Ministerium für
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lögd

Benchmarking
Regional Health Management
(Ben RHM)

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Final Report

to the European Commission

June 2003

The EU project **"Benchmarking Regional Health Management"** was carried out under the leadership of the Ministry for Health, Social Affairs, Women and Family North Rhine-Westphalia (MGSFF), Germany and the co-ordination of the Institute of Public Health North Rhine-Westphalia (lögd), Germany with the financial support of the European Commission.

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Contents

1. Summary

The project "Benchmarking Regional Health Management" (Ben RHM) set up by the EU under the framework of the Health Monitoring Programme (HMP), was aimed at enlarging the knowledge of regional health policies with respect to the governance of health programmes and processes, the administration of regional public health authorities, financing institutions and providers and institutional arrangements for monitoring activities. It intended to support a learning process among European regions using the variations between different regional health care regulations and activities.
To get an insight into the different regional health systems and the according management structures in Europe the tracers, measles immunisation and breast cancer screening as examples for prevention and screening strategies were chosen. Detailed questionnaires, additional background information and face-to-face interviews were used to gather the relevant information on the health policies of the 8 European regions that took part.

The analysis of the questionnaires and collected information material showed an immense variety in the organisation, implementation and evaluation of different measles immunisation- and breast cancer screening programmes. The participating regions gained knowledge and understanding of different ways of working and got information on how to improve their own prevention and screening programmes. However, an international or rather interregional benchmarking with the aim of identifying good practice models could not be achieved due to the limited information that could be gained in this rather short period of time, due to the in many aspects not comparable very different socio-economic and historical backgrounds and especially due to the limited number of regions.

To enable a continued learning progress among European regions and to achieve more transparency amongst the different regional health systems, it would be beneficial to involve a far larger group of regions, and give special consideration to political and socio-demographic backgrounds as well as epidemiological developments. This would allow a comprehensive benchmarking and the identification of good practice models for each group, enabling regions to implement changes according to the procedures most similar to theirs.

2. Introduction

In June 1997, the European Parliament adopted a programme of Community action on Health Monitoring within the framework for action in the field of public health across the European community. The programme, known as the Health Monitoring Programme (HMP) intended to contribute to the establishment of a Community health monitoring system by:

- measuring health status, trends and determinants throughout the Community;
- facilitating the planning, monitoring and evaluation of Community programmes and actions;
- providing Member States with appropriate health information to make comparisons and to support their national health policies.

The actions to be implemented under the programme as well as their specific objectives were divided into three sections:

- the establishment of Community health indicators
- the development of a Community-wide network for sharing health data and
- analyses and reporting on health in the European Union (European Commission 2001).

During the period 1997 - 2001 the concept of the Health Monitoring Programme was implemented in a number of different European projects, many of which involved comparisons of different health issues at the national level.

However, there were only a few European teams looking at aspects of public health at the regional level, even though discussions about changes in the distribution of political and administrative powers to a more regional model across Europe were observed.

It was with this aspect in mind that the Ministry for Health, Social Affairs, Women and Family in North Rhine-Westphalia (NRW), Germany submitted a project proposal "Benchmarking Health Monitoring Programmes". During the initial phase of the project this title was changed to "Benchmarking Regional Health Management" (Ben RHM), as the content of the project was focussed on analysing and benchmarking regional health policies and systems.

3. Project Organisation

3.1 Project group

The project group consisted of representatives of the Ministry for Health, Social Affairs, Women and Family NRW (Düsseldorf, Germany), the Institute of Public Health NRW lögd (Bielefeld, Germany) and the Consulting Company for Applied System Research BASYS (Augsburg, Germany), who were responsible for the development of the methodology and instrument to collect the information concerning prevention and screening policies, the analysis of the questionnaires and additional documents, the organisation of project meetings, and the drawing up of the final report.

3.2 Project partners

Initially, representatives from 9 Member States (Austria, Denmark, Germany, Greece, Ireland, Italy, Spain, Sweden, and United Kingdom) and 4 applicant countries (Czech Republic, Lithuania, Poland, and Slovenia) were asked to support the project group by completing the questionnaires and collecting relevant information about the regional health systems, additional background material, and related data in their respective countries.

The project participants who supported the project are listed in the table below:

Country	**Region**	**Project Partner**
Austria	Upper Austria	Dr. Reli Mechtler, University of Linz
Czech Republic	Moravia-Silesian	Dr. Jaroslav Volf, Regional Institute of Hygiene
Germany	North Rhine-Westphalia	Dr. Birgit Weihrauch, Ministry for Health, Social Affairs, Women and Family NRW
Greece	Western Greece	Dr. Eleni Jelastopulu, School of Medicine, University of Patras
Ireland	Eastern, Midland and North Eastern regions	Mr. Kieran Hickey, The Health Boards Executive (HeBE)
Italy	Veneto	Dr. Fabio Perina, Veneto Region, Department of Health and Social Services
Sweden	Stockholm	Dr. Magnus Stenbeck, Centre for Epidemiology, National Board of Health and Welfare
United Kingdom	England	Prof. John Davies, University of Brighton, Faculty of Health

3.3 Project meetings

There was one meeting for all project partners including the representatives of the European countries on 14 and 15 June 2002 in Düsseldorf, Germany, to discuss the methodology and working plan.

Two further meetings of the project partners from the Ministry of Women, Youth, Family and Health NRW, BASYS and lögd were held to discuss and explain the methodology to the organisations active in administering health services in North Rhine-Westphalia. These meetings took place in Düsseldorf, Germany, on the 11 March 2002 and 6 June 2002.

On the 28th and 29th of March 2003 a final workshop was organised by the project partners to present and discuss the results of the project with all participants.

4. The Ben Project

4.1 Background

Within the 15 Member States of the European Union there are 76 so-called NUTS 1 regions. These regions are increasingly gaining importance as units of political and administrative management in Europe, as they are considered to be an ideal framework for leading activities in favour of the citizens and their regional identities (AER 2002). However, the level of autonomy in the field of public health enjoyed by sub-national regions differs from country to country, and the roles and responsibilities of regions are changing rapidly. One aspect is the decentralisation movement relating to health care systems, which can be observed in many countries. It is leading to an increasing regional involvement in the formulation and implementation of health policies already present at the national or international level, attempting to connect policy with practice in the areas of health care and social services (WHO 2001).

Against this background the Ben project intended to give an insight into the different regional health systems and instigate a peer learning process among European regions using the variations of regional health care regulations and activities to improve health governance and public health.

4.2 Objectives

The aim of the Ben project was to enlarge the knowledge of European regional health policy systems focussing on two representative preventive respectively early detection activities: measles immunisation and breast cancer screening as a starting point for further research in this field.

The structure and organisation of measles immunisation programmes and breast cancer screening programmes were to be analysed as well as the processes involved in implementing these health programmes. Using the benchmarking concept, good practice models of regional health management were to be identified, considering all organisations active in the administration of health services such as regional public health authorities, financing institutions and providers.

The following objectives were formulated:

- Provide an insight into the different regional health systems and their management structures in Europe (institutional arrangements for monitoring activities, administration by regional public health authorities, sickness funds, and providers)
- Analysis/benchmarking of different aspects of regional health management with respect to the two chosen tracers: measles immunisation programmes and breast cancer screening programmes
- Identification of good practice models of regional health management structures
- Supporting the learning process among representatives of European regions
- European Regional Network on health governance relating to prevention and health programmes

5. Project Methodology

5.1 Measles immunisation and breast cancer screening

Measles is an acute infectious disease caused by the measles virus. Despite the extraordinary advances of the 20th century, a significant component of the global burden of illness remains attributable to infectious diseases. Developed countries have more or less eradicated measles, but continuous surveillance and vaccination is still necessary. For example, in southern parts of Italy or in London measles outbreaks occur randomly because of insufficient immunisation and the import of the measles virus by foreigners.

Breast Cancer, a non-communicable disease, is expected to account for an increasing burden of disease among women in Europe. Each year breast cancer is diagnosed in about 220,000 European women and kills around 75,000. Estimates suggest, however, that the lives of about 25,000 women could be saved, if best practice of screening were available to all women in the European Union (Commission of the European Communities 2003). Screening for cancer and the establishment of best practice still vary between Member States. The development and implementation of best practice methodologies for breast cancer screening is therefore a crucial element of public health policy in Europe.

5.2 The concept of benchmarking

Benchmarking is a highly respected practice in the business world and can be seen as a tool to improve activities and organisation of programmes. It looks outward to find best practice and high performance and then measures actual business operations against these goals. In the area of preventive medicine governments use the example of other countries with excellent performance as a benchmark for reviewing their own structures and processes. A second possibility is to take international standards as benchmarks. However, if the international benchmarks are averages, they cannot serve for countries with excellent performance standards.

According to the European Benchmarking Network, benchmarking usually encompasses the following:

- Regular comparisons of performance (functions or processes) with best practitioners;
- Identification of gaps in performance,
- Seeking fresh approaches to bring about improvements in performance,
- Implementation of improvements and
- Monitoring progress and reviewing the benefits.

The idea behind benchmarking is to facilitate learning about circumstances and processes that underpin superior performance (European Benchmarking Network, undated).

To measure the performance of a preventive programme it is necessary to focus on intermediate indicators and final outcome indicators of process quality and process efficiency. One common indicator of the intermediate performance of the programme is the participation rate, or up-take rate of the target population. Both measles immunisation and breast cancer screening aim at high participation rates. In the case of measles prevention a high participation rate is necessary to avoid an outbreak of measles. Incidence of measles is an outcome indicator too, although in the case of non-communicable diseases incidence rates alone provide no meaningful interpretation. Instead survival rates and quality-of-life measures are used to evaluate final outcome.

5.3 Benchmark indicators

As benchmark indicators may differ from a regional, national and international perspective, international outcome targets and quality guidelines were chosen as benchmarks for the two chosen tracers.

5.3.1 Measles immunisation

At its 48th session held in Copenhagen in September 1998, the WHO Regional Committee for Europe adopted the European Health 21, Target 7 for reducing communicable diseases which states:
"By the year 2020, the adverse health effects of communicable diseases should be substantially diminished through systematically applied programmes to eradicate, eliminate or control infectious diseases of public health importance." (WHO 1999)
In the document, 'A strategic framework for the elimination of measles in the European Region', which was approved by the European Advisory Group on Immunisation as the most appropriate approach for the elimination of measles from the WHO European Region (Ramsay 1997), the maintenance of high routine coverage of a single dose of vaccine, use of two dose schedules and conduction of mass 'catch-up' campaigns are measures mentioned as contributing to the elimination of measles. All countries in the European Region were to develop a measles elimination plan based upon an assessment of the local epidemiology, achieve and maintain high routine immunisation coverage, strengthen measles surveillance, estimate the age-specific proportion of the population who are susceptible to measles, choose an appropriate strategy to accelerate measles control and choose a strategic framework for the elimination of measles in their region.

5.3.2 Breast cancer screening

In 1999, at the request of the European Commission, the Advisory Committee on Cancer Prevention prepared recommendations on cancer screening in the European Union. The Committee reviewed the scientific literature and analysed the experience of different screening networks established under the Europe against Cancer programme. The Committee also organised an international symposium on cancer screening to take into account the latest progress on cancer screening and to discuss the draft recommendations with the international scientific community. Based on the most up-to-date science, these recommendations established a set of general principles for best practice in cancer screening and made specific recommendations for the implementation of mammography screening for breast cancer.

The central *mammography screening requirements* called for by the European Parliament are: Women between the ages of 50 and 69 must have the right to attend high-quality mammography screening at two-year intervals in dedicated and certified centres paid for by health insurance schemes;

- Each mammogram must be read independently by two radiologists, each of whom must read the mammograms of a minimum of 5 000 women per year so that they have a trained eye;
- An independent national body to keep the radiation dose to a minimum and the image quality to a maximum must monitor the equipment regularly.

The "European guidelines for quality assurance in mammography screening", based upon experiences gained through the national screening programmes, the Europe against Cancer funded European Network for Breast Cancer Screening and the European Reference Organisation for Quality Assured Breast Screening and Diagnostic Services (EUREF), serve as reference for quality assurance (Perry et al 2001).

5.3.3 Elements of European Benchmarks

The WHO approach to the elimination of measles in Europe and the European guidelines for mammography screening served as a basis for identifying benchmarks for the measurement of performance of the two chosen preventive programmes, early detection respectively, as summarised in Table 1.

Table 1: Elements of European Benchmarks

	Measles	Breast cancer screening
Outcome Targets		
Incidence/mortality:	Elimination	Reduction of 25%
Up-take rate:	95%	70%
Structures		
Conditions	Surveillance system, documentation, vaccination registers, vaccination status checking	Cancer register
Incentives	Bonuses	Cost-effectiveness (incentives)
Compliance	Invitation system, reminder system (vaccination uptake rate, vaccine distribution)	Compliance in the eligible population (participation rate)
Training programme		Proper training of providers (technical repeat rate)
Processes		
Technical standards	Two dose MMR, Immunisation guidelines	Mammography with the highest standard
Assessment centres	Measles incidence rates, measles death	Further assessment in special breast cancer centres of positive cases
Evaluation process	Analyse causes of insufficient participation and of the measles outbreaks	Monitor outcomes and screening process; analysis of cost-effectiveness

Source: Ben Project (2003)

5.4 Data collection

As an instrument for gathering the relevant information / meta-data on the regions' health policies two questionnaires, one for measles immunisation programmes and one for screening programmes for breast cancer, were developed. They contained questions about the processes and organisation of the various programmes and their integration into the corresponding health systems, covering the aspects:

- Planning, organisation and legislation
- Action and measures involved

- Programme financing
- Information and education about measles and breast cancer and the related programmes
- surveillance and monitoring of the diseases.

The questionnaires were completed by the project participants and discussed in further interviews to clarify problems and to assure the quality of the data collected. The analysis of the questionnaires and collected background material was intended to identify best-practice models for regional health management.

Additionally, other various data sources, such as national and regional centres involved in prevention or international networks, were used to find outcome indicators such as mortality, morbidity, and participation in preventive activities. For example, incidence and mortality data on breast cancer were available from GLOBOCAN (GLOBOCAN 2000).

6. Regional Summaries

The description of the regional health management systems and particularly the organisation of the measles immunisation and breast cancer screening programmes, also illustrated as organigraphs, is based on the information given by the project participants.

6.1 Upper Austria – Austria

6.1.1 Demography

Upper Austria is one of 9 regions (Länder) in Austria. With a population of roughly 1,38 million spread over 12 000 square kilometres, which results in a population density of 15 inhabitants per square kilometre (OÖ Landesregierung 2000).

Of the roughly 0.63 million inhabitants who were employed in 2001, 7.3% of them where employed in the agricultural and forestry sector, 42.1% in the industrial sector and 50.4% in the public service.

The regional demographic characteristics of Upper Austria are as follows:

Male population:	**0.68 million (49%)**
Female population:	**0.71 million (51%)**

There are 74.47 thousand inhabitants in the 0-4 years old age-group.

The female population in the age-group normally targeted for mammography screening programmes, can be divided as follows:

Age-group in years	**number in thousands**
50-54	40.94 (28%)
55-59	35.46 (24%)
60-64	38.32 (26%)
65-69	30.93 (21%)
total	145.65

At almost 0.1 million, the migrant population in Upper Austria constitutes 7.2% of the inhabitants.

6.1.2 Organisation and structure of the health system

The government system in Austria has two levels of authority, the national (federal) level and the regional (Länder) level. Each of the nine federal provinces is administered by its own government. The federal government is responsible for legislation, formulating health policy and general directives and technical supervision of the health insurance system, which is managed on an autonomic basis. The provincial authorities (the governors), assisted by health advisory councils, are responsible for carrying out directives and implementing laws and policies. Health officers at provincial and district level supervise the carrying out of federal and provincial measures in the districts and communes.

The delivery of health care services to the population and controlling the health care system is considered to be primarily a public task in Austria. More than two thirds of the country's health care system is funded through social insurance contributions and general tax revenue, approximately 15 % by direct payments and 15% by private insurance.

By paying a monthly compulsory contribution to social health insurance funds, citizens acquire entitlements to treatment as set out in the current general social security provisions.

The tasks of the federal government and its authorities are largely delegated to the regions and/or social insurance funds within the framework of indirect federal administration arrangements, while the federal authorities retain a significant role in terms of its supervisory bodies for health law enforcement and training issues.

At regional level, legislation is made by the regional governments, whose members are elected by proportional representation. The laws are monitored and implemented by the respective regional governments which are headed by regional governors and are the supreme authorities of the regions.

Every regional government has its own health department, which is headed by the regional director of health and each district has its own health department, which is headed by the district medical officer.

Regions and communities have an important role to play in establishing, implementing and monitoring various forms of public health delivery. The regions' administrations have special departments to combat notifiable infectious diseases and are responsible for vaccination and counselling services, health promotion and collecting state health statistics (European Observatory on Health Care Systems 2001a).

6.1.3 Measles immunisation programmes

Immunisation programmes in Austria are planned and carried out in all 9 regions. The combined Measles, mumps and rubella immunisations (MMR) for children aged 14 months with a repeat dose at the age of 7 years were established in 1993 and 1994 respectively. All measles vaccinations are offered free of charge by the regional public health authorities or specialised practitioners.

In January 1998 the Ministry of Health and Women (BMGF) put a new National Immunisation Concept into practice for all Austrian regions: it states that recommended vaccinations for children up to the age of 15 years are offered free of charge. The costs are shared by the federal government (2/3), by the regional government (1/6) and by the social insurance companies (1/6). Parents receive immunisation vouchers for the vaccine and have the choice of whether their children are vaccinated by their general practitioner, a paediatrician or the public health services.

The vaccination of school children is exclusively offered and carried out by the regional and local public health services.

Organisation of programmes

The organisation and implementation of immunisation programmes is done at regional level by the respective regional health authorities.

In 2000, the regional government of Upper Austria together with the Regional Health Authority and the Insurance Company of Upper Austria formulated ten health targets for the region in their health report "Gesundheitsbericht Oberösterreich 2000". Target 5 is directed at measles and aims to eliminate endemic measles in the region by 2005 or even earlier, and to gain certification of the elimination of this disease by 2010 (OÖ Landesregierung 2000).

The different organisations, agencies and professional groups involved in the realisation of measles immunisation programmes as well as the levels at which the programmes are planned and co-ordinated are illustrated in the organisation plan below (Figure 1).

Figure 1: Organisation plan for the measles immunisation programme in Upper Austria

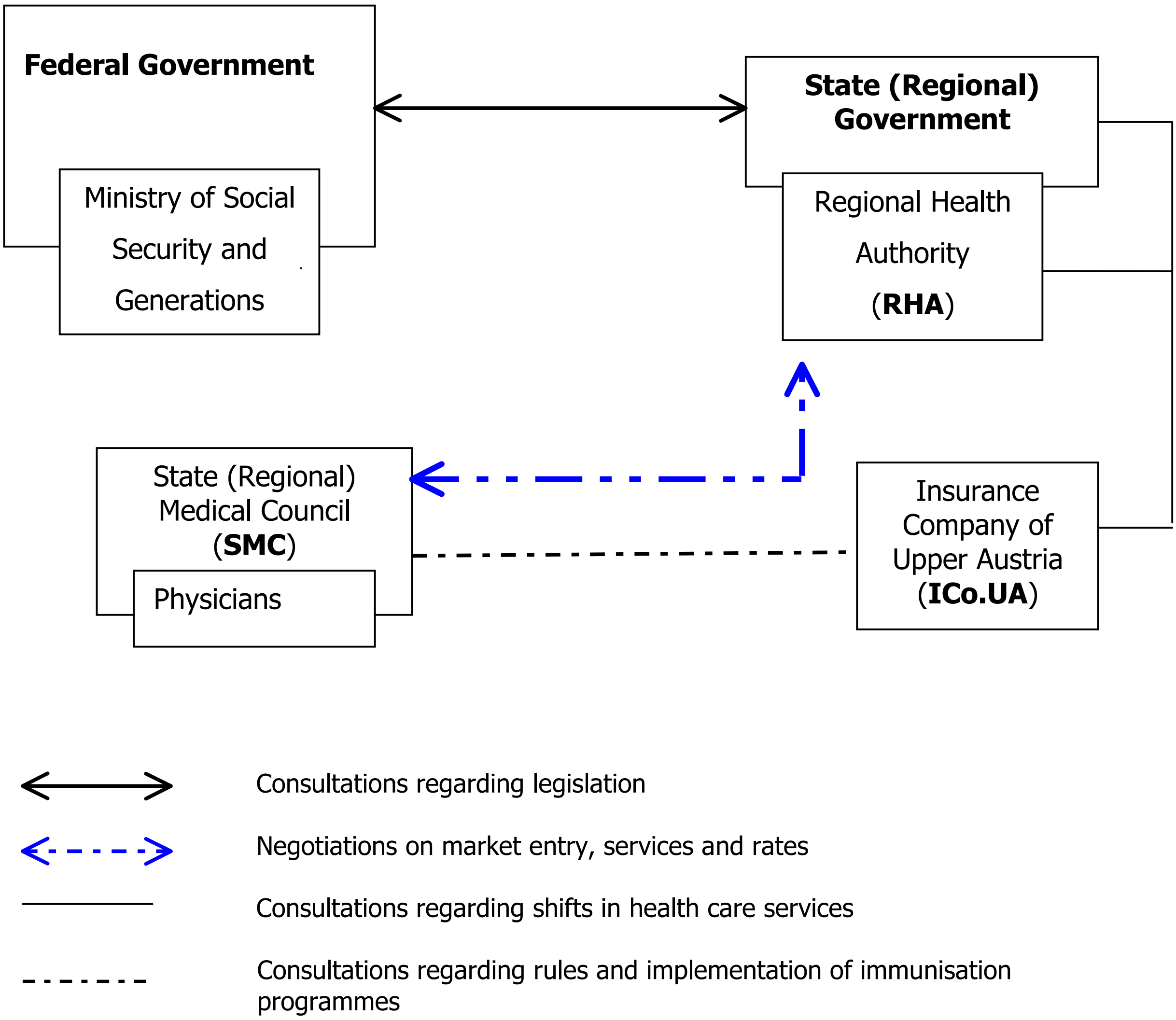


Figure 1 displays the different levels of responsibility with respect to the measles immunisation programme in Upper Austria:

The Regional Health Authority (RHA) has the overall responsibility to plan and implement the Measles Immunisation Programme (MIP) at regional level.

RHA: **-** is responsible for implementing laws and running the health system

- plans and implements immunisation programmes according to the national immunisation concept
- is responsible for health education in general and also for informing physicians about current recommendations and new developments relating to measles immunisation

The Federal Government (FG) and **State Government (SG**) are only responsible for the legislation.

BMSG (Ministry of Health and Women): builds the health system's national legal framework.

SG: builds the health system's regional legal framework, considering the national legislation.

To carry out the Measles Immunisation Programme (MIP) according the law and the implementation rules, the RHA co-operates with the State Medical Council (SMC), which is the representative body for the physicians.

The responsibility for funding is shared between FG, SG and ICo.UA

FG: funds 2/3 of the immunisation programme

SG & ICo.UA: fund 1/6 of the immunisation programme each

Vaccination strategy

For infant immunisation parents can obtain vouchers from pharmacies, physicians and the public health services. Vouchers are exchanged for actual vaccines at pharmacies, which are administered by their general practitioner, the paediatrician or another doctor. Although there is no officially organised system to invite or remind parents to get their children immunised, parents can get immunisation schedules. Prior to starting school all children are invited to be medically examined and are then offered the second MMR vaccination.

Information and education

Parents are informed by parents' advice services, physicians and local or regional health services about immunisation programmes in general.

The regional health authorities also hold seminars and meetings for physicians and nurses working at parents' advice centres to inform them about new recommendations or changes relating to immunisation programmes. Measles immunisation appears not to be a topic of public interest, and has not been made into one, with little exposure in the media or interest from the general public.

Vaccination documentation/data collection

The documentation of vaccinations is carried out by the vaccinating physician in a parent held 'mother-child document'. No vaccination registers are maintained.

Population data referring to the vaccination coverage of children is based on the number of children vaccinated. However, there is no differentiation between the first and second MMR or both.

Disease surveillance

Although measles is a notifiable disease in Austria, notification is not maintained in Upper Austria. The Austrian Statistics Institute presently collects national hospital data on measles incidences, but there seems to be no comprehensive surveillance system in place.

6.1.4 Breast cancer screening programmes

In 1974 professional breast examination became part of the health screening examinations funded by the National Health Insurance as part of the gynaecological screening offered to women between 50 and 70 years of age, two times a year. The examination entails palpation of the breast and lymph nodes by a GP or gynaecologist. In case of suspicious palpation findings further steps are taken in co-operation with specialised diagnosis and treatment centres. Although there is no real programme for professional breast examination as such, this examination plays an important role in the early detection of breast cancer in Austria, especially as mammography screening programmes have yet to be implemented.

Breast self examination

Similar to professional breast examination, there are no real programmes for breast self examination. Instead, women are informed about how to examine their breasts during visits to the GP or gynaecologist. Again similar to professional breast examination, this practice plays an important screening role for the detection of breast cancer, as a substantial number of women visit their gynaecologists after having felt an abnormality in their breasts. This is also true for women who perhaps wouldn’t normally go for gynaecological screening examinations.

Mammography screening programmes

The Austrian National Ministry of Health and Women plans to implement a nation-wide mammography screening programme which will be run in accordance with the third EU Guidelines for Quality Assurance in Mammography Screening.

6.2 Moravian-Silesian Region – Czech Republic

6.2.1 Demography

Moravia-Silesia is one of 14 regions in the Czech Republic with about 1.26 million of the country's roughly 10 million inhabitants. 0,62 million of the inhabitants are male and 0,65 million female.

The region lies in the eastern part of the country, which shares borders to Poland and Slovakai, and is divided into six districts. Moravia-Silesia covers an area of 5 554 square kilometres with a population density of 234 inhabitants per square kilometre.

6.2.2 Organisation and structure of the health system

The health system in the Czech Republic has undergone several changes and reforms, some of which are still ongoing. Decentralisation of the health care system (mainly focused on ambulatory services) is a major feature of the reforms, but its implementation is not yet complete. The task of health care has been delegated to health insurance funds, which are under the supervision of the state.

The Ministry of Health is responsible for the preparation of health care legislation, health and medical research, for the licensing of pharmaceuticals and medical technology and for the management of two institutes for postgraduate education and training of health professionals. It also organises the joint negotiations concerning the list of services covered by health insurance which serves as the fee schedule. The Ministry directly manages regional hospitals, university hospitals, specialised health care facilities and institutions for research and postgraduate education.

Following the dissolution of both the district institutes of national health and the regional institutes of national health, state health administration was incorporated into the district authorities in the form of health offices headed by district health officers. The district health officers are under the direct supervision of the Ministry of Interior Affairs, whilst the Ministry of Health provides methodological guidance and supervision. The district health officers are, however, legally responsible for ensuring that accessible health services are provided in their areas.

In line with recent reforms, hygienic services (public health services) no longer exist at the district level. The whole system is now based at the regional level, with the regional public health institutes being responsible for public health in the whole region. These institutions are responsible for epidemiological surveillance, immunisation logistics and safety measures concerning environmental hazards, food and other areas (European Observatory on Health Care Systems 2000a).

6.2.3 Measles immunisation programmes

Immunisation programmes are generally covered by the national legislation within the Public Health Protection Act from the year 2000. The provision of immunisation by the responsible organisations is obligatory and parents have to have their children immunised against diseases covered in the child immunisation programme. The state is responsible for the welfare of children and youth up to the age of 21 and has the right to force parents to have their children immunised.

The routine obligatory vaccination against measles started in 1969 in the Czech Republic. A two doses strategy was introduced in 1974.

Organisation of programmes

The Ministry of Health together with the public health institutions at regional level plans the national immunisation programmes.

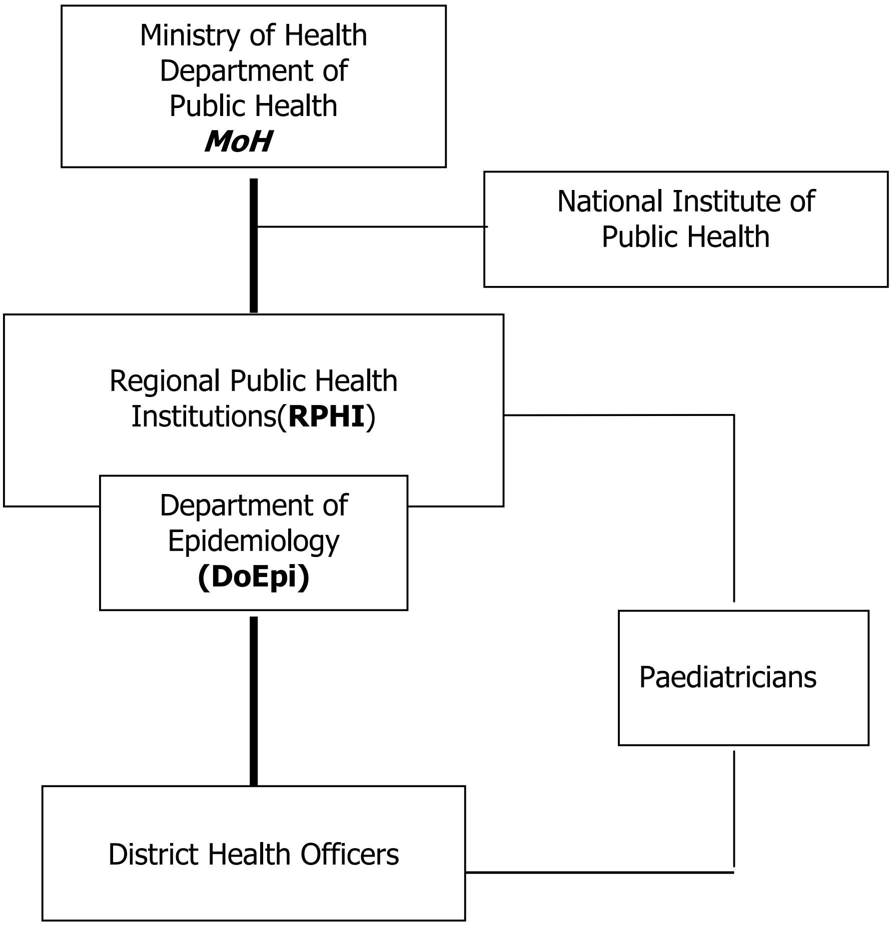
The National Institute of Public Health, which falls under the Department of Public Health in the Ministry of Health, in co-operation with regional public health institutes prepared a national public health policy which includes the targets of the immunisation programmes.

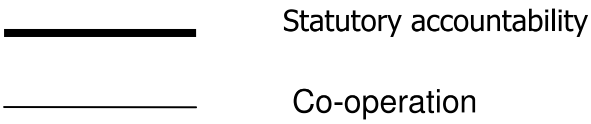
Regional measles immunisation programmes are part of the national immunisation programme and are basically organised similarly in all regions.

Regional immunisation programmes are drawn up by district public health officers who prepare the programmes to reflect the national policy. The programmes are financed from the national budget via the regional public health institutes. The Department of Epidemiology in each regional public health institute is responsible for the implementation of the measles immunisation programmes.

Paediatricians, in their role as primary health care providers are responsible for preventive services such as immunisation and co-operate with the public health institutes at both regional and district level (Figure 2).

Figure 2: Organisation plan for the measles immunisation programme in Moravia-Silesia





Vaccination strategy

The two dose MMR vaccine is carried out with the first dose being given at 15 months and the second at 21-25 months of age. The MMR vaccine was introduced in the Czech Republic in 1996, prior to which a local vaccine called MOPAVAC Divacine had been given.

The Moravian-Silesian region has a special computerised system, ISID (Information System for Immunisation of Children) which it uses to invite and remind parents to take their children for vaccination. This system is not used by all other regions in the country.

At birth, each child is registered, and allocated a paediatrician by the respective district public health institute, which forwards the information to the Regional Public Health Institute. The Regional Public Health Institute maintains a register of all children in the region and their respective paediatricians. When a particular vaccination is due, the regional institute sends a letter of invitation to the parents, giving information about which inoculation is necessary and their appointment at the paediatrician. The paediatrician is informed of those children required to attend for vaccination on a particular day and is expected to inform the regional Public Health Institute of available appointments for the administration of vaccinations. In the case of non-attendance, the paediatricians send a reminder to the parents. Should the child still not attend, the Regional Public Health Institute then explains the importance of the vaccination to the parents.

Two of the 6 districts in the region do not have the computerised system and the paediatricians there have to organise the invitation of parents themselves. The invitation system run by the regional office is financed by the municipality in Ostrava, where the office is located.

The Ministry of Health provides each region with vaccine, which is distributed as necessary to the district public health institutes, from which paediatricians order their vaccines. The Regional Public Health Institute is responsible for checking that appropriate conditions are maintained for the storage of vaccines.

Information and education

Although no systematic measurement of public opinion has been undertaken, the measles vaccination programme is generally considered to be good and well accepted. .

Public health authorities organise special training workshops for paediatricians in the districts once or twice a year. The participation is voluntary and carried out by the health insurance companies and medical board.

Programme related projects/campaigns

At present there are no campaigns or projects related to measles immunisation being organised. The measles uptake rate is very high for both the first and second doses of MMR and the region of Moravia-Silesia has had no measles incidence in the past 4 or 5 years.

Vaccination documentation/data collection

There are three levels of vaccination documentation in Moravia-Silesia, two of which are country-wide. It is the duty of the paediatrician to record the date, type and batch number of the vaccine given in the child's medical record. Secondly, the paediatrician has to enter the vaccination details on the child's vaccination certificate, which is held by the parents. The third form of documentation, which is only regional involves the computerised documentation of the vaccination details. The paediatrician returns the list of children he/she received from the Regional Public Health Institute, having marked the children who attended. Information such as vaccination coverage of children of a particular age can be obtained from the computerised system for any chosen period or point in time.

Paediatricians also check the immunisation of their patients in the vaccination certificates during each medical or preventive examination.

Disease surveillance

Together with the introduction of the obligatory measles vaccination programme in 1969, a national surveillance system for measles was introduced.

The National Institute of Public Health in Prague is responsible for the national surveillance of measles in the Czech Republic; there are two national reporting systems, one for all infectious diseases in the country and one covering vaccine related complications.

Annual reports on the data are published in print form and on the internet.

6.2.4 Breast cancer screening programmes

A **professional breast examination** programme has been included in the Czech National Oncological Prevention Programme since 2002. GPs and gynaecologists carry out breast examination as part of preventive examinations offered to women between 45 and 69 years of age every two years.

There are no special campaigns, information events or projects held in relation to professional breast examination, as the participation in the oncological prevention programme is assumed to be quite high, though dependant on educational and social background.

Breast self examination has been part of the national public health promotion agenda for a long time. Although strictly speaking no programme exists, a lot of information (pamphlets, brochures, booklets, posters) have been published and distributed to the public in general. Discussions are held in schools and clinics and GPs and gynaecologists discuss the issue with their patients.

Mammography screening programmes are in the process of being implemented in some parts of the Czech Republic. In the Moravian-Silesian region, the programme officially started on the 2nd of September 2002 and up to the end of March 2003, eight screening units were involved, four of them based in Ostrava, the regional capital city. At this time, there are 49 accredited screening units nation-wide.

Organisation of programmes

The mammography screening programme, was suggested by physicians, who felt the need to have a proper screening methodology for the population. Endorsed by the Ministry of Health, a national committee consisting of radiologists and other specialists was established with the responsibility of accrediting and organising quality assurance checks of the workplace-units. Each unit must conduct a minimum of 5000 mammographies per year and fulfil the technical requirements to achieve and maintain accreditation..

Although health insurance companies are not directly involved in the organisation and implementation of the screening programmes, the accredited screening units negotiate directly with health insurance companies over finances.

Even though national meetings are organised for all screening units within the mammography screening programme, no real co-operation amongst units in the same region is evident

Screening strategy

The screening programme is targeting women in the 45-69 years age-group. Since no invitation system operates in the Moravian-Silesian region, patients are referred by their gynaecologist or GP. Following their first appointment the unit's computer uses the stored patient data to generate invites for repeat checks. At the initial attendance, women are requested to complete questionnaires on family risk factors, breast self-examination experience and results, hormonal therapy and general medical history.

Dissemination of results

The national screening programme recommends that mammograms are to be read by two experienced radiologists whilst the patient is waiting, and results given out immediately. This is however not always possible, as some units do not have the necessary number of radiologists to do this, in which case, the results are sent to the referring physician within three days of the mammogram. Should the mammogram be unclear or abnormalities are seen, the woman is invited for further assessment.

Information and education

A lot of publicity, mainly through the popular media, has accompanied the establishment of mammography screening programmes. This, together with the recent rising interest of citizens in matters concerning their health, has led to a lot of interest from the public in general and women in particular. Women in Moravia-Silesia have been known to go to their gynaecologist and request to be referred for mammography screening. Gynaecologists, thus, find it easier to convince their patients of the necessity of the screening procedure. One problem, which still has to be solved, is that of how to approach and also raise the interest of women with low educational backgrounds and/or from the lower social class.

Information events are also organised for gynaecologists where they are informed about the aims and objectives of the programme. Further education/training courses and meetings are also organised for radiologists and other professions involved in the programme.

Programme monitoring and evaluation

In Moravia-Silesia no programme evaluation has been conducted up to date, as the programme itself is still quite young; it is however, planned on an annual basis. The national committee responsible for accreditation of units will inspect all units yearly and the accreditation will be renewed annually. The success of the screening programme will be measured using determinants such as attendance rates, cancer detection rate and further assessment referral rate.

Disease surveillance

Cancer registration is maintained nationally by the Institute of Informatics and Statistics in Prague. All gynaecologists and physicians are bound by law to report all cases of cancer diagnosed to the nearest public health authority at the district or regional level. The public health authorities then forward the information to the Institute of Informatics and Statistics for entry into the national cancer registry.

6.3 England – United Kingdom

6.3.1 Demography

Although it is normally classified as a country, for our project we considered England as a region of the United Kingdom. With a population of just over 49.18 million spread over 130,000 square kilometres and a population density of 380 residents per square kilometre, it is the largest of the regions which participated in our project. More than 85% of England's inhabitants live in urban areas.

The regional demographic characteristics of the region are as follows:

Male population:	**23.92 million (49%)**
Female population:	**25.22 million (51%)**

Of the almost 2.93 million inhabitants in the 0 - 4 years age-group, 1.5 million are male and 1.43 are female.

The female population in the age-groups targeted by mammography screening programmes is divided as follows:

Age-group in years	**number in millions**
50-54	1.70
55-59	1.40
60-64	1.22
65-69	1.12
total	5.44

The migrant population in England at 6.01 million roughly constitutes 12% of the inhabitants.

6.3.2 Organisation and structure of the health system

The National Health Service (NHS) is the dominant health care provider in England. It operates according to the principle of collective responsibility by the state for a comprehensive health service, which is to be available to the entire population free at the point of use, introduced in the NHS Act of 1946. A key feature of this approach was the freedom from user charges which placed heavy emphasis on equality of access (European Observatory on Health Care Systems 1999a).

The Department of Health (DoH) under the direction of the Secretary of State for Health is responsible for the provision of health services through the NHS. The NHS can be characterised as a publicly owned and financed health system with strong lines of vertical accountability. During the 1990's, responsibility for decision making was partly devolved to local organisations and agencies thereby loosening some of the central command and control features displayed in the NHS.

The structure of the NHS has undergone several changes since the 1980's. These changes, until 1999, are described in detail in reports such as the Health Care Systems in Transition series for UK compiled by the European Observatory on Health Care Systems.

The NHS is overwhelmingly financed through general taxation. There are, however, some complementary sources of health finance such as private out-of-pocket payments for non-prescription medicines and also payments for private health care which may be funded out of pocket or through private health insurance.

The new NHS

A number of structural changes have again been implemented since April 2002, starting with the dissolution of England's 95 Health Authorities which passed many of their responsibilities to Primary Care Trusts (PCTs). The Health Authorities have been replaced by 28 larger health authorities, which since October 2002 have been known as Strategic Health Authorities. Special Health Authorities (SHAs) such as the National Blood Authority and the National Institute of Clinical Excellence, and Non Departmental Public Bodies (NDPB) such as the committee on Safety of Medicines or the Public Health Laboratory Service have been established. The NDPBs may be either advisory or have executive powers.

6.3.3 Measles immunisation programmes

The origins of public health medicine in the United Kingdom can be traced back to the middle of the nineteenth century when the main Acts of Parliament concerning public health issues were passed.

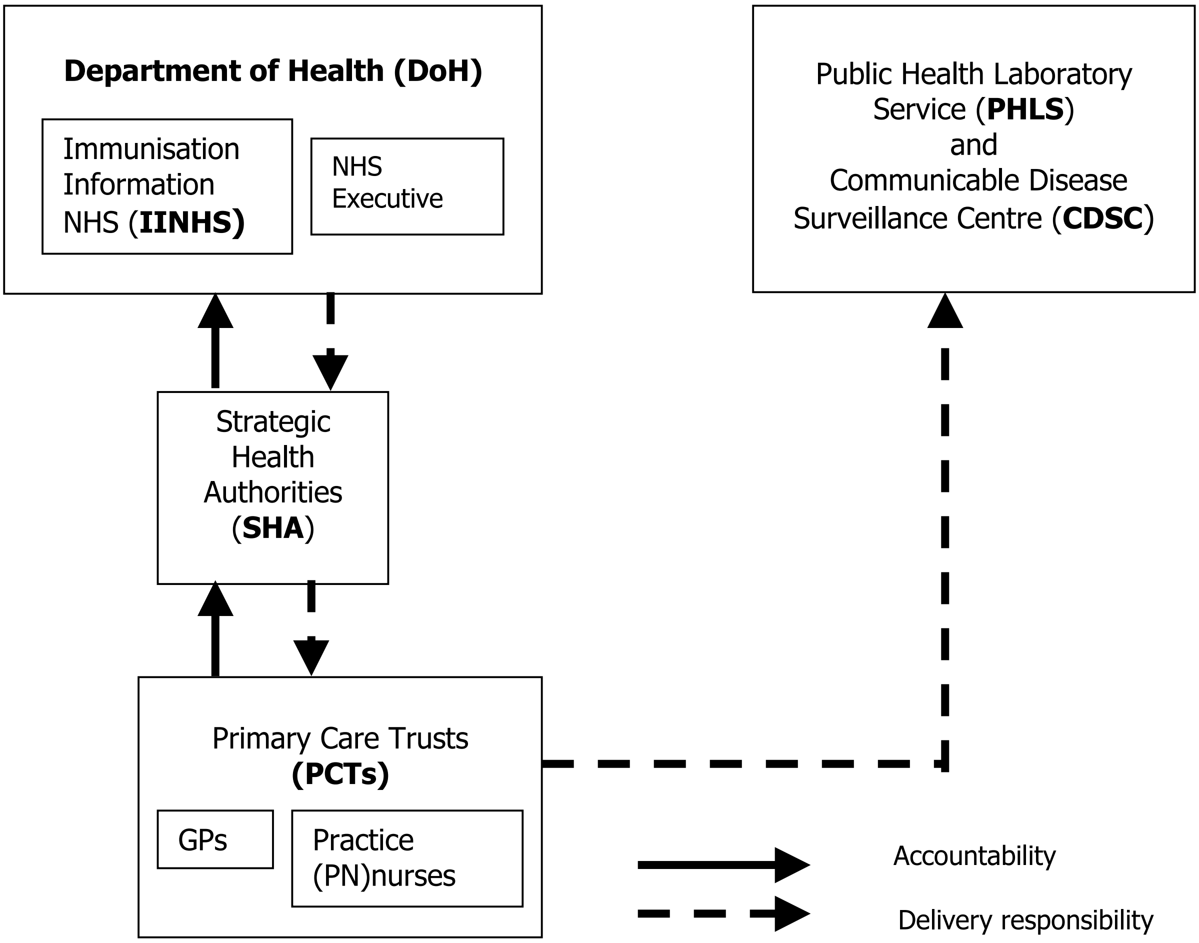
The measles vaccine, then given solely, was introduced in England in 1968 for children aged between 1 and 2 years and led to considerable reductions in the number of notified cases. Before the introduction of MMR in 1988, measles vaccine was given to infants from age one and (until 1996) rubella vaccine was given to girls at age 10 to 13 years. The introduction of the combined MMR vaccine resulted in measles incidences falling to an all time low (Bedford and Elliman 2000).

Organisation of programmes

The organisation and implementation of immunisation programmes in general is done on a national basis by the Departments of Health for England, Wales, Scotland, and Northern Ireland together.

These departments jointly publish guidelines for immunisation programmes and formulate programme targets. For measles immunisation, they adopted the WHO targets. The different organisations and agencies involved in the realisation of measles immunisation programmes and those responsible for planning and co-ordination are illustrated in the organigraph below (Figure 3).

Figure 3: Organisation plan of the measles immunisation programme in England



Explanations to figure 3:

DoH:
- encompasses **IINHS & NHS Executive**
- responsible for planning and implementation of all immunisation programmes together with immunisation co-ordinators at **SHA** & **PCT** level co-ordinates activities of programme
- publishes guidelines for the measles immunisation programme
- adopted immunisation programme targets set by WHO
- centrally purchases all vaccines for childhood programme and supplies them free of charge to GPs

GPs & **PN** : **-** part of **PCTs,** deliver immunisation services (**PCTs** pay GPs for administering vaccines)
PCTs: - maintain child health system & register of those vaccinated

PHLS: - evaluates measles immunisation programme
- runs the national surveillance system
- together with **CDSC** collects immunisation and/or disease data at local, district, regional and national level
IINHS : - conducts biannual surveys of mothers' attitudes to immunisation
- provides health educational material (posters, leaflets, web site etc) for the population and also for all health professionals

Vaccination strategy

The two MMR dose strategy has been used in England since 1988, with the first dose being given at 12-18 months and the second at 3,5 – 4 years of age.
Each child is registered with a computerised Child Health System (CHS) or a GP system through birth registration and these systems, run by the Primary Care Trusts, are used to schedule and produce invitations to vaccination. The vaccines are centrally purchased by the Departments of Health and provided free of charge to GP surgeries and pharmacies. Vaccines that are part of the UK childhood immunisation schedule, such as measles, are provided to the population free of charge.
GPs receive payment for administering the vaccines and additional target payments (by vaccine) with a certain minimum payment being given for achieving 70% vaccination coverage by 2 and 5 year olds, plus a bonus payment for achieving more than 90% in the same groups.

Information and education

A lot of work and effort is invested in informing the public on various issues related to immunisation in general and other health topics. In addition, to distributing information leaflets, use of posters, seminars for parents and health professionals, videos and fact-sheets, the Health Protection Agency, a part of the Department of Health England, uses the internet as a platform to reach and advise members of the public as well as health professionals. Following the claim that the MMR vaccine causes Chrohn's disease and/or autism, measles immunisation has attracted a lot of interest in the media. Some parts of the media have since been calling for the single antigen vaccine to be made available as an alternative to the triple MMR vaccine.
The media attention has also resulted in insecurity amongst parents which has had adverse effects on the vaccination uptake rates.

Programme related projects/campaigns

The Department of Health has implemented a number of campaigns to improve vaccination coverage in health authorities with very low MMR coverage. Campaigns were also organised to encourage participation in MMR specific workshops for both health professionals and parents and an internet web site 'MMR The Facts' was launched. The Department of Health monitors the success of such projects/campaigns by evaluating MMR coverage on a monthly basis and by monitoring parents' attitudes to vaccination and infectious diseases in the bi-annual surveys of mothers' attitudes.

Vaccination documentation and data collection

Documentation is provided by the NHS to parents in a ‚parent held record book' and is also entered onto the appropriate GP and Child health system held locally. The Communicable Disease Surveillance Centre (CDSC) Immunisation Division collects immunisation data at the local, district, regional and national level. UK vaccine coverage is evaluated by the Public Health Laboratory Service (PHLS) through the COVER programme on a quarterly basis for children aged 12 months, 24 months and 5 years and published in the Communicable Disease Report and on the internet. Annual data is also published by the Department of Health.

Disease surveillance

England has a long tradition of disease surveillance with notification being introduced in 1889 as a means of identifying and preventing the spread of infectious diseases. Measles was made a notifiable disease in England in 1940. Today, notification is required under the Public Health (infectious diseases) Regulations from 1988 (McCormick 1993).

Before the school-based measles-rubella vaccination campaign was conducted in England and Wales in 1994, measles surveillance relied upon the notification of clinically diagnosed cases to the Office of National Statistics and upon reports of serologically confirmed cases by laboratories to the Public Health Laboratory Service Communicable Disease Surveillance Centre. From 1995, laboratory confirmed cases have been used for surveillance purposes rather than notifications as all notified cases are offered an oral fluid test to confirm the diagnosis. At least 65% of all notified cases have consistently been tested each year, and of these, only 2-6% have been confirmed.

The surveillance programmes have been continuously improved and updated. A range of computer and electronic communication systems were developed in the late 1980's to early 1990's to speed up and strengthen surveillance activities (Grant and Eke 1993).

The CDSC routinely monitors both coverage of vaccines used in the childhood programme and cases of notifiable diseases reported in the population. Additional information such as vaccination status, contact history and history of travel are requested from the general practitioner for all confirmed cases.

6.3.4 Breast cancer screening programmes

Mammography screening programmes are the only breast cancer screening methods formally used in England. The principle of breast self-examination was abandoned by the Department of Health in 1991 and women are advised on how to become ‚breast aware‛. Professional breast examination programmes are non-existent in England.

The NHS Breast Cancer Screening Programme was implemented in England in 1988 to invite women aged 50-64 years for screening. The programmes began inviting women for screening in 1990 and national coverage was achieved by 1993. Two view mammography is carried out at the first check and one view at subsequent visits.

Organisation of programmes

The organisation responsible for the breast cancer screening programmes in England is referred to as The National Breast Cancer Screening Programme. It is co-ordinated by the NHS Breast Cancer Screening Programme with responsibility throughout all tiers of the Health Service, Strategic Health Authorities, Primary Care Teams and Hospital Trusts.

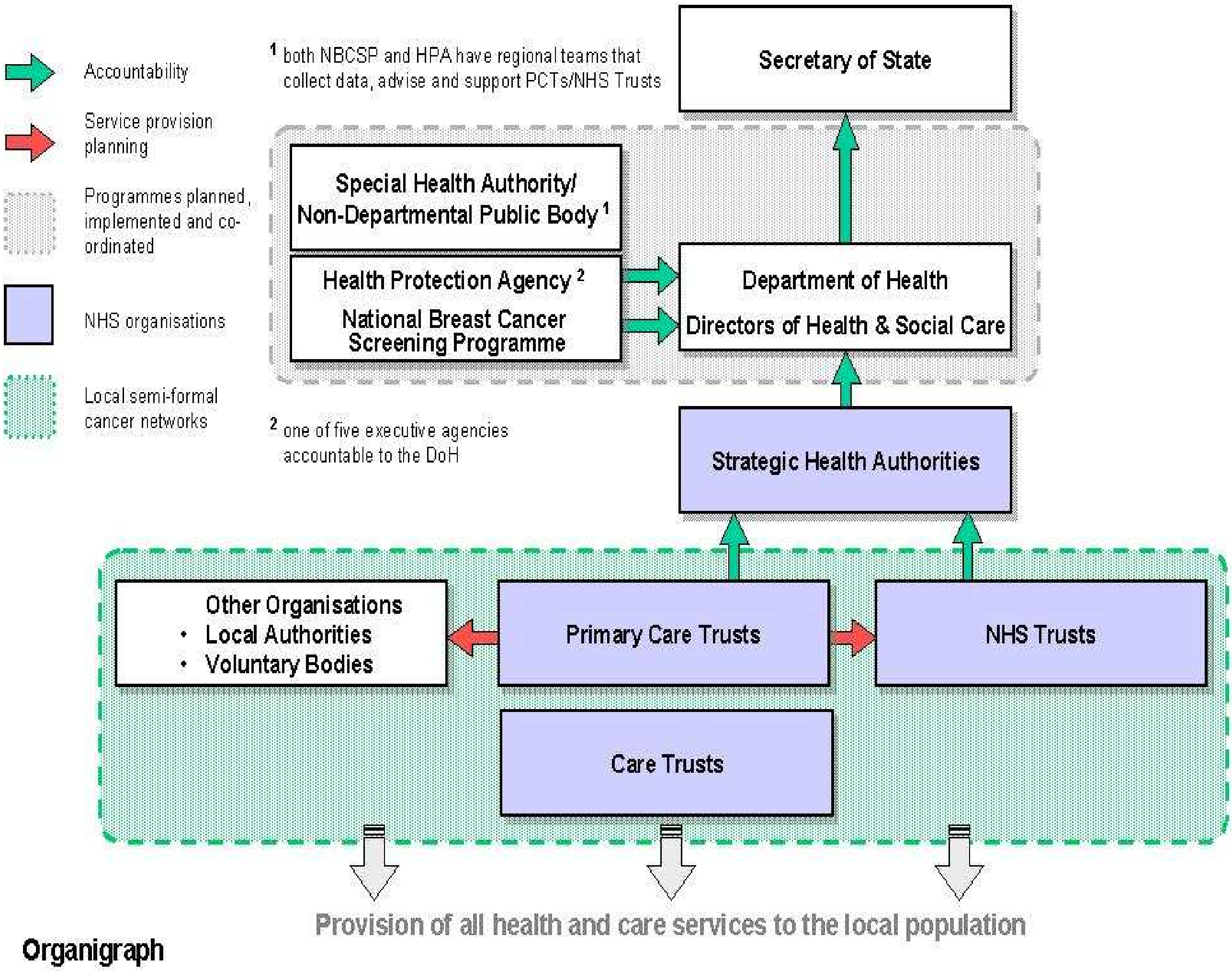
There are over 90 breast screening units across the UK with a co-ordinating office for England in Sheffield and an advisory committee which oversees the programme and reports to government officers.

The NHS in England is responsible for programme implementation which it delegates to local screening services. Each screening service has one main screening office but may have one or more satellite offices or sites where screening is carried out. Individual screening services control all aspects of the screening programme for the women in their catchment area. Public health authorities oversee the implementation of the programmes. Gynaecologists, legislators and medical insurance providers are not involved in the implementation process.

The Department of Health sets National standards which are regularly inspected by an independent inspectorate. It also allocates money for the programmes, although this may not always cover all costs and the local Health Service will add to it.

Primary Care Trusts have the responsibility of ensuring the provision of population screening programmes, management of arrangements in relation to collation and provision of information on public health programmes and maintenance of cancer registries. As a result of a recent joint initiative, each PCT has a lead clinician for cancer who has a strategic leadership role in line with the NHS Cancer Plan through the local cancer network. The bodies and agencies involved in the realisation of the screening programmes as well as their levels of interaction are illustrated in the organigraph in Figure 4.

Figure 4: Organisation plan of the breast cancer screening programme in England



Screening strategy

The invitation of all women in the 50-64 year age-group and an associated uptake rate of at least 70% of all invitations were part of the programme's initial targets.

The targeted age-group for mammography screening is, as from the beginning of 2003, being extended to include women up to 70 years of age. The taking of two mammography views at every attendance is also being introduced. Both changes are expected to be fully implemented by 2004.

NHS patients are directly invited to attend screening at specialised screening units in or near their residential area. The units can either be mobile, hospital based or permanently based in another convenient location such as a shopping centre.

GP registers are used to invite the women sometime between their 50th and 53rd birthdays. They are then invited every three years until their 70th birthday. The NHS call and recall system holds up-to-date lists of women compiled from GP records, and records levels of attendance and non-attendance.

Women who have special needs, such as a physical or a learning disability, are asked to contact the breast screening unit at an address shown on the invitation letter. The screening unit then arranges a special appointment, usually at a hospital screening unit, where there is easier wheelchair access, better provision for a supporter to accompany the woman if she wishes, and more time can be allowed than is possible on a mobile screening unit. Localised activities are targeted to areas of social deprivation, ethnic minority groups, or disabled people, with specialised activities being determined by the needs of the local population.

Dissemination of results

Mammography is carried out by radiographers and radiologists. The mammograms are read by two experienced radiologists and the results sent to the woman and to her GP within two weeks. In 2000/2001, about 8.3% of women attending for a first screen, and about 3.9% of those attending a subsequent screen were asked to go to an assessment clinic for a further mammogram. This was either for technical reasons (if the mammogram was not clear enough) or because a potential abnormality was detected. More tests such as a clinical examination, more mammograms at different angles or ultrasound are offered.

Women diagnosed as having cancer are referred to a consultant surgeon to discuss the options open to them. Many women have a choice about the type of treatment they receive depending on the type and location of the cancer. There are special breast care nurses at assessment centres, who give advice and help to women undergoing diagnostic tests or having been diagnosed as having cancer.

Information and education

Similar to measles immunisation programmes, a substantial amount of effort is put into informing women and the public in general about the screening programme. All women invited for screening receive a national information leaflet entitled 'Breast Screening – The Facts'. The leaflet covers issues such as how the programme is organised, how much it costs, why women under 50 are not invited, the invitation process and also what actually happens at a screening unit. It has been translated into five languages which are all available on the programme's web site.

The programme requires all professionals involved in it to undertake initial and continuing professional development and are six training centres in England for professionals are involved in the service. Other professionals such as GPs and public health consultants receive a more general training. For example the region Kent organises two meetings each year for everyone involved in the breast cancer screening programme.

Programme related projects/campaigns

Different projects in relation to the screening programme have been and are being carried out. A recent one looked at the possibility of introducing out of hours screening service. Quality and health promotion projects are also conducted.

Programme monitoring and evaluation

Data on different aspects of the programme such as numbers of women invited, the numbers attending, referrals for further assessment, cancer found and types, are collected regionally by professional quality assurance reference centres. A computerised call and recall system for breast cancer screening is used for data collection. Information from all units is summarised and published on an annual basis by the Government Statistical Service.

In addition to an annual review, formal quality assurance of breast screening services is carried out at three levels:

locally:	by the staff of each screening service
regionally:	by regional quality assurance departments (professional quality assurance teams and quality assurance reference centres). The quality assurance teams also visit each screening programme, review case histories, screen films and meet with all professionals to discuss outcomes.
nationally:	by national professional quality assurance committees and national co-ordination team.

Disease surveillance

Cancer registration in England is conducted by 9 regional registries (regionally based from the old Regional Health Authorities) which collect and collate data on cancer in their area. They then submit a standard data-set on these registrations to the Office for National Statistics (ONS). Registries link their information with that from other NHS services, notably to support the evaluation of the effectiveness of the national breast and cervical screening programmes.

Primary care trusts have the responsibility of maintaining cancer registries in their areas. Staff from cancer registries collect data, follow up women and hold information on treatment and survival rates.

6.4 Western Greece – Greece

6.4.1 Demography

Western Greece is one of 13 regions in Greece and is made up of 3 of the country's 52 prefectures. The region, which covers the north-western part of the Peloponnes and the western point of the Greek mainland, has an area of 11,350 square kilometres, 8.6% of the whole country's area. Only 29.1% of the region is flatland, and the rest mountainous or hilly.

According to the national census figures from 2001, Western Greece has a population of 0.74 million, roughly 7% of Greece's total population. The majority of these inhabitants reside in the prefecture Achaia, (43.6%), with 30.3% and 26.1% residing in the prefectures Aitoloakarnania and Ilia respectively.

The regional demographic characteristics of the regional are as follows:

Male population:	**0.38 million (51%)**
Female population:	**0.36 million (49%)**

Of the 36.56 thousand inhabitants in the 0-4 years age-group, 18.83 thousand are male and 17.73 are female.

The female population in the age-groups targeted for mammography screening is divided as follows:

Age-group in years	**number in thousands**
50-54	45.05
55-59	34.09
60-64	40.50
65-69	41.36
total	161

The migrant population in Western Greece comprises roughly 5.2% of the regional population, and the majority (64.3%) are Albanians.

6.4.2 Organisation and structure of the health system

The Greek health care system can be characterised as a mixed system of both the mandatory (or statutory) health insurance system and the National Health System (NHS, established in 1983) with an extensive involvement of the private sector. It is a mixture of the public contract and public integrated models, financed by a mixture of social insurance and general taxation, with public and private providers (Ministry of Health and Welfare 1999).

The Ministry of Health and Welfare is the main authority in developing and financing health policies in Greece. It is responsible for the provision and financing of the National Health System (NHS) as well as health and social policies for the needy, the elderly and those with special needs.

Although the health system in Greece is not yet fully decentralised, a certain structure based on the regional and district divisions of the country does exist. There are Regional Departments and District Departments of Health and Welfare operating in every region and prefecture respectively, with each region having at least one regional hospital (in most cases a university teaching hospital), and each prefecture also having at least one hospital.

According to recent legislation, regions are responsible for the planning and co-ordination of regional development and local health activities. They play a significant role in determining priorities and proposals for local needs, while districts are responsible for the provision of a complete range of health services to the population of their authority area, including primary and secondary care, and primarily public health services.

Greek citizens are compulsorily insured in one of the roughly 40 social insurance funds providing coverage against sickness, with the assignment of fund depending on the occupation of the insured and not on the income level. The uninsured and the needy are entitled to access to public hospitals, outpatient departments of public hospitals and health centres in rural areas. Administratively, the majority of the funds are public entities and operate under the supervision and control of the government. The range of services covered, the type of doctors to whom access is permitted, and the contribution rates are approved by the Ministry of Labour and Social Insurance and the Ministry of National Economy (Ministry of Health and Welfare 1999).

6.4.3 Measles immunisation programmes

The Greek National Immunisation Programme which was legislatively founded in March 1991 has since been modified on several occasions. One such occasion was after the measles epidemic in 1996, when new guidelines were instituted in 1998, stating that the second MMR vaccine was to be given at age 4-6 years and not 11-12 years as before.

The MMR vaccine became commercially available in Greece around 1975 and infant vaccination started in the private sector, without any officially stated policy. The vaccination of children during the second year of life with MMR was later included in the National Immunisation Programme and became available in the public sector in 1989 (Panagiotopoulos et al. 1999).

Organisation of programmes

The official National Immunisation Programme is planned and organised by the National Committee of Immunisation, whose members are chosen by the Minister of Health every three years. The committee is responsible for the structure of the programme and ensures that the programme is in line with new medical developments and according to the guidelines from the WHO. In addition, the committee is responsible for the organisation of programmes for certain population groups, e. g. gypsies. The Hellenic Society of Paediatrics, the National School of Public Health and the Medical Schools assist the National Committee of Immunisation in its work.

Other immunisation programmes, e.g. from the Department of Public Health (Division of Disease Epidemiology), the Department of Primary Health Care (Division of Planning of Programmes) and from the Division of Social Paediatrics of the Institute for Children's Health are also run parallel to the official national programme.

Non-governmental organisations such as Medecins du Monde, Physicians Without Frontiers and the Red Cross also plan immunisation programmes which have to be approved by the Ministry of Health and Welfare.

The organisation and implementation of immunisation programmes is the same in the whole country, with similar agencies and organs involved in all regions (Figure 5).

The Regional Department of Health and Welfare supervises the prefecture Departments of Health and Welfare and ensures that the implementation of the immunisation programme is according to national plans. The prefecture Departments of Health and Welfare are responsible for the implementation of the programme.

The social insurance fund IKA, (the largest social insurance fund in Greece), PIPKA, (special children's centres where vaccinations are also done), NGOs, health centres, paediatricians, physicians and GPs are all involved in the provision of the individual vaccinations.

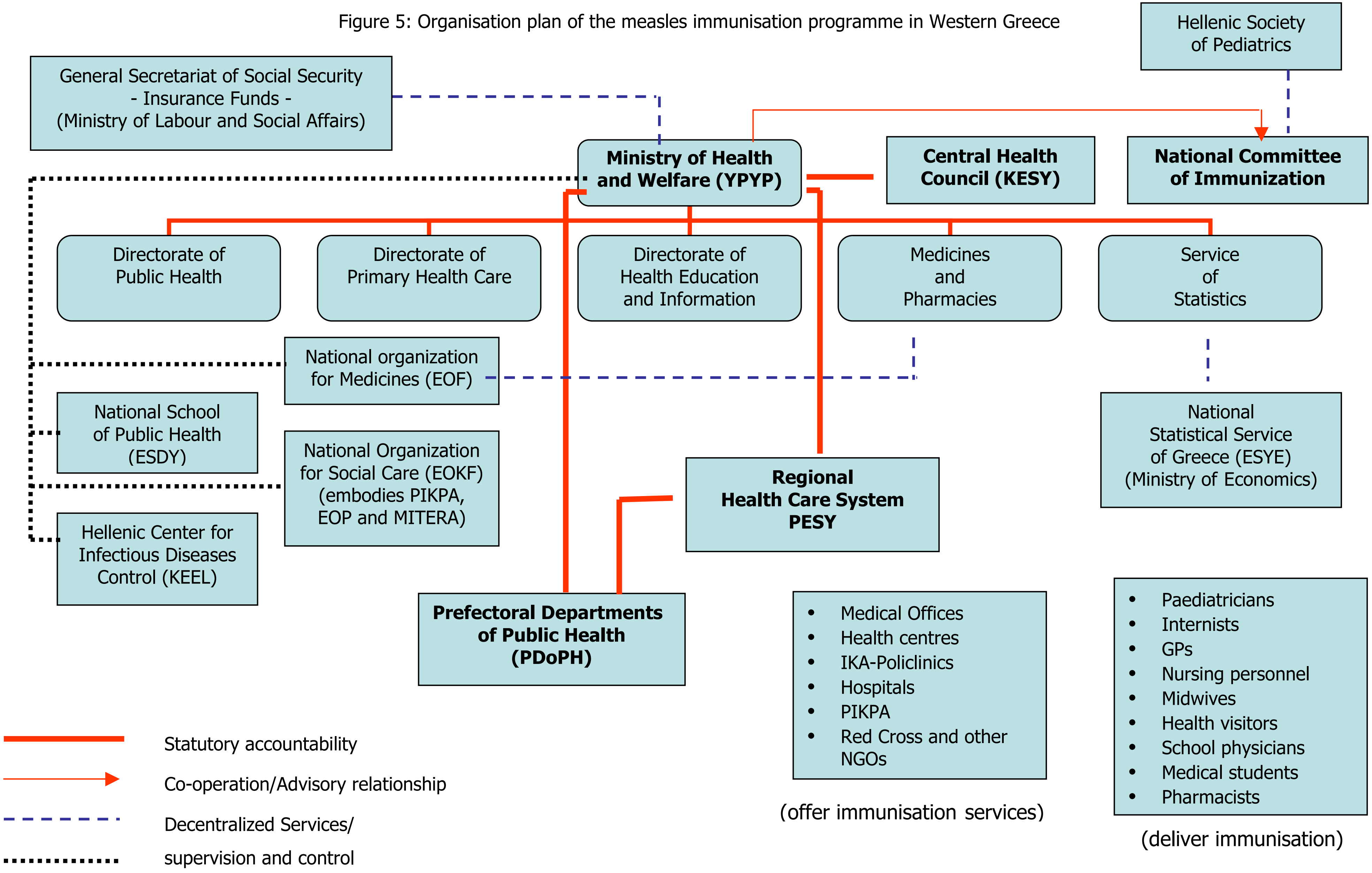


Figure 5: Organisation plan of the measles immunisation programme in Western Greece

Vaccination strategy

The two dose vaccination strategy has been followed in Greece since 1989, with the first dose being given at 15 months of age and the second at 4-6 years of age. In areas with a high measles incidence rate, the first dose can be given at 12 months of age. Three types of vaccine are used in Greece:

- PRIORIX: a combined vaccine for Measles, Mumps and Rubella from Smithkline Beecham
- MMR: a combined vaccine Measles, Mumps and Rubella from Vianex, and
- ROUVAX: a single vaccine for Measles from AEBE-Gerolimatos.

Pharmaceutical companies deliver the vaccines to large pharmacies, which in turn deliver them to the normal pharmacies from where insured citizens collect the vaccines and take them to their paediatrician, to the IKA polyclinic, PIPKA, or health centre.

The pharmaceutical companies also deliver vaccines to the Ministry of Health and Welfare, which distributes to the different prefecture Departments of Health and from there to the health centre and PIPKAs. Gypsies, uninsured citizens, and the very poor get the vaccines free of charge from the health centres and the PIPKAs.

Vaccine delivery is also made by pharmaceutical companies to large pharmacies belonging to the IKA social insurance company, which then distribute to their regional institutions in the whole country.

There is no invitation or reminder system to vaccination operating in Greece. At the first visit to a paediatrician, parents are informed about all the vaccinations, which their children are supposed to get. They are also given vaccination booklets, in which the next vaccination appointment is noted.

Measles vaccination is obligatory according to Greek legislation, and thus parents can not refuse to have their children vaccinated, e.g. on the grounds that they want their children to acquire natural immunity by getting measles.

The National Immunisation Programme, under which measles immunisation is organised, is financed by the Ministry of Health budget, the social insurance, the EU (especially programmes for minority groups) and NGOs. It is stated by law, that all vaccines provided under the National Immunisation Programme be given free of charge to everyone.

Information and education

Normally there are no posters or advertisements calling for parents to take their children for vaccinations. This is only done in conjunction with particular projects or campaigns. Parents are generally informed by paediatricians or by the responsible persons at the IKA institutes or PIPKAs.

The department of health promotion and information in the Ministry of Health publishes a brochure with detailed information about the National Immunisation Programme. These brochures can be found at the paediatrician’s, health centres and PIPKAs.

From time to time information related to the National Immunisation Programme is also given out in the media, e.g. when new guidelines come out or when new vaccinations are incorporated into the programme.

In 2001, the Institute for Child Health, the Hellenic Centre for Infectious Diseases (KEEL) and the Medical Department of the Ministry of Health conducted a study on the opinion and attitudes of parents to immunisation. Parents were generally found to be satisfied with the programme and had no fears regarding adverse effects of vaccines. The media coverage of the possible relationship between MMR vaccine and autism and Chrohn's disease in 2002 did not visibly disturb Greek parents.

There are plans to establish social-medicine centres, where Gypsies and other minority groups will be informed about vaccinations and where vaccinations will also be carried out.

Several organisations are offering training for health professionals involved in immunisation programmes. The Hellenic Centre for Infectious Diseases (KEEL), the National School of Public Health, the Institute for Child Health, professional groups and the medical schools all organise seminars, lectures and congresses for health professionals.

Programme related projects/campaigns

In Greece, there are no campaigns or projects being carried out specifically for measles immunisation. Campaigns and projects are generally done for the immunisation programme as a whole and for Gypsies and other minority groups. Such campaigns are organised by different organisations such as NGOs or the Institute for Child Health.

Vaccination documentation/data collection

Vaccination documentation should be completed by the vaccinating person in the parent-held vaccination booklet. At the IKA and PIPKA vaccination centres, record cards are made for each vaccinated child, and vaccination booklets are also issued. Some paediatricians in private practice also maintain vaccination records, but the majority does not do so.

There is also a law stating that health centres should administer vaccination booklets for recording personal details of the vaccinated person, the date and vaccine given, and the next vaccination appointment.

Another law, which states that all children should have proof of vaccination (vaccination card) before being admitted to kindergarten or primary school, is also not strictly followed. In addition to that, the majority of minority group children do not go to school and thus their immunisation status can not be controlled.

Disease surveillance

Measles is a notifiable disease in Greece and all paediatricians and physicians country-wide are obliged by law to report each measles case to their respective prefecture Department for Public Health, from where the cases are forwarded to the National Centre for Surveillance and Intervention (EKEPAP). EKEPAP has developed a detailed form which the doctors can complete and directly report cases.

The EKEPAP, in turn, reports all cases to the Ministry of Health and Welfare's Department of Public Health and to the Minister of Health's office.

Parallel to the registration of the measles cases, serological data from private laboratories is also registered using a special form from EKEPAP.

Hospitalised measles cases are directly reported to the Ministry of Health and then to the National Statistical Services of Greece (ESYE).

EKEPAP analyses the collected data using special epidemiological programmes such as EPI-Info. The institute is also trying to predict possible measles epidemics using the collected vaccination figures and special mathematical models.

In an effort to try and improve the currently unreliable and unsystematic reporting, EKEPAP is planning to establish a 24 hour telephone hot-line on which all notifiable diseases can be directly reported. There are also plans to develop new information centres, through which reporting from the physician's practices can be done, as well as establishing a systematic registration method for vaccinations done. The development of a surveillance system for illegal immigrants and refugees is also being planned.

ESYE analyses hospitalised measles data according to geographical area, sex, age, treatment success and average stay in hospital. This information is published in monthly bulletins, in the Statistical Yearbook of Greece and the Social Welfare and Health Statistics book. These books are distributed to physicians, paediatricians, lecturers and other interested professionals.

6.4.4 Breast cancer screening programme

The Hellenic Cancer Society which was formed 43 years ago with the aim to inform, provide preventive care, early detection, therapy and rehabilitation of the Greek population, organises various activities in the field of breast cancer screening. The society distributes general and specific information brochures which inform women about breast self-examination, clinical examination by the doctor and mammography. These brochures are distributed to hospitals, health centres, gynaecologists and other relevant organisations, institutions, and agencies.

The Hellenic Cancer Society also organises many information events with discussions and video clips.

Strictly speaking, no professional breast examination or breast self-examination programmes exist in Greece. However, there are individual initiatives from different organisations or clubs which, through the distribution of information, encourage women to attend regular preventive care examinations and also inform about breast self-examination.

Currently, a programme which involves the clinical examination of women from certain population groups by medical teams is being organised by the Association of Volunteers Against Cancer together with the Hellenic Association of Women with Breast Cancer and the Oncology hospital "Metaxa".

Mammography screening programmes have not yet been implemented within the Greek National Health System, neither at national, or at regional level. Breast cancer screening, including mammography, is carried out at some breast centres or breast clinics which are located in public hospitals, but not in a systematically organised way.

In 1989, a pilot mammography screening project was started by the Hellenic Society of Oncology (HSO) in two prefectures in Greece, one of them (Ilia) in Western Greece, under the European programme "Europe Against Cancer". The project ran for 10 years and invited women in the age-group 40-64 years. The HSO further developed the programme and extended it to more regions and prefectures, including one more prefecture in Western Greece (Aitoloakarnania).

The following programme description mainly refers to the Greece Against Cancer programme, which is run similarly to its predecessor programme, Europe Against Cancer.

Organisation of programmes

The Hellenic Society of Oncology and the Hellenic Anti-Cancer Institute carried out the Europe against Cancer programme and are now running the Greece Against Cancer programme. They have formed an organisation called the Hellenic Foundation of Oncology, which organises and implements mammography screening programmes in the whole of Greece.

In Western Greece, a mammography screening programme was first introduced in the prefecture Ilia in 1989 as part of the pilot project Europe Against Cancer. In the prefecture Aitoloakarnania, the first phase of the programme is currently being implemented.

Screening is done in mobile units which are stationed at various places in the prefectures (towns and villages) for a certain period of time. A mini-bus service is run together with the mobile screening service for the transportation of women who live in far outlying areas.

A period of 4-5 months is required to prepare the programme and inform the public before screening is done in any particular area. The local authorities assisted with the organisation and planning of the programme by offering rooms in which local offices of the HSO could be housed and made it possible for the mobile units to be stationed at particular points by providing electricity, water and telephone lines. In Ilia, the mobile unit was stationed at 25 points within the prefecture.

The programme employs two surgeons, two computer specialists, two drivers, four radiographers and a further twelve persons who help with administrative work. Furthermore, 3 surgeons, seven radiologists, two cytologists, a radiation physician and an epidemiologists are employed on a part-time basis.

The Greece Against Cancer programme is mainly financed by the Hellenic Foundation of Oncology and run according to the European Guidelines for Quality Assurance in Mammography Screening.

Screening strategy

The programme invites women aged 40-64 years every two years. Demographic data from the National Statistical Service of Greece and from voters' registers were entered into an electronic database at the HSO's main office and used for the invitation of women in the target population. Every woman who attends the screening programme has to complete a questionnaire covering information about the personal medical history and the family's history of breast cancer. Two view mammography is done at every visit and the mammograms, together with the questionnaire, are sent to the HSO main centre in Athens on a weekly basis.

Only women who attend the initial screening round are invited for the next round.

Dissemination of results

Mammography is carried out by radiographers and radiologists. The mammograms are independently read by two experienced radiologists in Athens. In case of disagreement in the diagnosis, a third reading is organised in which 5 persons (including the two radiologists concerned) participate.

When a mammogram is positive, the woman is invited for further assessment to the point where the mobile unit will be stationed at that time. She will be clinically examined by a medical team comprising a surgeon, a radiologist and a cytologist. Should surgical biopsy be necessary, the woman is referred to the reference centre (University Hospital Rio, Patras, Western Greece), or to the breast clinic at the oncology hospital in Athens. Women who are not willing to go to the reference centres, to which they have been referred, are given copies of their examination and result documents.

Information and education

Before screening is done in any area, numerous information events are organised, not only by the HSO but also by local authorities and churches. For instance in the prefecture Ilia, the bishops initiated a memorandum to be read at the end of each church service to encourage all women to take part in the screening programme.

The points where the mobile unit will be stationed are also published out in the newspapers, television and radios.

Professionals involved in the screening programme are informed about new developments and guidelines through special further training courses, seminars, medical journals as well as congresses.

Programme related projects/campaigns

The HSO and other organisations such as the Red Cross and women's organisations arrange many information campaigns for the public in the areas where screening programmes are being implemented.

Programme monitoring and evaluation

Data on different aspects of the programme such as numbers of women invited, the numbers attending, referrals for further assessment, cancer detection rate and interval cancers are collected.

The HSO evaluates its programme by participating in the programme "Quality assurance programme for mammography screening with mobile units", where different aspects of the screening programme including the invitation system and the information dissemination are looked at. The programme is also annually evaluated by the European Network of Reference Centres for Breast Cancer Screening (EUREF).

A daily ‘suitcase protocol’ as quality control of the mammography units and dark rooms is maintained by the radiographers.

Disease surveillance

The Greek cancer registry was established in 1990 within the Ministry of Health and Welfare’s central health council. Clinic based registers also exist at the University Hospital Rio in Patras and at the general hospital Agios Andreas also in Patras, Western Greece.

Data from the HSO organised Greece Against Cancer Programme are forwarded to the Greek cancer registry, where it is analysed and published.

6.5 North Rhine-Westphalia - Germany

6.5.1 Demography

North Rhine-Westphalia (NRW) is one of the 16 German federal states with a total population of 18 million inhabitants. This corresponds to about 22% of the German population. It covers an area of 34.080 km^2. With 530 persons per km^2, NRW's population density is more than twice as high as the German average.

Further demographic characteristics of the state of NRW are as follows:

Males:	**8.82 million (49%)**
Females:	**9.18 million (51%)**

Of the almost 880.000 inhabitants of the age group 0-4 years, 450.000 are males and 430.000 females.

The female population of the age groups 50-69 years targeted for mammography screening (a total of 2.13 million) can be broken down into the following categories:

Age group in years	**Number in millions**
50 – 54	0.47
55 – 59	0.49
60 – 64	0.59
65 – 69	0.58
total	2.13

With 2 million people, NRW's migrants account for about 11.4% of the state's population.

6.5.2 Organisation and structure of the health care system

Germany is a federal republic with 16 federal states each of which has its own constitution which is in accord with the German Federal Constitution. The sharing of decision-making powers between federal and state level is a fundamental aspect of the political system and thus also of the health system. The German health care system is primarily characterised through the development of health insurance funds.

The statutory health insurance system (GKV), which was set up under the Federal Government's social legislation scheme, provides insurance protection for about 90% of Germany's citizens since GKV membership is obligatory for employees up to a fixed income level.

In addition to the health insurance funds as financing bodies on the one hand, Germany's health care system is characterised through its doctors, dentists, pharmacists and hospital organisations as service providers on the other hand. Like health insurance funds they are organised as public corporations and/or associations and perform their tasks as self-administered bodies, i.e. within the framework of federal government regulations and supervision they are authorised to perform all functions under their own responsibility.

The Federal Government defines the organisational structure of the self-government system through legislation and decrees in the Social Codes (above all Social Code V).

At regional level, the German states are responsible for hospital planning, hospital investments and for the public health service. For these areas they have their own decision-making powers but also the possibility to exert influence on the governments' statutory health insurance legislation through their representatives in the German Bundesrat.

6.5.2 Measles vaccination programmes

Before the reunification of the former GDR and the Federal Republic of Germany in 1990, both countries differed considerably in their approaches to measles surveillance, vaccination strategies and the provision with vaccines. The former GDR had a highly centralised health system. In 1970, the voluntary single measles vaccination, which had been introduced in 1967, was made obligatory by law for children aged 8 months or older. The public health service played a central role in the implementation and registration of the vaccination. In 1986, a second vaccination was introduced as a matter of routine 6-12 months after the first vaccination. In the Federal Republic of Germany, measles vaccination was generally carried out on a voluntary basis and recommended for infants aged 12 months or older. In 1980, the combined measles, mumps, and rubella vaccination was introduced, with a recommended second vaccination from the year 1991 onwards. After the German reunification, this practice was also adopted for the states of the former GDR.

Organisation of vaccination programmes

The legal basis for the prevention and fighting of infectious diseases – among others also for protective vaccinations – in the Federal Republic of Germany is the Infectious Disease Control Act (IfSG) which entered into force on 1 January 2001. Under this Act obligatory notification of measles cases was introduced for the first time all over Germany and the health departments were obliged to ascertain the vaccination status of children during school entrance examinations. Up to that time, the vaccination status had been identified during school entrance examinations in NRW on a voluntary basis.

There is no compulsory vaccination in the Federal Republic of Germany. Recommendations for vaccinations are worked out in accordance with state-of-the-art-knowledge by an expert committee, the Standing Vaccination Committee (STIKO) of the Robert-Koch-Institute in Berlin. The list of vaccinations recommended by STIKO comprises standard vaccinations for infants, children, adolescents and adults including the recommended age at which the vaccination should be taken and the minimum intervals between the vaccinations.

The individual German states decide for themselves whether they will adopt these recommendations without any changes. In NRW, the correspondingly latest STIKO recommendations are regarded as official recommendations.

The individual German states also decide for themselves about the planning and implementation of vaccination programmes as well as about their main focuses. Vaccination programmes can be carried out both at state and local level, as single actions or as concerted actions.

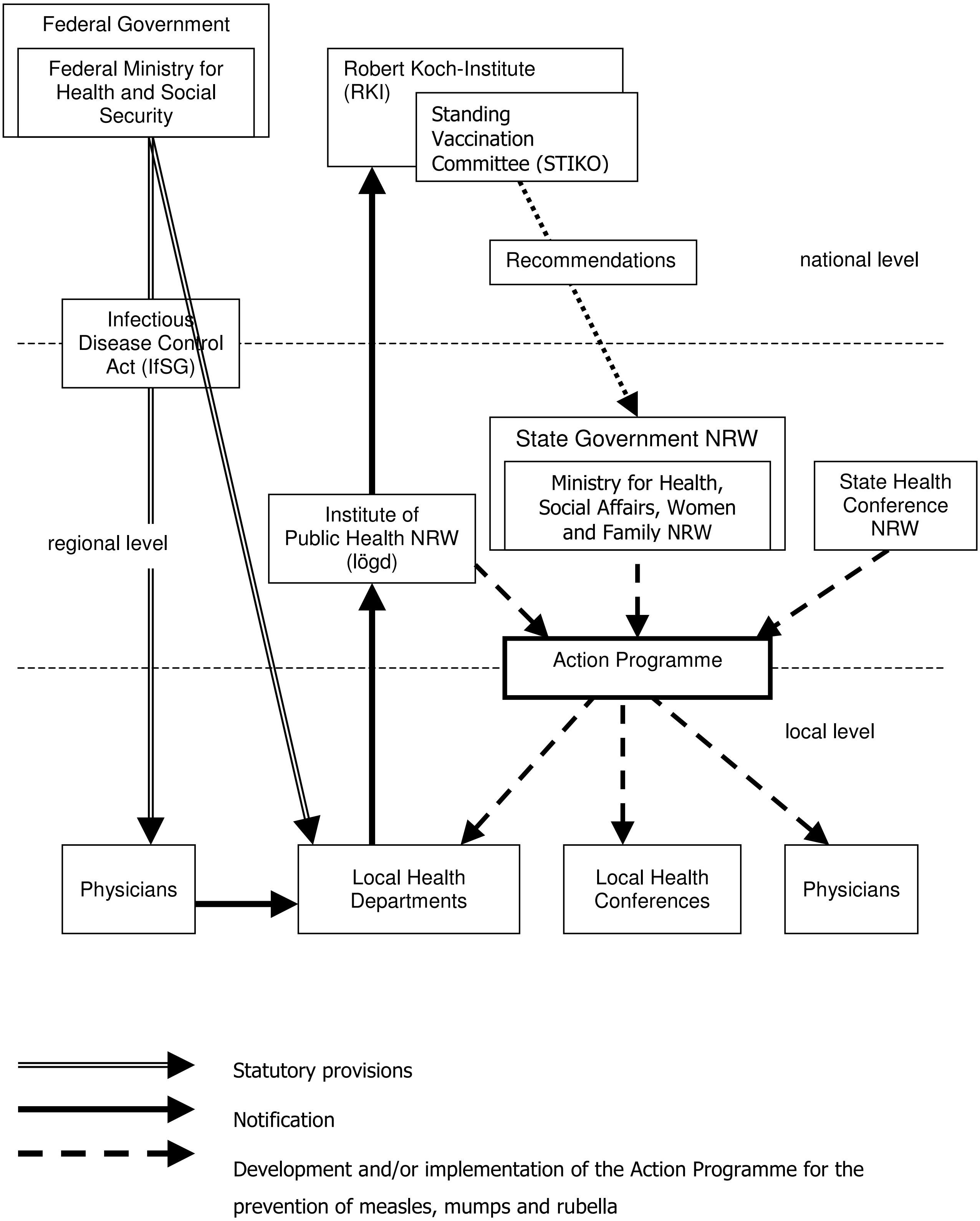
The WHO target to eliminate measles by the year 2007 is explicitly supported by the Federal Republic of Germany. So at the 71st Health Ministers' Conference (GMK) in 1998, the responsible health ministers and senators decided to take concerted measures for the combat of measles together with the Federal Government, the public health service (ÖGD), the health insurance funds, the chambers of physicians and further partners. Participation in measles' vaccination programmes shall be considerably increased and the incidence of measles reduced by 90% in Germany within the next years.

In a move to implement this resolution, an action programme for the prevention of measles, mumps and rubella was adopted at NRW's 10th State Health Conference which includes all major actors involved in NRW's health care sector. Members of this body are representatives of the chambers of the medical care professions, associations of panel doctors, social insurance funds, hospital society, charitable organisations, self-help initiatives, trade unions, employers' associations and of the public health service.

This action programme in NRW provides for various measures at different levels (state and local level) which support and supplement each other.

The different organisations and authorities which are involved in implementing the measles' vaccination programmes in NRW as well as the levels at which they act, can be taken from the following organisation plan (Figure 6) below.

Figure 6: Organisation plan of the measles immunisation programme in North Rhine-Westphalia



Vaccination strategy

Recommendations for a first and second measles, mumps and rubella vaccination have been in force for Germany since 1991. In its July 2001 recommendations, STIKO supports the first MMR vaccination for children between their completed 11th and 14th month of life and the second between their completed 15th and 23rd month of life. Missing vaccinations should be received by the 18th year of life at the latest.

Vaccinations are given following consent from the parents/legal guardians who also have the right to opt against vaccination for their children. There is no automatic invitation or reminder system for vaccination attendance. At the birth of their children, parents are issued with a vaccination card together with a child health record booklet which they should bring with them each time they see their doctor. Parents learn about the STIKO recommendations from a vaccination plan they can get from their paediatrician, family doctor or from the sickness funds. Thus it is in most cases within the responsibility of the parents to survey and observe these deadlines and to make the required appointments with their paediatrician or family doctor. The vaccinations are mostly carried out by the paediatrician or family doctor in his/her practice rooms. Doctors order the vaccines from pharmacies and forward their claims to the statutory health insurance funds (GKV) via the association of panel doctors.

Information and education

Parents/legal guardians are amongst others also informed about the procedure and necessity of measles vaccinations when they see their paediatrician or family doctor. Another opportunity for information is provided by the school entrance examination, which is carried out by the medical staff of the health departments.

Surveys in Germany have shown that the doctor's advice is paramount in influencing the decision for vaccination. Information campaigns on vaccinations therefore regularly include doctors and physicians.

The latest STIKO recommendations are conveyed by the Federal Chamber of Physicians to the chambers of physicians at state level which then inform the doctors. At the same time doctors are informed through publications in the corresponding medical journals or through additional vaccination seminars which are organised by the chamber of physicians.

To inform the population about vaccinations, the state of North Rhine-Westphalia uses various methods. These include the telephone announcement service of the Ministry for Health, Social Affairs, Women and Family (MGSFF). Under a service telephone number interested citizens are informed at two-week intervals about topical issues from the health care sector through the announcement service. This also includes an announcement text on vaccinations. Through publications from the press release office of the MGSFF, the population in NRW is also informed about this issue. Moreover, MGSFF has also issued its own flyer on measles, mumps and rubella which can also be used by the health departments in NRW for vaccination campaigns.

For local vaccination campaigns, the health departments turn directly to the regional media (e.g. local press, radio stations) and issue their own press releases.

Health insurance funds use their magazines to inform their members at irregular intervals.

Programme-related projects/campaigns

The Action Programme for the Prevention of Measles, Mumps and Rubella adopted by the 10th State Health Conference in August 2001 is aimed at a permanent increase in vaccination levels among children and adolescents in NRW. The background are the presently still high incidence figures particularly for measles as well as the risk potential resulting from inadequate vaccination levels against mumps and rubella.

- **Activities at state level**

For the planning, co-ordination and implementation of supra-regional vaccination programmes, NRW has the Institute of Public Health NRW (lögd) at its disposal. In addition to its functions stipulated in NRW's legislation as a "public health co-ordination centre" and "official NRW authority for the surveillance of infectious diseases" (in accordance with Sec 11 Infectious Disease Control Act) the management of local vaccination data through the lögd as a service provider supplements the requirements for this function. The list of measures conceived by the lögd is aimed at abolishing deficits in knowledge, motivation and implementation of the vaccination idea both within the population and in the health sector. Important single measures of this campaign are the early identification of the vaccination status as early as at kindergarten entrance, improved vaccination information campaigns in schools and companies, improved qualifications of those working in the health sector, the targeted improvement of vaccination levels by sending a mobile vaccination unit to the municipalities as well as a continuous evaluation and publishing of the activities carried out. Important partners during implementation phases are in particular the local health conferences as well as the health departments in the municipalities.

- **Activities of the local health conferences**

An important body for the discussion and implementation of measures also with regard to protective vaccinations in NRW are the local health conferences. Members are health care actors involved in health promotion and health care for the population, self-help groups and institutions for health care and patients' rights protection as well as members of the council or district assembly responsible for health. Together, as an independent body, the local health conferences deliberate on various thematic topics and questions of interest in health care at the local level with the objective of co-ordinating them and if required give recommendations for action. These recommendations are implemented under the self-commitment of the actors involved. The persons involved agree joint solutions at the

local level and initiate their own actions such as for example actions for the prevention of measles, mumps and rubella.
To support these activities, the lögd has developed a planning programme for MMR.

- **Activities of the individual health departments**

There are 54 health departments in NRW which are part of the local self-government system. As implementation level of the public health service, they are among other things responsible for important tasks pertaining to hygiene control and the promotion of health protection at population level. In addition to the identification of the vaccination status at school entrance examinations, these tasks also include vaccination activities which are based on recommendations for action given by the local health conferences or which can be decided by the health departments themselves. They are primarily guided in their actions by the principle of respecting the subsidiary sharing of tasks according to which the implementation of officially recommended regular vaccinations primarily falls within the responsibility of practising doctors and measures of the public health service should only be aimed at improving vaccination levels.

Vaccination documentation/data collection

In accordance with the Infectious Disease Control Act (IfSG), the vaccinating doctor is obliged to register every protection vaccination on a vaccination card or, if it has not been submitted, to issue a vaccination certification. The kind of data to be documented is also fixed in the Infectious Disease Control Act.
There are no further documentation methods such as for example a vaccination register.
The vaccination status of children is identified during school entrance examinations which are required for school entrance. All children and/or their accompanying parents are requested but not forced to bring the vaccination card. For NRW figures from the year 2000 show that of 137.284 children who had participated in the school entrance examination and had been issued with a vaccination card almost 90% had received the first MMR vaccination but only 14% the second vaccination.
As stipulated in the Infectious Disease Control Act, the health departments are obliged to transmit vaccination data collected during school entrance examinations in an anonymised and aggregate form to the Robert-Koch-Institute via the superior state health authorities. The Institute of Public Health annually publishes the data available from school entrance examinations in NRW and thus also the vaccination data.

Disease surveillance

With the entering into force of the Infectious Disease Control Act on January 1st 2001 all clinically and laboratory-confirmed measles cases were made notifiable in Germany.
The Infectious Disease Control Act stipulates that independently from each other both the attending doctor and the confirming laboratory are obliged to report the name of the measles patient. The task

of putting both kinds of information together into one case and if necessary to conduct further inquiries falls within the responsibility of the health department. The notification deadline of 24 hours and the extent of facts and information to be notified are also stipulated by law.

This process has to be distinguished from the notification procedure from the health department to NRW's state authorities and RKI. It differs from the above-described procedure both with regard to the extent and deadline of the notification. In accordance with Sec 11 of the Infectious Disease Control Act, anonymised data have to be transferred to NRW's state authority by the third working day of the following week after the health department has received the notification. The state authority again has to transfer the data within one week to the RKI. The responsible state authority at the lögd is charged with the tasks of pooling, quality control and surveillance of the notifications they receive from all 54 districts and/or self-administered cities in NRW. This also includes publishing the information on the Internet without delays to ensure a back-flow of information as part of a closed data cycle. At federal level, the same tasks are performed by the Robert-Koch-Institute. With the publication of the data in the "Epidemiologisches Bulletin", on average about 3 weeks after having registered the notification, the data are given official character.

To complement this routine notification procedure, in October 1999 a measles sentinel for the continuous and immediate registration of measles cases was set up at the national level. In this study called "Arbeitsgemeinschaft Masern" (AGM) about 1.200 physicians, in most cases paediatricians, on a voluntary basis collect data on the seasonal, regional and age-specific distribution of measles in Germany. Of special importance are data which can only be gained through this – from the IfSG notification procedure – independent system on the individual development of the disease, on the precise vaccination status and on the results of comprehensive laboratory diagnoses. The latter in particular provide indisputable contributions to assessing the effectivity of the vaccination.

Both registration systems, which presently exist simultaneously, ensure good national surveillance as a prerequisite for the further systematic fighting of measles with the objective of their eradication.

6.5.4 Breast cancer screening programmes

Introductory remarks

The statutory framework for cancer screening programmes is set at the federal level (with the involvement of the German Bundesrat). Therefore medical early cancer detection measures for women described under item "**Medical breast examinations"** and the concept for mammography screenings described under item "**Mammography screening"** are also based on German federal law. The federal states are responsible for their implementation and organisation.

In spring 2001, in a common effort together with North Rhine-Westphalia's health care actors (sickness funds, association of panel doctors, chambers of physicians, hospital society, association of the leading organisations of the charity institutions, self-help groups and Cancer Society NRW as well as experts from and outside NRW) the Concerted Action against Breast Cancer was launched by NRW's health ministry. This action is aimed at establishing a comprehensive concept throughout the state of North Rhine-Westphalia to improve health care services for breast cancer patients in the fields of early cancer detection, diagnostics, treatment and follow-up care including psycho-social monitoring and patient information. A central element of this initiative is for example the establishment of breast centres modelled on the EUSOMA criteria which are aimed at the co-operation, concentration and standardisation of breast cancer treatment.

In the field of early cancer detection a separate initiative for breast self-examination was established under the Concerted Action. At state level, with the involvement of the Concerted Action, mammography screenings are moreover monitored following their introduction and their implementation is arranged and organised.

Medical breast examinations as part of early cancer detection screenings

In 1976, free cancer screenings were introduced for the members of the statutory sickness funds at the national level. The foundation for this is provided by the guidelines of the Federal Association of Physicians and Social Health Insurance Organisations based on Social Code V. These guidelines have been continued over the course of the years. The medical measures to be conducted in accordance with these guidelines serve the early detection of genital cancer diseases in women from the age of 20 years onwards as well as of cancer diseases of the breast and skin from the age of 30 years onwards and of the rectum and large intestine from the age of 50 years onwards.

Concerning medical breast examinations the mammary glands and regional lymphatic nodes are palpated for early cancer detection and instructions for regular self examinations given. In case of a disease or suspected disease further targeted diagnostics and if necessary therapy are provided as part of the treatment.

The examinations and their findings are documented. Sickness funds and associations of panel doctors have been instructed to collect and analyse the findings arising. Presently, medical breast examinations are not being evaluated on a standardised basis.

Both sickness funds and physicians, the organisation for the combat of cancer at the regional level and self-help groups are involved in informing the public about medical cancer screening programmes. The participation rate in cancer screening programmes among women is less than 50%. Through information campaigns and public relations work as part of the Concerted Action against Breast Cancer participation rates shall be improved. This requires an overall concept in connection with the introduction of mammography screenings.

Breast self-examination

Instructions for breast self-examination are part of the medical cancer screenings described under item "**Medical breast examinations"**. To encourage more women to become aware of and deal with the issue of breast cancer and to provide them with the corresponding profound knowledge for self-examinations, seminars for breast self-examinations are held as part of the Concerted Action to enable women to carry out breast examinations on their own.

The objective is to sensitise women on the issue of breast cancer and to strengthen their feeling for their own body and responsibility for themselves. Moreover, women should learn that in addition to medical examinations regular self-examination is necessary for the early detection of breast cancer. In this context it is self-evident that self-examinations cannot replace medical screenings and mammography.

The seminars are on principle offered to all women free of charge and run by competent gynaecologists. A seminar takes about 1.5 hours and is divided into a theoretical and practical part. The theoretical part deals with the pathogenesis and early detection of breast cancer. Subsequently, breast palpation techniques are exercised. For this purpose modern palpation models made of silicone are used.

Simultaneously, instruction and information materials have been developed which are distributed in the seminars but which interested women can also obtain from the health ministry. This material is a leaflet and the so-called "shower card" (waterproof sealed instructions for breast self-examination for hanging up in the bathroom) on the issue of "Self-examination – earlier breast cancer detection".

The seminars are evaluated. For this purpose both the gynaecologists conducting the seminars and the women themselves complete structured questionnaires directly after the seminars and the women again after 6 months.

Mammography screening

- **Decision on the introduction of mammography screenings in Germany**

The introduction of mammography screening for Germany was unanimously decided and/or called for by the German Bundestag, Bundesrat and the Health Ministers' Conference of the German states. In spring 2003, the Federal Association of Physicians and Social Health Insurance Organisations responsible for the introduction of the mammography screening as part of the statutory early cancer detection programme worked on a change to the guidelines on early cancer detection and in particular on health care services to be provided under the breast cancer early detection programme through mammography screenings and submitted them to the federal government for approval. The Federal Ministry for Health and Social Security must approve the changes to the guidelines and health care services.

The intended screening programme is based on the experiences of the model project for the introduction of mammography screenings in the areas of Bremen, Weser-Ems and Wiesbaden as well as on experiences of other European countries which have already introduced mammography screenings. The foundation for this is provided by the European guidelines for the introduction of mammography screenings (EUREF guidelines). According to these guidelines all women as from the age of 51 up to their completed 70th year of life shall be entitled to a screening mammography every 24 months.

- **Most important characteristics of the mammography screening programme**

The programme is based on the following characteristics:

- Invitation system for all eligible women between 50 and 69 years of life, in accordance with the European guidelines
- Motivation and information for the women concerned through corresponding information material
- Reading of mammographs through two independent, correspondingly qualified doctors
- High demands on the qualification of the diagnosing doctors and technical equipment: recognition as part of an approval procedure
- High standards for regular reviews and quality assurance checks
- Structuring of quality assured clarification diagnostics
- Standardised documentation
- Evaluation of the programme and its target achievement based on anonymised and aggregated data

- **Translation into practice**

Presently the statutory requirements in terms of data and radiation protection are being established for the introduction of mammography screenings at federal and state level. The introduction shall legally be possible on Jan. 1st 2004 and will then swiftly be implemented above all in those areas where pilot measures are already being carried out (Bremen, Weser-Ems and Wiesbaden). Due to the high quality demands that have to be met the cancer screening programme will probably be introduced in North Rhine-Westphalia in a step by step process starting with the year 2004.

6.6 Eastern / Midland / North-Eastern Regions – Ireland

6.6.1 Demography

The Eastern Regional Health Authority (ERHA) with its three constituent Health Boards, and the Midland and North-Eastern Health Boards respectively, cover the combined Eastern, Midland and North-Eastern regions.
The Health Boards Executive (HeBE) was established in February 2002 to enable Health Boards, the Eastern Regional Health Authority and non-statutory provider agencies to work together on an agenda to develop and modernise the health delivery system. The Board of HeBE is comprised of the Chief Executives of the Health Boards and the ERHA and also has representation from the Chief Executives of the Dublin major teaching hospitals.

The demographic characteristics of the combined three regions are as follows:

Male population: **0.89 million**
Female population: **0.92 million**

Of the 126.8 thousand inhabitants in the 0-4years age-group 65.4 thousand are male and 61.4 thousand are female.
The female population in the age-group targeted by mammography screening programmes is divided as follows:

Age-group in years	**number in thousands**
50-54	46.0
55-59	38.1
60-64	34.0
total	118.1

(1996 Census of Population)

6.6.2 Organisation and structure of the regional health system

Health services in the Republic of Ireland are financed through general taxation, with funding for programmes being provided to the Health Boards by the Department of Health and Children.
The description of the structure and organisation of the Irish health system, which also applies to the Eastern Regional Health Authority with its three area Health Boards, is taken from "Quality and Fairness", a paper of the Department of Health and Children explaining the New Health Strategy 2001:

" *The Government, the Minister for Health and Children and the Department are at the head of health service provision in Ireland. The Department's primary role is to support the Minister in the formulation and evaluation of policies for the health services. It also has a role in the strategic planning of health services in consultation with health boards, the voluntary sector, other government departments and other interests. The Department has a leadership role in areas such as equity, quality, accountability and value for money.*

The health boards, established under the Health Act, 1970 are the statutory bodies responsible for the delivery of health and personal social services in their functional areas. They are also the main providers of health and personal social care at regional level. Health boards are composed of elected local representatives, ministerial nominees and representatives of health professions employed by the board. Each health board has a Chief Executive officer (CEO) who has responsibility for day-to-day administration and is answerable to the Board. The Health (Amendment) (No. 3) Act, 1996 clarified the respective roles of health boards and their CEOs by making boards responsible for certain reserved functions relating to policy matters and major financial decisions and CEOs responsible for executive matters. In addition, many other advisory, executive agencies and voluntary organisations have a role to play in service delivery and development in the health system." (Department of Health and Children 2001)

As regards the Health Boards within the combined Eastern/Midland/North-Eastern regions, their main role can be considered as the planning, arranging, co-ordination and delivery of health and personal social services in the region in co-operation with the local voluntary service providers.

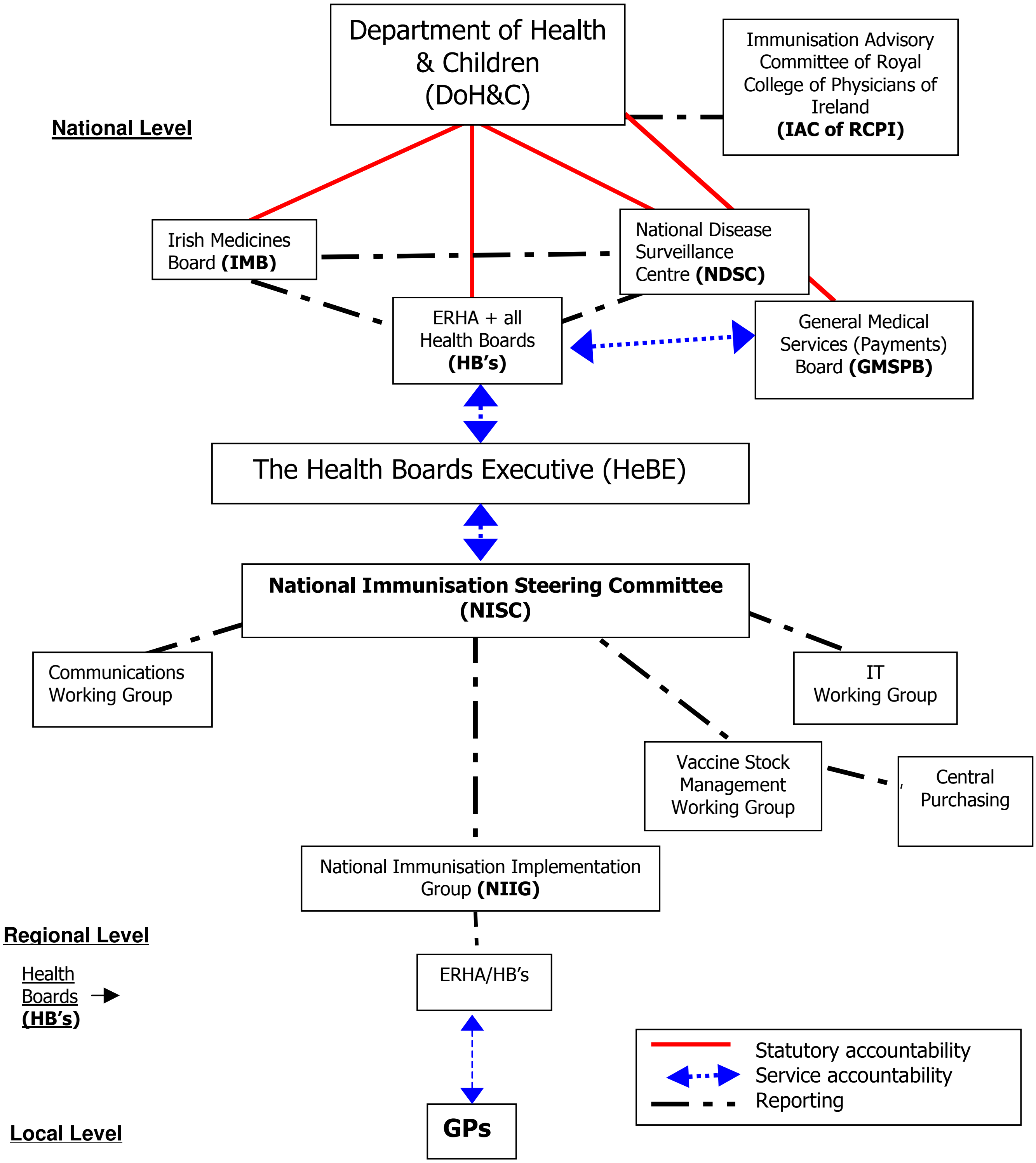
6.6.3 Measles immunisation programmes

Measles vaccination was introduced country-wide in 1985, the combined MMR vaccine was introduced in October 1988. In 1992, a second dose of MMR was recommended for boys and girls aged 10-14 years. The introduction of measles vaccine and the combined MMR vaccine has led to a decrease in the numbers of measles notifications. However, the uptake of MMR in Ireland has not yet reached the target of 95% and outbreaks continued to occur in 1993 and 2000 (The Health Boards Executive 2002a). Therefore the Health Board Chief Executive Officers initiated a "Review of Immunisation/ Vaccination Programmes" which was to examine the policy, practice and procedures of all immunisation/vaccination programmes. An increasing emphasis on the need to improve the uptake of immunisation/vaccination programmes e.g. MMR, and the increasing public and media discussion of immunisation/vaccination issues such as vaccine safety were part of the background against which the review was established (The Health Board Executive 2002b).

Organisation of programmes

The different organisations and agencies involved in the realisation of measles immunisation programmes as well as the levels at which the programmes are planned and co-ordinated are illustrated in the organisation plan below (Figure 7).

Figure 7: Organisation plan of the measles immunisation programme



Department of Health and Children (DoH&C):

- formulates immunisation targets on advice of **IAC of RCPI**
- decides on programme policy and funding (financing is through general taxation)
- provides **HB's** with funding for immunisation programmes
- together with **HB's,** is responsible for health education in general

Immunisation Advisory Committee of Royal College of Physicians of Ireland (IAC of RCPI):

- draws up guidelines and advises on targets for measles immunisation programme based on WHO and other international guidelines

Irish Medicines Board (IMB):

- decides on licences and conditions of use of vaccines and monitors adverse reactions to vaccines

Health Boards Executive (HeBE):

- co-ordinates the planning and implementation of immunisation programmes with **HB's** at regional level
- facilitates a co-ordinated national response involving all key actors e.g. HB's, DoHC, NDSC, IMB etc.
- together with **HB's,** is responsible for specific information on immunisation programmes and actions
- together with **HB's** and **DoHC,** is responsible for national promotion and public information campaigns on immunisation.
- informs **NISC** of matters of common operational or policy significance discussed with **HB's.**

National Immunisation Steering Committee (NISC):

- is a newly established body representative of all key interest groups dealing with immunisation in general
- under the aegis of **HeBE**, co-ordinates activities of measles immunisation programme at national level
- will in future address the evaluation of projects or campaigns relating to measles immunisation

National Immunisation Implementation Groups (NIIG):

- acts as a practical co-ordinating mechanism between **NISC** and **Health Boards**, as each Health Board is represented on **NIIG** by its Regional Immunisation Co-ordinator
- provides feedback and policy advice to **NISC**

National Disease Surveillance Centre (NDSC):

- evaluates immunisation programmes at national level (monitors vaccine uptake and incidence of disease)
- analyses data from all Health Boards and publishes quarterly reports

Health Boards (HB's):

- responsible for planning and implementation of immunisation programmes i
- order vaccine from supplier and distribute them to GP practices and other required locations
- implement special campaigns or projects relating to measles immunisation at regional level
- are responsible for regional surveillance and for documentation of vaccines given
- primarily responsible for operation of call/recall systems

General Medical Services (Payment) Board (GMSPB):

- pays **GPs** for immunisation services provided on behalf of **HB's**

General Practitioners (GPs):

- provide immunisation services and have responsibility to identify children who have been immunised and to follow up defaulters
- maintain records of children immunised and forward immunisation and/or disease data to **HB's** and to **DoH&C** as required.
- responsible for updating their knowledge on immunisation and to promote childhood immunisation

Vaccination strategy

In accordance with the RCPI guidelines, two doses of MMR have been recommended in the Republic of Ireland since 1992, with the first dose being given at 12–15 months of age and the second at 4–5 years of age. Parents are personally invited to bring their children for vaccinations and this is occasionally supplemented by public information through the media.

Vaccine procurement is organised centrally by the HeBE and it is distributed directly from the supplier to each Health Board in the quantities requested by them. It is then distributed to GP practices and to other required locations for use in schools or special clinics. A new system of direct distribution from supplier to end user is being piloted in order to shorten the supply chain and to better avoid any vaccine deterioration e.g. due to storage at sub-optimum temperatures.

Individual immunisation is free of charge and delivered through GP practices but also through Health Board Medical Officers in schools and in 'black-spot' areas.

Immunisation services provided by GPs are paid for by the Health Boards through the General Medical Services (Payment) Board. Theoretically, GPs who achieve a 95% vaccination uptake level are supposed to receive a financial bonus for each child on their panel who has reached his/her second birthday in the calculation period. This, however, doesn't always occur due to communication/ documentation problems.

Information and education

Various means are being used to inform the public, particularly parents, about measles immunisation. A TV cartoon type infomercial, features and interviews involving authoritative medical figures on radio and in the press have been used.

However, the findings of the National Review of Immunisation Programmes (The Health Board Executive 2002b), made it clear that a more systematic, varied and targeted public information approach is needed.

Information leaflets have since been made available to parents. A major initiative in 2002 by the HeBE has been the production of a comprehensive information and discussion pack on MMR for use by health professionals and by parents.

The reported links between MMR vaccine, autism and inflammatory bowel disease (Crohn's Disease) in children have been of interest to the press, radio and TV and have been the subject of news stories, interviews and features involving researchers and parents of autistic children. A report of a study carried out by one Health Board in 2002 showed that parents felt insecure and confused by such media coverage and are then hesitant to have their children vaccinated.

Programme related projects/campaigns

Special projects relating to measles immunisation are implemented by the HeBE at the national level and by the Health Boards at the local level. Such projects include the production of information packs and public information campaigns. There is however limited evaluation of such projects, an area which is to be addressed by the new National Immunisation Steering Committee.

Vaccination documentation and data collection

The GPs and Health Boards are responsible for the documentation of vaccinations given. Neither vaccination certificates nor chip cards are routinely issued. An individual child health record booklet to help parents keep a record of their child's health history, including sections to be completed by a doctor or nurse e.g. on vaccinations given, is available but not in universal use.

Data on immunisation status, vaccine uptake and measles incidences are routinely reported to the National Disease Surveillance Centre by each Health Board and published in a quarterly report. At local level data is collected by the Health Boards through GPs and other medical staff.

At present this data is sent electronically for entry into a separate central surveillance system. It is planned to transfer the data directly into a new single integrated system, however, at the moment, information about immunisation and vaccination can only be accessed in a number of separate Health Board databases, a process which requires time and effort.

The main data gathering method is linked to GP claims for payment which must provide data over a range of fields. Data is also provided by Health Board Medical Officers in respect of school or special clinics. Both of these data collection methods support continuous systematic reporting but some GP claims are sporadic and time lagged.

Programme monitoring and evaluation

The performance of measles immunisation programmes are assessed using criteria such as the percentage uptake rate and the incidences of measles. A number of marketing type criteria have been piloted to measure the impact of public information campaigns related to immunisation and will be developed further in line with the development of more systematic, targeted campaigns mentioned earlier.

The ERHA has one of the lowest measles vaccination uptake rates in the Republic of Ireland and as a consequence the highest measles incidence rate. The last measles outbreaks which have occurred in in Ireland have been in this region. However, the low vaccination levels in the region reflect the situation in the whole country., (Eastern Health Board 2000).The new organisational and governance approach outlined in Fig.7 is aimed at improving this situation.

Disease surveillance

As soon as a medical practitioner becomes aware of or suspects that a person on whom he/she is in professional attendance is suffering from or is the carrier of an infectious disease, he/she is required to transmit a written notification to the relevant Medical Officer in his Health Board.

Under new regulations in 2000, the National Disease Surveillance Centre (NDSC) was assigned responsibility for the collation and analysis of weekly notifications of infectious diseases, taking over from the Department of Health and Children. Thus the NDSC is responsible for the national surveillance of vaccine uptake and incidence of measles disease, with the department of public health medicine in each Health Board being responsible at the next level.

Since 1999, the NDSC publishes quarterly reports showing uptake levels for all Health Board areas and this receives wide dissemination, including to the media, which from time to time carry reports on low uptake concerns. The NDSC may also issue a press release specifically relating to measles, e.g. linking incidence of the disease to low immunisation rates.

For the period 1997-2001, in measles immunisation and incidence data collected from the participating regions, it was not possible to differentiate between confirmed and just clinically diagnosed cases. Limited information on hospital admissions due to measles is available.

An enhanced surveillance system for measles commenced at the beginning of 2003 in the whole country which aims to correct the above points amongst others. It is hoped to have more detailed information on measles cases in the near future.

6.6.4 Breast cancer screening programmes

There are no defined programs of professional breast examination and it is usually carried out by a breast surgeon or specialist breast nurse in specialised breast clinics in some hospitals.

Breast self-examination is not promoted in Ireland as it was feared that it could either cause anxiety by omission (women who do not self-examine may feel guilty for not doing so) or by a lack of knowledge (women who think that they have found something may worry unnecessarily).

Mammography screening programmes are the only official breast cancer screening programmes being used in Ireland. The National Breast Screening Programme, known as BreastCheck, was established in 1998 following a pilot period from 1989 to 1994, with the aim of reducing mortality from breast cancer by 20% over a 10 year period. Phase 1 of the programme started in February 2000 with the screening of women between 50 and 64 years of age in the combined Eastern/Midland/North-Eastern region.

Organisation of programmes BreastCheck is jointly overseen by the Health Boards for the early diagnosis and primary treatment of breast cancer in women. A statutory joint board, the National Breast Screening Board, was established by the Minister for Health and Children whose members consist of the Chief Executive Officers of the Health Boards and other nominees drawn from the disciplines involved in the early diagnosis and treatment of breast cancer in women, and a consumer representative (The National Cancer Forum 2003).

This Board, under the direction of the Health Boards, is responsible for instituting, co-ordinating and carrying out the programme.

The BreastCheck programme is managed locally by Clinical Directors who are responsible for their unit and its team, they report to the Project Director. The programme also has its own IT system, epidemiologist, statistician and researcher.

Funding for the programme is provided from national taxation by the Minister of Health and Children to the ERHA and Health Boards in the combined regions covered by the current phase 1 of the programme and they are required to meet the expenses of the National Breast Screening Board in such proportions as they may agree, or, failing such agreement, as may be determined by the Minister.

The Breast Screening Programme is managed and organised centrally with decentralised multi-disciplinary clinical units for screening, recall and assessment which are adjacent to a host hospital for the provision of primary treatment.

Screening strategy

Women aged 50-64 years living in the combined regions covered by the current phase of the programme are personally invited in writing to attend for screening at either a static or mobile unit at a specific time and date, which can be changed to suit their convenience. Women are given seven days of notice before their appointment.

The population database for the areas concerned is used as a source of personal details for the women resident there. The database is formed using data from the following sources: Voluntary Health Insurance, General Medical Services and Department of Social and Family Affairs; and self-registration is used to supplement the database.

Screening for the BreastCheck programme is done at two clinical units, each of which has two mobile units. The two centres were chosen on the basis of established expertise in breast cancer at both hospitals. Two view mammography is carried out at every round and the European Quality Assurance Guidelines are followed very closely.

There are no charges demanded for individual mammography provided under the programme; targets are set for each quality parameter of performance such as percentages of attendance, recall, and cancer detection rate.

A plan for the roll out of phase 2 of the programme – expansion of the programme nation-wide – was submitted to the Department of Health and Children in 2002.

Dissemination of results

Mammography is carried out by radiographers and the mammograms are read by two radiologists. Following mammographic screening, a woman is either informed that her mammogram is normal and that she will be recalled in two years (provided she remains within the specified age range of 50-64 years at that time) or is recalled for further assessment if an abnormality is detected. BreastCheck runs assessment sessions once or twice a week. The programme aims to send out results within three weeks of the mammogram and to ensure that women are offered an appointment for an assessment clinic within two weeks of being notified of an abnormal result. At the assessment clinic, the women are seen by a consultant doctor and supported by Breast Care Nurses. Assessment results are sent within a week and women are kept informed of any delays regarding results.

Women diagnosed as having cancer are fully informed about the treatment available to them and have the right to refuse treatment, obtain a second opinion or choose alternative treatment without prejudice to their beliefs or chosen treatment. There are special Breast Care Nurses to support the women before and during treatment.

Information and education

There is a lot of media interest in the success and usefulness of mammography screening and also in the extension of the current phase 1 of the programme to a fully national programme.

A Women's Charter was established within the BreastCheck Programme to inform and encourage women to give their views about the programme and any other related points of importance to them (BreastCheck 2002).

Health professionals involved in the programme are regularly informed about current recommendation and new developments via relevant journals, articles and press cuttings which are circulated. Monthly staff meetings are also held and radiographers have joint meetings 3 times a year.

Programme related projects/campaigns

At present the only campaigns held in relation to the breast cancer screening programme are media campaigns. Success of such campaigns is assessed by the attendance rates, which for BreastCheck are over 70% to date.

Programme monitoring/evaluation

Data on different aspects of the programme such as numbers of women invited, attendance rate, referrals for further assessment and cancer detection rates are collected by BreastCheck in its centralised database.

Rigorous audit and quality assurance is an integral part of the screening programme to ensure that women invited for screening receive the best quality of service.

The performance of the programme is compared with predetermined standards based on the third edition of the European Guidelines for Quality Assurance in Mammography Screening.

In 2001, a team of experts in radiography, radiology, pathology, surgery, physics and epidemiology validated BreastCheck's guidelines for quality assurance in mammography screening. This was done in agreement with the European Centre for Quality Assurance in Breast cancer Screening (EUREF). Recommendations from this evaluation and the input from the European Manual on Quality Assurance provide assurance that the quality parameters reached by the Irish National Breast Cancer Screening Programme are to internationally approved standards (BreastCheck 2002).

Disease surveillance

BreastCheck has centralised data on all cancers detected. There is also a National Cancer Registry in Ireland where all cancer cases are documented by so called 'Tumour Registration Officers' (TRO). These are qualified nurses who undergo specialised training in cancer registration. The National Cancer Registry (NCR) has eighteen such officers and between them they cover all the hospitals, hospices, nursing homes etc in the Republic of Ireland where the data is actively collected.

Confirmation of exact recording of tumours is facilitated by assistance from pathologists and clinicians to whom the TRO will go to if extra verification is required. The data is recorded onto a laptop computer on site and is transferred electronically to the NCR headquarters for quality control. Once quality control is complete, an annual report is produced on the incidence of cancer in Ireland.

The NCR analyses national data whilst BreastCheck analyses its own data.

6.7 Veneto – Italy

6.7.1 Demography

Veneto is one of 20 regions in Italy, each of which is governed by an executive and a regional council, both democratically elected. 4.5 million of the country's 57.7 million inhabitants live in the region of Veneto, an area of 18,364 km^2 .

Of the female population O.56 million are in the 50-69 year old age-group targeted for mammography screening.

6.7.2 Organisation and structure of the health care system

Italy's health care system is a regionally based national health service that, like the UK, provides universal coverage free of charge at the point of service. The system is organised at three levels: national, regional and local. The national level is responsible for ensuring the general objectives and fundamental principles of the national health care system whilst the regional governments, through the regional health departments, are responsible for ensuring the delivery of a benefit package through a network of population-based health management organisations (local health units) and public and private accredited hospitals.

The Ministry of Health, the main central institution responsible for health, manages the National Health Fund and distributes resources to the regions. Its role in financing is restricted to allocating the resources from the global national budget and ensuring uniform availability of resources in the regions. The regions finance the remaining health care expenditure from their own sources.

In accordance with the decentralisation process occurring in Italy's National Health Service since 1992, regional governments, through their regional health departments, are responsible for legislative and administrative functions, for planning health care activities, for organising supply in relation to population needs and for monitoring the quality, appropriateness and efficiency of the services provided (European Observatory on Health Care Systems 2001b).

Regions are also responsible for determining the size and organisation of local health units and monitoring their operation. Local health units are geographically based organisations responsible for assessing needs and providing comprehensive care to a defined population. Veneto has 21 local health units.

6.7.3 Measles immunisation programmes

The measles vaccine was introduced in 1979 in Italy as a single vaccine which was replaced by a single dose MMR vaccine in 1982 (European Sero-Epidemiology Network ESEN 1998).

Organisation of measles immunisation programmes

The Ministry of Health compiles the national immunisation regulations and policies together with the Inter-Regional Infectious Diseases and Immunisation Committee. It also evaluates obligatory notification of diseases preventable by vaccination. The Health Prevention Department is responsible for disease surveillance at the national level.

There is a national plan which determines the vaccines which are to be given by statutory law (obligatory on the part of the provider) and recommended ones. The planning, organisation and implementation of programmes is the responsibility of the regions, which work together towards the elimination of measles. The regional governments determine the immunisation programmes, which are then organised and managed by the regional public health service and the local health units.

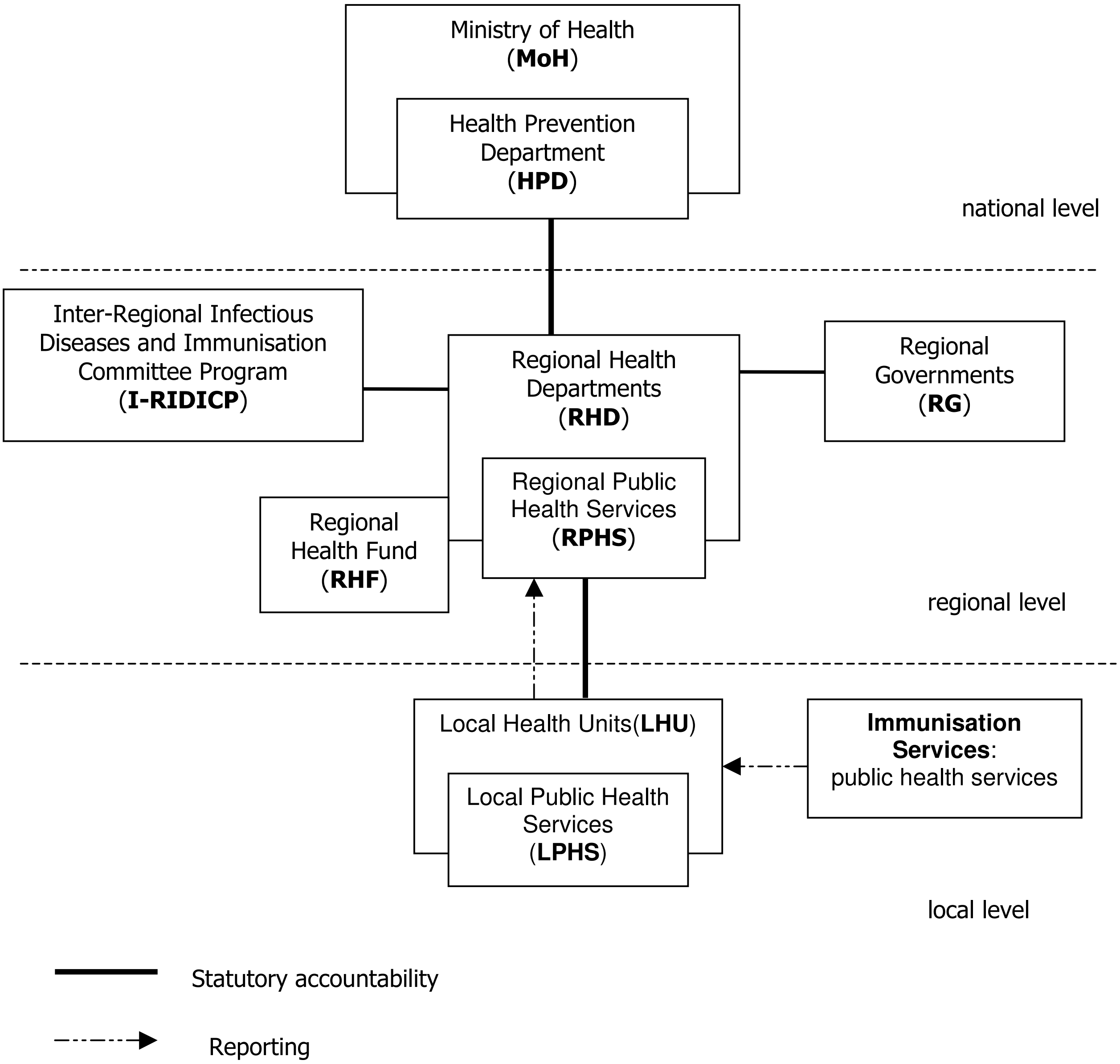
The regional programme is implemented by the epidemiological and public health services of the Health Prevention Department and by the public health services of the Health Prevention Department at the local level (local health units). These organisations also co-ordinate the programmes at their respective levels.

The regions instigated an Inter-regional Infectious Diseases and Immunisation Committee, which together with the Ministry of Health and the National Health Institute, formulate targets for the immunisation programmes. The targets are in line with those set by the WHO for the European region, e.g. 95% vaccination uptake rate.

A measles immunisation programme which includes programme guidelines is currently being established by the regions together.

The organisations involved in the realisation of measles immunisation programmes as well as the levels at which they operate are illustrated in the organigraph below (Figure 8).

Figure 8: Organisation plan for the measles immunisation programme in Veneto Region, Italy



Vaccination strategy

In the Veneto region, MMR is given as a single dose to children at the age of 12-15 months. All children are invited to be vaccinated and a recall system is used for those who do not turn up.

The public health services of the local health units are responsible for the written invitations and they also maintain vaccination registers.

Vaccines are procured by the local health units, who distribute them to the immunisation services - public health practitioners, paediatricians and health workers - in their areas. Vaccination is only carried out with informed parental consent, however written consent is not required.

Information and education

Parents, and the public at large, are informed about the immunisation programme via campaigns in the forms of posters, pamphlets available in the local health units, and information forms given to parents during the vaccination notifications. The general public opinion is not measured.

Vaccination services personnel are informed about changes or new information regarding measles and/or immunisation through circular letters containing recommendations and immunisation campaign results.

Currently there are no structured programmes involving the media dealing with measles immunisation.

Programme related projects/campaigns

Following the measles outbreak which occurred in the Veneto region in 1997, the region enforced a measles immunisation programme for a period of 4 years (1998 - 2001). The programme entailed cohort catch up vaccinations for the groups with low vaccination coverage. During the campaign, more than 150.000 infants and approximately 69.000 individuals between 2 and 21 years of age were vaccinated, the latter comprising the 'catch-up' group. The programme was evaluated through data collection of the vaccine coverage in the cohorts involved in the programme. The regional annual incidence rate went down dramatically in 1998 and the following three years of the campaign.

Vaccination documentation/data collection

The public health services of the local health units maintain vaccination registers and are responsible for the overall documentation of immunisation details. They collect immunisation and disease data at the local level whilst the regional Epidemiological and public health services do so at the regional level and The Health Prevention Department of the Ministry of Health at national level.

Immunisation status is checked biannually and at school entry.

Programme monitoring and evaluation

All regions have to supply data relative to the number of vaccine doses administered each year and the vaccine coverage at 24 months of age for MMR and other vaccines to the Ministry of Health. The Ministry of Health uses these figures to evaluate the programme. It also evaluates the obligatory notification of diseases preventable by vaccines.

Disease surveillance

Measles surveillance is maintained on a national level with data transferred through the health service levels to the Department of Health prevention in the Ministry of health. The measles data collected by GPs or paediatricians is transferred to the public health services of the local health units where it is stored in a regional software programme before being forwarded on a monthly basis to the regional Epidemiological and Public Health Service who in turn forwards the data to the Ministry of Health.

The regional Epidemiological and Public Health Service analyses all data collected in the region and prepares annual reports which are then sent to the services of the local health units for distribution to the immunisation services providers and to paediatricians.

6.7.4 Breast cancer screening programmes

Mammography screening is the methodology being used for breast cancer screening in the Veneto region. Although professional breast examination is offered within a normal clinical work context, e.g. during GP or gynaecological consultations, no programmes for professional breast examination exist and no data is collected.

Breast self-examination is at times promoted within health education activities, but again without any clearly defined programme. In some mammography screening programmes, after a negative mammogram, women are advised to regularly perform breast self-examination, but no practical training is given.

Organisation of programmes

The Veneto mammography screening programme started inviting women in 1999 in 10 of the region's 21 local health units. In 2000, the programme was initiated in two more local health units. Meanwhile, 17 units are implementing the programme.

The public health departments of the local health units together with radiology, surgery, oncology and radiotherapy departments are responsible for the planning of the mammography screening programmes in the region. The co-ordination of the programmes is normally done by the Public Health Department, however, a few are co-ordinated by the Radiology Department.

Radiology departments are mainly responsible for the implementation of the programmes, which are run according to guidelines issued by the National Oncology Commission which are in turn based on the European Guidelines. Screening programmes are part of the "LEA" (essential health services) and as such are financed entirely by the government within normal budget. Nevertheless, to promote the implementation the Regional Government and the Ministry of Health have repeatedly granted additional funds.

Screening strategy

The primary aims as stated in the regional program reports include the early diagnosis and treatment of breast cancer and the associated mortality reduction, whilst the secondary aims concern the use of conservative and, from the women concerned, acceptable therapy (Zorzi et al 2000).

All women between 50 and 69 years of age who are registered as resident in the 17 local health units, where the programme has been implemented, are personally invited (with appointment) every two years for a two-view mammography examination. Self-registration is also used to supplement the registers and services provided free of charge to all women who attend.

A special information system is being developed for the screening programme. The computerised system will not only be used for invitation purposes but also for the storage and retrieval of programme data.

The regional targets set for the screening programme include, expanding the programme to all 21 units, a participation rate by targeted women of at least 70% and that screening is available biannually.

Dissemination of results

Results are disseminated differently in each region, in 8 local health units, a so-called 'standard organisation model' is in operation, first all the mammograms are read, then participating women are recalled for further assessment. Three local health units use a system where the reading of the mammograms and the conduction of non-invasive further examinations are done in one sitting. In the units where the standard organisation model is followed, an average of 88% of negative results were sent out within 21 days from the day of examination. In case of a positive or unclear result, the woman concerned is invited by telephone to an assessment session. 73% of the further assessments were achieved within 21 days of the initial examination.

Information and education

There is a lot of interest in the mammography screening in the media as well as within the population, with a generally positive opinion reported from women and the general public. Posters and meetings with population groups are used as means of disseminating information about the programme. Invited women also receive information leaflets and are given a free telephone number where they can get more information or raise questions.

Professional training meetings are organised once or twice a year for those involved in the realisation of the programmes.

Programme related project/campaigns

Apart from the information sessions with population groups, there are currently no projects or campaigns being held in relation to mammography screening programmes. However, there are plans for to implement campaigns in the future.

Programme monitoring/evaluation

Data on different aspects of the programmes such as number of women invited, participation rate, referrals for further assessment and cancer detection rates are collected by the local health units. The co-ordinating department of each local health unit uses these figures to monitor and evaluate their respective programmes. A common and specific information system is adopted by each unit and the data collected is forwarded to the Regional Reference Centre for Monitoring and Evaluation on a yearly basis.

Disease surveillance

Personnel at the regional cancer registry in the Veneto region are responsible for the documentation of cases in the cancer registry. Data is provided from the local health units, analysed, and published on an annual basis.

6.8 Stockholm – Sweden

6.8.1 Demography

Sweden has 21 county councils which are grouped into 6 medical care regions, one of which is the Stockholm region. In 1997, the region had a population of 1.75 million, approximately 20% of the entire Swedish population.

6.8.2 Organisation and structure of the health system

The health care in Sweden is regionally-based and publicly operated. It is organised on three levels: national, regional and local, with the basis of the health care system being formed by the regional level through the county councils. County councils and local municipalities enjoy a considerable degree of autonomy in relation to the central government, because they are in charge of the health care delivery system from primary care to hospital care, including public health and preventive care. They are also responsible for financing and providing health services (European Observatory on Health Care Systems 2001c).

The overall responsibility of the health care sector however rests with the Ministry of Health and Social Affairs at the national level.

The National Board of Health and Welfare supervises implementation of public policy matters and legislation in health care and social welfare services.

6.8.3 Measles immunisation programmes

The measles vaccine was introduced country-wide in 1971, replaced in 1982 by the MMR vaccine. Since its introduction, the vaccine is administered in two doses, the first one at 18 months and the second at 12 years of age.

Sweden is one of the few countries which was classified as having almost eliminated measles by 1998 (European Sero-Epidemiology Network ESEN 1998).

Organisation of programmes

The responsibility for health care in Sweden, funding and organisation including public health and preventive care, rests with the county councils, which are independent, regional government bodies and the local independent organ for county services.

The communicable diseases control unit of the National Board of Health and Welfare (NBHW), on the advise of its advisory group, makes recommendations regarding immunisation programmes. These recommendations are implemented in all counties within the children health care system.

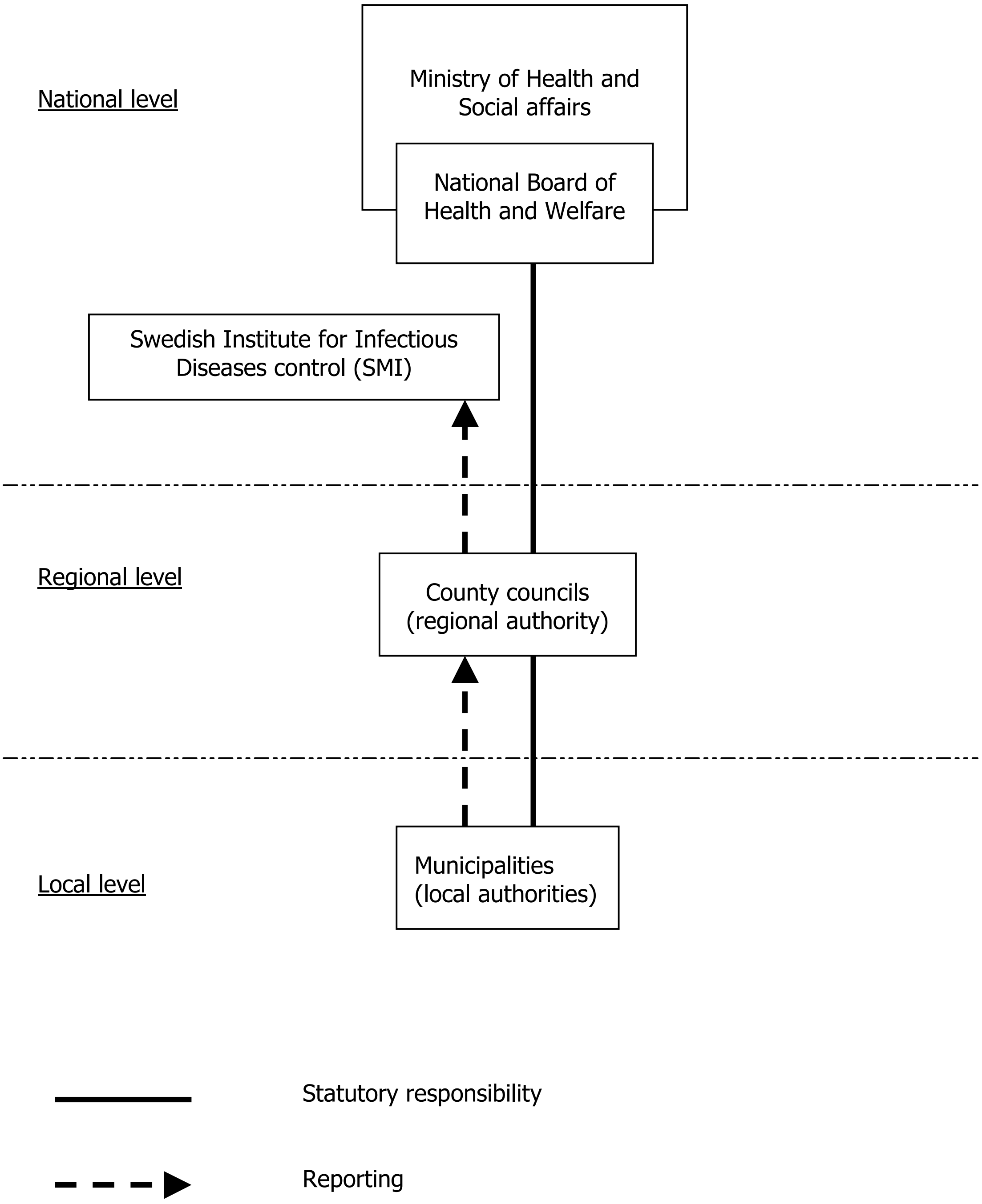
A paediatrician and the county communicable diseases consultant are involved in the local planning. The NBHW has the specific role of supervising and monitoring the public health activities of county councils and municipalities and evaluating the immunisation programmes.

The Swedish Institute for Infectious Diseases Control is responsible for the collection of measles immunisation coverage and incidence data, with surveillance being maintained continuously.

The different agencies and organisations involved in the realisation of the measles programmes as well as the levels at which they are active are illustrated in the organisation plan (Figure 9).

Although in administrative terms county councils have the character of independent secondary level local government, their authority can not intrude upon the municipalities' constitutional rights and powers.

Figure 9: Organisation plan of the measles immunisation programme in the Stockholm region, Sweden



Vaccination strategy

Parents are personally invited to bring their children for vaccinations and defaulters are followed up. Nurses at the different health centres are responsible for the invitation and reminding. Parental informed consent is always required before any vaccination is given.

Each county buys its own vaccines and distributes them to the health centres and/or schools where individual immunisation is mainly delivered by nurses and funded by the county councils.

Information and education

Various means are used to inform the public, particularly parents, about measles immunisation. Advice and information are disseminated via the media, in the form of booklets, posters or as brochures however media attention has reduced in the last few years.

A number of studies to measure or assess the opinion of the general public about measles immunisation (programmes) have been performed and public was found to be well informed.

There is an ongoing information distribution through professional channels as well through the county communicable diseases consultant and county head of the children's health centres for those involved in the realisation of the programmes.

There are plans to improve the information material for both parents and professionals and also to improve the training of personnel in child care centres and schools involved in immunisation.

Programme related projects/campaigns

Campaigns relating to measles immunisation are mostly through the media (newspapers) and are implemented by the county communicable diseases consultants and the county heads of the children health care centres.

The effectiveness of such campaigns is assessed by the resultant vaccination coverage achieved.

Vaccination documentation/data collection

The health professional vaccinating the child is also responsible for the documentation in parent-held record books, no additional vaccination registers are maintained.

The immunisation status of children is checked periodically and reported annually by nurses at children health centres and schools who collect measles immunisation data and forward it to the Swedish institute for infectious diseases control. The later, together with the National Board of Health and Welfare analyse the collected data and publish it in professional journals as well as in the normal press.

Programme monitoring and evaluation

The performance of measles immunisation programmes is assessed using criteria such as the percentage uptake and measles incidence figures these are surveyed yearly and continuously respectively. The NBHW evaluates the immunisation programmes.

Although no official programme targets are in place, the county wishes to reach a vaccination of 95%. For the year 2001 there was a drop in coverage by 2 year olds, from 95,5% two years earlier to 88%. This drop can possibly be a result of poor compliance on the part of parents or due to adverse media coverage in relation to possible side effects of vaccines.

Disease surveillance

The Swedish institute for infectious diseases control is responsible for the surveillance of measles nationally. Immunisation data collected by nurses at children health centres and in schools are forwarded to the institute for analysis and publication.

Measles is a notifiable disease country-wide and surveillance is done continuously and systematically.

6.8.4 Breast cancer screening programmes

Mammography screening programmes are the only breast cancer screening programmes being used in Sweden as breast self-examination is generally discouraged and professional breast examination is carried out during the clinical examinations within the mammography screening programmes.

Mammography screening programmes were introduced as randomised trials in some parts of Sweden in the late 1970's and programmes have been implemented county-wide in Stockholm since 1986. The first randomised breast cancer screening trial with mammography was initiated in Stockholm region in 1981. Women aged 40-64 years were invited, with the first round being completed in 1983 and the second round in 1985 (Lidbrink et al 1996).

Organisation of programmes

In 1986, the National Board of Health and Welfare published guidelines on breast cancer screening using mammography, recommending that women aged 40-54 years be screened every 18 months and those aged 55-74 every two years. If resources were limited, women in the age-group 50-55 years were to be screened with a two years interval and those over 69 should not be screened.

Each county council is responsible for deciding whether to implement the screening programmes under the recommendations of the NBHW and co-ordinating the program within its own area. In addition to the NBHW recommendations each county council follows the European Guidelines during the planning and realisation of the programmes.

The screening programmes are financed from taxes but women are expected to pay small contribution of 6 Euro for each mammography.

Screening strategy

The overall aim of mammography screening in Sweden is to reduce mortality due to breast cancer through early detection and treatment.

In the Stockholm region (county), all eligible women aged 50-69 years are invited by personal letter for screening at a mammography centre. Generally, two view mammography is done at every visit and a screening interval of two years is followed.

Dissemination of results

Mammography is carried out by specially trained radiographers and radiologists. The mammograms are independently read by two experienced radiologists. The results sent to the woman within 14 days following the examination.

When a mammogram is positive, the woman is informed by telephone within a week following the mammography examination, and called back for further assessment. Should the diagnosis of cancer be confirmed, she is directly examined and treated by the breast cancer team at the mammography unit and taken out of the mammography invitation programme.

Information and education

The county councils are responsible for the dissemination of relevant information to the public at large.

Mammography screening is currently not as present in the media as in the past few years. Generally there is strong support of the programme from all sectors of the society, but participation is probably largely independent of the media debate. A temporary decrease in participation was however noted in 1999, when screening was being highly debated internationally.

Programme related projects/campaigns

At the moment there are no programme related projects being implemented as this was completed some years ago.

Programme monitoring and evaluation

A wide spectrum of data on all women from the numbers invited, participation rate, examination done, results, to eventual surgery are regularly collected and monitored.

Data and information from the Stockholm region for the period 1989-1999 was recently analysed and will be published soon.

Disease surveillance

All physicians are obliged to report newly diagnosed cases of cancer using a special form which is filed by the regional oncological centre and verified by a pathology report. The data are transferred annually to the national database at the national oncological centre. The data are analysed by academic researchers and descriptive data are published by the national cancer registry, a part of the National Board of Health and Welfare, and the regional oncological units.

7. Management of Prevention- and Screening-Programmes

Depending on the overall organisation of the health care systems, the organisation, implementation, and evaluation of the measles immunisation and breast cancer screening programmes differ considerably between the participating regions of the Ben project. To provide an overview of the various aspects of health governance, the following two paragraphs present the information collected in form of tables.

7.1 Measles Prevention Programmes

Table 2: Elements of the regional measles vaccination programmes

Country	A	D	UK	GR	IRL	IT	S	CZ
Region	Upper Austria	NRW	ENG	West. Greece	E/Mid/Ne	Veneto	Stock-holm	Moravia-Silesia
Surveillance system: documentation, vaccination registers, vaccination status checked	No	No	Yes	No	Yes	Yes	Yes	Yes
Invitation, reminder system	No	No	Yes	No	Yes	?	Yes	Yes
Two dose MMR	Partly	Yes	Yes	Yes	Yes	No	Yes	Yes
Coverage with first dose at the age of 24 months (2000)		89.9%	87%		81.0%	90.5%		99.4%
MMR vaccination schedule	14 months / 7 years	15 months / 6-12 months later	12-18 months / 3.5-4 years	12-24 months / 4-6 years	12-15 months / 4-5 years	12-15 months	18 months / 12 years	15 months / 21-25 months
Training for professionals or parents	No		Both					
WHO Targets	No	Yes	Yes		Yes	Yes		Yes

Source: Ben Project (2003)

Table 3: National and regional authorities responsible for measles immunisation programmes

			National level		Regional level	
	Region	**Type of health system**	**Governance**	**Surveillance**	**Governance**	**Purchasing/ Financing**
A	Upper-Austria	HI*	MoHW* (BMGF)	No (Statistik Austria)	Regional Health Authority/ HI	Federal (1/3) Regional (1/3) HI (1/3)
CZ	Moravia-Silesia	HI	Public Health Department of MoH*	Institute of Informatics and Statistics	Regional Public health Institutions	HI
D	North Rhine-Westphalia	HI	MoH STIKO	RKI	State MoH Kven*/HI Associations	HI
GR	Western Greece	NHS*	National Committee of Immunisation	EKEPAP, EYSE	Prefectoral Departments of Public Health	MoH, IKA, EU, NGOs
IRL	East/ Midland/ North East	NHS	MOH, HeBE and National Immunisation Steering Committee	NDSC	Health Boards	Health Boards
IT	Veneto	NHS	MoH and Interregional Immunisation Committee	Health Prevention Department MoH	Regional Public Health Services	Regional Public Health Services
PL	Silesia	HI	MoH, Chief Sanitary Inspectorate National Epidemiological Council	National Institute of Hygiene	Regional Sanitary Inspectorate	MoH (vaccines) HI (services)
S	Stockholm	NHS	National Board of Health (recommendations)	Institute for Infections Disease Control	County health departments	County health departments
UK	England	NHS	Health Protection Agency	CDSC	Primary Care Trusts	Strategic Health Authorities/ Hospital Trusts

Source: Ben Project (2003)

*HI: Health Insurance
*NHS: National Health System
*MoHW: Ministry of Health and Women
*MoH: Ministry of Health
*KVen: Kassenäztliche Vereinigungen

7.2 Breast Cancer Screening Programmes

Table 4: Differences in regional mammography programmes

Country	A	D	UK	GR	IRL	IT	S	CZ
Region	Upper Austria	NRW	ENG	Western Greece	E/Mid /NE	Veneto	Stock-holm	Moravia -Silesia
Target group	No	50-69	50-64	40-64	50-64	50-64	50-69	45-69
Compliance target in the eligible population	70%	70%	70%		70%			
Organised mammography with 1 or 2 views	Planned		1	2	2		2	2
EU-Quality Guidelines	Planned	Planned	Yes	Yes	Yes		Yes	Yes
Training of providers	Planned		Yes	Yes	Yes		Yes	Yes
Further assessment in special units	Planned	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of outcomes and screening process	Planned		Yes		Yes		Yes	Yes
Monitoring of cost-effectiveness	No	No	Yes					
Cost-sharing of patients	No	No	No	No	No	No	Yes	No

Source: Ben Project (2003)

Table 5: National and regional authorities responsible for mammography screening

			National level		**Regional level**	
	Region	**Type of health system**	**Governance Authorithy**	**Surveillance**	**Governance Authorithy**	**Purchasing/ financing**
A	Upper-Austria	HI*	Not implemented MoHW* (BMGF)	No (Statistik Austria)	Not implemented	HI Associations
CZ	Moravia-Silesia	HI	National Oncological Prevention programme (MoH)	Institute of Informatics and Statistics	-	HI
D	North Rhine-Westphalia	HI	MoH*	-	State MoH, KVen*/HI Associations	HI Associations
GR	Western Greece	NHS*	(Hellenic Foundation of Oncology)	Cancer Register MoH	-	Hellenic Foundation of Oncology
IRL	East/ Midland/ North-East	NHS	MOH and National Breast Screening Board	National Breast Srceening Board and Irish Cancer Registry	National Breast Screening Board	Health Boards (financing)
IT	Veneto	NHS	MoH	National Cancer Register	Regional Public Health/ Radiology Department	Regional Public Health/ Radiology Department
PL	Silesia	HI	MoH National Mammography program	Cancer Institute	HI	HI
S	Stockholm	NHS	National Board of Health	National Oncological Centre	County Health Boards	County Health Boards
UK	England	NHS	Breast Cancer Programme	National Statistical Office	Strategic Health Authorities	Strategic Health Authorities

Source: Ben Project (2003)

*HI: Health Insurance
*NHS: National Health System
*MoHW: Ministry of Health and Women
*MoH: Ministry of Health
*KVen: Kassenäztliche Vereinigungen

8. Discussion

The description of the measles immunisation- and breast cancer screening programmes in different European regions as two tracers to give an insight into the regional health systems and their management of programme and processes showed an immense variety of approaches used to reach the targets of the elimination measles and the early detection of breast cancer and reduction of breast cancer mortality. The aim of the Ben Project was to take a first step in benchmarking the management of health programmes and processes in Europe with the aim of identifying good practice models from which the individual regions could learn and which they could apply to their own system. The analysis of the questionnaires, which covered aspects on the planning, legislation, and implementation of the programmes, on funding, education, information, surveillance and compilation of existing data showed, that the method employed allowed no more than a limited benchmarking approach of the procedures describing the underlying structures and management processes. This can be explained by the following points:

- Even though the questionnaires were developed together with the project participants, the commitment to answer the questions and to collect relevant information material varied widely. The regional summaries for some regions are more detailed than for others, making it difficult to assess the effectiveness of each programme with respect to health governance and to measure the programme performance against the set benchmarks, in this case the WHO target to eliminate measles and the European Guidelines for Quality Assurance in Mammography Screening.
- Within the regions representing a total of 8 regions from 8 European countries completely different health systems are present, which can be described but whose individual elements cannot simply be applied to other systems, should these components prove to be especially effective and efficient. This becomes clear by a short look at the German and British health systems: whereas Great Britain has a largely tax-financed system with a hierarchical form of organisation from the national down to the district level, the German health system is financed through statutory and private health insurances, with the German states primarily being responsible for the implementation of health services. Other European countries such as for example the Czech Republic have mixed forms of these two extremes.
- The 8 regions included in the project differ extremely in terms of population figures (England 49 million, NRW 8 million, and Western Greece 0.74 million inhabitants), population density, age structure, but also economic situation and thus employment and unemployment rates. This leads to differences with regard to the health status which cannot exclusively be explained by looking into the health systems, as for instance the socio-economical and historical background of each region has a major impact on arrangements concerning the statutory regulation of immunisation or data documentation and registration. This has the effect that although prevention and screening programmes of a health system may prove to be especially successful, this is not

necessarily a result of management processes within the system but may also be attributed to factors outside the system.

- Another aspect are the different "epidemiological development phases" within the individual countries and/or regions. Comparing the effectiveness of programmes with the help of morbidity and mortality data is a difficult undertaking if one region is in a position to fall back on many years of development and experiences with regard to screening and prevention, whereas in another region these issues are still in their initial development phase. So for example, in 2002 North Rhine-Westphalia was still discussing the forthcoming introduction of mammography screenings for the whole region, whereas women in Sweden have been mammography-screened on a regular basis since 1986.

A follow-up project could deal with these problems and, by considering the results of other EU project such as the ISARE project, include a considerably greater number of European regions which, depending on socio-demographic situation, health system and basis-epidemiological development, would be divided into clusters enabling a sound benchmarking within these clusters.

The issues of measles vaccination programmes and mammography screening could be maintained and further aspects of health care and health services and a further disease added, to provide a wider insight into health systems, regional health care regulations and health governance.

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Annex 1

02 July 2002

Questionnaire: Immunisation programmes against measles

Measles is an acute and highly contagious viral disease capable of producing epidemics. In some cases it can even lead to pneumonia, inflammation of the brain, permanent disability or death. Fortunately measles is vaccine preventable.
The aim of this questionnaire is to gather information about the process and organisation of immunisation programmes against measles and their integration into the corresponding health systems. Since questionnaires cannot cover all aspects in detail, we would like to ask you to add to every question as far as possible background information, important documents, references to literature, definitions for technical terms with a special country-specific significance and data as well as data sources.
If questions are still unclear, please do not hesitate to contact us, because for the analysis of the questionnaires it is of utmost importance to avoid ambiguities due to diverging terms and expressions or unclear formulations.

You can use this word file to fill in the questionnaire directly, please write in the grey text fields.

Please specify the region of your country participating in the project:

Please give the name(s) and address(es) of the person(s), who fill in the questionnaire:

Participating regions are either regions which are either members of the Assembly of European Region or of the Committee of Regions and which fulfil the following criteria:

- The region is the territorial body of public law established at the level immediately below that of the state and endowed with political self-government.
- The region is the expression of a distinct political identity, which may take very different political forms, reflecting the democratic will of each region.
- The region should have responsibility for all public health functions with a predominantly regional dimension.

Does your region fulfil these criteria? If not, how far does it deviate from this definition?

A: Planning and Legislation

1. To what extent is the planning and implementation of immunisation programmes generally and measles programmes specifically founded in national or regional legislation?

2. Are there legal regulations which suggest how to carry out the immunisation programmes? If so, please give reference details and state who issued these regulations?

3. Is the provision of immunisation by the responsible organisation obligatory or voluntary?

4. Are immunisation programmes generally and measles programmes specifically part of the current political agenda (nationally and locally)? If yes, which priority do they have (high, medium or low)?

5. Which organisations are responsible for the planning of immunisation programmes generally and measles specifically?

6. Are there guidelines for the measles immunisation programmes and what are they?

7. Are there clearly defined targets (e.g. immunisation rates, measles eradication, ..) for the measles immunisation programmes (national, regional) and how have they been developed?

8. Who/ which organisation has formulated these targets?

9. Does an evaluation of immunisation programmes generally and measles specifically take place? What aspects are being evaluated (e.g. immunisation uptake achieved, reduction in disease rates, effectiveness of public information campaigns, ...) and by whom is it done?

B: Actions and Measures

10. How are the regional measles immunisation programmes embedded in the organisation of the national health systems?

11. Is there a hierarchical management system for each of those involved in the measles immunisation programme? If so, how is it organised and who is involved at the different levels of activity (legislators, medical insurance providers, public health authorities, scientific associations, GP's, paediatricians, etc.)?

12. Is there a single organisation or department which is responsible for the implementation of the measles immunisation programme(s)?

13. Is there a single organisation or department which co-ordinates the activities of the measles immunisation programme?

14. Who delivers the individual immunisation (please state precise professional group)?

15. What kind of vaccine (single or combined, brand) is used and how is it distributed?

16. At what age or under what criteria are measles immunisations carried out (age of recipient, interval between immunisations, time and place of immunisation)?

17. To what extent do parents have to agree to the immunisation of their child (parental consents)?

18. Are there (automatic) call/ recall systems and/or invitation systems (e.g. direct letter or notification) and who is responsible for operating the systems? Do they include or exclude private insurance patients?

C: Finances

19. How is the immunisation programme (and/ or different activities within the programme) financed (including or excluding private insurance patients)? Payment of providers?

20. Are individual immunisations (generally or measles specifically) available free of charge (including or excluding private insurance patients?)? If not, what proportion of individual immunisations are paid for by (1) the state/regional government, (2) the insurance company/other payer, (3) the patient/parent?

21. Are there rewards for participation or penalties for non-participation in measles immunisation programmes for medical practitioners or patients/parents? What are the criteria for these rewards?

D: Information and Education

22. Is the general public opinion about measles immunisation (programmes) known or measured? If so, please comment briefly on the main issues identified.

23. Is measles immunisation part of the current/recent media agenda? If possible, please give some examples.

24. How and in what form is the population and parents particularly informed and educated regarding measles immunisation (immunisation campaigns, advice)?

25. How is the population informed of and invited to take part in immunisation programmes (personal invitation, public information campaign by responsible organisation, or both)?

26. What knowledge by way of training/education is provided for physicians (GP's, practitioners, paediatricians) about current recommendations and new developments relating to measles immunisation?

27. Is the participation in training and other forms of education obligatory or optional for practitioners?

28. Which other health professions (nurses, midwifes, ...) are informed of the necessity for and the current recommendations relating to measles inoculation?

29. Who/which organisation is responsible for health education in general? And who/which organisation is responsible for specific information about immunisation programmes and actions?

30. Are there any special campaigns or projects relating to measles immunisation, who implements them?

31. Is there an evaluation of the success of these projects? How and by whom is this evaluation done?

32. What are the criteria used to assess the performance of the programme(s) relating to measles immunisation?

33. Which social subgroups do you take into consideration in your evaluation?

34. Are there any intentions to improve the existing measles immunisation programme(s) and /or specific aspects such as information/education? If yes, what do the improvements consist of?

E: Surveillance System

35. Do you have a national or regional surveillance system? (please insert name of it and address of responsible organisation)

36. How is data relating to measles immunisation transferred into the surveillance system?

37. If you don't have a surveillance system, where is the immunisation data linked together? Who manages the data?

38. Is there a register maintained of those vaccinated?

39. Who/which organisations/institutes are collecting data (immunisation data and/or disease data) on the local, district, regional and national level?

40. Which data gathering methods are used to collect this data (surveys, sentinels, continuous/ systematic reporting,..)?

41. Is there a duty to notify each detected case of measles?

42. Who is responsible for the documentation and how is it done (e.g. vaccination certificate, chip cards, ...)?

43. At what stage are immunisation data collected (e.g. immunisation status checked at entry to school/kindergarten)?

44. How far are data of private patients included or excluded?

45. Who/which organisation analyses the data?

46. How do you secure dissemination of the results of the programmes relating to measles to the public?

47. **Please give a detailed description of the current performance in your region:**
    What data is collected and what indicators are calculated from these data (measles incidences, immunisation coverage, ...)? (please include a detailed description of data and quantities since 1997)

48. Do you have benchmarks for the performance of your measles immunisation programme? If yes, what are these benchmarks?

02 July 2002

Questionnaire: Screening programmes for breast cancer

Breast cancer has become the most frequent cancer in women and is one of the leading causes of death for women from their 40´s on. That is why it is necessary to proceed to an early detection of the disease. In that respect, screening programmes have been implemented in many countries in order to achieve a significant reduction in breast cancer mortality.

The aim of this questionnaire is to gather information about the process and organisation of screening programmes and their integration into the corresponding health systems. Since questionnaires cannot cover all aspects in detail, we would like to ask you to add to every question as far as possible background information, important documents, references to literature, definitions for technical terms with a special country-specific significance and data as well as data sources.

If questions are still unclear, please do not hesitate to contact us, because for the analysis of the questionnaires it is of utmost importance to avoid ambiguities due to diverging terms and expressions or unclear formulations.

You can use this word file to fill in the questionnaire directly, please write in the grey text fields.

Please specify the region of your country participating in the project:

Please give the name(s) and address(es) of the person(s), who fill in the questionnaire:

Participating regions are either regions which are either members of the Assembly of European Regions or of the Committee of Regions and which fulfil the following criteria:

- The region is the territorial body of public law established at the level immediately below that of the state and endowed with political self-government.
- The region is the expression of a distinct political identity, which may take very different political forms, reflecting the democratic will of each region.
- The region should have responsibility for all public health functions with a predominantly regional dimension.

Does your region fulfil these criteria? If not, how far does it deviate from this definition?

1. What kind of breast cancer screening programme(s) is/are already implemented in your health system on national level, on regional level in general and in your region?

   Programmes relating to:
   - Mammography (low dose x-ray technique used to visualise the internal structure of the breast)
   - Professional examination (palpation of breast and lymph nodes by GP, gynaecologist, or other professional)
   - Self-examination (palpation of breast by women themselves)

2. Are they carried out in combination with each other or separately?

3. Is there a surveillance system for breast cancer screening implemented in your region? If yes, how is it organised and who is in charge (please give address)?

I. Mammography Screening Programmes

4. Please comment the state of mammography screening programmes or activities in your region/ nation (already implemented, planned, others)

A: Planning, Organisation and Legislation

5. To what extent are mammography screening programmes founded in national or regional legislation?
6. Are there legal regulations, which suggest how to conduct mammography screening programmes? What are they and who recommended them?
7. Is the provision of mammography obligatory or voluntary?
8. Are mammography screening programmes part of the current political agenda (nationally and regionally)?
9. Which organisations are responsible for the planning of mammography screening programmes?
10. Are there clearly defined targets for mammography screening programmes and what are they?
11. What determinants are used to reach these targets (high attendance rates, screening intervals, evaluation)?
12. Who/which organisation monitors and evaluates these programmes and what are the results?

B: Actions and measures

13. Is there a single organisation or department which co-ordinates the activities of mammography screening programmes?

14. Who/ which organisation is responsible for the implementation of mammography screening programmes?

15. Is there a hierarchical management system for each of those involved in the implementation of mammography screening programme(s), if so how is it organised and who is involved at each stage (GP's, gynaecologists, legislators, medical insurance providers, public health authorities, etc.)?

16. How are regional screening programmes embedded in the national health systems?

17. Who is carrying out the mammography screening (please state precise professional group)?

18. To what extent are standards of quality taken into account (structure, process, outcome - especially: European guidelines of quality assurance in mammography screening)?

19. Are there "guidelines" how to perform a mammography (e.g. single view or two view mammography)?

20. If yes, who defines those "guidelines"?

21. What is the target group (age group, population size, geographical size) for mammography screening programmes?

22. Do you undertake special activities to reach social subgroups of the population?

23. What are the circumstances (place, time, occasion) under which women are examined?

24. Is there a (separate) invitation system for mammography?
    (e.g. invitation systems by direct letter or notification? Do they include or exclude private patients?)

25. What is the screening interval?

26. What happens exactly, when a mammography is positive? How is the link to the clinical-services organised?

27. Are there any activities to evaluate mammography screening? If yes, who is doing it and what are the results?

C: Finances

28. How are mammography screening programmes (and/ or different activities within the programmes) financed (including or excluding private insurance patients)? Payment of providers?

29. How is the individual mammography financed (including or excluding private insurance patients?)?

D: Information about mammography screening programmes

30. Is mammography screening part of the current media agenda?

31. What is the women's/ the public opinion about mammography screening? How far are they satisfied with the current situation? Do you collect any data on client satisfaction?

32. Who/which organisation is responsible for specific information about mammography screening programmes and actions?

33. How are women informed about ongoing or planned mammography screening programmes? Are there settled arrangements or agreements in principle to this?

34. How often and in which form are those who carry out the individual mammography informed of current recommendations and new developments?

35. Which professions are informed during their training about the necessity for and the current recommendations relating to mammography screening programmes?

E. Projects

36. Are there any special campaigns or projects relating to mammography screening programmes, who implements them?

37. How are these projects financed?

38. Is there an evaluation of the success of these projects? How and by whom is this evaluation done?

Are there any intentions to improve the existing mammography screening programme(s)? If yes, what do the improvements consist of?

F: Monitoring

39. Do you have a population-based national or regional cancer register? (please insert name of it and address of responsible organisations)

40. Do you have clinic-based registers in your region? (please insert name of it and address of responsible organisations)

41. Do you collect any data relating to mammography screening? Which methods do you use surveys, sentinels,…)?

42. Can you trace in your cancer registries by which mean breast cancer cases were initially detected by breast self-examination, professional breast examination or mammography?

43. If you don't have a cancer register, are there any activities to document, which breast cancer cases were initially detected by breast self-examination, professional breast examination or mammography?

44. Who is responsible for the documentation of cases in the cancer registries and how is it done?

45. How far is data of private insurance patients included or excluded?

46. Who/ which organisation analyses the data?

48. Do you have benchmarks for the performance of your mammography programme? If yes, what are these benchmarks?

49. Which social subgroups do you take into consideration in your evaluation?

50. Please give a detailed description of the current performance in your region:
What data is collected and what indicators are calculated from this data (participation rates, false negative results, ...)? (please include a detailed description of data and quantities since 1997)

II. Professional Breast Examination

1. Please comment the state of professional breast examination programmes or activities in your region/ nation (already implemented, planned, others)

A: Planning, Organisation and Legislation

2. Are there any programmes for professional breast examination and if so, to what extent are they founded in national or regional legislation?

3. Are there legal regulations which suggest how to conduct the professional breast examination? What are they and who recommended them?

4. Is the provision of professional breast examination obligatory or voluntary?

5. Are professional breast examination programmes part of the current political agenda (nationally and regionally)?

6. Whose/ which organisation's responsibility is the planning, implementation and supervision of professional breast examination **(**programmes)?

7. Is there a hierarchical management system for each of those involved in the programme? If so, how is it organised?

8. Are there any health targets, which clearly involve professional breast examination programmes, what are they and who/ which organisation has formulated them?

9. Are there any activities to evaluate professional breast examination? If yes, who is doing it and what are the results?

B: Actions and measures

10. Is there a single organisation or department which co-ordinates the activities of professional breast examination programmes?

11. Who is involved in the implementation of professional breast examination programmes (GP's, gynaecologists, legislators, medical insurance providers, public health authorities, etc.)?

12. How are regional strategies relating to professional breast examination programmes embedded in the national health systems?

13. Is there a hierarchical management system for each of those involved in the programme, if so how is it organised?

14. Who is carrying out the professional breast examination (please state precise professional group)?

15. What are the circumstances (place, time, occasion) under which women are examined?

16. What is the target population?

17. Do you undertake special activities to reach social subgroups of the population?

18. Are there "guidelines" how professionals should carry out the examination?

19. If yes, who defines those "guidelines"?

C: Finances

20. How are activities relating professional breast examination financed (including or excluding private patients?)? Payment of providers?

21. How is the individual examination financed (including or excluding private patients?)?

D: Information about professional breast examination programmes

22. Is professional breast examination part of the current media agenda?

23. What is the general public opinion about professional breast examination?

24. Who/which organisation is responsible for specific information about professional breast examination programmes and actions?

25. How far are women involved/ informed about ongoing or planned professional breast examination programmes?

26. How often and in which form are those who carry out the individual breast examination informed of current recommendations and new developments?

E: Projects

27. Are there any special campaigns or projects relating to professional breast examination, who implements them?

28. How are these projects financed?

29. Is there an evaluation of the success of these projects? How and by whom is this evaluation done?

30. Are there any intentions to improve the existing professional breast examination programme(s)? If yes, what do the improvements consist of?

F: Monitoring

31. Do you collect any data relating to professional breast examination? Which methods do you use (surveys, sentinels,..)?

32. How far is data of private patients included or excluded?

33. Who/ which organisation analyses the data?

35. Do you have benchmarks for the performance of your professional breast examination programme? If yes, what are these benchmarks?

36. Which social subgroups do you take into consideration in your evaluation?

37. Please give a detailed description of the current performance in your region:
What data is collected and what indicators are calculated from this data (participation rates, false negative results, ...)? (please include a detailed description of data and quantities since 1997)

III. Breast Self Examination

1. Please comment the state of breast self-examination programmes or activities in your region/ nation (already implemented, planned, others)

A: Planning, Organisation and Legislation

2. Are there any programmes for breast self-examination and if so, to what extent are they founded in national or regional legislation?

3. Are there legal regulations which suggest how to teach/ inform about the procedure of breast self-examination? What are they and who recommended them?

4. Are breast self-examination programmes part of the current political agenda (nationally and regionally)?

5. Which organisation's responsibility is the planning, organisation, implementation and evaluation of breast self-examination programmes?

6. Is there a hierarchical management system for each of those involved in the programme? If so, how is it organised?

7. Are there any health targets for breast self-examination programmes or which clearly involve breast self-examination programmes, what are they and who/ which organisation has formulated them?

8. Are there any activities to evaluate breast self-examination programmes? If yes, who is doing it and what are the results?

B: Actions and measures

9. Is there a single organisation or department which co-ordinates the activities of breast self-examination programmes?

10. Who is involved in the implementation of breast self-examination programmes (GP's, gynaecologists, legislators, medical insurance providers, public health authorities, etc.)?

11. How are regional activities relating to breast self-examination embedded in the national health systems?

12. Who teaches/ informs about techniques of breast self-examination (please state precise professional group)?

13. What are the circumstances under which women get informed/ trained (place, time, invitation, ...)?

14. What is the target population?

15. Do you undertake special activities to reach social subgroups of the population?

16. Are there "guidelines" for the instruction of how women should examine their breast?

17. If yes, who defines those "guidelines"?

C: Finances

18. How are activities relating to breast self-examination programmes (training, information, ...) financed (including or excluding private patients?)? Payment of providers?

19. Are there any incentives for the participation in breast self-examination programmes (for medical practitioners, gynaecologists or patients)?

D: Information about breast self-examination programmes

20. Is the breast self-examination part of the current media agenda?

21. What is the women's /the public opinion about breast self-examination?

22. Who/which organisation is responsible for health education in general? And who/which organisation is responsible for specific information about breast self-examination programmes and actions?

23. How are women informed about ongoing or planned breast self-examination programmes?

24. How often and in which form are those implementing the individual training on breast self-examination informed of current recommendations and new developments?

E: Projects

25. Are there any special campaigns or projects relating to breast self-examination, who implements them?

26. How are these projects financed?

27. Is there an evaluation of the success of these projects? How and by whom is this evaluation done?

28. Are there any intentions to improve existing breast self-examination programme(s)? If yes, what do the improvements consist of?

F: Monitoring

29. Do you collect any data relating to breast self-examination? Which methods do you use (surveys, sentinels)?

30. How far is data of private insurance patients included or excluded?

31. Who/ which organisation analyses the data?

33. Do you have benchmarks for the performance of your breast self-examination programme? If yes, what are these benchmarks?

34. Which social subgroups do you take into consideration in your evaluation?

35. **Please give a detailed description of the current performance in your region:**
What data is collected and what indicators are calculated from this data (participation rates, false negative results, ...)? (please include a detailed description of data and quantities since 1997)

Annex 2

Minutes of the 1st Meeting of the Representatives of the Regions

14th and 15th June 2002 in Düsseldorf

Participants:

Klaus Bösche, Germany, Ministry of Women, Youth, Family and Health NRW
Helmut Brand, Germany, Institute of Public Health NRW
Birgit Cornelius-Taylor, Germany, Institute of Public Health NRW
Aldona Fraczkiewicz-Wronka, Poland, University of Katowice
Kieran J. Hickey, Ireland, St. Mary’s Hospital, Dublin
Eleni Jelastopulu, Greece, University of Patras
Adelheid Kraft, Germany, Institute of Public Health NRW
Reli Mechtler, Austria, University of Linz
Fabio Perina, Italy, Regione Veneto
Tapani Piha, European Commission
Michael Rigby, United Kingdom, Keele University
Peter Schäfer, Germany, Ministry of Women, Youth, Family and Health NRW
Markus Schneider, Germany, BASYS
Magnus Stenbeck, Sweden, Centre for Epidemiology
Jaroslav Volf, Czech Republic, Regional Institute of Hygiene
Birgit Weihrauch, Germany, Ministry of Women, Youth, Family and Health NRW

Friday 14th June 02

1. After a short welcome by Birgit Weihrauch, Klaus Bösche, the head of the department of health at the Ministry of Women, Youth, Family and Health NRW, gave a presentation about the region North Rhine-Westphalia.
2. Introduction of the EU project “Benchmarking Regional Health Management” (Ben RHM) and presentation of background information about the history and development of the project as well as its political importance by Birgit Weihrauch

3. Adoption of the agenda: Changes due to the order of sequence were accepted by the participants.
4. Opening notes about the current state of the EU action programme on public health 2003-2008 and the contributions of "Ben RHM" to it by Tapani Piha
5. Introduction of the participants with short statements about position and responsibility
6. Detailed presentation of the tasks, goals and time table of the project "Ben RHM" by Helmut Brand
7. Information about methodological background of benchmarking particularly relating to benchmarking health systems by Marcus Schneider
8. Presentation of the EU CHILD project and its relevance for the project Ben RHM by Michael Rigby
9. Discussion of the questionnaire on measles immunisation programmes:
   - The short presentation of each of the representatives of the regions gave a first impression of the variety of immunisation activities in Europe. It ranges from a system, where immunisation against measles is obligatory and the coverage is more than 96% in all of its regions, to a system, where immunisation is obligatory as well as the collection of data, but "nobody does it", marginalised groups are not considered and therefore no reliable data is available.
   - It was felt by some participants that the questions are too open and leave too much of a choice of what to answer. On the other hand it was agreed that the questions should not go too much into detail, as we want to collect meta data to get an overall insight into the various health systems.
   - Additional aspects which should be considered in the questionnaire are the distribution of vaccine, the type of immunisation (single or combined) and the acceptability of policy in public.

Saturday 15th June 02

1. Clarification of contractual matters of the project Ben RHM:
   - The financing for candidate countries does not cover personnel costs, only travel expenses and subsistence for the attendance at the two appointed workshops have for legal reasons got the approval by the Commission of the European Community.
   - Any changes within the contract (Grant Agreement SI2.328187) have to be made in accordance with the Commission until the end of 2002.

2. Discussion about the questionnaire on breast cancer screening programmes:
   - The presentation of the various activities regarding breast cancer screening in the European regions showed an even broader variety as regarding immunisation programmes: for example in one nation several mammography screening projects are distributed all over the country, but not covering the whole of the population. In another country there are two very well organised mammography screening programmes which are competing for the same population group, and in a third one mammography screening is highly recommended and covered by the health insurance, but if women want to get examined they have to wait at least 6 month for an appointment.
   - Additional aspects which should be taken more into consideration are the role and power of influence of the media and satisfaction of the target group.
3. The contributions to both of the questionnaires will be included until the beginning of July and then the revised version will be sent to the representatives of the regions.
4. Introduction of and contribution to the time table:
   - According to the schedule the interim report should be handed in to the Commission latest at the 31st August, but there is a possibility to ask for a delay. Tapani Piha stressed that as for the importance of the final report the interim report could be either seen as a blue print or framework for it or as an administrative report depending on the amount of available information and results.
   - It was agreed that the second workshop should take place on the 28th and 29th March 2003 and that there should be no prolongation for the project.
5. Ideas for the next project
   - The closing date for a call for proposal will be either the end of August 2002 or end of February 2003 depending on the proceedings in the European Commission regarding the new public health action programme.
   - Several very different ideas for the next project were given by the participants for example:
     - using the same tracers, but focussing more on the health care system and treatment of breast cancer and measles, shifting from prevention to health care system
     - looking at health determinants for breast cancer at cross borders
     - continuing with the same tracers, but going deeper into systems-, care-, and services-research
     - looking at the access of breast cancer screening and immunisation programmes to marginalised population groups

  - taking a closer look at consumers participation and patient's rights in the different systems (using again the same tracers).
- As partners for the project it was suggested to include all EU Member States, the regions of the Regions for Health Network, and political representatives and to involve both the political/ administrative body and the academic body.

6. At the end of our meeting it was suggested to publish the results of the Ben RHM project not only as a final report for the Commission, but also in a special version for politicians. It was also agreed on creating a special web-site for Ben RHM with a password protected area for the participants.

Minutes of the Final Workshop of the Representatives of the Regions
28th and 29th March 2003 in Düsseldorf

Participants:
Birgit Cornelius-Taylor, Germany, Institute of Public Health NRW
Jürgen Deckers, Germany, Ministry of Health, Social Affairs, Women and Family NRW
Kieran J. Hickey, Ireland, St. Mary's Hospital, Dublin
Chloe Hill, United Kingdom, University of Brighton
Eleni Jelastopulu, Greece, University of Patras
Adelheid Kraft, Germany, Institute of Public Health NRW
Reli Mechtler, Austria, University of Linz
Fabio Perina, Italy, Regione Veneto
Florence Samkange-Zeeb, Germany, Institute of Public Health NRW
Peter Schäfer, Germany, Ministry of Health, Social Affairs, Women and Family NRW
Markus Schneider, Germany, BASYS
Magnus Stenbeck, Sweden, Centre for Epidemiology
Jaroslav Volf, Czech Republic, National Institute of Public Health
Birgit Weihrauch, Germany, Ministry of Health, Social Affairs, Women and Family NRW

Friday 28th March 03

1. The meeting was opened by Birgit Weihrauch who welcomed all participants and gave some background information on the interests of the EU Commission. She stressed the importance of transparency as one of the main aims of Ben I, which is not only a matter of data collection but also of system analysis. Thus results which describe the structure and process of the health systems are needed.
2. A presentation of the "Methodology and Results of Ben RHM" as an overview and summary on the work which has been done and the results which have been achieved, was given by Birgit Cornelius-Taylor.
3. Presentation of "Measles Immunisation: Structure and Processes" by Florence Samkange-Zeeb

Discussion:

- A deadline for the development of organigraphs would need to be set as there are changes continuously taking place within health systems and they can't all be taken into consideration. It was suggested to look at systems as to 31.12.02
- The need for more detailed information on regional structures within the national context was underlined: organigraphs should differentiate between processes/issues which are obligatory for the nation as a whole, and those which are left to the regions themselves to decide.
- Importance of process was stressed as it clarifies how outcomes were achieved and why differences exist. In this context external factors which influence system-functioning and hence outcome should be taken into account (e.g. parent's attitude in relation to measles immunisation)
- It is not possible to link WHO targets and EU guidelines to system structures as they do not refer to structure/process but rather to outcome. Therefore performance indicators, which consider actors, activities, and regulations need to be identified and/or developed (Ben II).

It was agreed that the organigraphs would be sent back to the partners so that levels of responsibility, degree of autonomy, etc. could be incorporated. A set of questions which aim at describing the regional characteristics and the functioning of the systems would also be forwarded to the partners.

4. Presentation of "Measles Immunisation: Epidemiology" by Florence Samkange-Zeeb

   Discussion:

   - The very high uptake rates in Moravia-Silesia/ Czech Republic was explained by Jaroslav Volf: children up to the age of 19 years are the responsibility of the state and have to be immunised even without parental consent. A computerised invitation system is used for the immunisation programmes: parents get a letter informing them of their children's next appointment at a particular paediatrician, who also gets a list of children he/she should expect.
   - Different factors influencing immunisation uptake rates were mentioned such as: move from primary care via nurses to GPs (Ireland), use (or lack) of incentives for attendance of screening/preventive programmes (Austria) or the question of complacency which was raised for regions with very low measles incidence rates (Sweden: certain families/communities might not see the necessity of immunisation if there is no disease in their immediate surrounding, immunisation is then only done in response to a perceived threat).

   - Issues associated with notification of measles cases:

     Measles might not be considered to be a serious disease and therefore the child/person might not be taken to a doctor. Such cases then go unattended and unregistered.
   - Parents', GPs', nurses' and politicians' opinions and values are additional variables which should be used to measure the impact of the immunisation programmes.
   - The question of whether the immunisation system of Moravia-Silesia/ Czech Republic could be taken as a gold-standard was raised. Generally it was felt that the system as a whole could not be taken as a gold-standard as there are cultural and social background issues which don't apply to all regions. Certain aspects as modules of the systems could however be considered as gold-standard such as the invitation system and how it is organised.

It was agreed that we need more information about the data collection, data quality and availability. The data collection should be extended and data be sent to the lögd.

Saturday 29th March 03

1. Presentation of results on "Breast Cancer Screening" by Florence Samkange-Zeeb

   Discussion:

   - Breast self-examination:

     Whereas in some regions such as in Ireland, England and Sweden, the effectiveness of breast self-examination is under doubt (the danger of counter-productivity was mentioned i.e. encouraging self-examination might be to the detriment of mammography screening), the importance of breast self-examination as a tool for breast cancer screening was stressed by other regions (NRW, Upper Austria), especially as up to 60% of breast cancers detected are said to be a result of the women having felt it themselves. Additionally, in NRW and Upper Austria the aspects that breast self-examination also involves women in age-groups who are not covered by mammography screening programmes and that it enables women to get to know their own bodies better play an important role.

- The differences in the structures of the measles immunisation and mammography screening programmes was pointed out: measles is generally done according to recommendations of the ministry of health, whilst the latter is mostly run by autonomous bodies who can push things and therefore be more effective (Ireland).
- The importance of a "reality check" was stressed several times. It plays a major role in identifying the effectiveness of the programme performances.
- It was suggested to combine the action flow charts for breast cancer screening programmes including planned activities and campaigns with organigraphs to be able to highlight the co-operation between and actions of different units.
- It was agreed that all project partners would collect further information and data, which enable a more detailed description of the programmes, structures and processes.

2. Summary of the workshop and presentation of ideas for Ben II by Birgit Cornelius-Taylor

   Discussion:

   - The final report of Ben should stress the aim of the project to achieve more transparency and to initiate a learning process. Aspects such as regional characteristics, best practice modules within the regional context and data availability/data comparability should be considered each in different chapters.
   - The partners agreed to send further information regarding regional characteristics, to collect data as far as possible plus comments on data availability, and to revise the organigraphs for the two tracers.
   - Ben 2 project proposal:

     The presented scheme was generally found to be good. Additionally the aspects of financial sustainability and quality assurance should be added to the reference framework for the process analysis of the different regional health systems.

     As there are no guidelines/ targets/ gold-standards which determine how well systems function, these will need to be developed in Ben II.

     The title of the project should be "Benchmarking Regional Health Management II".

     More regions from the European Regions for Health Network will be approached and asked to take part in the project. The present partners may form the core group if they wish. A short informative letter of request will be formulated and sent to the respective regions.