

THE NETHERLANDS INSTITUTE OF PRIMARY HEALTH CARE

RESEARCH PROGRAM 1989

March, 1989



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1. PRIMARY HEALTH CARE IN THE NETHERLANDS AND THE POSITION OF THE NETHERLANDS INSTITUTE OF PRIMARY HEALTH CARE

1.1. Primary health care in the Netherlands

In Dutch primary health care the position of the general practitioner used to be unique in the sense that access to secondary medical care was channelled through his surgery. The provision of physiotherapy and prescriptions, for instance, is initiated by a visit to the GP.

Nowadays the domain of referral has been extended to cover the provision of ambulatory mental health care. The general practitioner and the social worker are the sentries at the gate of this (flourishing) sector of the Dutch health care system.

Primary health care is not confined to the realms of general practice. The core of primary health care is formed by general practitioners and district nurses, who represent the health profession's part in primary care, and social workers and home helps, who represent the social sector. In addition to these professions, physiotherapists (in private ambulatory practice), pharmacists and midwives are counted as primary health care providers.

Due to the aforementioned characteristics, the structure could be described as fragmented. On the one hand health services like general practice care and physiotherapy are provided by independent professionals, whereas on the other hand, professions like district nursing and family care are services provided by institutions which are each organized and funded quite differently. Bringing more cohesion to this fragmented structure is an important goal of Dutch health policy.

As has been the case in most industrialized countries containment of the cost of health care has been a major political objective for successive Dutch governments over the last decade. The objective of cost containment was translated in four major topics of policy concern:

1. the reduction of the number of hospital beds;
2. the containment of costs by a policy of budgetting (initially in second-line medical institutions, but later on among all providers of health care);

3. the strengthening of primary health care;
4. the (reluctant) imposition of price thresholds on the client's side.

One of the important topics in health care policy in the past decade has been the strengthening of primary health care. Until recently, the ways to reach this goal were, first of all, protection of the central position of the general practitioner, but also the promotion of cohesion and cooperation, not only in primary, but also in the other sectors of health care.

More cohesion could be attained by local (government) planning. Since 1988, when the so-called Dekker Committee published its recommendations on how to change the health service structure, government policy has been directed towards promoting cohesion around specific functions in care; due to this, the clear distinction between primary and secondary health care is likely to vanish. In short, the proposals of the Dekker committee are the following:

- a compulsory basic health insurance cover for everyone - with the possibility of supplementary insurance cover for dental care for those over the age of 19, and for medication prescribed in primary care and paramedical care;
- the health insurance companies would no longer be obliged to make agreements with the professionals. A free market mechanism would be in operation in this case, and agreements would be made on the basis of negotiations between insurance companies and the professionals involved in health care.

Whether the functions are performed by primary or secondary health care professionals is not important, as long as they are carried out in a cost-effective and qualitatively acceptable manner. Nevertheless, close co-operation between primary care providers is vital for many care activities.

The Institute's main topics of research are the Dutch health care system and health care policy which have been roughly outlined above.

1.2. The Netherlands Institute of Primary Health Care

1.2.1. Its position in Dutch society

In order to understand the tasks and function of the Institute, one has to consider the position of the NIVEL in relation to other

research Institutes, the universities and the Ministry of Welfare, Public Health and Cultural Affairs.

The NIVEL is one of the four sector-institutes that carry out research on Dutch health care. The other three are: the Netherlands Institute for Preventive Health Care (which studies public health, occupational health, etc.), The National Hospital Institute and the National Centre for Mental health Care. Two of the Institutes, (The NIVEL and the National Centre for Mental health Care) are funded by the Ministry of health, the Institute for Preventive Health Care is part of a large organization for applied scientific research (most of it in the field of natural science and technology) and the Hospital Institute receives its funding from a small levy, included in the fee for each day spent in hospital in the Netherlands. In addition to the four Institutes already mentioned, there are research activities (of an applied or a more fundamental character) at the University departments of general practice medicine, medical sociology and psychology, health economics, nursing research, social medicine, and others.

The four sector-institutes are principally concerned with applied health services research which serves as a basis for decisionmaking in health care policy.

Although the Ministry of Health provides the bulk of the funds which make up the NIVEL's income, the Institute's status is that of an independent research foundation. Scientific work can only flourish in relative independence, even in research specifically aimed at supporting government policy, a relatively independent approach is considered to be essential.

In August 1987, the NIVEL became a collaborating centre within the World Health Organization (WHO) for primary health care. It is the only Institute in the European region engaged exclusively in primary health care research.

The division of the Institute's Board of Governors is tripartite. One third comes from the professional organizations (doctors, nurses, physiotherapists), one third from consumer organizations and health care insurers (the consumer organization, the associations for the handicapped and disabled, the public insurance funds and private health insurance companies). The final third has an academic background (in nursing research, general practice medicine, management sciences). The chairman of the Board is Mr. Clemens Olthoff, a management consultant. The Ministry of Health, the Public Health Insurance Fund's Council and the National Organizations for Social Work and Family Care are represented through advisors to the Board.

1.2.2. The organization of the Institute

Jozien Bensing (research psychologist) is the general director. She is assisted by two managers, one for general management and administration, Mr. Titus de Jong, and one for scientific management, Dr. Jouke van der Zee. Dr. Van der Zee is assisted by a substitute head of the scientific department, Dr. Peter Groenewegen. The backbone of the institute (which has more than a hundred members of staff, including approximately 45 graduates) is formed by a group of ten senior research fellows each of whom is responsible for one of the institute's major topics of research. They are assisted by junior research workers and supporting staff.

In 1988 NIVEL set up a chair in primary health care at the University of Limburg in Maastricht to stimulate and develop research in primary health care. The Professor occupying this chair at the moment is Dr. Jouke van der Zee.

1.2.3. The role of the Institute and its primary research tasks

The main tasks of the Institute are:

1. the provision of information and the description of existing and new areas of research;
2. the evaluation of experiments and government policies;
3. the scientific analysis of the functioning of the health care system.

The provision of information

Information is collected on three subjects. First of all information is collected on current research in primary health care in the Netherlands. A report on current research is published annually. In addition to descriptions of research projects, it also contains information on the size of the projects and on funding. In 1985, a trend study on research in primary health care was published by the Institute. Trend studies are to be carried out once every five years in future.

The second subject concerns compiling information about what is going on in primary health care. A great deal is known about what is going on in specialist medical care, because specialists receive a fee for each case, or each item of service, and when services are actually billed they are usually recorded fairly accurately. In contrast, the capitation fee in general practice is an obstacle to the production of routinely collected statistics. Therefore, the Institute has a continuous information system of 'sentinel

practices' which forms part of an international network. An annual report is published in both Dutch and English. Due to the fact that the number of items recorded in the sentinel practices project is restricted, a more encompassing national study of morbidity and interventions in general practice was started in 1986 (data collection finished in 1988). Information projects on the nature of the work carried out by other primary health care providers, like physiotherapists and district nurses, are being designed.

The third subject deals with information on manpower in primary health care. Our manpower information system contains data about general practitioners, midwives and physiotherapists and it is being extended to other professions in private practice. We have not collected data on salaried professionals in primary health care - of which the most important group is formed by district nurses. Although one would expect manpower data on salaried professionals to be readily available, this is not the case, and it may therefore be necessary to extend our information system on manpower to the salaried professionals.

Evaluation

The research activities of the Institute are quite closely linked with the implementation of government policy. This may be policy of a general sort, or highly specific experimental policy measures. The task of the Institute is the provision of information on the success, failure and possible adaptation of a wide range of structural experiments designed to change the provision of health services.

Scientific explanation

The Institute's third task is to provide a scientific explanation of what is happening in the health services. Description and evaluation are not enough. It is, by way of example, not only important to have information on the distribution of general practitioners throughout the country, but it is equally important to know what the causes of an uneven distribution are and indeed, perhaps most important is the need to know the consequences of an uneven distribution, for instance in respect to the number of people referred to secondary medical care.

Although the institute operates in an applied field of health services research, the value of the results and the research reports increases proportionally with their level of scientific quality. On the other hand, strict scientific norms can easily frustrate health service research.

Policy measures that should be evaluated have often already been initiated before the proper research measures have been organized. Daily life (including major changes in health care policy) does not draw to a halt until the experiment is over. New measures (and more important, new technologies) are being introduced while a research unit is still engaged in the meticulous evaluation of previous measures.

The credibility of a research institute depends upon the degree to which it succeeds in finding the right balance between three major interests in the field of health services research 'scientific', 'political' and 'professional' interests.

1.2.4. Topics of research

The Institute's field of research can be divided into four areas. The first is the comparison of health care systems internationally. This is the most comprehensive and most complex type of research. It expresses an increasing interest in what is going on in other countries. As virtually every health care system in the world is confronting the same problem of containing costs whilst coping with a rise in the utilization of health services, health care administrators everywhere are looking for solutions to the same problems. Consequently, the comparison of health care systems is more important now than it was a decade ago.

Two further areas of research can be derived directly from the structural problems discussed in the introduction to this program. The second area of research concern is labelled 'Cohesion' in health care. It contains studies which look into the position of primary care in relation to the other sectors of the health care system, such as secondary medical care, (ambulatory) mental health care and public health care.

The research topics incorporated within the field of 'Cohesion' are similar to the research topics covered by the four national institutes of health service research. Many projects in this field of 'Cohesion' require cooperation between one or more of the national research institutes.

The cooperation between providers of care within the primary health care system is the third topic of research. It is important to mention here the prominence of multidisciplinary health centres in the Dutch health care system.

In the fourth area of research the emphasis is on topics within primary health care. These topics are chosen on the basis of different criteria; on the one side the stratification of primary

(health) care and on the other side the stratification of concern (demand, supply, process, outcome). Both dimensions are combined to form a matrix (figure 1). Not all possible combinations are being studied at the moment (only those marked with an 'X').

Figure 1: Research topics within primary health care

cohesion within primary health care (section 2.3.)								
'medical sector'						'social sector'		
	g.p.	dis-trict nurse	physio-therapist	mid-wife	pharma-cist	others	social work	home-help
Demand	X	X	X	X		X	X	
Supply - content of work - volume/ manpower	X	X	X	X				
	X		X	X	X	X		
Process	X		X				X	
Outcomes	X		X					

The first row of the matrix contains the key word demand: Research programs in this row contains studies of health care needs in the population as well as studies of utilization of health facilities. The row with the key word 'Supply' is subdivided. The first area of concern within this row is the (quantitative) supply of care, i.e. number of providers, their regional distribution, background characteristics like age, sex, type of practice, qualifications and the number of future providers following vocational training. Research in this field is on a database of the personal characteristics of all providers. The second area of concern is the content of the services rendered by the professional. In this area there is a division of responsibility between the university depart-

ments of general medicine which study the content of the medical services and our Institute which concentrates on health service aspects.

The third row is the process of interaction between the consumer and the provider of health care. As far as the general practitioner-patient interaction is concerned, the data for research in this field is a collection of 3000 videotaped consultations.

The fourth row is labelled 'outcomes'. The fact that only two cells of the matrix are filled, reflects the fact that research has only recently shifted towards this subject. This is a consequence of the shift in government policy away from 'the organization and structure of health care' towards 'improving the general level of health among the population as a whole'.

In the second part of this program we describe the research topics, starting with international comparative research (section 2.1), the relation between primary health care and other sectors (section 2.2), cohesion within primary health care (section 2.3) and topics of research within primary health care (section 2.4).

2. RESEARCH TOPICS OF THE NETHERLANDS INSTITUTE OF PRIMARY HEALTH CARE

2.1. International comparisons of health care systems

(research fellows Jouke van der Zee, Ph.D., Peter Groenewegen, Ph.D.)

The rising costs of health care provision has put pressure on the policy makers to make urgent changes to the system. The study of other health care systems does not act as a source of inspiration but it may at least warn us about the pitfalls.

The international comparison of health care systems can throw some light on the problem areas and black spots in Dutch health care. In choosing health care systems for comparison to the Dutch system, one has to keep in mind the peculiarities of the Dutch system:

- the separate organization of the planning and financing of health care;
- the organization of curative and preventive health care in different sectors of the system;
- the capitation fee for the general practitioner for his publicly insured patients;
- the partly publicly and partly privately insured patients;
- the general practitioner as the principal provider of primary health care.

Health care systems with free access to specialist medical care (such as Belgium) or a different system of remuneration of general practitioners and specialists (as is the case in Denmark) or systems where the general practitioner is not the central provider of primary health care (such as Sweden), are relevant subjects for comparison.

In order to collect data on health care systems in industrialized countries in a more systematic way, an inventory is now being carried out throughout all countries of the western, northern and southern Europe. The participants in this project are: the Birmingham Research Unit of the Royal College of General Practitioners, the Danish Central Research Unit of General Practice and the Netherlands Institute of Primary Health Care with the cooperation of the European General Practice Research Workshop and additional funding from the EC Health Services Research Group. The inventory has a two-fold aim: First it will describe the division between primary and secondary care in a variety of health care

systems. Secondly it will yield research proposals to compare health care systems in terms of specific characteristics, e.g. the use of diagnostic facilities, the care of the chronically ill and disabled, referrals from primary to secondary medical care, etc.

Apart from work on this inventory the following projects are being carried out at the moment:

- changing the remuneration system of general practitioners; in this project an analysis is being made of the effects of a change in the way general practitioners are remunerated in Copenhagen. The change will be from capitation to a mixed system of basic capitation and fees for specific services; a kind of change that is also being discussed in the Netherlands.
- the income position of general practitioners in European countries; the income position of GP's in the UK, Belgium, West Germany, Denmark, Sweden, France and Italy has already been described. Research is going on for a number of other countries. The whole collection will be published in English in 1989.
- regional analysis of systems of health care; an analysis of regional variations in hospital admissions in the Netherlands and Belgium showed that regional analysis is a fruitful approach to the comparison of health care systems. This analysis is now being extended to data of the northern regions of France. Furthermore the influence of some country-specific variables is to be studied.

NEW - documentation centre with information on health care systems
The changes in the various health care systems taking place at the present moment, make it essential to have an updated documentation centre for research in this field. The centre will be a joint venture between the NIVEL and other European research institutes. In addition to gathering information on certain parts of the health care system, the NIVEL will also be able to take charge of the coordination. Preparations for the setting up of a documentation centre as outlined above are to start in 1989.

NEW - health care in 'pluralistic' health care systems
'Central Europe' (West-Germany, France, Belgium, The Netherlands, Luxembourg and (non-EC Member Switzerland) has a health care system which is controlled by different authorities like the government, the (social and health) insurance schemes, the professional organizations and other agencies. This is in contrast to the surrounding countries where the health care systems are tightly organized. The NIVEL, as a WHO-collaborating centre, pays special attention to these pluralistic systems in Europe. There-

fore, the Institute's first move is the organization of a conference (in Maastricht in 1990) on health care systems and social security and disability in the five EC-countries in Central Europe with the aim of supplying administration barriers.

2.2. Relations between primary health care and the other health care sectors

This field can be divided into three parts: relations with secondary medical care (specialist and hospital care), relations with mental health care and the relations with public health and occupational health.

Apart from a study in well-baby care, no research projects are currently being done in the latter field.

We will, therefore, only discuss the relations of primary health care with secondary medical care and with mental health care.

2.2.1. The relation between primary and secondary medical care (research fellow: Mr. Diederik Kersten)

In the Dutch health care system access to secondary medical care is controlled by the general practitioner. A good deal of research has been carried out into the relationship between primary and secondary medical care. The focus of this type of research has been on: referrals by general practitioners to medical specialists, the influence of general practitioners on hospital admissions, and the length of the stay in hospitals. Recently there has been a growing interest in after care at home and the technological changes required to give high quality (nursing and medical) care in the home.

Over the past decade the emphasis in research has been on the analysis of the considerable variation in referral rates among general practitioners and/or practices. It has been shown that the organization of practice affects the number of referrals to secondary care. Integrated health centres, in particular, have lower referral rates.

At this moment in the Netherlands general practitioners are paid by a capitation fee system for their publicly insured patients and by a fee for service system in the case of their private patients. Along with all kinds of other changes the government is now making plans for changing the capitation fee part of the system in the long run.

Different regional experiments with new types of remuneration systems are being tried out to determine which system functions the best in the Dutch situation. Theoretically, the main disadvantage of the capitation fee system is that it does not stimulate the general practitioner to give anything above and beyond elementary care; there is not any incentive to discourage general practitioners from referring patients in need of complicated care to the medical specialists. The planned experiments vary in the way they try to overcome this problem.

The NIVEL is involved in the evaluation of these experiments.

A related topic of research concerns the influence of general practitioners on hospital admission rates. Although in the Dutch health care system general practitioners only directly influence hospital admission rates in acute and emergency departments, there is quite a variation in the proportion of patients admitted, if looked at in terms of the proportion of patients referred to specialists. This variation per practice can not be traced back to the characteristics of the practice population. Characteristics of practices with low relative admission rates and high admission rates are compared in this project.

The substitution of home care for hospital care is a major topic of research in primary health care. Policy measures that may contribute to lowering hospital costs by reducing the average length of stay per hospital admission can be called extremely effective. The relation between general practice, the district nurse, and the family assistant as representatives of primary health care and medical specialists and hospital nurses as their counterparts in secondary medical care is the principal subject of research. The following are the ongoing projects:

- regional differences in length of stay in general hospitals. This project is an extension of the existing macro-statistical models that have been developed at the institute for referral rates and hospital admissions. In this extension the dependant variable is the average length of stay per admission. Supply and demand factors will form part of the model.
- evaluation of the organization of post-hospitalization home care. Three different models of organization will be compared and evaluated.
- task division between general practitioners and medical specialists. Research is going on in the field of task division between general practitioners and medical specialists in the care of epileptic patients. This includes the real tasks carried out

by both types of doctors as well as their opinions about the best division to ensure an optimum return of tasks.

NEW - technological innovation in primary health care. There is a growing tendency of out-reaching hospitals. Increasing constraints on hospitalization force to 'export' their technology to the ambulatory sector and home care. The question is addressed as to whether innovation in primary health care itself is an alternative to outreaching activities.

NEW Obstetric care in the Netherlands

The Netherlands takes a unique position in the industrialized world due to its high percentage of home confinements in combination with one of the lowest perinatal mortality rates in the world. About 35% of all deliveries still takes place at home. For the last 10 years this 35% has been a relatively stable figure. Three professional groups are involved in obstetric care in the Netherlands: general practitioners' load, obstetricians and midwives. The general practitioners has fallen substantially from 46% of the total number of confinements in 1950 to 16% in 1985. The share of the obstetricians on the other hand has increased from 17% to 42%. The midwives' share has remained rather stable in this period, namely 42%. The midwife plays a crucial role. Midwives have a unique status in the Dutch obstetric care system because they are allowed to perform maternity services at the primary care level independently. As a part of the information system on manpower a database is being kept on general practitioners and midwives. This information is used for research on regional differences in home deliveries.

The following projects are being carried out:

- the health risks for mother and child in home and non-clinical hospital deliveries.

In opposition to international trends, one third of all babies born in the Netherlands are home deliveries rather than taking place in hospitals. These involve low-risk deliveries. An evaluation study has been carried out as to which location gives the best results in terms of the health of the mother and child. Furthermore, the factors which make pregnant women choose for either hospital or home will be studied.

- obstetric care by general practitioners
(research fellow: Lammert Hingstman, Ph.D.)

In 1982/1983 information was gathered on obstetric activities carried out by general practitioners. In view of the rapid changes in this field it seemed useful to look at it again. Therefore a

new study is starting in 1989 to measure the developments in obstetric care given by general practitioners on a scale that will allow regional differences to be found. The results will be related to former studies in order to illustrate the changes over a period of time.

In addition to this study, obstetrical care by general practitioners is also a subject of study in the National Study of Morbidity and Interventions (see chapter 2.4.2).

2.2.2. Primary health care and mental health care

(research fellow: Peter Verhaak, Ph.D.)

Research in this sector is characteristic of the Dutch health care situation. In the Netherlands a strong tradition of ambulatory mental health care exists alongside classical institutional psychiatric care. A couple of years ago, a series of independent ambulatory care institutions devoted to specific categories of patients and/or problems were reorganized into Regional Institute for Ambulatory Mental Health Care. There are 59 of these regional institutes and they take care of the ambulatory side of a considerable range of psychological and psychiatric problems. These regional institutions are not directly accessible to the population. Referral is required either from a general practitioner or from a social worker. Patients discharged from psychiatric hospitals do have direct access for their after-care. However the indications for ambulatory mental health care are not entirely clear. Questions such as 'What are the problems in this area that can be solved by the primary health care sector (the GP and the social-worker)', 'What sort of problems need referral to ambulatory care and what sort of problems need residential and institutional care' must be answered by politicians and health care professionals. Research that tries to establish the problem solving capacity of primary and mental health care is important in ensuring that the right decisions are taken. The Dutch Ministry of Welfare, Public Health and Cultural Affairs has produced a policy paper on the problems mentioned above. Questions deriving from this policy paper will govern research in the area for the coming years.

First we will give a review of research projects in the relation between primary health care and mental health care; subsequently we will discuss projects relating to the problem solving capacity of primary health care.

In the field of the relation between primary health care and mental health care the following topics are being studied:

NEW - Social workers and regional institutes for ambulatory mental health care: differences and similarities in population and care. The task division between social workers and the institutes for ambulatory mental health care is not clear. Quite a lot of clients from the institutes for instance could be helped by a social worker. Therefore a discription will be made - by means of questionnaires and interviews - on the kind of psycho-social problems clients of social workers and of the institutes for ambulatory mental health care have. In addition records of clients will be kept over a longer period in order to determine the predictive value of various criteria like the existence of psychopathology and situation specificity of the clients problem.

- The place of psychologists in primary care. There is a growing involvement on the part of private psychologists in primary care. This involvement will be evaluated by the collection of descriptive information about their numbers, approaches and relations with other primary health care providers and through the study of experiments. Experiments will be designed with different organizational models.

The second group of projects relates to the problem solving capacity of primary health care itself in the field of psycho-social problems.

- The presentation and course of psycho-social problems in general practice.

This project consists of three related parts. The first one is devoted to the determination of factors that are related to calling in a general practitioner in the case of psychosocial problems. It is hypothesized that the process of proto-professionalization is an important factor in explaining differences in calling in a GP's attendance. The second part is an epidemiological study of psycho-social problems in general practice. Earlier studies revealed a large variation between general practitioners in terms of the number of psycho-social problems during one year, presented to them and/or detected by them. The third part concerns a longitudinal study of the course of psycho-social problems during one year.

- Changing models of conversation: variations in doctor-patient communication.

One of the findings of previous research has been that doctors tend to switch from quick, to the point, directive types of

questions which attempt to generate a diagnosis by means of direct anamnestic questions within consultations to a 'model' where questions are less direct and where there is much more room for the patient to influence the outcome of the conversation. It is not yet clear which factors trigger these different styles of questioning. Further research is being carried out to detect the conditions that favour the discussion of psycho-social aspects of complaints in doctor-patient communication.

2.3. Cohesion within primary health care (research fellow: Dinny de Bakker, Ph.D.)

Since the proposals of the Dekker Committee were accepted by the Dutch government, policy has changed in favour of promoting cohesion around specific functions in care, rather than promoting a stronger primary health care system. Home care should be given a special mention. More and more people who, on medical grounds could opt for hospital care choose to stay at home, thereby requesting intensive care from primary and secondary health care providers. Close cooperation between primary and secondary health care is necessary in providing home care, as is close cooperation between primary care providers.

A unique feature of Dutch primary health care is the existence of multidisciplinary cooperation between social workers and family assistants on the one hand, and general practitioners and district nurses on the other hand, sometimes supplemented by physiotherapists and midwives. The shared premises where these disciplines are found all together under one roof are called health centres in the Netherlands. The term 'health centre' has a very specific significance in the Dutch health care system and it always refers to multidisciplinary cooperation between social workers and medical professionals in a shared building.

Within this changing context, research takes place on the cohesion within primary health care. The theme is subdivided into three fields of research: multidisciplinary cooperation within primary care, the political and organizational cohesion of the primary health care system and specific functions of care (home care, emergency care).

Research on multidisciplinary cooperation has the longest tradition at the Institute. Two types of research take place. Descriptions of

developments in multidisciplinary cooperation takes place on the basis of a registration system. Evaluation of the possible effects of multidisciplinary organization for the health care people receive is the second type of research.

- The registration of multidisciplinary teams.

(research fellow Mr. Wienke Boerma).

Since 1977 the Institute has systematically recorded all multidisciplinary health centres in terms of content, distribution and change. From 1985 onwards, multidisciplinary teams not sharing common premises have also been approached and subsequently systematically registered alongside health centres. Social workers are a mine of information in this field as they usually record where they have systematic and formal cooperation with other workers involved in primary health care. The resulting database is a source of statistical synopses and provides data for further research.

The following research projects concern the effects of multidisciplinary cooperation on the health care people receive:

- The effect of multidisciplinary cooperation on the number of referrals.

Earlier research has been shown that general practitioners in cooperative practices have lower referral rates to medical specialists than single handed general practitioners. Recent studies suggest that this difference may be due to patient selection. The analysis will therefore be repeated with the addition of new data.

- The effect of (the lack of) coinciding catchment areas in cases of care received from the district nursing services.

The fact that the catchment area of district nurses and general practitioners do not coincide is often cited as a major drawback for the advancement of cooperation and has, therefore, a possible influence on the care delivered. In this study the care delivered by district nurses in situations where catchment areas coincide is compared with a situation where catchment areas do not coincide.

- Evaluating cooperation in terms of specific patient categories. In this research project, the care received by specific patient categories (e.g. rheumatoid arthritis) is examined to compare patients of primary health care providers in health centres with other patients.

The projects concerning the organizational, political and administrative cohesion of the primary health care system are:

- The evaluation of the political and administrative organization of health care in Almere.

In Almere a newly established city of about 60.000 inhabitants (in the newest South See-polder) the health care system is organized in an experimental way, the accent being on a strong and integrated primary health care system. Primary health care in Almere is organized in eleven health centres equally distributed all over the city. General practitioners, social workers, district nurses and other care workers participate in these centres. They are all employees of the same foundation. The policy is to be reticent in referring patients to secondary health care. The newly built hospital has, therefore, been kept small. There are strict arrangements between the primary care agency and the hospital to prevent the hospital being used by the public without a letter of referral from a general practitioner. Research is aimed at projects on substitution of primary health care for secondary health care and projects on primary health care itself (patients satisfaction, morbidity and similar topics).

- NEW - Evaluation of the organizational structure of general practitioners.

An agreement in 1986 between the Dutch association of general practitioners and the government resulted in a support structure for general practitioners.

This study will describe the policy with respect to support and advancement of expertise and the with this related activities.

In the third field of research, specific functions in care, the following project is going on:

- NEW - Emergency care

The effects of the opening of a new hospital for emergency care are the subject of research in this project. In general, people tend to chose for the hospital, when they have the choise between hospital and general practitioner. When a new hospital was opened in Zoetermeer general practitioners and hospital agreed that people with minor problems who came to the emergency department of the hospital were to be sent back to the general practitioner. We are studying the effects of this policy for patient flows and patient satisfaction.

2.4 Research topics within primary health care

In the introduction we pointed out that the research projects, carried out in this area, can be looked upon as the cells in a matrix. The columns of the matrix are formed by the various professions in primary health care and the rows represent the main areas of interest: demand, supply, process and outcome. However, projects are usually not restricted to one cell of the matrix and some fields of interest are better developed than others. The actual description of projects therefore follows the historically determined patterns of research at our Institute.

We will start with projects in the field of supply of primary health care professionals. Next we will discuss the field of morbidity and interventions in general practice. This in fact concerns demand, process as well as outcomes.

The third section is devoted to the communication between health care providers and patients. Thus, the emphasis here is on process. The next two sections contain projects on the whole range of fields of interest for the paramedical professions and district nurses. The last section is on the subject of demand.

2.4.1. The supply of manpower and its function in primary health care

(research fellow Lammert Hingstman, Ph.D.)

To meet the lack of information on the supply of primary health care providers that used to exist and in part still exists, an information system on manpower has been devised and is still being extended. The information system started in 1974 as a data base containing personal records of all Dutch general practitioners (approximately 6,275 at the moment). The system has been extended with databases on midwives ($\pm 1,000$) and physiotherapists ($\pm 9,000$). In the years to come data bases on dentists, dispensing chemists and other primary health care professionals will follow.

The information system contains data for all professionals actually practising their profession in primary health care.

Apart from these, the system also contains data on all professionals who complete their vocational training. A questionnaire is sent out to everybody who has completed vocational training and is formally qualified to practise in primary health care annually. The aim is to monitor the activities of those who have not yet settled down in practice.

The objective of the information system on manpower is threefold. The first aim is that it should yield reliable and accurate information about the size, composition in terms of age and gender and regional dispersion of professions in primary health care. This information is summarized in annual statistical synopses.

The second aim is to use trends and patterns in this data as the subject of research. To give an example, research has been done into the determinants of regional disparities in the density of primary health care professionals.

The third aim is to have a data source for further research. Complete and reliable population data are indispensable for drawing samples used in all kinds of research projects.

To avoid sterile statistical synopses, the data bases are closely related to a research program which attempts to explain regional variation in the density of the different professionals, to predict the consequences of this variation for the use of the health services and to analyse indicators of the demand for health services in relation to supply.

The following projects are being carried out:

- The distribution of primary health care facilities in urban areas. Past research into the geographical distribution of primary care concentrated on regional disparities throughout the entire country. Linked to the WHO-program of Healthy Cities, attention is now being shifted towards an analysis of the supply and demand of primary health.

NEW - The varying functions of physiotherapists and general practitioners.

Besides the existing studies on manpower, studies on the work done by physiotherapists and general practitioners are being investigated. A registration system is being set up on the existence of post-graduate courses for physiotherapists, on certain types of treatment and their influence on daily practice. In the case of the general practitioner, the time he spends on certain tasks will be looked at, like care for the elderly in homes for the aged, medical examinations and being a physician for the municipality.

- Manpowerplanning in primary health care.

To reach the goals of the WHO-concept 'Health for all by the year 2000' manpowerplanning plays an important role. In this way disproportions in health care can be removed.

An overview article is in preparation to describe the situation at the moment.

- Female general practitioners, a follow-up study.

In 1984 a study was rounded off on the problems female practitioners face in carrying out their profession. In a follow-up study a cohort of graduates from post-graduate training have been screened over a period of a couple of years to see how their ideas, plans and ambitions change when confronted with the limited opportunities of establishing themselves in their profession. The ambitions and opportunities of male and female future general practitioners are compared and predictions are made about who will and who will not succeed in establishing himself of herself as a general practitioner.

2.4.2. Morbidity and interventions in general practice

(research fellows: Marleen Foets, Ph.D. and Koos van der Velden, M.D.)

In the Dutch health care system, routinely collected information from general practice only emerges where the work of the general practitioner touches a sector of the health care system, where a fee-for-service remuneration exists. The capitation fee for the general practitioner effectively prevents the production of routinely administrated information, i.e. specific information depends on the evidence for the service in the form of a fee. The best known parameter of the general practitioner's work is the referral-rate to medical specialists, or the referral-rate to physiotherapists. Consequently, data that is at the disposal of government policy makers and researchers in the field of general practice, is either completely out of date (the last national morbidity survey dates from the 1960's), or collected on a case basis (new morbidity statistics are usually based on no more than ten practices), or representative but fragmentary (in the Dutch system of Sentinel Practices a limited number of items is being recorded by a 1% representative panel of Dutch general practitioners).

When it is so self evident that new information on a national scale is needed, why is there a reluctance to collect it? There are three main obstacles to a new National Morbidity and Intervention Survey. The first is a certain disaffection in respect of huge databases which seem to be able to answer every question but the one that one happens to want to ask at the time. The second problem is that each morbidity survey always shows an enormous and unexplainable inter-doctor and inter-practice variation in the items recorded. This is surely a very expensive method of measuring differences in doctors'

personalities and the organization of practices. Are the results of such a survey sufficiently valid? The third question, closely connected to this, is the question of the reliability of the data. Self-administration and registration are notoriously unreliable. These three obstacles can be countered by employing the following guidelines:

1. To avoid the collection of data irrelevant to the questions to be answered, a preliminary survey should first be conducted on the basis of the questions of government policy and research that need to be answered. An inventory of relevant questions made beforehand has the advantage that the design of the survey can then be adapted to it. In a normal representative sample, for example, few female doctors are included. However, when one knows beforehand that the difference in the role of male and female doctors is a relevant issue, one can add an additional quota of female doctors to the sample.
2. The second problem: the validity of the information collected, should be tackled from a different angle: i.e. the health services research perspective. In this perspective one accepts differences between doctors and practices and tries to explain the differences found, on the basis of theories derived from health services research. Inter-doctor and inter-practice variation is a valid and a relevant subject of study for this type of research. The relevance of the project for government policy purposes increases considerably when a health services research point of view is part of the design of the project from the very beginning.
3. Self registration should be avoided as much as possible. The possibility of 'central coding' should be mentioned here as a solution to the problem of the reliability of self recording.

The following relevant questions are derived from health care policy:

- what factors increase the problem solving capacity of primary health care in general and of the general practitioner in particular?

The main items of interest are:

- what kind of problems can be solved in primary care and should not be referred to specialistic (secondary) medical care?
- what kind of problems can be solved in primary care (medical and social) and do not need to be referred to (ambulatory) mental health care?

- which factors induce a shift from the presentation of problems in primary health care to self care and the care of the surrounding social network of patients?

A series of research proposals has been constructed on these rather general policy questions. Before we describe these topics in some detail, we will devote some space to practical aspects of the design of the National Study of Morbidity and Interventions.

Data collection started in April 1987. In 150 general practices (totalling nearly 200 general practitioners) all morbidity and interventions are being recorded. The period of data recording is three months and the participating practices have been divided in four groups and spread over the year.

Social and demographic background data will be collected on all patients and health interview surveys will be held with a random sample of 100 patients for each practice.

The data-collection of the main project has been rounded off and has been very successful (i.e. high response and good quality data). The data-entry of only one part (i.e. prescription) has been delayed; at present (beginning 1989) we are restructuring the database to make it analysis-ready.

The analysis is centered around the following research topics, deriving from the general policy questions mentioned above and will be carried out in 1989 and 1990.

- National study of morbidity in general practice.

The objective of this subproject is a description of morbidity as presented to the general practitioner. Because social and demographic background data on all patients on the lists of general practitioners will be available, social and epidemiological analysis will be possible.

- General practitioner and chronic disease.

Of a number of chronic conditions, hypertension, diabetes, COPD, cardio-vascular disease and arthritis, diagnostic criteria will be settled and used by the general practitioners. The aims of this study are to define the share of these chronic diseases in the morbidity pattern in general practice, to investigate the interventions of general practitioners in these chronic conditions and to improve the treatment of chronic disease by the so-called population-oriented approach.

- General practitioner and prevention.

Prevention is generally looked upon as an important means in

improving the health status of the population and general practice has a role to play in this. As a part of the National Study the preventive activities of general practitioners, such as vaccination and screening for cancer and chronic diseases will be examined and how preventive activities can be incorporated in general practice will be explored.

- The use of diagnostic facilities by general practitioners.

Diagnostic procedures and tests done in the general practitioner's office as well as in outside laboratories and hospitals will be recorded, to enable us to detect determinants behind the request for diagnostic tests.

- Prescriptions in general practice.

In a national morbidity and intervention survey a thorough study of the prescription patterns in general practice is a necessity. Prescription habits for the same type of complaints and diagnoses can be compared and descriptive information about quantities and qualities of prescribed medicines form a good basis for possible cost containment measures.

- Obstetrical care by general practitioners.

Obstetrical care in the Netherlands is unique in the industrialized world: a high percentage of deliveries take place at the patient's home (35% in 1984) combined with a very low perinatal mortality level (9.8 per 1,000 in 1984). This 'obstetrical home care' is provided by midwives and to a lesser extent by general practitioners. Qualitative and quantitative aspects of the general practitioners share in obstetrical care will be studied.

- Referrals to physiotherapy.

All that is known about referrals to physiotherapists is that there is an enormous variation in the habits of doctors who make the referrals. The indications for physiotherapy vary considerably between general practitioners and so does the number of patients referred. The main goal of this study is the explanation of this variation by relating the referral rates to physiotherapist density, the size and type of practice, the doctor's attitude to physiotherapy and the characteristics of the practice population.

- After-care of hospital patients.

The role of general practitioners in the after-care of hospital patients has only been described in case studies which show a potential influence of the general practitioner on the average length of stay of hospital patients. The doctor's activities in this field and the characteristics of the hospital are related to

the activities of the district nurse and the hospital nursing department. It is important in this study to establish the feasibility of a more detailed and thorough organization of after-care.

- The general practitioner and (ambulatory) mental health care.

The number of referrals from general practice to ambulatory mental health care is so low that it is not useful to study the variations in this referral rate. Studies in this field would do better to concentrate on the psycho-social problems treated in general practice and on the natural course of psycho-social complaints in families. For this purpose videotaped observations of doctor-patients interaction are a necessity.

- Referral rates.

Most of the referral research in the Netherlands is based on the rough National Insurance Fund referral rate, that is the number of referred patients as a proportion of the general practitioner's list. It is more interesting to relate referral figures to the number of contacts and not to the number of patients. Moreover the referral cards should be split up into different parts, as it is necessary to distinguish referrals to ophthalmologists and to establish who took the initiative in the referral and the origin of the referral. About 20 to 25% of the referral cards come from specialists who wish to continue treatment after the maximum formal period of one year. It is clear that the number of referrals which in fact stem from specialists needs an explanation which differs from the active decisions of the general practitioner and from the direct requests from patients.

- A differentiated capitation fee.

One of the ways of improving the effectiveness of a general practitioner's work is to remunerate him according to the time he spends on different types of patients. In the Dutch health care system the doctor receives the same capitation fee for each patient irrespective of age, sex and health status. If clearly recognizable groups (for example age/sex groups) show marked differences in workload for each general practitioner, the composition of the practice according to those characteristics might form a basis for a differentiated capitation fee.

- Self care and care by the social network compared with professional care.

One of the main disadvantages of morbidity surveys in general practice is that there is very little general and systematic information on patients. Age and sex are two variables that are

coded quite reliably, but other information should be checked before it is made part of the study. In the English National Morbidity Surveys the morbidity files are linked with the census files. As the last Dutch census took place in 1971 and a linkage between census files and morbidity files is not a tenable option in the Netherlands, extra information should be collected on a voluntary basis. Each patient who visits his doctor will be asked to complete a short questionnaire with questions about his education, profession, social class, marital status, etc. Persons who do not visit their doctor in the recording period will be approached using mailed questionnaires. A sample of the patients will be approached with a more elaborate questionnaire that contains questions about medical consumption, self assessed health status, and social network characteristics.

The database of the study is so attractive that besides the 12 subprojects mentioned above, other projects could be designed, which has been done inside as well as outside NIVEL.

At the beginning of 1989 ten new projects were formulated and ready for take off:

- three on child health (psychiatry/pediatrics/vaccination);
- two on prescription (side effects/NSAID);
- two on the social economic status specific morbidity;
- one on the geographical variation in morbidity;
- one on the doctor's assistant;
- one on the mixed capitation fee.

The sentinel practices project

(research fellow: Aad Bartelds, M.D.)

This morbidity project has collected data continuously since 1970 and recently became part of the International Primary Care Network.

- The sentinel practices

Since 1970 a 1% sample of Dutch general practitioners has been recording items of morbidity and interventions in terms of an annual program with regular changes. Some of the items have been recorded from the beginning (yearly influenza rates) and some have only occurred on the annual list for one or two years.

The items for 1989 are the following:

1. the incidence of influenza;
2. cervical smears;
3. sterilization (male and female);
4. the morning after pill;

5. attempted suicide;
6. pregnancy (despite contraceptives);
7. mammography;
8. concern about AIDS;
9. acute non-ordinary headache;
10. burning wounds;
11. referrals to speech therapists.

The yearly report of the sentinel practices project is published in English. In 1989 a volume will be published, summarizing the results of the projects from the start in 1970 up to the present moment.

The sentinel practices project participates in Euro-sentinel, a project within the EC Medical Research Programm, Comac - Health Services Research.

2.4.3. Doctor-patient communication

(research fellow: Peter Verhaak, Ph.D. and mrs. Jozien Bensing)

It is widely known that doctor-patient interaction influences the presentation of complaints in general practice and the outcome of that presentation i.e. the diagnostic label attached to the complaint by the doctor. Whatever item is measured in general practice, one always has to cope with inter-doctor and inter-practice variation.

Further research into this inter-doctor and inter-practice variation can only be carried out by means of the analysis of the communication process between the provider and the consumer of care. At the Institute a large collection of videotaped consultations forms the basis of many research projects, sometimes directed specially towards the analysis of inter-doctor variation, sometimes as the basis of more specific questions on policy and research. Information collected by the videotape has usually been corroborated by the use of other methods such as questionnaires, self administration of interventions and self assessment of health status and health problems by patients. At the moment the following project is in progress:

NEW - Validation of the NIVEL observation system on the Roter-Method (Task Force on the Medical Interview).

From 100 videotaped consultations, which are observed by the NIVEL observationsystem (NOS) observations are also made by the protocol designed in the United States by Roter (an adjustment of Bales' Interaction Process Analysis) and used by the Task Force on the Medical Interview.

The coherence of global conceptions which both observation methods pretend to measure will be compared. In addition the predictive value of both methods will be examined for evidence of bias and the accuracy of general practitioners with respect to the presence of psychic problems.

2.4.4. Paramedical professions

(research fellow: Joost Dekker, Ph.D.)

In the Dutch health care system physiotherapy and speech therapy are to a large extent part of the primary health care system. There is about one physiotherapist for each 1,600 inhabitants. For this the Netherlands follows the continent of Europe in contrast to the Anglo-Saxon countries, where most physiotherapists work in hospitals.

Ergotherapists traditionally work in (long-stay) hospitals, but there is a trend towards integration in the primary health care system.

A common feature of these disciplines is their functional approach to health problems. The traditional goals of medical care are diagnosis and treatment of organic pathology. The goals of physiotherapy, speech therapy and ergotherapy are at the level of improvement of functional status or quality of life.

The Institute's research priorities in this area are epidemiological survey studies; assessment of the outcome of these therapies in comparison with other treatments and general aspects of care (such as patient education).

The following projects are in progress or expected to start soon:

- Continuous data collection and evaluative research in physiotherapy.

Comparable to the sentinel practices project in general practice, a continuous data collection project has been designed for physiotherapy. This will provide basic data for evaluative research in three broad fields. The first concerns the structure of physiotherapy practice; important changes in the financing and payment of physiotherapy may be expected to occur in the next few years. The second field concerns the process of physiotherapy: questions concerning the communication between physiotherapists and other health care professionals can be answered. The third field is the outcome of physiotherapy; for selected diagnoses data on the patients conditions at the start of therapy and at the end may be measured.

NEW - Patient-education by physiotherapists

In comparison to many other disciplines, the contact between patient and therapist is of a long duration and intensive. Therefore, the conditions for patient-education are relatively good. In this study, patient education by physiotherapists is described in an empirical way. An observation protocol to assess audiotapes of treatment sessions has been developed.

NEW - Osteoarthritis: referrals by general practitioners for physiotherapy.

Patients with osteoarthritis are often referred for physiotherapy. Systematic knowledge on the indicators for such referrals is not available. In this study a comparison will be made between treatment by general practitioners and physiotherapists. Indicators for referral to the physiotherapist are to be studied as well.

NEW - Speech therapy: an epidemiological survey

For the realistic planning of outcome studies, knowledge about the incidence of various disorders in the practice of speech therapists is essential. In this study an epidemiological survey of this type will be given. In the first part of this study a classification and registration system of disorders treated by speech therapists will be designed and tested.

NEW - Ergotherapy in primary health care.

There is a trend towards the integration of ergotherapy in the primary health care system. The efficacy of such treatment will be assessed, in studies on patients with cancer and other illnesses.

2.4.5. District nursing

(research fellow: Ada Kerkstra, Ph.D.)

District nursing in the Netherlands can be divided into two types of care: home care for the (chronically) ill and the elderly and preventive care for children 0-4 years old. Both types of care are given by the same district nurse. This is in contrast with Great Britain, where it is done by two different persons.

District nursing is of increasing importance in Dutch health care. On the one hand the number of elderly people is increasing. This leads to a growing demand for nursing care at home. On the other hand government policy is directed towards keeping the elderly in their own home environment as long as possible. Consequently home nursing has great priority in health care policy. Our research program in this field started about 4 years ago. The accent of the first research projects was, therefore, on descriptive research and

development of appropriate methodologies and measurement instruments.

These projects are:

- The content of work in district nursing.

This project aims to provide a descriptive study on a national, representative scale of the content of the work of district nurses by means of questionnaires and self-registration forms developed in a pilot study. In this way it is for instance possible to relate national variation in the kind of work done by district nurses to individual characteristics (e.g. education and work experience), to information about the organization of the work, and to the intensity of contact and collaboration with other professionals in primary and secondary health care.

Also a description will be given about which care (preventive or curative) will be given to whom and when (day or night).

- Well-baby care

The main target-groups for district nurses are the elderly and the very young. Their work for babies and toddlers is organized in teams with either general practitioners or specialized physicians. In this project video observations are made to assess the tasks carried out by the general practitioner or specialized physician and the district nurse in their care for children of 0-4 years old. Conformities and differences will be described.

Also, the way in which the registration of the results of the medical examination are recorded will be looked into, because a good form of registration is very important for the continuity in health care for the youngsters.

- Measuring the need for home nursing.

Not only do instruments have to be designed for measuring the functions and tasks of district nurses, but correct measures of the needs of the population are also required. A set of instruments will be designed that can be used in further research.

- NEW - Private home care

Nowadays patients are discharged from hospital earlier, but they still need care at home. This means a lot of extra work for the district nursing services. Their manpower, however, is not sufficient to provide all the care needed. Therefore, private home care has had a chance to increase in importance. Since the health insurance companies have agreed to pay the costs for private home care, the number of private home care offices has risen enormously. In this study information will be gathered on how many of these offices there are and what they do. Probably this study

will be followed by a study on the quality of the care given.

NEW - An evaluation study on models for taking over the care for children with CNSLD when they come home from hospital

A discussion is going on as to whether district nurses can handle all the tasks needed for good care at home for children with CNSLD. Therefore three models on taking over the care from the hospital will be evaluated. The most important differences between these models are the persons who give the home care and report to the specialist in the hospital, they are respectively: social nurses from the hospital, specific nurses and district nurses. In the beginning of 1989 the study will start with the development of measurement instruments.

2.4.6. The demand for primary health care

(research fellow: mr. Loe Peters)

With the shift in government policy away from influencing the structure of health care and towards influencing the state of the health of the whole population, it has become increasingly important to study the demand for health care systematically, and the alternatives to using health care services. These topics have been and are being studied in a whole range of NIVEL projects. However, it is our intention to develop it as a field of research in its own right, integrating aspects of demand into other research projects and directing new projects.

The following projects are being carried out at the moment:

- Cooperation between general and alternative practitioners

Alternative medicine is increasingly popular among the public in the Netherlands. General practitioners and health insurance companies are also turning a benevolent eye towards alternative medicine. Therefore a couple of experiments will be set up in which general practitioners and alternative practitioners will cooperate. The results will be evaluated.

- Cooperation between rheumatologists and alternative practitioners
Patients with chronic diseases go to alternative practitioners relatively often, because in these cases regular medicine is often less successful. This study will describe the vision of rheumatologists and their patients on tasks and other activities (to be) carried out by rheumatologists in advising over, referring to and cooperation with alternative practitioners.

NEW - Questions about AIDS

The general practitioner plays an important role in taking care of patients with AIDS or helping patients who are afraid of (being

carriers of) AIDS. A description will be made on a national level about how many times general practitioners are confronted with these kinds of problems. The data come from the Sentinel Practices Project (see chapter 2.4.2).

Projects that will start in 1989 are:

- Consumer panel

NIVEL will start a consumer panel in collaboration with the 'Consumentenbond' (a consumer organization). In this (continuous) project a panel of 1000 average health care consumers will be regularly (at least once a year) questioned about their opinion on different primary health care topics.

NEW - General practitioner and AIDS

General practitioners are increasingly confronted by AIDS problems. For this reason, the focus in this project will be on the opinions, the expertise and the general practitioner's methods of handling cases where HIV-problems are involved.

NEW - The demands on and the strengthening of primary health care.

Although the government has stimulated the strengthening of the primary health care sector, the results of this are, at the present moment, very poor. Causes are looked for on the supply side of the health care sector, but cause on the demand side should be examined too. A lot of patients ask their physician for a referral letter to secondary health care. As a preliminary study, a literature search will be carried out on 'maturity and tendencies towards secondary health care'.

2.5. General activities

NEW Scenario-project 'home care'

(research fellow: mr. John Wenning)

The Netherlands is one of three countries in Europe that carries out scenario-projects in connection with the planning of health care in the manner advocated by the WHO. Scenarios describe the present situation of society (or a part of it) and possible situations in the future, and series of events that must take place to lead to this future situation.

Scenarios are used to increase the anticipatory capability of policy-makers. A national government funded Steering Committee on Future Health scenarios coordinates the execution of scenario-

projects. This Steering Committee has given the NIVEL the task of carrying out a scenarioproject on primary health care. A scenario committee has been appointed especially for the project, consisting of experts in the field of primary care.

The subject of the scenarioproject is home care. A model will be constructed on the basis of which the number of health care providers needed can be determined for different disciplines. In this model, suppositions are made about the trends in the use of different types of home care services (i.e. treatment, nursing, support, assistance).

The use of home care services in the present situation will be determined for different categories of patients, each having a distinct care profile (the different types of home care given to each patient). By demographic forecasts, the size of each patient category can be estimated for the future.

When this is combined with the care profiles, it gives an estimation of the future use of home care - working on the supposition that the care profile stays the same. Alternative future patterns of use will be created by making suppositions about changes in the care profile (due to trends in consumption or changes in government policy).

The scenario committee will create different organizational structures for home care, given the estimated future consumption of home care services. The number of health care providers needed will be computed under different organizational structures supposing varying trends in the use of home care.

Registration projects

- the registration of current scientific research in and about primary health care (RWO)

A report is published annually about all current and planned research in and about primary health care in the Netherlands since 1972. The registration is computerized, so that up-to-date information on current research can be obtained very easily.

NEW - the registration of innovations in primary health care

In 1989 a registration of innovations in primary health care starts similar to the above mentioned RWO-project. A report will be published annually also.

Concerted actions

Within the scope of 'Europe 1992' collaboration between the various research institutes in Europe becomes more important and all kinds of activities in this field are coming up rapidly. The NIVEL is in-

voled in several of these so-called concerted actions.

At the moment the following concerted actions are in progress:

- referrals by general practitioners (organized by Douglas Fleming, Great-Britain)
- Eurosentinel project (see also chapter 2.4.2)
- comparisons of the health care systems in Belgium, Luxemburg, France, West-Germany and the Netherlands
- alternative medicine in Europe
- Mc Ace-project: designing a so-called MBDS (minimal basic data set) for medical information science
- HIM-project (health information model), an initiative from West-Germany (Prof. W. van Eimeren, Prof. D. Schwefel, München).

Conferences

At set times the NIVEL organizes international scientific conferences:

- 16-17 March 1989 International Conference on Community Nursing (in 's-Hertogenbosch, the Netherlands).
- NEW - 10-11 May 1990 'Doctors at Work', facts and figures about general practice (in Utrecht, the Netherlands).

The results will be presented of the Study of Morbidity and Interventions.

The program of the first day is focussed on the consequences of the results of the Study of Morbidity and Interventions for the Dutch health policy. The language of the lectures will, therefore, be Dutch.

The second day will be a scientific exchange of experiences on specific subjects of the Study of Morbidity and Interventions (the language will be English on this day):

- psychosocial problems
- studies on morbidity
- interdoctor variation
- the patient
- general practitioners and secondary health care
- social determinents of illness.

For each subject results from the Study will be presented; three 'eminent' scientists in that field are invited to present their viewpoints and (if possible) results of their own research.

3. LIBRARY AND DOCUMENTATION SERVICE

(head: mrs. Alma de Leeuw)

The NIVEL has a library with approximately 2,000 books (of which 750 are in English) and 4,000 reports (of which fewer than 300 are in English) on primary health care and health service research in general.

From the 110 journals which are available, about one third are written in English. Among these you will find the most current editions of American and British journals on medicine and public health.

Recently, the library has been computerized. It is now possible to gain access to more than 20,000 publications and selections can be made through all kinds of headwords.

The use of the library and documentation service is free for researchers from outside the NIVEL.

The documentation service consists of annotated bibliographies and monographs on topics such as primary health care policy, quality assessment in primary health care and primary health care in industrialized countries.

4. ENGLISH LANGUAGE ARTICLES, PAPERS AND REPORTS

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