depth, in some cases including detailed methodological and statistical explanations. Hence, they are aimed at a more narrowly defined target group than the booklets. Among the things published in this series are the findings of population-based analyses, most of which are based on data from the health surveys conducted by the Robert Koch Institute. Beyond that methodological reports dealing with the design and instruments used in RKI’s health surveys, as well as expert reports compiled by the RKI are released as Contributions. The latter are commissioned, for example, by the Federal Ministry of Health or Advisory Council on the Assessment of Developments in the Health Care System. The latest Contribution on Federal Health Reporting was “Cancer in Germany”, which RKI publishes every two years in cooperation with the Society of Population-Based Cancer Registries in Germany (GEKID). Approx. 20 contributions have appeared in this series up to now. The print editions usually vary between 3,000 and 5,000 copies. They can also be downloaded from the RKI’s website.

Die The aim of the *Health in Germany* reports is to provide a comprehensive overview of the population’s state of health and the country’s healthcare services. Unlike the booklets, Contributions on Federal Health Reporting and issues of GBE kompakt, which deal with specific topics and issues, the Health Reports for Germany are characterized by the diversity of subjects and an opportunity for observations and evaluations in a broader context. The first report in 1998 made an overall appraisal and established the Federal Health Reporting. Since the second report, which was published in 2006, the focus has been on portraying developments and trends over time and on international comparisons. The Health Reports for Germany are compiled jointly by Robert Koch Institute and the Federal Statistics Office. In future they will be published in both printed and electronic form every five to seven years. The last printed edition totalled 20,000 copies. An online version is available from RKI’s website or IS-GBE.

The **Information System of the Federal Health Monitoring** (IS-GBE) is an online database (at www.gbe-bund.de) which provides information on all GBE topics. It is maintained by the Federal Statistical Office. The database systematically pools information from over 100 different data sources, including official statistics, administrative and registry data, and surveys. This information is made available partly in the form of individually configurable tables and graphics as well as text. There are also documentations on the data sources and survey methods. GBE publications can be accessed via IS-GBE. The range of information offered is continuously being expanded and regularly updated. Information on this is provided by a newsletter, to which interested users can subscribe.

### Data basis

Strict demands are made on the data basis of Federal Health Reporting. The data must be representative, valid and reliable, and should be collected continuously, so that developments and trends over time can be depicted. It should also enable observations to be made on specific population groups, since this is the only way in which existing problems can be revealed and target groups identified for political interventions. The data available for Federal Health Reporting has improved significantly over the past 20 years, although there is still a lack of information on certain topics. Figure 2 can only display the most important and frequently used of GBE’s more than 100 data sources.

**Figure 2**

**Selected GBE data sources**

Robert Koch Institute’s health surveys provide comprehensive information on the population’s state of health and health behaviour, as well as on healthcare services in Germany. Particular surveys include the 1998 Federal Health Survey and the telephone health surveys conducted annually between 2003 and 2006, which were closely oriented to GBE’s data requirements. The same applies to the National Health Interview and Examination Survey for Children and Adolescents (KiGGS, www.kiggs.de), which was conducted between 2003 and 2006. This was the first time that the Robert Koch Institute had made comprehensive health information on the younger age groups available.

The RKI’s health monitoring will make it possible to continuously observe the health situation in Germany and improve the quality of data for Federal Health Reporting. Health monitoring comprises three components, each of which collects parallel and coordinated longitudinal and cross-sectional data: the German Health Update (GEDA) (www.rki.de/geda), which is based on annual telephone surveys; the German Health Interview and Examination Survey for Adults (DEGS) (www.rki.de/degs), which carries on the

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**Health surveys and population-based studies**

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1998 German National Health Interview, thus making longitudinal observations possible; and a continuation of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS) as a cohort study (Figure 3). In addition, other health surveys and population-based studies – mostly focusing on certain themes – are also relevant for Federal Health Reporting. One example is the Bertelsmann Foundation’s Health Monitor, which has been conducted twice a year since 2001 and places special emphasis on outpatient care. Another is the German Oral Health Study, which is concerned with dental and oral health and has been conducted by the Institute of German Dentists every five to seven years since 1989. Informative data on tobacco, alcohol and drug consumption is provided, for example, by the Drug Affinity Study and other surveys conducted by the Federal Centre for Health Education (BZgA), the Epidemiological Survey of Substance Abuse among Adults and the European School Survey Project on Alcohol and Other Drugs, both of which are the responsibility of the Institute for Therapeutic Research (IFT), as well as a study called Health Behaviour in School-aged Children, which is coordinated by the World Health Organization (WHO). Examples of population-based studies on cardiovascular disease and risks are the KORA Study (Cooperative Health Research in the Augsburg Region) and the SHIP Study (Study of Health in Pomerania), both of which have a regional focus.

**Registry data**

Systematically collected information on certain diseases is also available from population-based registries. These are designed to keep a record of all cases of a disease in a certain population. The aim is to generate information on this basis about the incidence, prevalence and course (survival, lethality/mortality) of the diseases and to reveal epidemiological interrelations.

One example is the registration of cancer cases by the regional (state) epidemiological cancer registries, which regularly send their data to the Federal Cancer Surveillance Unit at the RKI. Another important source (since 1980) is the German Childhood Cancer Registry (DKKR) in Mainz, which covers cancers occurring in children and adolescents. The RKI checks the completeness of this data, evaluates it and publishes it jointly with the Society of Population-Based Cancer Registries in Germany (GEKID).

When the Federal Cancer Registry Data Act came into force in August 2009, the Federal Cancer Surveillance Unit was expanded to the new Centre for Cancer Registry Data at the RKI (www.rki.de/krebs) and given a broader remit. Other examples of population-based registries include the Erlangen Stroke Registry and the registries of the KORA and SHIP studies, which document cardiovascular diseases in the Augsburg region and Mecklenburg Vorpommern respectively.

In addition to the population-based registries, clinical registries are also relevant for health reporting, especially when there is otherwise little or no population-based data available. Examples include the core documentations on rheumatic diseases in adults and children, the trauma registry of the German Association of Trauma Surgery, and various registries on cardiac diseases, including the heart attack registries in Berlin and Ludwigshafen, and the national registry of congenital heart defects.

**Official statistics**

Official statistics are collected by the federal and state statistical offices to comply with legal provisions. The legal basis at the federal level is the Federal Statistics Act of 1987. The official data sources that are used for GBE include, for example, the microcensus, hospital statistics and cause-of-death statistics. 1% of the population are included every year in the microcensus to gather representative data on

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**Figure 3:** Components of health monitoring at the Robert Koch Institute

<table>
<thead>
<tr>
<th>GEDA</th>
<th>DEGS</th>
<th>KiGGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adults</strong></td>
<td><strong>Adults</strong></td>
<td><strong>Children and adolescents</strong></td>
</tr>
<tr>
<td>Cross-sectional studies</td>
<td>Longitudinal study</td>
<td>Longitudinal study</td>
</tr>
<tr>
<td>Initial survey</td>
<td>Initial survey</td>
<td>Initial survey</td>
</tr>
<tr>
<td>Telephone interviews</td>
<td>Interview and medical examination</td>
<td>Interview and medical examination</td>
</tr>
</tbody>
</table>
the population and the labour market. An additional survey on health is carried out every four years which provides, for example, data on diseases and accidental injuries, body measurements, smoking behaviour and disabilities. Hospital statistics collect (among other things) the data of all patients who receive inpatient treatment in the course of a year in hospitals, preventive-health clinics or rehabilitation facilities (with more than 100 beds) including, for example, information on the primary diagnosis, the period of hospitalization and the department in which the patient was treated for the longest period of time. The cause-of-death statistics are based on an annual full census of all deaths, categorized by the aetiological cause of death. They form the basis for determining important health indicators such as mortality rates, years of life lost, and preventable deaths.

**Administrative data**

The use of so-called routine or administrative data for the tasks and issues of health reporting is also on the increase. This generic term covers all personal data that is routinely collected by the health and social services for (primarily) administrative purposes. Above all, the accounting data of the (statutory) health insurance companies contain a lot of personal information from all service areas of the healthcare system, including rehabilitation and nursing. They make it possible to conduct cross-sectoral and longitudinal analyses of the population’s use of health services (healthcare epidemiology). Further potential advantages of routine administrative data over primary studies include the large scale of their samples and the fact that some key error sources – such as non-response – can be excluded. However, there are also certain restrictions on the use of routine data. For example, the populations of insured people are not representative of Germany’s population – even when they are taken from large individual companies. The Federal Ministry of Health publishes statistics on statutory health insurance (GKV). These offer information on surveys conducted by the health insurance companies, on the people insured by GKV, on financial results and details of GKV’s business results.

Methodological problems can also arise in connection with case definitions, data validation, and compliance with data-protection requirements. The accounting data of the Gmünder Ersatzkasse, Techniker Krankenkasse and various local health insurance offices, among others, can be used for scientific purposes. In addition to health insurance data, the routine data of German pension insurance is especially interesting from the point of view of health reporting.

**International databases**

In order to be able to describe developments in the public healthcare system in an international context, health reporting is increasingly dependent on the use of health data from international databases. Suitable databases have been developed by international organizations over the past decade, specifically the World Health Organization (WHO), the Organization for Economic Cooperation and Development (OECD), and the Statistical Office of the European Communities (Eurostat). All these organizations maintain their own databases, which in some cases are filled with identical data deliveries from the cooperating countries. However, since it will take a few years before the collection of harmonized European health data becomes routine, the international comparability of data is still limited.

**Networking and interfaces**

**Federal and state levels**

Federal Health Reporting is networked in many ways with health reporting at both the federal-state and the European level. In addition, there are numerous points of contact with other reporting systems and political control processes. Federal Health Reporting provides important reference and comparison figures for state-level health reporting, making it possible to assess health development in the individual states in the light of nationwide developments. To this purpose, GBE makes available nationally representative data on key indicators of state reporting, some of which are used in municipal health reporting and can be accessed via IS-GBE. One example of cooperation between federal and state health reporting is the 2007 report on the Health of Children and Adolescents in Schleswig-Holstein. Here, data from the RKI’s KiGGS study was combined with information from school-enrolment studies and official statistics from the state of Schleswig-Holstein. Furthermore, cooperation and coordination between health reporting at the federal and state levels is ensured by the GBE committees of the Association of the State Health Authorities (AOLG) and the Health Reporting and Health Monitoring commission. Federal/state workshops organized by GBE and contributions to congresses and technical conferences (e.g. the annual congress in Berlin entitled Poverty and Health) represent further platforms for cooperation.

**European indicators**

Links between health reporting at the national and European level include, for example, GBE’s participation in projects to develop European health indicators and their implementation in European and national reporting. One result of this development work is a list of 85 health indicators (European Community Health Indicators, ECHI), which is to form the basic framework of European health reporting in the future (www.healthindicators.eu). Parallel to this, a questionnaire has been developed for a European Health Interview Survey (EHIS) based on interviews, which is to provide the basic data for many ECHI indicators. The third pillar of European health reporting in which GBE is participating is the compilation of health reports either on specific subjects or of a more comprehensive nature. What is now the third Report on the Status of Health in the European Union, which paints a multifaceted picture of health in Europe, was published in March 2009 (www.eugloreh.it).
**Reporting on poverty and wealth**

As far as links with other forms of political reporting are concerned, GBE participates in Federal Government’s reporting on poverty and wealth. GBE compiled scientific expert reports revealing the links between poverty, social inequality and health for the second and third report on poverty and wealth, which were published in 2005 and 2008. In addition, GBE has in recent years made direct contributions to reporting on children and adolescents and on families. The findings of GBE and the RKI’s population-based research are also used extensively in reporting on the elderly, on nutrition, addiction, sports and the environment.

**Political control processes**

The importance of GBE for political control processes can be illustrated by the development of national action plans, the formulation of health targets, and the reports of the Council of Experts for the Assessment of Developments in Healthcare. GBE is involved in the coordination of the National Action Plans for Combating Poverty and Social Exclusion (NAP’incl) through its participation in the circle of scientific experts on poverty and wealth reporting. There is a whole series of other national action plans based on the findings of GBE, such as the National Action Plan for a Child-Friendly Germany and the National Action Plan for the Prevention of Bad Eating Habits, Lack of Exercise, Overweight and the Diseases thus Caused.

Formulating and implementing national health targets is a joint initiative of the Ministry of Health and the Association for Social Security Policy and Research (GVG) (www.gesundheitsziele.de). GBE has supported this process from the outset, for example by

- participating in the working groups on the individual target areas,
- compiling the health reports that often formed the basis for defining health targets and basic measures on their implementation, and
- helping to draw up evaluation concepts aimed at monitoring target achievement and the effectiveness of the measures used.

**Reports of the Advisory Council**

Every two years, the Advisory Council on the Assessment of Developments in the Health Care System compiles scientific expert reports on healthcare in Germany on behalf of the Ministry of Health – on the basis of section 44 of Book V of the German Social Security Code (SGB V). Key subjects include identifying healthcare deficits and inefficiencies, making and suggestions for further developing the healthcare system, taking into account the overall financial and structural conditions. In many of its expert reports, the Advisory Council uses (survey) data and material provided by GBE to describe the healthcare situation and the population’s state of health. When required, GBE also compiles population-based expert reports; one example was a comprehensive specific evaluation of the German Health Interview and Examination Survey for Children and Adolescents for the Advisory Council’s scientific expert report in 2009.

**Outlook**

Federal Health Reporting has been continuously further developed since the beginning of the routine phase in 1998. It now provides data and information on a wide range of subjects relevant to health policy. A topical example is the report entitled “20 Years After the Fall of the Berlin Wall: How has Health Developed in Germany?” (www.rki.de/mauerfall, available in German only). This report examines similarities and differences between western and eastern Germany in the development of health and the healthcare system over the period from 1990 to 2009. Analyses of developments and trends over time will continue to be a focus of health reporting in the future, because they represent an essential prerequisite for the planning, implementation and evaluation of health measures and programmes. The data supplied by the Robert Koch Institute’s health monitoring provides an important basis for this. For example, the annual telephone interviews (GEDA) will make it possible to quickly identify developments and trends relevant to health policy. The other components of health monitoring (DEGS and KIGGS), which are published at regular intervals every few years, provide information that indicates how the population’s state of health, health behaviour and healthcare services change over time.

It is important to publish the data collected by health monitoring as quickly as possible. For example, the GEDA data is presented in an annual Findings Report, which is structured according to selected indicators. The data obtained through monitoring is also integrated into the IS-GBE and forms an important basis for all other GBE publications.

GBE kompakt is especially important. Since this series of publications appears on a regular basis, it is well suited for publishing the monitoring data promptly. The lead article will often deal with topical issues and discussions. However, GBE kompakt also aims to make reporting more flexible and up-to-date, so that especially relevant issues will repeatedly be at the centre of attention. GBE kompakt is thus establishing a new series of publications that takes the improved data situation into account and supports a topical form of health reporting.

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