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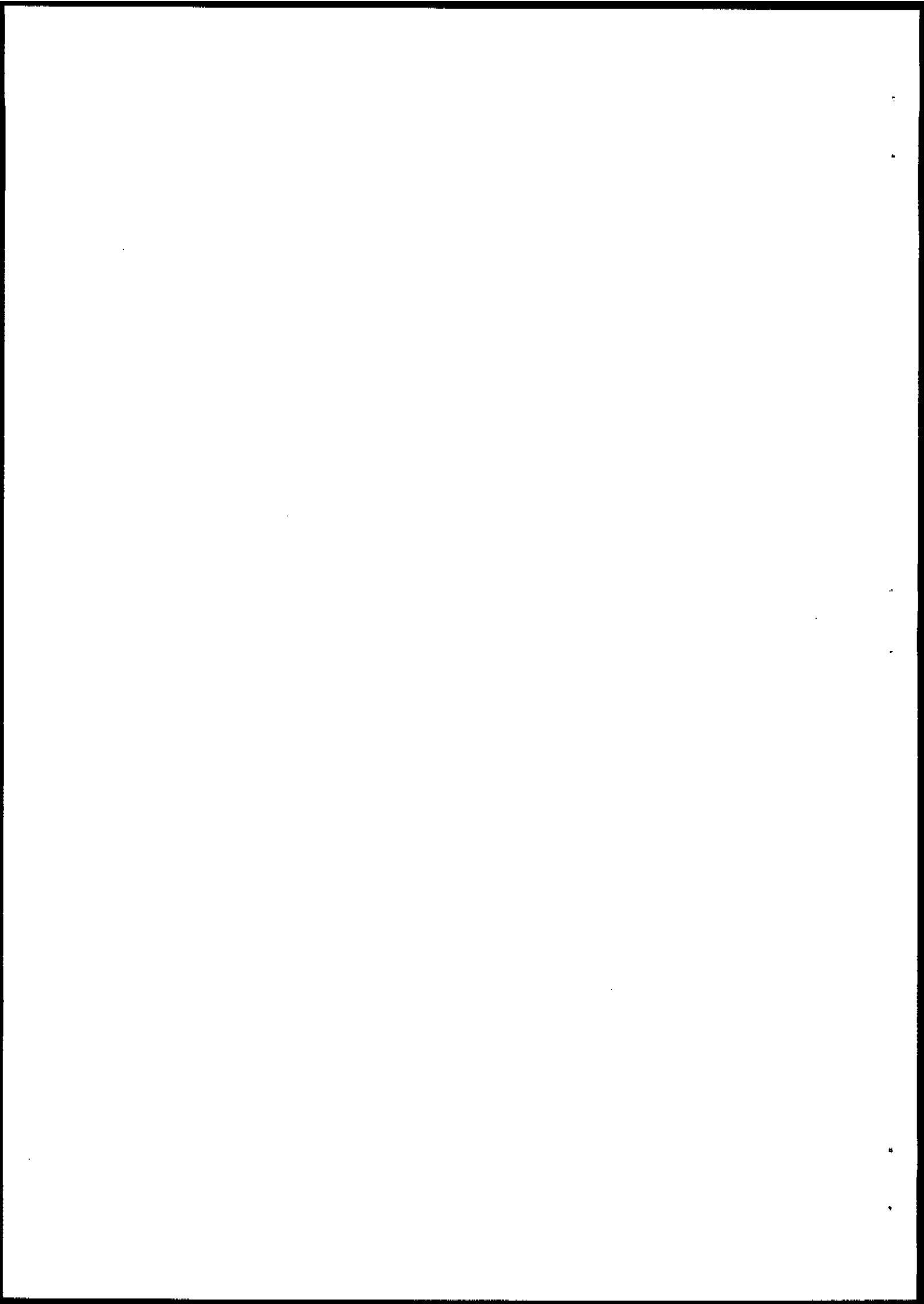
TARGET 27

Rational and preferential distribution of resources according to need

By 1990, in all Member States, the infrastructures of the delivery systems should be organized so that resources are distributed according to need, and that services ensure physical and economic accessibility and cultural acceptability to the population.

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1. INTRODUCTION

A Working Group on information for primary health care was held in Kuopio, Finland, from 9-12 December 1986. The meeting was organised by the European Regional Office of WHO, in collaboration with the WHO Collaborating Centre for Primary Health Care at the universities of Kuopio and Tampere. The main purpose of this meeting was to consider information for the planning, monitoring and evaluation of PHC at local level and to investigate whether it was possible to derive a minimum data for use for these purposes. It was also intended that the meeting should review the regional indicators relating to PHC and assess their relevance to information needs at the local level in countries

The meeting was opened by Mr Juhani Kärjä, the Rector of the University of Kuopio, who welcomed participants on behalf of the University of Kuopio and by Ms Tuula Eerola, Chief of the Department of Social Affairs and Health, on behalf of the Regional Administration in the Province of Kuopio. Dr Walter Hubrich, Medical Officer, Hospitals and Primary Health Care, from the WHO Regional Office for Europe, conveyed the greetings of the Regional Director, Dr Jo E. Asvall, to the meeting and outlined its scope and purpose. Mr M Rosén was elected chair of the meeting, Dr M Rimpela vice chair and Ms Ann Taket rapporteur. Secretary to the meeting was Dr W Hubrich.

Participants from 12 different countries in the European Region were present at the meeting; the list of participants is included as Annex 1 and the programme of the meeting as Annex 2. Prior to the meeting, a

statement was prepared for each country covering aspects of the existing situation with regard to PHC information.

In his opening address, Dr Hubrich outlined the main tasks for the meeting. He stressed that primary health care (PHC), as the key to the achievement of HFA, is regarded as one of the most important cornerstones in the European Regional strategy for HFA. Efforts are needed to improve the information available for planning, monitoring and evaluating primary health care services at the local level in order ensure the delivery of effective PHC.

The development of PHC is a social as well as a technical process, and the evolution of PHC information systems will reflect the development of PHC itself. PHC should not be considered in isolation from the rest of the health care system; it is particularly useful to consider information relating to PHC within a wider concept, that of a district health system based on PHC. This comprises a well-defined population within a clearly defined geographical area and includes all institutions and individuals providing health care in the district, whether governmental, social security, non-governmental, private and traditional and covering self-care and all health care workers and facilities, up to and including the hospital at the first referral level and the appropriate support services. The degree to which this concept applies to the current situation in individual countries varies, as amplified later in the report.

Dr Hubrich explained that as a basis for the discussions some time would be spent in the meeting as a whole presenting descriptions of models of information about and for primary health care at the local level used in different European countries. The meeting would then consider the kind and quantity of information needed in primary health care, the mechanisms for collecting and processing information for primary health care and the use of information for management decisions in primary health care. The meeting was therefore required to consider both information for and information about PHC.

During the meeting discussions were held in three subgroups to allow detailed consideration of the collection and use of information for PHC at the local level. Reports of the individual subgroups discussions were presented during plenary sessions, which also provided an opportunity for consideration of important issues by the group as a whole.

The meeting was also to consider the regional indicators for Health For All and their relevance for PHC at the local level. A presentation reviewing the regional indicators and their use was given, and detailed discussions on this issue took place in small subgroups.

The focus of the meeting was on PHC information for purposes of the planning, monitoring and evaluation of PHC at local level. While this covers many of the aspects included in the management of PHC, the detailed management of individual patient care was excluded from specific consideration, as were information requirements for clinical and

epidemiological research. This still left a very large area to be covered, and so it was suggested that the discussions should be further focussed around some of the main providers of PHC, namely doctors and nurses.

1. *REPORT OF DISCUSSIONS AND SUBGROUP WORK*

2.1 Country statements and presentations

Before the meeting, statements were prepared for each country represented by the participants of the meeting. These statements were prepared according to detailed guidelines and were in two parts. The first dealt with comments on regional and national indicators related to PHC and the content of these are overviewed in section 2.3 below on PHC related regional indicators. The second part of these statements dealt with the situation regarding information related to PHC in the country, covering: the availability and use of information at the local level; information requirements at the local level; information collection and dissemination; and problems in information flow.

Prior to general discussion by the working group regarding information related to PHC, specific keynote presentations were given, dealing with the situation in three countries: Finland, Yugoslavia and the United Kingdom. The Finnish presentation focussed on developments in the field as seen from the perspective of the local level situation in a health centre, and compared the actual situation to the concepts of "selective" and "comprehensive" PHC. The first of these focusses on medical interventions aimed at improving the health status of individuals in the most cost-effective manner and the second on the developmental processes by which people improve both their lives and their lifestyles (Rifkin and Walt, 1986). The situation in the country most nearly conforms to the description of selective PHC, despite being aimed at the more comprehensive approach with active community involvement in health planning. The presentation also critically reviewed the role of data experts in the development of health information systems for PHC, stressing that only in exceptional cases are these people the most capable of interpreting the data.

The Yugoslavian presentation first of all described the social system in the country and the existing health services information systems before identifying some of the problems and drawbacks of the current situation. Some important pilot projects in the field of PHC information at the local level in Yugoslavia were also described. It was stressed that the provision of PHC in the country is rather heterogeneous, with different emphasises in the provision of PHC services in different places. Particular weak points in the existing system

(which were also found in the statements from many other countries) included a high level of redundancy of information, very limited data analysis, little evaluation and only limited computerisation.

The final presentation was from the United Kingdom, and focussed on the situation in England. The work of the Körner committee on minimum data sets for the community health services and developments in Family Practitioner Committee and general practice information systems were outlined, together with a critical review of the associated problems. Particular problems in assuring co-ordinated planning and comprehensive information systems across the whole of the PHC sector are caused by the existency of three different types of authority (District Health Authorities, Local Authorities and Family Practitioner Committees) with overlapping responsibilities in the field. Finally, pilot projects using an approach referred to as "patch" (or locality) planning were described; the emphasis of this approach is on planning PHC to deliver a distinctive set of programmes relevant to the particular needs of the population resident in a specific locality; the involvement of the community in the planning process and in the definition of information requirements is also stressed in this planning approach.

The general discussions which followed emphasised the need to define clearly the purpose(s) for which information is required before systems for its collection and use can be established; different information will be required for different purposes and at different levels in the system. Purposes that are particularly relevant in the context of this

meeting include: identifying needs and health problems in local communities, resource allocation, (both parts of the wider planning function), and monitoring and evaluation. Also important is the question of who are to be the users of the information. The existence of explicit local objectives/targets for PHC is particularly helpful in focussing the process of defining information requirements.

PHC systems in the Member States of the European Region are very different in both content and organisation. This makes it difficult to conceive of detailed general recommendations that are applicable for all countries and this should be recognised as an underlying constraint on the discussions. However many of the country statements and presentations pointed out that the particular emphasises of PHC in different parts of the same country were often different, and furthermore that such differences were desirable if the provision of PHC was to be responsive to the particular needs of local communities.

2.2 Information related to PHC: subgroup work and discussions

The meeting discussed information related to PHC in three subgroups, spending a full day on this subject. The discussions were focussed around information for planning, monitoring, evaluating and managing PHC at the local level and did not include consideration of information required for care delivery and patient handling nor information requirements for clinical or epidemiological research. The subgroups were asked to concentrate on two main issues: information requirements at

local level, including a consideration of possible minimum data sets; and the collection and dissemination of information. Particular questions to be discussed included:

- how can the use of information be improved?

- how can information be used to support the planning of PHC according to the needs of the local populations?

- how can community participation in the determination of information requirements and information use be fostered?

- how can the collection and dissemination of information be improved?

Each of the three subgroups were asked to take a different focus for their discussions, the first group that of the single-handed health professional, the second that of a health centre or other local group of professionals, and the third subgroup focussing on the needs of coordinating bodies or other local equivalents at district level. The use of a particular focus for each subgroup discussion was not meant to preclude consideration of other points of view and most groups touched on all aspects in their reports. Distinctions were also made where necessary for different types of health system.

The variety in organisation and content of PHC across the Member States in the European Region means that it is not appropriate to conceive of a single minimum data set related to PHC; this was reflected in the discussions of all the subgroups. Minimum requirements will depend on the particular situation in a country; where common elements of PHC can be identified across a group of countries then it is possible to discuss possibilities for a common minimum data set. The meeting however was not in a position to do this in the time available. The subgroups presented lists of items which should be considered for inclusion in minimum or supplementary data sets for PHC; these are summarised in Table 1, which should be regarded as a checklist of potentially useful items. The choice of an appropriate selection from the checklist will depend on particular country circumstances, and the list is certainly not intended to be prescriptive.

The first subgroup considered information requirements according to the different purposes for which the information is required. In order to identify the problems and needs of the population the group noted that information on the prevalence of risk factors, (including alcohol and tobacco consumption, as well as the presence of possible environmental hazards in the locality such as chemical or nuclear plants), on the occurrence of accidents and the need for at-home services were all desirable items of information to enable better targetting and more appropriate provision of PHC services. A priority for public health research should be the design of standardised and simple collection instruments for items of data on risk factors like alcohol and smoking.

The group also considered that it would be useful for countries to define specific lists of what were considered to be local unacceptable events, (such as for example avoidable deaths, cases of congenital rubella, neonatal tetanus, diphtheria, poliomyelitis, nosocomial deaths or infection), and for these to be monitored through reporting from local level PHC professionals.

For the purposes of assuring appropriate coordination of care between the many different agencies that provide PHC at the local level, it is particularly important to compile a directory of services available in the locality as well as information on their accessibility. It is important to include in this details of services provided by volunteer or self help groups.

Important information required for the planning and determination of strategy for PHC includes details of the extent of health knowledge, beliefs and expectations in the local population; here it needs to be emphasised that much of this information is of a qualitative rather than quantitative nature and requires different handling and analysis skills.

The groups considered whether it would be possible to meet all the information requirements through data collection during the day to day delivery of PHC. Where possible, information requirements should be met as a by-product of operational procedures at the local level, but there are important subjects for which the data required is impossible or very

difficult to collect in this way; examples included: information on segments of the population not in contact with the PHC services, information on disability, impairment and functional capacity, information on the demand for health services, on self-perceived health and on satisfaction with services. It is thus necessary for information requirements to be met from two sources, where possible through data capture as part of operational procedures, but supplemented by results of ad hoc surveys and studies carried out at appropriate intervals. Ad hoc studies and surveys are also an important means of establishing the effectiveness of particular programmes and evaluating PHC services.

The meeting considered the use of approaches which can generally be labelled as "community diagnosis" in stimulating the provision of relevant information for planning, monitoring and evaluation of PHC. Community diagnosis is a social and technical process involving collecting, describing, analysing and disseminating information about health status and its determinants in the community. Its ultimate goal is to improve the health status of the population in that particular area by improving the basis for decision-making and by fostering community involvement.

Pilot projects involving the community diagnosis approach are being carried out in various areas of Sweden and similar approaches are being piloted in parts of the UK, under the name of patch or locality planning. These approaches form a particularly appropriate way of defining information requirements and in stimulating the effective use of

information related to PHC at the local. Similar pilot studies of the approach in other localities and countries should be undertaken and experiences from these should be collected and disseminated with the assistance of WHO.

In discussing current approaches to PHC, the twin concepts of "selective PHC" and "comprehensive PHC" were considered. The first of these focusses on medical interventions aimed at improving the health status of individuals in the most cost-effective manner and the second on the developmental processes by which people improve both their lives and their lifestyles (Rifkin and Walt, 1986). While some researchers have tended to see these two concepts as mutually exclusive, the working group identified features of both in the PHC systems of European countries, with a trend towards the increasing adoption of the comprehensive approach to PHC, represented in particular by the active involvement of the community in identifying priorities for local PHC through approaches such as community diagnosis (in Sweden for example) or the very similar patch/locality planning approaches being used elsewhere.

While discussions emphasised the importance of community participation in the definition of information requirements at the local level and in the use of such information for planning purposes, many difficulties in establishing and maintaining effective participation were identified. It is important to find strategies for developing a view of information as a resource for use by both professionals and the community at large. A major task is therefore to provide information systems that

are relevant to the needs of both health care professionals and the community; there are certain potential problems and conflicts involved in this and an important task is to try and identify ways of avoiding these.

It is important to encourage collaborative development of information systems by all parties concerned, although the distribution of decision-making power in the health system concerned affects the degree to which this objective can be realised. There is a need for continuous informal discussion between district and local level on information matters.

It is particularly important to recognise the distinction between data and information. The country statements and the discussions clearly identified that in most countries there were considerable amounts of data that were collected routinely and never used. There are many reasons for this including insufficient resources for the transformation of data into useful information; professional and commercial barriers to interchanges of data; and problems in information flows. In connection with the discussion of the resources required for the transformation of data into information, it was noted that frequently staff working at the local level in PHC have insufficient time to allow for any analysis of data and that appropriate training is rarely provided and motivation is poor; these factors effectively prevent such staff from recognising information as a resource for their use.

Local professionals must be motivated to collect, analyse and use information themselves and must be actively involved in the process of determining information requirements. Timely and clear presentation of information to the local level (feedback) is essential. The importance of relevant training should also not be neglected. A certain amount of standardisation and agreement on common definitions is required in order to permit the production of comparable information across for different localities.

There are many problems associated with the collection and dissemination of information which are common to the different countries and which impede the effective use of information for PHC at the local level. Concerted action is needed to tackle these. A checklist of the problems identified is contained in Table 2.

The need for comparative information from different places at the local level is clearly apparent, and standardised definitions and classifications to be used in data collection are obviously required. Some countries have centrally initiated and coordinated the necessary work in constructing suitable standard definitions and classifications, through the construction of detailed data dictionaries for example; this was generally regarded as a useful way of achieving comparability.

Discussions also focussed around the different forms of organisation and content of PHC in the countries represented at the meeting. While some, for example Finland, Yugoslavia, United Kingdom, involve specific local authorities with a defined responsibility for providing care to the local population, PHC in other countries (France, Netherlands, Belgium for example) is not organised in this way. This affects considerably the way PHC services are planned, monitored and evaluated, but the group considered that in all countries an information system, organised around defined local population units is necessary to fulfill all these functions, even if this is out of step with the administrative and organisational structures. It is only in this way that services can be effectively planned on the basis of need, and care delivery evaluated in terms of coverage, equity and accessibility. There is a particular role for national institutes in monitoring and evaluating the delivery of PHC in countries with little horizontal local organisation or responsibility for PHC services, and in developing the necessary information systems.

It is necessary to integrate data from different bodies providing PHC to provide the information bases required for local needs, and there are particular barriers to free exchange of information, stemming from commercial considerations where any private sector is involved, from professional barriers and also from consideration of issues of confidentiality. These barriers need careful identification in the case of each country and the issue of confidentiality raises many ethical questions that require further consideration.

The potential role of the district or next administrative level in coordinating information from more local levels and feeding back comparable information to individual local units needs to be considered; adequate feedback of information is one of the ways of motivating local staff to ensure availability of accurate data and to foster the use of information. However, there may be particular problems if the body responsible for the production of comparable information is also concerned with resource allocation or is otherwise perceived as exercising control over the local level; in such cases an independent or semi-independent organisation may be more appropriate to fill the role of producing and disseminating comparable information. The situation in this respect will clearly vary from country to country.

In many countries there is a considerable lack of knowledge at the local level about data collected in different places and how to obtain them. Careful attention needs to be given to publicising the information that is available, the rules about access to information and any charges involved. The provision of annual reports by local and district level bodies may be a useful way of improving awareness about information.

Computerised systems are frequently the most efficient and effective means of supporting information systems and assuring satisfactory production and dissemination of information. In most cases there are no remaining technical problems posed by hardware requirements and the potential exists for effective integration of data from different sources and dissemination of analysed information in a satisfactory manner.

However, the development of adequate systems also requires considerable resources in terms of system design and production of appropriate software. Furthermore, their successful use requires resources in terms of the effort required for data collection, validation, analysis of data and production, effective presentation and dissemination of information. In many countries insufficient resources are allocated to cover these most important tasks and as long as this situation continues, this will remain a crucial barrier preventing the production and use of effective information relating to PHC. In comparison to the health sector, private industrial concerns, for example, devote considerably larger budgets to cover these important areas.

TABLE 1: ITEMS TO BE CONSIDERED FOR INCLUSION IN
LOCAL LEVEL DATA SETS RELATED TO PHC

<u>SUBJECT</u>	<u>ITEM</u>
Population	- Identification of individuals with aggregation of information according to demographic, geographical and socio-cultural variables
Health status	<ul style="list-style-type: none"> - mortality rates - disability and impairment - degree of dependency/functional capability (using activity of daily living scales etc) - incidence and prevalence of selected diseases (for example polio, measles, congenital rubella for children, cerebral stroke and cancer of the cervix uteri for middle age groups, incidence of home accidents for the elderly, tetanus for all ages) - prevalence of selected health related behaviours (eg alcohol and tobacco consumption) - self perception of health - occurrence of "unacceptable events" (see text for discussion)
Services	<ul style="list-style-type: none"> - resource availability and accessibility (for staff this should include information on Whole time equivalent numbers, and also possibly level of education of staff and length of time in area) - service availability and accessibility - integration of data on services provided by different authorities, including voluntary and self-help groups

(CONTINUED)

<u>SUBJECT</u>	<u>ITEM</u>
Utilisation	<ul style="list-style-type: none"> - patient identification with possibility to aggregate usage across different services - ability to follow path of patients through PHC system (and referral to secondary and tertiary levels) - continuity of care - utilisation rates of all providers
Outcomes	<ul style="list-style-type: none"> - equity in relation to need (for example usage of services by different socio-economic, cultural and geographical groups standardised for age/sex and presence of long-standing illness) - costs (user based, provider based and disease based, identification of staff costs and drug costs) - user satisfaction - coverage with selected services - see also health status section
Other items	<ul style="list-style-type: none"> - health related knowledge, beliefs and expectations of the population - occurrence of accidents - potential health risks in the local environment - quality of services

Note: It may be appropriate to provide some of these items for samples of the population only.

TABLE 2 PROBLEMS IN COLLECTION AND DISSEMINATION OF INFORMATION
IDENTIFIED IN COUNTRY STATEMENTS AND DISCUSSIONS

- different information systems maintained by different health professionals
- little interchange of information between health professionals
- much data is collected and never used
- data available through surveys etc is often not fully exploited at the local level
- long time periods between information collection and dissemination
- insufficient feedback of information to local level
- difficulty of assuring necessary safeguards regarding confidentiality
- legislation on confidentiality can limit availability of data
- commercial barriers to interchange of information between public and private sectors
- lack of standardisation in data definition and collection hinders interchange and prevents comparability
- information not problem oriented
- very little dissemination of information to community at large
- information is disease rather than health oriented
- inaccurate data

- insufficient validation of data
- poor motivation and involvement of local level personnel
- poor linkage of data, not permitting identification of information related to family units or small communities
- use of non-standard software in computerised systems hindering easy interchange of data
- poor horizontal integration of PHC information
- insufficient training in value and use of information at local level
- insufficient resources devoted to the creation of information from data
- poor presentation of information

2.3 Review of PHC related Regional indicators

One purpose of the working group was to assist in the review of the regional indicators for Health for All in the European Region relating to PHC. The history of the development and use of the regional indicators was presented to the meeting as a background for the discussions, and a detailed review of the indicators from the point of view of Member States was also presented; the contents of this are reproduced in Annex 3 of this report. The current review of the regional indicators has to be completed by the end of April 1987, when the indicators for use with the Common Framework for Monitoring to be used in the next monitoring exercise taking place in 1988 will be finalised. As well as the review of the indicators to be carried out in the present meeting, participants were invited to submit any further comments they might have on the indicators following the end of the meeting.

Both speakers focussed on reviewing critically the current indicators related to PHC in the set of regional indicators and emphasised that much further development work was needed. In relation to PHC it is important to consider many of the regional indicators apart from those associated with targets 26 to 30 (the targets specifically focussing on PHC), since the achievement of progress towards many of the other targets was crucially dependent on activities in the PHC sector. Of particular relevance are the indicators covering lifestyles, health related behaviour, health education and environmental health.

Several of the regional indicators had been poorly reported on in the 1984/85 evaluation of progress towards the regional strategy for Health for All. In some cases this was because the information was not available and in others because of lack of clarity in the formulation of the indicators; the meeting assisted in identifying the indicators that required clearer explanation as well as making suggestions for new indicators in relation to PHC. The meeting also considered the relevance of the indicators for use at the local level in individual countries.

In the main, outcome indicators were represented by mortality indicators and the set was dominated by indicators related to resources and policy; it was recommended that further development of process, output and outcome indicators take place, with an emphasis on the measurement of positive aspects. In connection with this it was noted that the Nordic countries are jointly trying to develop uniform questions for surveys on morbidity and perceived health.

Particular gaps in available indicators were represented by the topics of: satisfaction of need; effectiveness; efficiency; continuity of care; accessibility; and measures of the process of PHC delivery. Coverage of the content of PHC was only partial in the existing set of indicators. It was also suggested that measures of equity within countries could usefully be obtained by requesting information on the standard deviation or range across the local level for established measures at the country level.

In many of the countries represented at the meeting, it was noted that there had been only a very limited distribution within the country of the country's response to the 1984/85 evaluation of progress towards the European regional strategy for Health for All, and of the resulting regional evaluation report. It was considered that these documents should be more widely distributed in future, although the sheer volume of some countries' documentation might prove a problem.

The derivation of appropriate overall indicators related to PHC for inclusion in the set of regional indicators is made particularly difficult by the variety in organisation and content of PHC in the Member States of the European Region. These complicated comparisons between countries in many cases put the emphasis on the examination of trends in individual countries. Improved indicators may be possible where common elements of PHC can be identified across a group of countries. The meeting, however, was not in a position to identify such common elements in the time available.

The discussions identified many instances where the formulation and explanation of particular regional indicators needed to be made clearer. Particular examples included the confusion between availability and accessibility of resources and services, and the need to clarify the meaning of some key terms such as: coverage, local health care, and first level contact.

One of the subgroups discussed in detail possibilities for indicators of accessibility. Barriers to use of services could be seen in terms of different determinants like knowledge, physical inaccessibility, economic barriers, language barriers, cultural, religious and social barriers. Detailed indicators can be proposed corresponding to each of these, but most will be appropriate for use only in particular countries or localities. The importance of measuring differential levels of access in relation to the target on equity was stressed.

Some suggestions for potential new indicators were also proposed: the possible use of tracer conditions to measure aspects of accessibility; percentage of first contacts which were with family physician or other PHC personnel; existence of standardised health record available to all relevant personnel; percentage of PHC doctors who are vocationally trained; in relation to community participation - whether representatives are elected or appointed, existence of pressure mechanism such as complaints systems, etc.

The discussion on the regional indicators also considered their relevance for use at local level in countries. Some will not be particularly useful at local level owing to problems with small numbers, for example some of the mortality indicators which would be based on very small numbers at local level. In addition some of the indicators present particular measurement problems at local level owing to factors such as data availability (a particular problem where the information is

collected through national surveys and where the sample size may not be sufficient to permit disaggregation to the required local level), ill-defined catchment populations and cross boundary flows, (a particular problem in urban areas).

There was a considerable overlap between the set of regional indicators and sets of indicators already in use in some countries, and with the information that could readily be produced from routine statistics in other countries.

The process of defining indicators for local level use needs to be done in each country individually, given the range of content and organisation of PHC. The existence of clearly defined national or local targets and objectives for PHC is a prerequisite for the definition of useful indicators related to the planning, monitoring and evaluation of PHC at a local level. In many places, considerably more effort needs to be put into the definition of such objectives before attempting to define indicators for local level use.

3. VISIT TO VARKAUS HEALTH CENTRE

During the meeting the participants visited Varkaus health centre to see the Finstar information system which has been developed by the health centre in collaboration with the University of Kuopio. The health centre is located on a main site shared with the district hospital and other

secondary and tertiary level facilities, and has several satellite primary health care stations; the visit was to the main centre. The centre serves the population of Varkaus and surrounding areas, around 33,000 people in all; some PHC is also provided on a private basis in the area as well.

The Finstar information system is based around a comprehensive computerised health record for each patient, which is selectively accessible to all health care professionals in the centre. Basic information is also available from the National Population Registry Office on all the residents of the area served by the health centre. This is updated as necessary for persons moving into the area and newborns.

The major use of the system so far is in the day to day organisation and management of patient care, with appointment booking systems etc. A selection of management reports covering activity statistics are also routinely produced. The system has the potential to produce much information relevant to the planning, monitoring and evaluation of PHC, although at present this is usually done on an ad hoc basis by individually interested professionals. It is not possible at present to produce information on episodes of patient care easily and care provided by the private sector is not included in the system. The Finstar system is in use in 20 installations in Finland, mostly health centres.

The visit to the health centre was extremely useful for the group in illustrating some of the possibilities of information systems for patient administration producing relevant information for planning, monitoring and evaluating purposes; it also demonstrated how some of the information requirements for these purposes can be easily met as a by-product of routine operational procedures.

4. CONCLUSIONS

As a general conclusion the group emphasised the importance of information and information systems for PHC as a necessary precondition for the planning and provision of effective PHC at the local level. In line with the European regional target on health information systems in general, the vital support role of information systems in PHC should be recognised.

Local, regional and national objectives and targets for PHC are particularly important in formulating appropriate information systems and constructing suitable indicators for PHC. Owing to the considerable differences between countries in the way that PHC is organised, differences in approach to both these issues are to be expected, although the experiences of other countries are selectively useful in most cases. The purpose for which information is required needs to be clearly understood before its content and format can be decided, since different types of information are required for different purposes and at different

levels in the health services system. The purpose for which the information is required needs to be understood both in terms of what it is intended for and whom it is intended for.

The variety of different organisational structures and content of PHC in the Member States of the European Region means that it is not appropriate to conceive of a single minimum data-set for PHC: this will depend on the existing situation in a particular country. Individual countries need to consider whether it is appropriate to define, for use within their country, a minimum data set for PHC, with standardised definitions and classifications to permit the production of comparable local level information within the country. Where common elements of PHC can be identified across a group of countries, then it is possible to discuss meaningfully the possibilities for a common minimum data set.

Although no conclusions are possible about the detailed content of an international minimum data set, the country statements and the discussions of the groups identified many items of data which should be considered for inclusion in such a set or for collection as supplementary items; these are summarised in Table 1 earlier in the report. It is also possible to state some general conclusions about the organisational approach to the setting up of information systems for PHC. Adequate information to permit examination of questions of coverage and to provide an epidemiological planning base on a local level is extremely unlikely to be available unless data are collected at the local level on the population base for which services are being provided. The construction

of a population based information system (by integration of data from different sources if necessary) should be regarded as essential, whatever of the administrative and organisational structures associated with PHC in the country concerned.

There can often be a conflict between the requirements for information systems for health care professionals and those for the community, with the danger, for example, of medicalisation of problems. For this reason the group spent some time discussing the problems and conflicts that can arise in this context and considered the factors which would help ensure that the needs of both parties are met. The importance of community participation was recognised by the group and the practical difficulties of maintaining it in the long term considered. Approaches such as those provided by the community diagnosis and patch/locality planning methods are regarded as potentially useful ways of fostering community participation in the planning and management of PHC as well as of making these processes more effective and responsive to the particular needs of local communities. Further field studies adopting this type of approach should be carried out in the Member States in the region; the results of these and existing studies should be collected and disseminated with the assistance of WHO.

The active participation of all types of local health care personnel in the discussions about requirements for information, in its collection and in the use of such information is of vital importance in assuring the existence and use of effective information for and about PHC. Local staff need to be motivated and involved in this respect, and as far as possible information requirements for higher administrative and planning levels should not require additional efforts on the part of local staff to those required to produce information for local needs. Adequate and regular feedback of information must be recognised as an essential incentive for increasing the motivation of local staff for information collection and use.

From the discussions held it is apparent that in all countries there are many problems with existing information systems and in particular with ensuring adequate dissemination of information (see Table 2 for a list of the problems identified in this area). This should be an urgent priority for action in Member States.

In discussing information for PHC, it is extremely important to stress the difference between data and information. While considerable amounts of data are often available from both manual and computer systems, in many cases this is not effectively transformed into information for use in the planning, monitoring and evaluation of PHC. Information is usually not limited to quantitative information and qualitative elements must also be incorporated.

A key question was how to make information a resource to be used in the planning, monitoring and evaluation of PHC. Appropriate presentation and dissemination are the key factors in influencing effective use of information. Appropriate training has a significant role to play in improving effective dissemination and use of information at the local level.

With the increasing sophistication of computer technology, which is generally becoming less expensive over time, the technical barriers to the existence of appropriate information systems for PHC are decreasing; there is however a particular problem in ensuring that adequate resources are available to provide for the satisfactory creation of information from the raw data-base and to permit full dissemination of this information.

In contrast to the situation in many private industries, it was noted that in the health system insufficient resources are often set aside for the transformation of data into information and for its effective dissemination. Local level staff, who are best placed to interpret information on local trends, usually do not have sufficient time, motivation or training to use the information in this way, and much of the data collected is never used. Member states should give priority to increasing the amount of resources earmarked for the development and use of information relating to PHC at the local level; this should not be limited to the introduction of computerised systems where appropriate, but should also include resources in terms of staff time.

Some items of information required for planning on the basis of the particular needs of local communities will often not be available as a by-product of routine operational procedures; examples include information on self-perceived health status, disability and impairment and information on the portion of the population not in contact with the PHC system. Information obtained from the routine operation of PHC systems thus needs to be supplemented by the results of special surveys, carried out at appropriate intervals to address such issues. Research institutes have an important contribution in carrying out such ad hoc studies and surveys in collaboration with local level PHC providers.

There are particular problems in ensuring adequate information where PHC providers are divided amongst many different authorities or where a considerable private sector exists and there are commercial or professional barriers to the free interchange of information. Issues of confidentiality with regard to personal information and its use also need particular attention.

5. RECOMMENDATIONS

1. On the basis of a clear and precise statement of the structure and content of PHC in their own countries and against a background of the process of decision-making and any national targets for PHC, Member States should recognize the importance of information as a resource that can contribute to the effective planning, monitoring and evaluation of PHC and should establish national guidelines for information collection.

2. National Health Statistics should allow the easy identification of resources associated with the delivery of PHC (especially manpower, but preferably also financial) at national and local levels so that the distribution of resources between the primary and other health care sectors can be identified and monitored. Activities including programmes in PHC should also be easily identifiable.

3. Information systems for PHC at the local level should be constructed around a defined population base so that important items such as coverage can be measured. This should apply even in countries in which the organization or administration of PHC is structured around the delivery of services to a defined population, although the Group considered that founding organizational and administrative structures on a defined population base aids the effective delivery of PHC.

4. Member States should ensure that sufficient resources are provided to allow the raw data collected to be turned into the information essential for the planning, monitoring and evaluation of PHC. The term resources should be understood to include resources for collecting data and analysing, presenting and disseminating information, as well as putting information systems on computers where appropriate.

5. For the successful development of information for PHC at local levels, Member States should recognize the need for field studies, with particular emphasis on the use of information to test and evaluate approaches such as community diagnosis or patch or locality planning, for example.

6. Member States should recognize the existence of considerable problems in disseminating information and that these should be a priority for future action. Improvement is needed in the return of information at local level, the interchange of information between different professionals at the local level, the use of information and training in its use, as well as in identifying and overcoming the barriers to effective information dissemination.

7. Member States should recognize that ad hoc studies and surveys will be needed to meet special needs for information in PHC at local level.

8. WHO should encourage and assist in setting up field studies, ad hoc studies and surveys, for example, by helping to coordinate discussions between countries and relevant research institutes with similar problems in developing population-based information systems.

9. WHO should facilitate the dissemination of results from studies, especially details of their use in decision-making, and the interchange of experiences in different countries in the development of information for local PHC.

10. WHO should discuss with the United Nations Economic Commission for Europe the possibility of including questions about PHC in household surveys.



Working Group on Information
for Primary Health Care
Kuopio, 9-12 December

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Working Group on Information
for Primary Health Care

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Kuopio, 9-12 December 1986

9 December 1986

PROVISIONAL PROGRAMME

Tuesday, 9 December

09.00 - 09.15

Registration

09.15 - 10.00

OPENING SESSION

- Welcome address by hosting institute
- Opening address by the representative of the Regional Administration of the Province of Kuopio (Ms Tuula Eerola, Chief, Department of Social Affairs and Health)
- Opening address (including Scope and Purpose of Working Group) (Dr W. Hubrich)
- Election of Chairman

10.30 - 12.30

OVERVIEW OF PHC RELATED INDICATORS FOR MONITORING PROGRESS TOWARDS HFA

- WHO's viewpoint (Dr M. Thuriaux)
- Viewpoint of Member States (Dr R. Salmela)

followed by discussion

14.00 - 15.30

PRESENTATION OF COUNTRY STATEMENTS FOR INFORMATION ABOUT AND FOR PHC

- Finland (Dr M. Rimpela)
- Yugoslavia (Dr Vuletic)
- UK (Ms A. Taket)

followed by discussion

16.00 - 17.00

Continuation of discussions

Coffee breaks: 10.30 - 11.00 and 15.30 - 16.00

Lunch break: 12.30 - 14.00

Wednesday, 10 December

09.00 - 09.15	Summary of previous day's discussions (by Chairman)
09.30 - 10.30	STATE OF THE ART RE INFORMATION FOR PHC IN MEMBER STATES - obstacles and problems Continuation of discussions from previous day
11.00 - 12.00	continuation of discussions
12.00 - 12.20	COLLECTION AND USE OF INFORMATION FOR PHC AT THE LOCAL LEVEL. Overview based on statements by participants (Dr W. Hubrich)
12.20 - 12.30	Structure for sub-group work
14.00 - 15.30	Sub-group work
16.00 - 17.00	Sub-group work (continued)
17.00 -	DEPARTURE FOR VARKAUS HEALTH CENTRE (demonstration of information system used in health centres)

Thursday, 11 December

09.00 - 10.30	Sub-group work (continued)
11.00 - 12.30	Plenary session - report back by spokesmen of sub-groups
14.00 - 14.10	INTRODUCTION TO SUB-GROUP WORK (FOR AFTERNOON SESSION) (Dr M. Thuriaux; Dr R. Salmela)
	<u>Sub-Group Work</u>
14.10 - 15.30	ASSESSMENT OF EXISTING INDICATORS AND PROPOSAL FOR NEW INDICATORS FOR PHC
16.00 - 17.00	Plenary session - report back by spokesmen of sub-groups

Coffee breaks: 10.30 - 11.00 and 15.30 - 16.00

Lunch break: 12.30 - 14.00

Friday, 12 December

09.00 - 10.30	IDENTIFICATION OF FURTHER INFORMATION NEEDED FOR PHC (plenary session)
11.00 - 12.15	PRESENTATION OF WORKING GROUP REPORT (by rapporteur); followed by discussion
12.15 - 12.30	Closure of Working Group

Coffee breaks: 10.30 - 11.00

ANNEX 3

Reijo Salmela, M.D., M.P.H.

THE RELEVANCE OF THE REGIONAL INDICATORS RELATED TO PRIMARY HEALTH CARE FROM THE VIEWPOINT OF THE MEMBER STATES

WHO Working Group on Information for Primary Health Care

Kuopio, Finland, 9-12 December 1986

Indicators of primary health care

According to the regional strategy (1980) the concept of primary health care (PHC) is very large (Figure 1), and therefore the indicators related to regional targets 26-30 (so called PHC targets) do not meet the information needs of planning, monitoring and evaluation in PHC. Out of these 5 targets 2 clarify the overall design of the health care system and crude resource allocation, and 2 others are related to essential elements of PHC (e.g. coordination of human resources and intersectoral collaboration). Only target 28 describes directly the contents of PHC, but its indicators are very MCHC (maternal and child health care) oriented at the moment, giving no picture about health care of adult men and the elderly, and no picture at all about curative health services.

Information needs in PHC

The information needs based on a comprehensive concept of PHC can be classified in two main categories, which are based on the two main types of decisions needed in health care management:

- 1) determinants of health i.e. factors affecting mortality and morbidity irrespective of administrative boundaries. Decisions about priorities in preventive work are based on this information.
- 2) consequences of ill-health, i.e. provision of services in an appropriate, efficient, effective and equitable way. The planning and management of health services needs this information.

The main concepts in this second group are described in Figure 2. The present regional indicators do not meet all these information needs. There still remain essential gaps to be filled by new regional indicators or by national indicators, the greatest gaps being in indicators of

- a) satisfaction of need, continuity and availability of care
- b) process and performance
- c) output, activities and services (primary, secondary and tertiary levels)
- d) efficiency and effectiveness.

The use of regional indicators at different levels

The regional indicators are aimed at monitoring progress towards regional targets, and these indicators have been planned to serve first and foremost the WHO Regional Office of Europe. The starting points and circumstances in the European member nations are very different, and this has some consequences lowering the usefulness of regional indicators at the national level. Many regional indicators monitor progress at the health policy level, and this is especially true for the indicators related to primary health care, targets

26-30. Therefore these indicators do not very well reflect the actual changes in health services delivery system, and are difficult to apply to the local level.

Regional indicators that refer to the existence of national programmes are mostly of no use at local level, because these programmes in most countries are really applied countrywide. At the local level these indicators should describe the actual implementation of the national programmes.

The global targets and indicators are not ambitious enough for the industrialized European region. Therefore the global indicators should be reformulated in the European region to include two steps indicating a) the number of countries having reached the global target, b) the number of countries having reached higher specified European target levels.

At the national level indicators should be used for two main purposes. First, to monitor progress towards national targets. Many regional indicators are useful both at national and local levels, but they need to be adapted to local ends. The wording cannot be the same everywhere at the national and local levels. It must be emphasized, that every country should formulate its own national NFA strategy as soon as possible. The European targets and indicators alone do not create necessary changes in health policy. According to the principles of epidemiology: if there are no national targets, there is nothing to monitor and there is nothing to evaluate at the national level. The second use of indicators at the national level is to

monitor progress towards regional targets, but the regional indicators should be only part of the national indicator list.

At the local level the most relevant approach is not to discuss the application of regional indicators at the local level. It is more practical to discuss indicators related to national targets, which should be formulated according to regional targets (as well as indicators, respectively). The reasons for this approach are that

- a) workers at the local level are not motivated to collect data needed for monitoring progress towards regional targets. National and local targets are preferred.
- b) regional indicators are not always valid from a local viewpoint,
- c) data collection and processing at the local level should be based on appropriate national and local targets, formulated according to principles of decentralization and self-reliance, and preferably based on the "community diagnosis" approach.

The local level has difficulties in using some mortality indicators owing to problems of small numbers. The local level has also problems with relevant denominators e.g. in countries with family practice system, where patients are not from a geographically defined district.

Data collection and management

The problems of data collection were generally speaking underestimated in the preparation of the tentative list of regional indicators. In the target document it was assumed that the information needed would

be available in most countries for 55 out of 65 essential regional indicators. In the first evaluation in 1985 it could be seen that the member nations could only provide information for 50 % of the indicators, on an average. Some experiences might be concluded about data collection and management:

- a) In theory it seems good to use the same indicators at the local, national and regional levels, and it is only a question of aggregation of data from lower administrative levels to higher levels. In practice this kind of principle does not always work, because the concepts, definitions, stages of development and circumstances are so different that it is not possible to gain international comparability of local indicators. This principle of aggregation of data is usually good inside member countries, but not practicable for international comparisons. For most indicators the national aggregate data must be further processed for purposes of regional monitoring and evaluation.
- b) It is recommended to obtain information for many indicators by national surveys (e.g. about the need of health services, satisfaction of demand, health behaviour). Perhaps the work load and expertise required for large national health surveys has been underestimated. According to experiences in Finland, nearly 10 years are needed for planning and reporting a large national health survey with recommended detailed disaggregations according to age, sex, geographical location, socioeconomic status etc.
- c) It will be difficult to get good comparability, if very many local surveys are carried out separately. It might be better to use national surveys, in which results are disaggregated according to local administrative units as well. This necessitates large samples.

d) PHC should be equivalent to more rational use of health resources. However, it is very difficult to assess effectiveness and efficiency of services by routine statistics. Therefore it is usually necessary to carry out special evaluation studies, which are time consuming. It will be very difficult to formulate regional indicators for effectiveness or efficiency, and at the moment these are practically lacking.

Evaluation of progress and equity

Because of low comparability of national data, in the next evaluations and monitoring exercises the trends towards the regional targets and towards the national targets must be emphasized. Therefore the countries should also state, what national target is regarding each indicator. For example, increase in a resource indicator may in some countries mean a positive trend, but in some countries a negative trend in comparison with national targets.

The first regional evaluation in 1984-85 did not give any clear picture about the progress towards equity inside the member countries. Because equity is one of the most important principles in HFA strategy, some standard method for measuring progress towards equity should be accepted. The minimum requirement is that the countries could state the minimum and maximum values between their main geographical units (e.g. provinces). However, a much better indicator of trends in equity is the coefficient of variation, which describes the variability by expressing the standard deviation as a percentage of the mean

$$CV(x) = \frac{sD}{\bar{x}} \times 100 \%$$

This coefficient of variation can be used for comparisons between different points of time and countries. If we want to reduce the inequalities in health status it is quite necessary to monitor the progress in health status at the local level as well, and undertake geographical comparisons. I suppose that this is not customary at this moment, most information related to health status is collected and analyzed at the national level only.

At the European level it is necessary to have separate lists of essential and optional (supplementary) indicators. At the national and local levels this distinction is not needed, if health care has uniform organization all over the country.

Revision of regional indicators

The first evaluation in 1985 revealed that the regional indicators must be revised. Proposed modifications in the indicators were discussed in the Regional Committee for Europe in September 1986 (Revision of the Regional Indicators and Plan of Action for the Implementation of the Regional Strategy for Attaining Health for All by the Year 2000, EUR/RC36/10), and the revisions will be submitted to Regional Committee again in 1987. Generally speaking the proposed revisions are better formulated, and they are giving more detailed and concrete information about the progress towards regional targets.

According to the global and regional HFA strategies the national health authorities should consider the possibility of modifying the national information systems to incorporate the routine collection of global and regional indicators. This modification might be easier if

the regional indicators were not changed too often and too much, because the changes in national information systems require considerable time. So far, most countries have not changed the information systems to suit the purposes of HFA strategy, and therefore even essential revisions in the list of regional indicators are acceptable in 1987. After this, great changes in the list of indicators may not readily be accepted by the member states.

(Detailed comments on regional indicators from the viewpoint of the member states are included in a separate statement paper "Approaches and use of information systems for PHC in Finland"., by R. Salmela and A. Hakkarainen).

FIGURE 1. SYSTEM OF PRIMARY HEALTH CARE MUST:

- BE BUILT ON THE PRINCIPLE OF COMMUNITY PARTICIPATION
- BE STAFFED BY A MULTIDISCIPLINARY TEAM,
- SERVE AS FIRST POINT OF CONTACT TO THE NATIONAL HEALTH SYSTEM.
- BE SUPPORTED BY AN EFFECTIVE REFERRAL SYSTEM
- PREVENT DISEASES, PROMOTE HEALTH, CARE AND REHABILITATE.
- MAINTAIN A CONTINUITY OF RELATIONSHIP WITH EVERY MEMBER OF THE POPULATION IT SERVES.
- REACH OUT INTO ALL HOMES AND WORKPLACES SYSTEMATICALLY TO IDENTIFY THOSE AT HIGHEST RISK.
- HELP PEOPLE TO ASSUME GREATER RESPONSIBILITY FOR THEIR OWN HEALTH.

SOURCE: REGIONAL STRATEGY FOR ATTAINING HEALTH FOR ALL BY THE YEAR 2000.

EUR/RC 30/8 REV. 2, 1982.

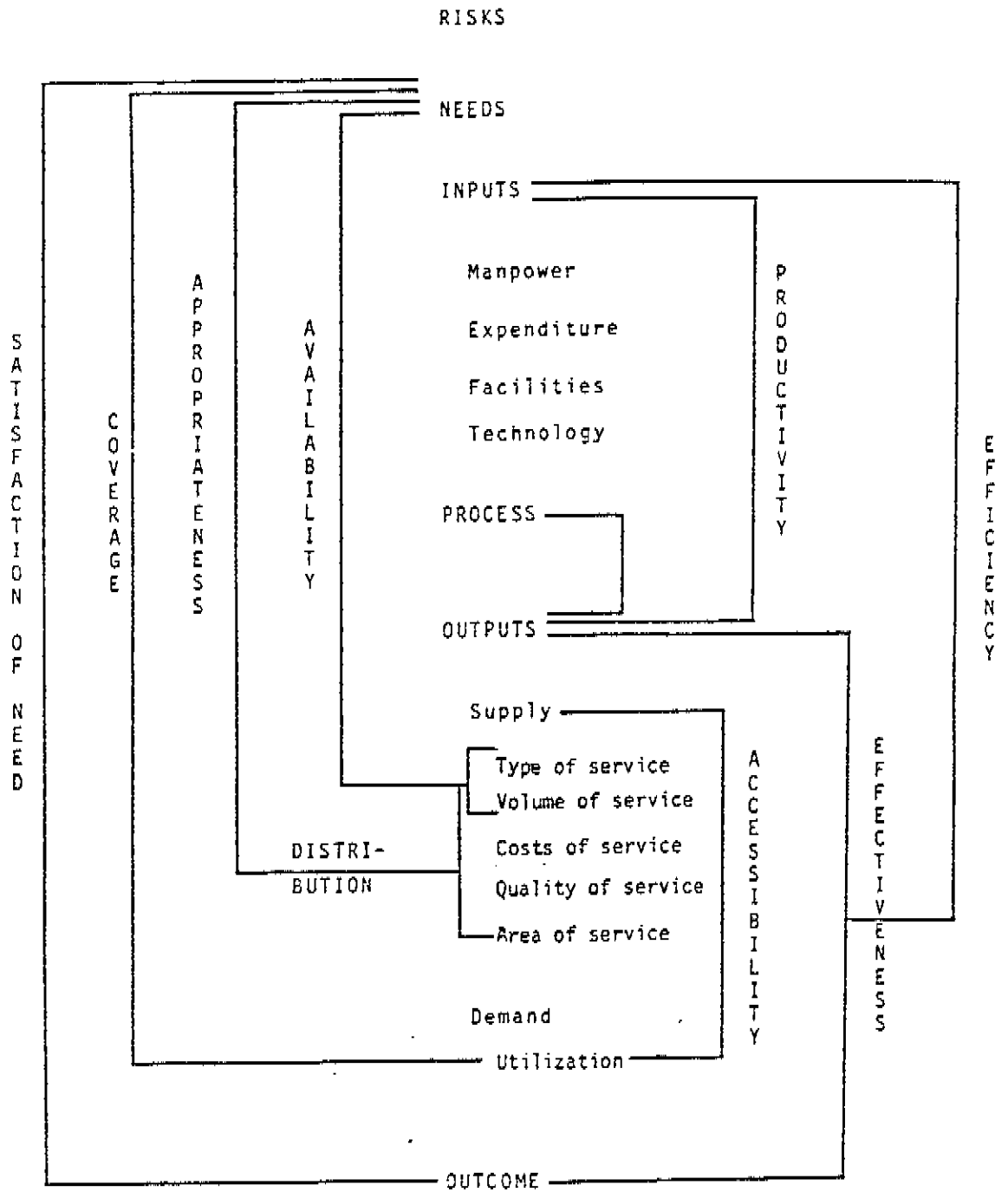


FIGURE 2. Key concepts in health care delivery (modified from: Health Serv. Research Planning Group, Medical Research Council of Finnish Academy, Helsinki 1980)