

WONCA INTERNATIONAL DICTIONARY FOR
GENERAL/FAMILY PRACTICE

edited by

NIELS BENTZEN

WONCA INTERNATIONAL CLASSIFICATION COMMITTEE

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PREFACE

WONCA, the World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians (Gps/FPs), short the World Organization of Family Doctors, through its various committees and working groups is trying to improve the quality of primary care throughout the world. One important method of achieving this is to improve communication. The basis for a good communication in general/family practice is understanding what is said and written about our speciality. We must have a common language to describe our patients' reasons for encounter and our professional work. When WONCA was established in 1963 an International Committee for Classification was formed - the WONCA International Classification Committee (WICC) - and it is this committee, that has undertaken the task to develop a classification for primary care - the International Classification of Primary Care (ICPC) - and a WONCA International Dictionary for General/Family Practice.

In the nineteen seventies the WICC recognized the need for defining criteria for diagnoses to be used in classifications. These criteria were published in International Classification of Health Problems of Primary Care - Defined, (ICHPP-2-Defined)¹ in 1983 in order to improve the consistency of coding in general/family practice. This classification has recently been updated through the publication of the International Classification of Primary Care, 2nd Edition, (ICPC-2)². In order to improve the consistency of coding even further this classification has inclusion and exclusion criteria listed under most of the reasons for encounter and all the diagnoses.

During this work it became apparent that there is a great need to ensure that the concepts and terms we use should be defined in the same precise way. The work of the WICC in the late eighties could be compared with the work of an architect who was designing a building, before it was decided what size and shape the bricks should have. Alongside the work with the classification and the diagnostic criteria, the work of defining and standardizing concepts and terms related to central themes in general/family practice was commenced. In other words the members of WICC had to agree on the size and shape of the bricks, they were going to use to build the house: the ICPC.

At the same time many newcomers joined the family of WONCA. Countries which had been concealed by the iron curtain now opened up, and the primary care physicians in these countries started to look around in order to get new ideas on how best to revitalize their primary care. In many of these countries general/family practice is now emerging, but in order to make that possible our "new" colleagues must communicate with that part of the world, where general/family practice has developed over the years. Their need for a source from which they can learn the meaning of the new concepts and terms, they have to use, is enormous. They need an International Dictionary of General/Family Practice. In WICC we hope that GPs/FPs, whose first language is not English, will translate and adapt the dictionary to their own language.

GPs/FPs whose first language is English may also need a dictionary which can clarify the meaning of the terms they use. The English language is developing differently in different parts of the English speaking world. It is as if the bricks we are going to use have different colours, and that will not make a nice building, so we have to agree on the colour as well. WICC uses English as its working language and has decided to make this first dictionary in English English.

The core of this dictionary is General Practice Glossary (1973)³ and International Classification of the Health Problems of Primary Care (ICHPPC) (1976)⁴. These glossaries are the basis of WICC's ICHPPC-2-Defined, ICPC⁵ and International Glossary for General/Family Practice (1995)⁶. John M. Last's book "A Dictionary of Epidemiology"⁷ has greatly inspired the International Classification Committee because of its content, format, and definitions of epidemiological terms. Many epidemiological terms are used in general/family practice research, and it was decided to amalgamate and update previously published general/family practice glossaries to one comprehensive dictionary containing terms which are especially relevant when GPs/FPs communicate about the work in their practices, with patients, in research, and in education.

Members of WICC and other WONCA committees and working parties as well as GPs/FPs outside these committees have commented on the work, as it progressed over the years. Drafts of the dictionary have been discussed at the annual meetings of the Committee and have been

submitted to WONCA's other working groups. A number of key GPs/FPs around the world, who have shown interest in developing a national or international language for general/family practice have commented on the dictionary. Administrators of primary care and consumer advocates of general/family practice services have also been involved. These contributors have been most helpful in ensuring an extensive collection of terms and their definitions.

The representation of different countries among the contributors is object to a certain disparity. There are e.g. many contributions from Australia and Scandinavia but few from e.g. the USA. This is by pure coincidence and certainly not intended by me. I asked for contributions to the dictionary, and the response is reflected in the national representation of contributors. The foundation of this dictionary (references 3, 4, 6, 7) has a very broad representation of contributors.

A few have done extensive work on the dictionary, either by reviewing it thoroughly or by ensuring that a network of professionals have commented on it or suggested further terms. Without the editing help of this group the work would have been very difficult, if not impossible. As an editor I have decided what to include and what to omit. For these decisions I take full responsibility, knowing that it is impossible to satisfy everybody.

The main purpose of this dictionary is to act as a reference for GPs/FPs throughout the world, so that they can communicate meaningfully about general/family practice now and in the near future. The dictionary tries to cover general terms regarding organization of and work in general/family practice: research, classification, and epidemiology. In order to communicate efficiently in the field of international general/family practice it is also important to agree on the meaning of concepts and terms related to education, training, teaching and learning, medical records, ethics, screening and preventive medicine, resource management, case mix, risk assessment, quality assurance, health services and health services research, practice management and administration, health informatics and health education, health economics, insurance reimbursement, and other central general/family practice subjects.

Some terms from other medical specialities have been included, along with terms from other areas

relevant to us. Many terms are from general/family practice itself and represent the core of our identity. The source of the definitions (i.e. specific references) is deliberately not included in the text, but a bibliography is listed at the back of the dictionary.

Clinical terms have been omitted. Terms used for the patients' reasons for encounter and clinical terms used by the GP/FP, are listed in ICPC-2, which contains often used terms for symptoms and diagnoses in general/family practice. ICPC-2 and the WONCA International Dictionary for General/Family Practice should be regarded as complementary.

WICC knows that this dictionary may contain controversial definitions. But we had to begin somewhere, realizing that our professional language is like a building which changes over time and needs maintenance, renovation, updating, and additions. In that way our language resembles general/family practice, always developing and changing. It is my hope that this dictionary will provide a substantial reference base regarding general/family practice work, management, organization, and structure, and that it also will be useful for other health workers, administrators, and others, who work within the health care system.

I am very much aware that a dictionary is never completed, and that this first edition is especially vulnerable to criticism. Some concepts and terms may be outdated, misdefined, or missing. I hope, however, that everybody interested in a living and up-to-date general/family practice language, will assist in changing, updating, and renewing the dictionary by making their comments to the WONCA International Classification Committee. (Internet address: wonca@bigpond.com).

The work has been possible due to funding from WONCA, "Magda and Svend Aage Friederich Mindelegat", "Fonden Vedrørende Financiering af Forskning i Almen Praksis og Sundhedsvæsenet i øvrigt" and "Praktiserende Lægers Uddannelses- og udviklingsfond", which provided travel support and financed some of the professional and secretarial assistance.

My secretary Lise Stark has been a great help, not only because she masters the English language but also because she has attended to the contact with the other members of WICC and the

contributors. Without the work of Chris Peterson, Deborah Saltman, and Philip Sive this dictionary would not have been possible. For the progress and the daily work I am much indebted to Bent Bjerre, a retired general practitioner, who's hobby is the English language. He has been an inspiring help and his assistance both as an contributor and professional secretary has been invaluable.

Niels Bentzen

Editor, Chairman of WICC

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A NOTE TO THE READER

Entry words are written with capital letters while the following text starts with a small letter in order to mark the transition from entry word to text. Words in the text written with capital letters are themselves found as entry words in the dictionary.

When referring to persons (patients, physicians) I use "he" when meaning "he/she". When referring to a medical graduate, who is not specifically a GP/FP, I use the term physician rather than doctor. Concerning the alphabetical listing in the chapters A - W I have chosen to list according to the initial letter in the qualifying adjective (e.g. CLINICAL TRAINING in preference to TRAINING, CLINICAL). This may seem inconsistent but is directed by common usage and supported by cross references. The cross referencing does not pretend to be comprehensive but should guide the reader towards actual entries.

I have chosen to refer to books with a broad scope within the actual topics in preference to studies with a narrow scope. Many definitions have been revised and re-edited to an extent that makes a reference to a specific source meaningless.

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ACRONYMS OF MEMBER ORGANIZATIONS OF WONCA

ANDORRA, AAMDP: Associacio Andorrana de Metges D'Atencio Primaria, Andorran Society of Primary Care Doctors.

AUSTRALIA, RACGP: Royal Australian College of General Practitioners.

AUSTRIA, OGAM: Österreichische Gesellschaft für Allgemeinmedizin, Austrian Society of General Practice/Family Medicine.

BANGLADESH, CGPB: College of General Practitioners of Bangladesh.

BELGIUM, Wetenschappelijke Vereniging van Vlaamse Huisartsen (Flemish Society) and Société Scientifique de Médecine Générale (Walloon Society), Belgian Society of General Practitioners/Family Physicians.

CANADA, CFPC: College of Family Physicians of Canada.

CHINA, CSGP: Chinese Society of General Practice, Chinese Medical Association.

CROATIA, CAFM: Croatian Association of Family Medicine.

CZECH REPUBLIC, CSGP: Czech Society of General Practice.

DENMARK, DSAM: Dansk Selskab for Almen Medicin, Danish College of General Practitioners.

ESTONIA, ESFD: Estonian Society of Family Doctors.

FIJI, FCGP: Fiji College of General Practitioners.

FINLAND, SYY: Suomen Yleislaaketieteen Ydistys, Finnish Association for General Practice.

FRANCE, CNGE: Collège National des Généralistes Enseignants, National College of Teaching General Practitioners.

FRANCE, SFMG: Société Française de Médecine Générale, French Society of General Practice.

GERMANY, DEGAM: Deutsche Gesellschaft für Allgemeinmedizin, German Society of General Practice/Family Medicine.

GHANA, West African College of Physicians Ghana Chapter.

GREECE, ELEGEIA: Greek Association of General Practitioners.

HONG KONG CHINA, HKCFP: Hong Kong College of Family Physicians.

ICELAND: Félag Islenskra Heimilislækna, Icelandic College of Family Physicians, (ICFP).

INDIA, IAGP: Indian Academy of General Practice

INDIA, IMACGP: Indian Medical Association, College of General Practitioners.

INDONESIA, KDKI: Kolese Dokter Keluarga Indonesia, Indonesian College of Family Physicians.

IRELAND, ICGP: Irish College of General Practitioners.

ISRAEL, IAFP: Israel Association of Family Physicians.

ITALY, CseRMEG: Centro Studie Ricerche in Medicina Generale.

ITALY, Italian Academy of Family Physicians.

JAPAN, JAPCF: Japanese Academy of Primary Care Physicians.

KOREA, KAFM: The Korean Academy of Family Medicine.

LITHUANIA, CGPL: College of General Practitioners of Lithuania.

MACAU, AMCGM: Associacio dos Medicos de Clinica General de Macau, Macau Association of General Practitioners.

MALAYSIA, AKKM: Akademi Kedokteran Keluarga Malaysia, Academy of Family Physicians of Malaysia.

MALTA, MCFD: Malta College of Family Doctors.

MONGOLIA, MAFD: Mongolian Association of Family Doctors.

NEPAL, GPAN: General Practitioners' Association of Nepal.

NETHERLANDS, NHG: Nederlands Huisartsen Genootschap, Dutch College of General Practitioners.

NEW ZEALAND, RNZCGP: Royal New Zealand College of General Practitioners.

NIGERIA, AGPMPN: Association of General and Private Medical Practitioners of Nigeria.

NIGERIA, AFGMPNPMCN: Faculty of General Medical Practice/Family Medicine National Postgraduate Medical College of Nigeria.

NORWAY, NSAM: Norsk Selskap for Allmenntmedisin, Norwegian College of General Practitioners.

PAKISTAN, CFMP: College of Family Medicine Pakistan.

PAKISTAN, PSFPL: Pakistan Society of Family Physicians.

PHILIPPINES, PAFP: Philippine Academy of Family Physicians.

PHILIPPINES, PSTFM: Philippine Society of Teachers of Family Medicine.

POLAND, KLRP: Kolegium Lekarzy Rodzinnych w Polsce, The College of Family Physicians in Poland.

PORTUGAL, APMCG: Associacao Portuguesa dos Medicos de Clinica Geral., Portuguese Association of General Practitioners.

ROMANIA, NSGP/FM: Romanian Society of General Practice/Family Medicine.

SAUDI ARABIA, SSFCM: Saudi Society of Family and Community Medicine.

SINGAPORE, CFPS: College of Family Physicians Singapore.

SLOVAK REPUBLIC, SSGFP: Slovak Society of General/Family Practice.

SLOVENIA, SSGPSMA: Slovenian Family Medicine Society, Slovenian Medical Association.

SOUTH AFRICA, SAAFP/PC: South African Academy of Family Practice/Primary Care.

SPAIN, SEMFYC: Sociedad Espanola de Medicina de Familia y Comunitaria, Spanish Society of Family and Community Medicine.

SRI LANKA, CGPSL: College of General Practitioners of Sri Lanka.

SWEDEN, SFAM: Svensk Forening for Allmänmedicin, Swedish Association of General Practice.

SWITZERLAND, SSMG/SGAM: Swiss Society of General Medicine.

TAIWAN R O C, CTAFM: Chinese Taipei Association of Family Medicine.

THAILAND, GPAT: The General Practitioner Association Thailand.

UKRAINE, UAFM: Ukrainian Association of Family Medicine.

UNITED KINGDOM, RCGP: Royal College of General Practitioners.

USA, AAFP: American Academy of Family Physicians.

USA, ABFP: American Board of Family Practice.

USA, STFM: Society of Teachers of Family Medicine.

ZIMBABWE, CPCPZ: The College of Primary Care Physicians of Zimbabwe.

OTHER ORGANIZATIONS RELATED TO WONCA

AIM: Action in International Medicine.

CCFP: The Caribbean College of Family Physicians.

EGPRW: European General Practice Research Workshop.

EURACT: European Academy of Teachers in General Practice.

IBEROAMERICA, CIMF: Confederacion Iberoamericana de Medicina Familiar, Iberoamerican Confederation of Family Medicine.

ISDE: International Society of Doctors for Environment.

NAPCRG: North American Primary Care Research Group.

UMLS: Unified Medical Language System.

WHO: World Health Organization.

A

AA abbr. for Alcoholics Anonymous.

ABILITY the power to perform in a certain way related to mental or physical skills.

ABNORMAL different from what is normal or expected. See NORMAL.

ABORTION RATE the estimated annual number of abortions per 1,000 women of reproductive age (defined as age 15-44). See RATE.

ABORTION RATIO the estimated number of abortions per 100 live births in a given year. See RATIO.

ABSENTEEISM absence from work or other duties.

ABSOLUTE RISK See RISK.

ABSTINENCE the voluntary avoiding of substance (e.g. alcohol or drugs) or activity (e.g. sexual intercourse).

ABSTRACT a summary of a medical scientific study or publication. See STRUCTURED ABSTRACT.

ABUSE 1. Misuse or excessive use (e.g. of alcohol, tobacco) or
2. Physical, emotional or verbal attack or injury to someone.

ACADEMIC MEDICAL CENTRE a medical centre or hospital attached to a medical school for teaching purposes.

ACCESSIBILITY the ease with which professionals in the health service can be reached. Refers to the availability due to physical proximity and hours of service.

ACCIDENT a sudden unintended and unexpected traumatic incident, that may result in an injury.

ACCREDITATION a process whereby recognition is granted by a professional organization to an institution or service person as assessed by predetermined criteria.

ACCURACY the extent to which results of measurements agree with reality as measured by a chosen "gold standard". Accuracy can be used as a comprehensive term for sensitivity and specificity together. See VALIDITY, GOLD STANDARD, PRECISION.

ACTION LEARNING See LEARNING.

ACTION RESEARCH is a research strategy dealing with the study of a social situation and at the same time intended to improve the quality of action. The two central concerns - improvement in practice and increased knowledge and understanding - are linked together.

ACTIVITIES OF DAILY LIVING (ADL) the basic activities performed by an individual (or patient) in the course of a normal day, often measured by rating scales. (e.g. Katz: Index of Independence in Activities of Daily Living.) See FUNCTIONAL STATUS.

ACTIVITY ANALYSIS a recording of chosen parts of the activity of the GP/FP and subsequent analysis of the obtained data. See AUDIT.

ACTIVITY LEARNING See LEARNING.

ACUTE 1. Recent or rapid onset and of short duration (less than 4 weeks) e.g acute pain.
2. Serious, sometimes requiring immediate intervention (e.g. acute abdomen). See EPISODE OF CARE.

ADAPTATION the process in which thoughts, feelings, attitudes, behaviour, and biophysical mechanisms of the individual adjust or conform to new or changed circumstances.

ADDICT a person who is dependent on drugs or certain activities, and who experiences symptoms and shows signs if these are discontinued.

ADHERENCE active, voluntary, collaborative involvement of a patient to produce a desired preventive or therapeutic result. Conveys the implication of choice and mutuality in treatment, planning, and implementation. See COMPLIANCE.

ADJUSTMENT a summarizing procedure for rates or measures of association in which the effects of differences in composition of the populations being compared have been minimized by statistical methods. Age is the variable for which adjustment is most often carried out. See STANDARDIZATION.

ADMISSION CRITERIA prerequisites for entry, e.g. into a medical school or scientific study.

ADMISSION TO HOSPITAL an admission must involve a stay in hospital lasting one night or more, irrespective of whether the patient is admitted for the first time, readmitted for a condition for which in-patient treatment has already been given or transferred from another hospital.

ADOLESCENCE the period of life when a person passes from childhood to adult age, usually at an age of 13 - 17 years.

ADOPT bring a person, usually legally, into one's family as a family member.

ADULT a person who has achieved the legal age of adult certification, which may differ from one country to another or from one culture to another.

ADULT EDUCATION education provided for adults for general educational rather than vocational reasons.

ADULT LEARNING See LEARNING.

ADVANCE DIRECTIVE See LIVING WILL.

ADVERSE REACTION a harmful or contrary reaction to an intervention (curative, preventive or diagnostic).

ADVOCACY acting on behalf of a cause or a patient.

AETIOLOGY 1. The study and science of the causes of disease.

2. The cause of a specific disease.

AFFECTIVE relates to or excites emotions or that is based on emotion.

AFFECTIVE LEARNING See LEARNING.

AFFILIATION an agreement between a general/family practice and a medical school on teaching medical students.

AFTER CARE health care offered to a patient after discharge from hospital.

AGE the age in years of a person at his last birthday.

AGED (Syn. elderly) persons of an older age, usually 60 or 65 years old and retired from work. See OLD AGE.

AGE DEPENDENCY RATIO See DEPENDENCY RATIO.

AGE DISTRIBUTION the spread of the population across age groups. See AGE GROUPS.

AGE FACTORS circumstances influencing the health and/or social welfare of the individual due to the effects of age.

AGE GROUPS standard age groups in years: less than 1 year; 1 to 4 years; 5 to 14 years; 15 to 24 years; 25 to 44 years; 45 to 64 years; 65 to 74 years; 75 years and over. 5-yearly cohorts are increasingly used for children and the elderly. Standard division points should be retained (e.g.: 5-9 years, 10-14 years, 65-69 years, 70-74 years, 75-79 years, 80-84 years and 85 years and over).

AGEISM prejudice or discrimination of people belonging to a certain, usually older, age group.

AGE OF CONSENT the minimum age for a young woman or man to have legal sexual relations. Varies between countries.

AGE-SEX REGISTER the list of all patients in a practice arranged by age and sex. The primary purpose of this register is to provide a defined population against which rates of observed occurrence in a practise may be calculated.

AGE-SPECIFIC FERTILITY RATE the number of births occurring during a specified period to women of a specified age group, divided by the number of person years lived during that period by women of that age group. When an age-specific fertility rate is calculated for a calendar year, the number of births to women of the specified age is usually divided by the mid-year population of women of that age.

AGE-SPECIFIC RATE a rate for a specified age group. The numerator and denominator refer to the same age group. The rate is often expressed per 100 or per 1,000 for a general practice population or per 100,000 or 1,000,000 for the total population.

AGE STANDARDIZATION (Syn. adjusted rates) a procedure for adjusting rates, e.g. death rates, designed to minimize the effects of differences in age composition when comparing rates for different populations. See STANDARDIZATION.

AGING OF THE POPULATION a demographic term meaning an increase over time in the proportion of older persons in the population. It does not necessarily imply an increase in life expectancy or that "people are living longer than they used to". The principal determinant of aging in the population has been a decline in the birth rate: when fewer children are born than in previous years, the result, in the absence of a rise in the death rate at higher ages, has been an increase in the proportion of older persons in the population. In developed societies, however, mortality change is becoming a factor: little further mortality reduction can occur in the first half of life, so reductions are beginning to occur in the third and fourth quarters of life, leading to a rise in the proportion of older persons from this cause.

AGREEMENT the extent to which the results of two observations agree under similar conditions, to more observers or to the same observer repeatedly. The observers should be blinded for each others assessments. In a two-by-two table the value of agreement is the proportion of results that are assessed as positive by all observers plus the results that are assessed by all as negative divided by the total number of observations. See KAPPA.

AID assistance for a person who is in some sort of need. Aid may be material, social, psychological, or emotional.

AIMS in education are general statements of intent made by the educator to describe the GOALS

for the teacher, in contrast to OBJECTIVES, which describe what the learner is intended to be able to do.

ALGORITHM, CLINICAL (Syn. **CLINICAL PROTOCOL**). An explicit description of steps to be taken in patient care in specified circumstances. This approach makes use of branching logic and of all pertinent data, both about the patient and from epidemiologic and sources such as **EVIDENCE-BASED MEDICINE**, to arrive at decisions that yield maximum benefit and minimum risk. See **DECISION TREE**.

ALLIED HEALTH PROFESSIONALS health service providers other than medical practitioners and nurses who provide care for and treatment of patients usually practicing various forms of diagnostics, prevention, health education, and treatment. Examples include physiotherapists, podiatrists, and psychologists.

ALLOCATION BIAS non-random distribution of subjects in a study, caused by failure to adopt acceptable procedures for random allocation, e.g. of cases and controls in a randomized trial.

ALMA ATA DECLARATION a conference sponsored by WHO in 1978 in Alma Ata, a city in central Asia, and then in the USSR, produced a declaration defining primary health care and made it the basis of health and health care. See **PRIMARY HEALTH CARE**.

ALTERNATIVE MEDICINE (Syn. **complementary medicine**) A type of therapy or therapeutic approach based on unconventional beliefs or using unconventional techniques. Usually "alternative" implies non-medical or non-Western treatment systems or practices. What is "alternative" to one profession or to one culture may be accepted practice in another.

AMBULATORY CARE care provided to patients who are independently mobile. The care may be provided in any framework e.g. the GP's/FP's practice or a hospital's outpatient clinic.

ANALYSIS OF VARIANCE (ANOVA) a technique for exploring how much of the variability in a set of observations can be ascribed to different causes.

ANALYTIC STUDY (Syn. **comparative study**) usually a quantitative study designed to examine associations, commonly putative or hypothesized causal relationships. An analytic study is usually concerned with identifying or measuring the effects of risk factors or the health effects of specific exposure(s) as opposed to a **DESCRIPTIVE STUDY**, which does not test hypotheses. Common types of analytic studies are cross-sectional, cohort and case control studies. In an analytic study individuals in the study population may be classified according to "attributes" that may influence occurrence of health problems. Attributes may include age, race, gender, health problems, genetic, biochemical, and physiological characteristics, economic status, occupation, residence, and various aspects of the environment or personal behaviour. See **CASE CONTROL STUDY**, **COHORT**, **CROSS SECTIONAL STUDY**.

ANATOMICAL-THERAPEUTICAL-CHEMICAL CLASSIFICATION See **ATC**.

ANCILLARY STAFF non-medical personnel working in a practice, including nurse or practice nurse, health visitor, medical social worker, secretary, practice aid, receptionist, administrator,

business manager, bookkeeper and others.

ANECDOTAL EVIDENCE the use of data from a single patient or an isolated incident to generalize to larger populations.

ANTENATAL CARE (Syn. prenatal care) care for pregnant women from the time of the first visit to a GP/FP confirming pregnancy through to the first stages of labor or termination.

ANTHROPOLOGY the descriptive study of humans divided into physical (body structure) and social (cultural and social characteristics).

ANTICIPATORY CARE care foreseeing a patient's future problems in order to prevent them from occurring or to diminish potential damage.

APPOINTMENT SYSTEM the system used by a physician to plan and regulate the timing of patient encounters.

APPRENTICESHIP in clinical **VOCATIONAL TRAINING** the trainee works together with a GP/FP, whose responsibility it is to supervise and teach the **KNOWLEDGE, SKILLS, and ATTITUDES** of general/family practice. See also **CLINICAL CLERKSHIP**.

APPROPRIATENESS REVIEW the review of individual cases for the appropriateness/medical necessity of surgical and diagnostic procedures. This review consists of comparing data to medical criteria.

ARTHRITIS IMPACT MEASUREMENT SCALES a multidimensional index that measures the health status of individuals with arthritis. Useful for evaluating the outcomes of arthritis treatments and programs. See **HEALTH OUTCOME MEASURES**.

ASSESSMENT (Syn. **EVALUATION, EXAMINATION** or opinion) has several meanings depending on the context in which it is used. In general/family practice assessment is often used in the following situations.

1. Clinical assessment:

- General or complete assessment: A standardized procedure to determine the physical, mental, and social well-being of the patient with appropriate investigations, including a complete record of findings and advice to the patient.

- Specific or partial assessment: Includes a history and detailed examination which relates to a specific diagnosis or problem with appropriate investigations, and including a complete record of findings, and advice for the patient.

- Functional assessment: The measurement, both objectively and/or subjectively, over a stated period of time of a person's ability to perform and adapt to his environment.

2. Educational assessment is the process by which one attempts to measure the quality and quantity of learning and thus describes a learner's progress and level of **ATTAINMENT**. See **MONITORING, EVALUATION**.

- Obtaining information concerning a student's progress and level of attainment. See also MONITORING and EVALUATION.
 - Formative assessment: measures the progress of gains made by the student and informs him about the amount still to be learnt before educational objectives are achieved.
 - In-training assessment is feed-back on the learner's performance in the clinical setting with regard to patient care and practical management.
 - Summative assessment: measures the achievement of the student at the end of an educational program, usually for the purposes of awarding a certificate or diploma or to enable progress to the next stage.
3. Qualitative assessment:
- The thorough study and analysis of a known or suspected problem in quality of medical practice, designed to define causes and necessary action to solve the problem.
4. Assessment in clinical notes using SOAP (see PROBLEM ORIENTED MEDICAL RECORD) as a method to enlist and describe the patients' problems. The assessment is the physician's best understanding of the health problem and its causes.

ASSOCIATION (Syn. correlation, statistical dependence.) Relationship between two or more persons, events, characteristics or other variables. A statistical association is present if the probability of occurrence of an event, characteristic or variable depends upon the occurrence of one or more other events, one or more other characteristics or one or more other variables. The presence of a statistical association does not necessarily imply a causal relationship.

ASSOCIATED PRACTICES See GROUP PRACTICE.

ASTHMA QUALITY OF LIFE QUESTIONNAIRE (AQLQ) was designed to determine the effects of treatment on quality of life in clinical trials in asthma. It was intended to measure health related quality of life in adult asthmatic patients without fixed airways obstruction and to tap both physical and emotional function. See HEALTH OUTCOME MEASURES.

ATC abbr. for Anatomical Therapeutic Chemical classification, which is an international standard classification for pharmaceutical drugs marketed internationally. The drugs are divided in different groups according to the organ or system on which they act and their chemical, pharmacological, and therapeutic properties. In order to measure drug use it is necessary to have both a classification system (ATC) and a unit of measurement. A technical unit of measurement called Defined Daily Dose (DDD) is added to the classification: ATC/DDD. WHO recommend that the ATC/DDD system is used for international drug utilization studies in order to improve the quality of drug use. The classification of a substance in the ATC/DDD system is not a recommendation for use, nor does it imply any judgment about EFFICACY of drugs or groups of drugs.

AT RISK characteristic of an individual or a population who because of their genetic, social, economic, cultural, or psychological circumstances or genetic background are vulnerable to a particular injury or disease. See RISK.

ATTACK RATE the number of episodes of disease or disability occurring in a population, usually

expressed per cents.

ATTAINMENT a learner's performance in a subject or in the whole curriculum measured by tests or **EXAMINATIONS**.

ATTENDING PHYSICIAN physician responsible for a patient in hospital.

ATTENTIVE LISTENING means giving one's total and undivided attention to the other person which tells the other person that one is interested and concerned. The listener absorbs everything the speaker is saying verbally and non-verbally without adding, subtracting, or amending.

ATTITUDE state of mind or feeling for or against something which predisposes to particular responses. It involves emotions (feelings) and knowledge (or beliefs) about the object and emanate in behaviour. It is not inherited but learnt and, though relatively stable, is modifiable by education or experience. One of the three main goals in medical education (together with skills and knowledge).

ATTRIBUTABLE NUMBER the number of occurrences of a disease or other outcome that can be ascribed to the exposure by a group of individuals to a given **RISK FACTOR**, assumed to be causal, over or above that experienced by people who are not exposed.

ATTRIBUTABLE RISK the excess risk of disease that can be ascribed to the exposure to the risk factor, over and above that experienced by people, who are not exposed. It thus provides an estimate of the number of cases of the disease that might be prevented if exposure to the risk factor was eliminated and is useful for determining the magnitude of the public health problem posed by such exposure.

AUDIT in medicine a systematic, critical analysis of some part of the structure, process, and outcome of medical care carried out by those personally engaged in the activity concerned, to measure whether set objectives have been attained and thus assess the quality of care delivered. It includes the organization of the health care, the procedures used for diagnosis and treatment, the use of resources and the outcome and quality of life for the patient.

AUDIT CIRCLE the systematic, critical review process which includes the description of a changeable problem, standard setting, data collection and analysis, comparison of findings, and possible implementation of changes. New data collection and comparison to see whether the objectives have been met and the quality improved. The process thus includes five steps:

1. Setting standards.
 2. Collecting data.
 3. Analysing the data.
 4. Implementing changes.
 5. Controlling outcomes.
- THORITY** an individual's status in social relationships allowing him to influence other people. May be granted formally by reason of role (e.g. GP/FP trainer) or because of expert knowledge (e.g. a physician at the scene of an accident).

AUTONOMY the right of individuals to exercise freewill in making informed choices of care.

AUXILIARY NURSING PERSONNEL See NURSING PERSONNEL.

AVERAGE 1. The numeric result obtained by dividing the sum of two or more quantities by the number of quantities, an arithmetical mean.

2. A standard or level regarded as usual (e.g. a student's performance).

AXIS one of the reference lines in a coordinate system, hence its use in a classification system. The International Classification of Primary Care (ICPC) is biaxial, with its primary axis representing body systems (chapters) and the other axis representing components (reasons for encounter, process and diagnosis).

B

BABY an infant or child, especially one who is not yet able to walk.

BALANCE BILLING the practice of collecting from the patient the difference between the charge and the insurance reimbursement.

BALINT GROUP a group of GPs/FPs meeting regularly over a long period of time to discuss their personal emotional problems arising in the care of patients in their practices with the intention of improving the quality of their medical performance and enhance their ability to care for their patients. Named after Michael Balint, the Hungarian psychiatrist, who initiated these groups in London.

BAREFOOT DOCTOR See MEDICAL ASSISTANT.

BARTHEL INDEX is an index of ACTIVITIES OF DAILY LIVING. It was developed to follow progress in self-care and mobility skills during in-patient rehabilitation and to indicate the amount of care required.

BASELINE DATA a set of data collected at the beginning of a study.

BASIC HEALTH SERVICES are health services usually provided as a minimum of care for a

designated population.

BASIC MEDICAL SCIENCES the medical sciences which are the basis for the applied clinical sciences, e.g. physics, chemistry, anatomy, physiology, pharmacology, molecular biology.

BAYES' THEOREM a theorem in probability theory used to estimate the probability of a particular diagnosis given the appearance of some symptoms or test results. It emphasizes what clinical intuition often overlooks, namely that the probability of disease giving this symptom depends not only on how characteristic that symptom is of the disease, but also how frequent the disease is among the population being served.

Bayesian calculations are performed in **ODDS**, not in **RATES**, **PROPORTIONS**, or percentages.

BED DAYS number of days a patient spends in a hospital bed. Different health problems are expected to require different numbers of bed days. In the last decade the number of bed days has decreased as more patients are being cared for as out-patients by doctors in Out-Patient Departments (OPDs) or in general practice or by home care professionals.

BED OCCUPANCY the number of hospital beds occupied by patients expressed as a percentage of the total number of beds available in the ward, hospital, etc.

BEDSIDE TEACHING See **TEACHING METHODS**.

BEFORE-AFTER DESIGN a basic quasi-experimental design. The dependent variable is measured before and after some change to the independent variable, to see if a change may be due to a change in the independent variable.

BEHAVIOURAL SCIENCE science focusing on understanding action, development, behaviour, values of individuals, institutions, or societies. Includes anthropology, sociology, and psychology.

BEHAVIOUR CHANGE THEORY is the theory which lies behind the question why or why not people change behaviour. It is essential to understand some of the mechanisms behind behaviour in order to use our professional skills effectively, since much of what we are trying to accomplish with our patients is related to behaviour. Change of behaviour may run through various stages:

1. A precontemplating stage. Changes in life style are not considered by the individual, because he or she does not worry about the harmful effects of their behaviour as opposed to the pleasure it gives them.
2. A contemplation stage, in which the individual is considering the benefits of a change of life style but has not done anything so far.
3. A preparation stage which involves making plans, informing friends and family. Goals are set and ways of achieving them made clear.
4. An action stage. The change is attempted. Support is needed.
5. A maintenance stage, in which the individual keeps to the new behaviour. The most difficult stage, where support and positive reinforcement is needed.
6. Relaps. Most patients will move up and down these stages several times. The physician must

ascertain at which stage the patient is at a certain time in order to act effectively. See CAUSATION.

BEHAVIOUR THERAPY treatment based on the belief that psychological problems which are treated are the products of faulty learning and not the symptoms of an underlying disease. Treatment is directed at the problem (or target) behaviour and is designed to change the behaviour of the individual patient, not for the diagnostic label that has been attached to him.

BENCHMARKING a method to measure the quality of health care by comparing - within the same clinical domain - own clinical performance with others, who are recognized as being of a good quality.

BENEFIT-COST RATIO See COST-BENEFIT ANALYSIS.

BEST PRACTICE MODEL a description of health services and activities which reflect the optimal situation.

BIAS deviation of results or inferences from the truth or processes leading to such deviation. Any trend in the collection, analysis, interpretation, publication, or review of data, that can lead to conclusions that are systematically different from the truth.

BIAS SELECTION See SELECTION BIAS.

BIBLIOGRAPHY list of books or other written material placed for reference after a piece of academic writing or appearing as a separate publication. An annotated bibliography contains critical comments on cited words.

BIMODAL a distribution of a variable with two distinct high frequencies.

BINOMINAL SCALE (Syn. dichotomous scale) a type of NOMINAL SCALE. Ordering characteristics or data in two divisions with a name with no ranking order, e.g. male or female, dead or alive.

BIOFEEDBACK the giving of immediate information through the use of technology to a subject about his bodily processes (e.g. heart rate) which are usually subconscious. These processes can then be subject to operant conditioning.

BIOPSYCHOSOCIAL a comprehensive or holistic concept of health of the individual comprising biological, psychological, and social dimensions. See HOLISTIC CARE

BIOTECHNOLOGY the development of techniques for the application of biological processes to the production of materials in use in medicine and industry.

BIRTH RATE, CRUDE number of live births per 1,000 population over a given time period, usually one year.

BIRTH WEIGHT an infant's weight recorded at the time of birth. Certain variants of birth weight are precisely defined: Low Birth Weight (LBW) below 2,500 g, Very Low (VLBW) below 1,500 g, and Ultralow (ULBW) below 1,000 g. Average weight for gestational age (AGA) is birth weight between 10th and 90th percentile. Large for Gestational Age (LGA) is birth weight above 90th percentile, Small for Gestational Age (SGA) is below 10th percentile. See PERCENTILE.

BLIND(ED) STUDY a study or experiment in which the observers and/or subjects do not know if the subjects belong to an intervention group or a control group. In a single blind study only the experimenter knows the allocation. In a double blind study the allocation is not known either to the observer or the subject. If the analyst does not know the allocation the study is triple blinded. Blinding is made to avoid bias.

BOARD CERTIFICATION process by which physicians who have completed all the training requirements are admitted to a medical speciality.

BODY IMAGE a person's perception of himself.

BODY LANGUAGE movements or postures of parts of the body (e.g. face, hands, sitting position) from which emotions and mental attitudes can be inferred. See COMMUNICATION.

BODY MASS INDEX an anthropometric measure of body mass. It is defined as weight in kg divided by the square of height in meters.

BODY OF KNOWLEDGE the core of information, which it is intended to impart to students in a particular course or subject.

BRAINSTORMING a technique of exploring possible solutions to a problem by generating a wide spectrum of suggestions.

"BY THE WAY, DOCTOR". See EXIT PROBLEM.

C

CAPITATION FEE a method of reimbursement under which a physician is paid a fixed amount per patient on his list regardless of the amount of services rendered. See FEE FOR SERVICE.

CARE PROVIDER See HEALTH CARE PROVIDER.

CAREER CHOICE in relation to medicine the choice medical students and young physicians have to make, when they plan their professional future.

CASE an instance of a particular health problem or risk factor in a particular person, in a population, practice, or study group identified as having the particular health problem or risk factor under investigation or undergoing an intervention.

CASE CONFERENCE a meeting where patients' medical histories are presented to a group of professionals - belonging to one or more specialities - in order to analyse all aspects of the problems encountered. Used as a method of clinical problem solving or auditing.

CASE-CONTROL STUDY a study that identifies persons with a problem and a control group without it. The relationship of an attribute of the problem is examined by comparing those with the problem and those without it. A case control study is often referred to as a **RETROSPECTIVE STUDY** (even if patients are recruited prospectively) because the logic of the design leads from an effect in the present, i.e. the selection criterion for being a case, to a presumed cause in the past. The presumed causal chain is analysed retrospectively.

CASE DISCUSSION See **CASE CONFERENCE**.

CASE-FINDING administering a test, examination, or questionnaire to patients, who have come to the GP/FP for another reason, in order to detect a treatable disease whose early diagnosis is important. See **SCREENING**.

CASE MANAGEMENT the process of medical care for a certain health problem in an individual patient from the first presenting symptom, **REASON FOR ENCOUNTER**, (RFE), through diagnosis to treatment. In case of a group of patients with a specific health problem accepted by medical professionals or health authorities it may be called a case management plan.

CASE METHOD (CM). See **TEACHING METHODS, LEARNING**.

CASE-MIX range and variety of morbidity of a patient population which describes the health problems of that population, usually in terms of one or more of the following: diagnostic profile, severity of illness, functional status, pathophysiologic data, and sociodemographic characteristics. Is used in both hospitals and community settings e.g. to analyse the costs of care. Several tools have been designed in order to base resource allocation on case-mix, e.g. **DIAGNOSIS RELATED GROUPS (DRGs)**.

CASE PRESENTATION summary or organized description of the medical data of a patient for discussion by a medical student or a physician with an audience.

CASE RECORD See **MEDICAL RECORD**.

CASE REPORT a published exposition of a patient's medical history (physical findings, course and management of care), providing the reader with sufficient information to understand the patient's health problems and the methods suggested to solve them.

CASE SERIES a study of patients identified as having a specified health problem without comparison with a healthy control group, though historical controls can be used to make inferences. The description of a **CASE SERIES** is used to illustrate a point of view or to describe rare or unknown health problems. If a case series is compared systematically with a control group it is

called a case control series.

CASE STUDY a study of patients identified as having a specified health problem.

CASE STUDY DESIGN a research method, which deals with development of knowledge from one or more particular cases, chosen to demonstrate or confront a more universal phenomenon relevant for a broader context.

CASUALTY as used in medicine: 1. Any injury of the body. 2. Old name for Accident and Emergency Department of a hospital.

CATCHMENT AREA a geographical area from which a particular population is drawn or for which health services are provided.

CAUSALITY the relating of causes to the effects they produce. Epidemiologic evidence alone is not sufficient to prove causality. Inference from epidemiological evidence by the professional community, the reader of a publication, or even the investigator who published the evidence, can lead to acceptance of a causal relationship. This acceptance of a causal relationship requires judgment. Causality is not proven, but judged to be existent on basis of evidence. See **INFERENCE**.

CAUSATION, CRITERIA OF the criteria of a causal association of a factor and a disease are

1. Consistency: The association is consistent when results are replicated in studies in different settings using different methods.
2. Strength: This is defined by the size of the risk as measured by appropriate statistical tests.
3. Specificity: This is established when a single putative cause produces a specific effect.
4. Dose-response relationship: An increasing level of exposure (in amount and/or time) increases the risk.
5. Temporal relationship: Exposure always precedes the outcome. This is the only absolutely essential criterion.
6. Biological plausibility: The association agrees with currently accepted understanding of biopathological processes. This criterion should be applied with caution.
7. Coherence: The association should be compatible with existing theory and knowledge.
8. Experiment: The condition can be altered (e.g. prevented or ameliorated) by an appropriate experimental regimen.

CAUSATION OF DISEASE, FACTORS IN a number of not mutually exclusive factors have been differentiated:

1. Predisposing factors are those that prepare, sensitize, or otherwise condition a patient to react in a specific way. Predisposing factors may be age, gender, marital status, knowledge, health beliefs, social status, etc.
2. Enabling factors facilitate the manifestation of the disease or use of health services or even maintenance of health or appropriate use of health services. Enabling factors may be income,

health insurance coverage, nutrition, and social and health care system.

3. Precipitating factors are responsible for the onset of a health problem, behaviour, or course of action. If more than one factor is involved usually one is more important or obvious, and may be regarded as necessary.

4. Reinforcing factors tend to aggravate the presence of a health problem, attitude, or behaviour. These factors may be repeated exposure to a pathogenic agent, work, stress, or presence of financial incentive or disincentive.

CENTILE See PERCENTILE

CERTIFICATION is attestation, usually written, of facts within the knowledge of the responsible persons. In medicine certification has two meanings:

1. The documentation by a physician, that a patient has a health problem indicating, that he is unfit for work or can be granted some other benefits. Often used for declaration of sanity/insanity.

2. Licencing of physicians - evidence that a physician meets the standards of performance required for practicing medicine. See MEDICAL LICENCE.

CHANCE See ODDS.

CHART REVIEW review of patients' case records either as a routine activity (to update files and throw away unnessesary paper or data) or as part of an audit activity. See AUDIT.

CHECKUP EXAMINATION See PERIODIC MEDICAL EXAMINATION.

CHILD a person less than 15 years of age (0 - 14 years). Different health care systems may set different upper age limits for children's services e.g. at which age a pediatric department should cease to accept children and refer them to an adult ward.

CHILD ABUSE maltreatment of children. It may take the form of sexual abuse, when a child is involved in sexual activity by an adult, physical abuse when physical injury is caused by cruelty or undue punishment, neglect when basical physical provision for needs is lacking, and emotional abuse, when lack of affection or negative emotions from caregivers damages a child's emotional development.

CHILD BEARING PERIOD the reproductive period of a woman's life from menarche to menopause.

CHILD BIRTH CENTRE (Syn. birthing centre) local facility usually managed by non-medical persons for the delivery of babies in low risk pregnancies.

CHILD DEATH RATE the number of deaths among children in the age group 0-14 in a given year per 1000 children in this age group.

CHILD HEALTH PHYSICIAN (Syn. community paediatrician) a physician concerned with the health management of children in a community, usually working in a child health clinic (CHC) together with health visitors and specially trained nurses employed by the local health authority. An important task is to screen children for physical as well as emotional impairments, disabilities, and handicaps and to ensure that deprived children are supported by the health and social services. In some countries the GP/FP performs the work of the child health physician, especially in countries where patients are listed with their GP/FP (United Kingdom, Denmark and Holland). See COMMUNITY PHYSICIAN.

CHILD WELFARE care provided for children with physical or emotional needs by local or national welfare departments.

CHI-SQUARE TEST a statistical test for detecting whether two or more population distributions differ from one another.

CHRONIC (Syn. longterm) as used in ICPC relating to an illness or disability lasting 6 months or longer.

CISP-CLUB (Club CISP) abbr. for Society of French-Speaking users of ICPC, acting both as a contributor to WICC (Wonca International Classification Committee), and as a mediator for its use in French-speaking countries or areas.

CLASSIFICATION an ordering of all elements of a domain into groups according to established criteria. A classification is characterized by:

1. Naturalness: The classes correspond to the nature of the things being classified.
2. Exhaustiveness: Any single object in the set will fit into one class.
3. Exclusiveness: Any single object in the set will fit into only one class.
4. Constructability: The set of classes is constructed by a demonstrably systematic procedure.

CLASSIFICATION OF DISEASES arrangement of diseases which have common characteristics into groups by cause and/or organ system. The usefulness depends on the user. Examples are: INTERNATIONAL CLASSIFICATION OF PRIMARY CARE (ICPC) and INTERNATIONAL CLASSIFICATION OF DISEASES, INJURIES AND CAUSES OF DEATH (ICD).

CLASS, SOCIAL See SOCIAL CLASS, SOCIOECONOMIC STATUS.

CLINIC in medicine can mean:

1. An or part of an establishment for examining and treating patients.
2. A session in which examination or treatment of a patient takes place.
3. A session in which a student receive clinical instruction.

CLINICAL ALGORITHM See ALGORITHM, CLINICAL.

CLINICAL CLERKSHIP a period in the medical curriculum during which the student is attached

to a GP/FP or a hospital ward. See APPRENTICESHIP.

CLINICAL COMMUNICATIVE METHOD a strategy for systematic development and utilization of communication for medical purposes. Such a method can consist of various tools e.g. "key questions" - speech acts designed to promote action, or "illness diaries" intended to facilitate symptom communication.

CLINICAL COMPETENCE the degree to which a physician's performance fulfils stated criteria for good clinical practice.

CLINICAL DECISION ANALYSIS applying outcome probability data to make a decision in clinical practice.

CLINICAL DIARY a note book used by students and trainees to record the clinical problems they meet and their thoughts and feeling during the encounter. Can be a powerful learning tool.

CLINICAL EPIDEMIOLOGY the methodology and practice of research in occurrence, diagnosis, prognosis, therapy, or determinants of health problems of patients in health care settings. A clinical epidemiologist can be a clinician or another professional. Includes decision analysis, technology assessment, meta-analysis, evaluation of health care systems, and other disciplines and techniques. Biostatistics is considered as a separate discipline.

CLINICAL EXAMINATION 1. Examination of patients by a physician. See EXAMINATION, CLINICAL.

2. An examination where a patient presents the clinical problem. See EXAMINATIONS.

CLINICAL GOVERNANCE a framework through which medical organizations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.

CLINICAL GUIDELINES recommended reference programs developed on the basis of EVIDENCE-BASED MEDICINE to assist physician and patient in choosing appropriate health care for specific clinical circumstances.

CLINICAL METHOD the procedure which should be followed when diagnosing or treating a specific health problem.

CLINICAL OUTCOME specifies CLINICAL STATUS as a consequence of the course over time of a health problem, treatment, experiment, or other medical intervention. See CLINICAL STATUS, HEALTH OUTCOMES.

CLINICAL PROTOCOL a set of accepted procedures, which should be followed in a clinical situation.

CLINICAL RESEARCH scientific investigations on occurrence, diagnosis, prognosis, therapy, or determinants of health problems of patients in health care settings aimed at application of the derived knowledge to patient care.

CLINICAL SIGNIFICANCE a difference in effect size considered, on the basis of expert judgement, to be important in clinical or policy decisions, even though not statistically significant.

CLINICAL STATUS (Syn. clinical health status) **HEALTH STATUS** of patients assessed in clinical settings by **HEALTH CARE PROVIDERS** using medical procedures and judgment. It can be described in terms of **REASON FOR ENCOUNTER (REF)**, symptoms, signs, diagnoses, results of additional diagnostic procedures, severity of the health problem, **CO-MORBIDITY**, and **FUNCTIONAL STATUS**. See **CLINICAL OUTCOME**, **SEVERITY OF ILLNESS**.

CLINICAL TEACHING involves patients and their health problems, and often takes place at the bedside, in the practice, or at a clinic.

CLINICAL TRAINING See **TRAINING**.

CLINICAL TRIAL a research which involves a test regime followed by patients intended to evaluate its efficacy and safety. The term is subject to a wide variation in usage.

CLINICAL TUTORS in general practice are GPs/FPs with educational skills and interests who teach students, trainees, and other GPs/FPs.

CLOSED QUESTION (Syn. close-ended question, convergent question) a question for which a specific one-word answer such as "Yes" or "No" is expected. It limits the response to a narrow field set by the questioner. See **QUESTIONS**, **OPEN QUESTIONS**.

CLUSTER aggregation of relatively uncommon events or diseases in amounts that are believed or perceived to be greater than expected by chance.

COCHRANE COLLABORATION an international organization that assembles studies in specific medical areas and performs meta-analyses in order to provide conclusions regarding scientifically proven methods of management of health problems. See **EVIDENCE-BASED MEDICINE**.

CODE a fixed sequence of signs or symbols, alphabetic, or numeric characters designating an object or a concept. In many coding systems such as ICPC, codes describe the position in the hierarchy of the concept. In others the codes are compound expressions.

CODE OF MEDICAL ETHICS a set of moral principles and professional standards agreed upon by the medical profession and accepted by the society for this profession. The Hippocratic Oath is the first and most widely accepted **CODE OF MEDICAL ETHICS**. It binds the physician to

observe a specific code of behaviour and practice set out by the Greek physician and medical teacher Hippocrates (460-370 BC). See HIPPOCRATIC OATH.

CODING SYSTEM a system that allocates codes to objects, concepts, terms, or any entities - e.g. health problems, procedures, symptoms - using a finite set of numeric or alphanumeric identifiers (codes).

COGNITION mental processes involving thought and memory, by which knowledge, attitudes, intentions, and behaviour are acquired. These include perception, reasoning, acts of creativity, problem-solving, and possibly intuition.

COGNITIVE THERAPY a form of psychotherapy based on the belief that psychological problems especially depressions are the products of faulty ways of thinking about the world. The therapist assists the patient to identify these false ways of thinking and to avoid them.

COHORT a designated group of persons who are followed for a period of time. See **INCIDENCE**.

COMMUNICATION 1. An exchange of information, ideas, or feelings that can be conveyed through a number of media such as speaking, writing, or information systems.
2. Interpersonal reactions in a clinical setting e.g. between physician and patient(s), between family members or couples. May be verbal or non-verbal (body language, facial expression).

COMMUNICATION BARRIERS anything that inhibits free and unbiased exchange of information. This may be cultural differences, language, emotional barriers, differences in values and attitudes, legal requirements, practical obstacles, or political control and censoring.

COMMUNICATION FACILITATORS anything that promotes the exchange of information, whether technical (hearing aid, microphone), individual (cultural background, language), or political (civil rights e.g. free press and freedom of assembly).

COMMUNICATION SKILLS a repertoire of capabilities such as verbal and written skills or the effective use of media to convey words, ideas, and images in a way that is easy for the receivers to understand.

COMMUNITY a group of individuals organized into a unit or manifesting some unifying trait or common interest; loosely, the locality or catchment area population for which a service is provided, or more broadly, the state, nation, or body politic.

COMMUNITY CARE the care and supervision of persons living in their usual environment by medical and social agencies providing primary care. See **COMMUNITY ORIENTED PRIMARY CARE (COPC)**.

COMMUNITY DIAGNOSIS the process of appraising the health status of a community,

assembling vital statistics, health statistics, and other information pertaining to determinants of health. Community diagnosis may be comprehensive or restricted to specific health problems.

COMMUNITY HEALTH is the speciality of medicine devoted to meeting the health care needs of particular populations rather than individuals. Includes epidemiology, screening, environmental health ect. It is concerned with the protection, promotion, and restoration of health in the population or groups of individuals through collective and social actions, usually provided by state or local authority health services.

COMMUNITY HEALTH CENTRE a service providing comprehensive health care for a local neighbourhood, normally offering multidisciplinary approaches to health problems. See PUBLIC HEALTH.

COMMUNITY HEALTH SERVICES the organization of medical, allied (physiotherapy, podiatry, dietetics, psychology) and other health services in a community. See COMMUNITY HEALTH.

COMMUNITY MEDICINE See COMMUNITY HEALTH.

COMMUNITY MENTAL HEALTH SERVICES a comprehensive range of psychiatric and psychological care provided in a community setting and readily available to all members of the community.

COMMUNITY NURSE a nurse who provides care for patients in neighbourhood clinics or at their own homes.

COMMUNITY ORIENTED PRIMARY CARE (COPC) a systematic assessment of health care needs in the practice population, identification of community health problems, modification of practice procedures, and monitoring of the impact of the changes to ensure that the medical services are congruent with community needs.

COMMUNITY PARTICIPATION responding to community needs e.g. working with community representatives in defining health issues and priorities.

COMMUNITY PHYSICIAN a medical practitioner whose primary concern is the health status of the population within a defined geographical area. He is usually responsible for assessment and evaluation of the community's health needs and for the organization of health services to meet those needs. He will generally not render personal health care, except for specific health problems such as selected communicable diseases. The role of a community physician varies from country to country, but he is usually employed by a government agency.

COMORBIDITY other diseases or health problems in addition to that being studied or dealt with.

COMPATIBILITY in the area of classifications the ability to interrelate in an established and consistent manner e.g. related to the conversion of ICPC-2 to ICD-10.

COMPETENCE the sum of personal attributes required to carry out a defined activity or fulfil a defined role.

COMPLAINT 1. A symptom, disorder, or concern expressed by the patient when seeking care.
2. An appeal made by a patient against a health worker or staff member regarding unsatisfactory service.

COMPLEMENTARY MEDICINE See ALTERNATIVE MEDICINE.

COMPLETION RATE the percentage of persons in a survey for whom a complete data set is available. See RESPONSE RATE.

COMPLIANCE the extent the patient carries out professional medical or health advice, particularly on the taking of medicine. The term ADHERENCE is now preferred because it infers a less passive role for the patient and a less authoritarian attitude of the professional.

COMPONENT part of a larger concept or construction, e.g. depression is a component of psychiatric illness. In INTERNATIONAL CLASSIFICATION OF PRIMARY CARE (ICPC) each of the 17 chapters contain 7 identical components (e.g. component 1: Symptoms and complaints, component 2: Diagnostic, screening, and preventive measures).

COMPOSITE SCALE (Syn. INDEX) a way of ordering characteristics or data by a value, a number, or a count, derived from different scales that are by themselves ordered in a nominal way, e.g. Apgar Score, Sickness Impact Profile. See HEALTH OUTCOME MEASURES.

COMPREHENSIVE CARE health care of an all-embracing scope. GPs/FPs are characterized by the provision of care that is comprehensive in the biopsychological approach and deals with problems in the entire health spectrum.

COMPUTERIZED MEDICAL RECORD (Syn. Electronic Medical Record (EMR)). A computer based record system, which contains the history of the patient and electronically transferred information from hospitals, laboratories, and other physicians. To ensure confidentiality the system should be a closed one, which can communicate with other systems only through an electronic mailbox.

CONCEPT the underlying meaning, a thought, an abstract idea.

CONCEPT MAP a picture of the relationships between ideas and theories, often represented as overlapping images e.g. Venn diagram.

CONDITION 1. The state of a patient's health.

2. A health problem, more general than the more specific term DISEASE. See DISORDER, DISEASE, ILLNESS.

CONFERENCE (Syn. Congress) in medicine a professional meeting where physicians and others with common interest in a topic discuss and exchange views.

CONFIDENCE INTERVAL a range of values for a variable, e.g. a rate, so that this range has a specified probability (most often 95%) of including the true value of the variable. See ESTIMATION.

CONFIDENTIALITY the principle in medical ethics that the information which a patient reveals to a physician is private and has limits on how and when it can be disclosed to a third party. Usually the physician must obtain permission from the patient to make such disclosures.

CONFLICT OF INTEREST compromise of a person's objectivity when that person has a vested interest in peer review or outcome of a study. Occurs when a person could benefit financially or in other ways (e.g. promotion, tenure).

CONFOUNDER (Syn. confounding variable) an unrelated, extraneous factor, unequally distributed among the subjects/groups in a study, which distorts the true relationship of the variables in the study.

CONGRESS See CONFERENCE.

CONSENSUS in medicine an agreement in opinion on a medical question reached by experts.

CONSENT See INFORMED CONSENT.

CONSISTENCY a property of measurements that when repeated are in close agreement or conformity.

CONSTANT is a quantity that is fixed, that is the same wherever it is found.

CONSULTANT a medical specialist who provides services related to his field of expertise at the request of another health care provider.

CONSULTATION the seeking of advice. In medicine:

1. ENCOUNTER, CONTACT where the physician responds to a patient's REASON FOR ENCOUNTER (RFE), fears, ideas, expectations, or health problems. It is a dynamic interaction with the aim of establishing a common agenda based on personal relationship and mutual trust in order to meet the patient's needs. It usually takes place on the physician's premises.

2. The discussion on a health problem of a patient with a CONSULTANT, sometimes in the

presence of the GP/FP, and sometimes between them in the patient's absence.

CONSUMER PARTICIPATION See COMMUNITY PARTICIPATION.

CONSUMER SATISFACTION See PATIENT SATISFACTION.

CONTACT See ENCOUNTER.

CONTACT, PRIMARY 1. The first direct contact between a patient and the health care services in the course of an episode of care.

2. Persons in direct contact with a patient who has a communicable disease.

CONTEXT the whole situation, background, or environment relevant to some happening or personality.

CONTINUING MEDICAL EDUCATION (CME) educational programs designed to keep physicians updated of recent advances in their practice of medicine.

CONTINUING PROFESSIONAL DEVELOPMENT (CPD) the acquisition, enhancement, and maintenance of knowledge, skills, and attitudes by professional practitioners with the aim of enhancing their professional performance and optimizing the outcomes of their practice.

CONTINUITY OF CARE health care devoted to the appropriate follow-up of patients over the course of time. See PERSONAL HEALTH CARE, SHARED CARE.

CONTRACT 1. An agreement between patient and GP/FP about the content and/or rules of the patient/doctor relationship.

2. Legally binding agreement e.g. between partners in a group practice, stating the conditions for shared responsibilities, economy, and working relationship or between GPs/FPs and the health service.

CONTRACT LEARNING education where a student negotiates an agreement with a teacher to meet certain learning objectives. Is especially used in postgraduate education.

CONTRACT RESEARCH research which is chosen and paid by a sponsor, who may have made certain requirements regarding publication of the research findings.

CONTROL GROUP patients in a comparison group not receiving the intervention studied in the trial.

CONTROLLED SUBSTANCES pharmaceutical preparations usually narcotics and psychoactive substances which are regulated by legislation.

CONTROLS, MATCHED controls selected so that they are similar to the study group or cases in specific characteristics. Common matching variables are age, sex, race, and socioeconomic status. Controls are subject to different treatments from subjects in the experiment.

CONVERGENT QUESTION See CLOSED QUESTION.

CONVERSION STRUCTURE See LINKAGE.

COOP/WONCA CHARTS (Syn. Dartmouth COOP Functional Health Assessment Charts/WONCA) functional health assessment charts developed for use in primary care patients. The charts are designed to measure physical fitness, feelings, daily activities, social activities, change in health, and overall health. See HEALTH OUTCOME MEASURES, FUNCTIONAL STATUS INDEX.

COORDINATED CARE See INTEGRATED HEALTH CARE.

COPAYMENT a payment made by the patient for selected services in a health care system over and above costs (or basics) which are covered by a national health insurance or a private insurance.

COPE manage successfully, especially accepting or coming to terms with the symptoms, cause, and complications of disease

CORE CURRICULUM common elements in the curriculum of an educational institution, which are studied by all students. See CURRICULUM DEVELOPMENT.

CORRELATION a measure of association that indicates the degree to which two or more sets of observations fit a linear relationship. Various formulae exist for estimating the strength of the correlation. In each case the range lies between -1 and +1. A correlation close to zero indicates no association between the observations. As correlations rise, the possibility of predicting the value of the second observation from the knowledge of the first becomes greater.

COST the amount of resources utilized - either objective (e.g. money, or resources, or subjective (e.g. distress, discomfort) - in order to achieve an outcome, be it incurred by patients, families, third parties, or society.

1. Direct: The resources identified as having specifically been used for the provision of a service.
2. Indirect: The share of those generic resources (e.g. administrative, capital) that has been used for the provision of that service.

COST-BENEFIT ANALYSIS an economic assessment, usually from society's perspective, in which the costs of medical care are compared with the economic benefits of the care, with both costs and benefits expressed in units of currency. The benefits typically include reductions in future health costs and increased earnings due to improved health of those receiving the care.

COST CONTAINMENT a strategic plan intended to control costs.

COST-EFFECTIVENESS ANALYSIS comparative assessment of the cost and the effectiveness of an activity, considering alternative activities to determine the degree to which they will achieve the goals. The preferred plan of action is one that requires the least cost to produce a given level of effectiveness, or provides the greatest effectiveness for a given level of cost. The outcome can be measured in terms of health status.

COST-EFFICIENCY the use of cost as a marker of efficiency.

COST MINIMIZATION ANALYSIS if health effects are known to be equal, only costs are analysed and the least costly alternative is chosen.

COST SHARING a provision in a health benefit program that requires that the patient or different sector such as the private sector pays part of the cost of the service rendered.

COST-UTILITY ANALYSIS an economic analysis in which outcomes are measured in terms of their social value.

COUNSELLING a term used to describe a process of consultation and discussion in which one individual (the counsellor) listens and offers guidance or advice to another who is experiencing difficulties (the patient). The counsellor does not direct or make decisions for the client. The general aim is to solve problems, increase awareness, and promote constructive exploration of difficulties so that the future may be approached more confidently and more constructively.

COURSE in education is a series of lectures, lessons, and workshops with set objectives and defined content and time-frame.

COURSE ORGANIZER in vocational training courses a GP/FP who is responsible for the day release courses and other trainee courses. He acts as a group leader, helps the trainees to plan their curriculum, and meets their learning needs.

COVERAGE a measure of the extent to which the services provided cover the potential need for these services in a community. It is expressed as a proportion in which the numerator is the number of services provided, and the denominator is the number of instances in which the service should have been provided.

CRISIS a turning point in a physical illness or the emotional state of a patient or a family. In psychosocial terms often used of an acute failure to cope because of a disastrous event such as sudden serious illness or loss.

CRITERION (plural: **CRITERIA**) in classification describes a predetermined requirement. In quality assurance it is an evidence-based systematically developed explanation of what is good medical practice with regard to a specific health performance.

CRITICAL CARE health care services provided to patients in life threatening circumstances.

CRITICAL READING refers to the reading of a research paper and may be implemented by following these headings:

1. The background and the aim of the study and its relevance to general practice.
2. Were the methods used appropriate to the aim of the study? Who were the drop outs, and how did they affect the conclusion of the study?
3. Do the results answer the aim and, are they justified by the methods used? Are there alternative explanations to the findings?
4. Does the conclusion follow from the results? Which are the consequences of the conclusions for general practice? Are they relevant for the GP/FP, and are there barriers?

CROSS CULTURAL relating to various psychological, social, and cultural factors in assessing similarities and diversities in two or more different cultures or societies.

CROSS-CULTURAL STUDY study involving populations from different cultural backgrounds.

CROSS-OVER DESIGN a method of comparing two or more treatments in which the patients upon the completion of one course of treatment are switched to another.

CROSS-SECTIONAL STUDY (Syn. transversal study) the observation of a defined population at a single point in time or time interval. Exposure and outcome are determined simultaneously. See COHORT, CASE STUDY, CASE CONTROL STUDY.

CRUDE BIRTH RATE See BIRTH RATE.

CRUDE DEATH RATE See DEATH RATE.

CUMULATIVE DEATH RATE See DEATH RATE.

CURRICULUM DEVELOPMENT the course of action designed to produce a structured set of learning experiences.

CURRICULUM VITAE (CV) a summary of educational, professional, and relevant life experiences, usually used when seeking employment.

CUSTODIAL CARE services provided on a long time basis, usually for people who are unable to manage their affairs for whatever reason.

D

DALY abbr. for DISABILITY ADJUSTED LIFE YEARS.

DARTMOUTH COOP FUNCTIONAL HEALTH ASSESSMENT CHARTS/WONCA (COOP/WONCA). See COOP/WONCA CHARTS.

DATA a collection of items of information about patients.

DATA ANALYSIS phase of a research study where the collected patient information is examined.

DATABASE an organized set of data that can be used for a specific purpose.

DATA COLLECTION any systematic gathering of information ordered according to a predetermined plan.

DATA INTERPRETATION critical review of all relevant available data.

DATA PROCESSING conversion of data into a form where it is easily stored and easily accessible for analysis. The term is sometimes used for statistical analysis of data by a computer.

DATA SET raw data gathered by investigators.

DAY (HEALTH) CARE CENTRE a centre caring for individuals during day time, usually disabled or elderly people who are under medical supervision in a special institution, while they continue to live at their own homes.

DAY PATIENT a patient who attends a DAY HEALTH CARE CENTRE and spends the night at home and thus continues to live at his own home.

DDD abbr. for Defined Daily Dose. See ATC.

DEATH CERTIFICATE a vital record signed by a licensed physician or other designated health worker that certifies the death of a person and includes deceased's name, sex, birth date, address, and the time, place, and cause of death.

DEATH RATE (Syn. mortality rate) The proportion of a population that dies during a given time period, usually one year. The numerator is the number of persons who have died during the year, and the denominator is the mid-year population.

The death rate can be specified:

1. Age-specific death rate is the number of deaths among persons of a given age group per 1,000 population during a given time period, usually one year.
2. Cause-specific death rate is the number of deaths from a stated cause per 100,000 population during a given time period, usually one year.
3. Crude death rate is the number of deaths per 1,000 population during a given time period, usually one year.
4. Cumulative death rate is the proportion of a population that dies during a specified time interval. May refer to all deaths or deaths from specific causes.

DEBATES in relation to CONFERENCES and CONGRESSES are sessions consisting of a short introduction highlighting the controversy followed by a contribution "for" and a contribution "against" opening a discussion among the contributors and the audience.

DECISION ANALYSIS the application of explicit, quantitative methods that quantify prognoses, treatment effects, and patient values in order to analyse a decision under conditions of uncertainty.

DECISION-MAKING the methods used to reach a decision about a defined problem or question.

DECISION TREE a graphic illustration of possible ways of solving a problem, showing the various outcomes at each stage of the problem-solving process.

DECLARATION OF HELSINKI See HELSINKI, DECLARATION OF.

DEDUCTIBLE the part of health care expenses that the patient must pay before coverage from the insurer begins.

DEDUCTION a method of problem-solving using general knowledge to reach specific conclusions.

DEDUCTIVE TEACHING See TEACHING METHODS.

DEFENSIVE MEDICINE medical behaviour that deviates from the clinical norm in order to protect the physician from patient dissatisfaction or litigation.

DELPHI TECHNIQUE, DELPHI METHOD a way of gaining information about a problem from a panel of experts without bringing them together. It employs a questionnaire with cycles of feedback rather than face-to-face discussion.

DEMAND FOR HEALTH SERVICES willingness and/or ability to seek, use, and, in some settings, pay for health services. Sometimes further subdivided:

1. Expressed demand - which equates with use.
2. Potential demand - which equates with potential/maximal use. See NEED/DEMAND.

DEMOGRAPHIC DATA the collection of the following demographic data should be considered:

1. Patient identification: Should be unique.
2. Residence: There are several options for the classification of residence which include address, telephone number, census tract, postal or zip code, grid, or municipal jurisdiction.
3. Date of birth: Should be collected in such a way that age may be calculated to the nearest year or, in infants, to the nearest month.
4. Sex: Male or female.
5. Marital status: Married (includes Common-law), single, separated, divorced, or widowed, and significant other such as carer or sexpartner.
6. Socioeconomic status: May be derived by several techniques which use occupation, education, income, method of payment, area of residence within census tracts, or a combination of two or more of these parameters. Other demographic data like language group, ethnic origin, religion etc. may be considered, depending of the data needed.

DEMOGRAPHY the description of populations' size, density, sex and age distribution, fertility,

growth, mortality, and other vital statistics and their interaction with social and economic conditions. See VITAL STATISTICS.

DENOMINATOR the lower portion of a fraction indicating population size used to calculate a population based rate or ratio. See NUMERATOR.

DENOMINATOR PROBLEM refers to the difficulty sometimes encountered in defining precisely the practice population or the population at risk. This causes problems in the calculation of comparative rates and ratios.

DENSITY the number of items (practices, patients, people) in relation to area.

DEPENDENCY RATIO proportion of dependent persons, often meaning children under the age of 15 and elderly over the age of 65 in a population. Number of dependent persons divided by the number of the rest of the population.

DEPENDENT VARIABLE a variable which depends on another variable (the independent variable) in a study. The dependent variable is analysed in relation to independent variables. The dependent variable can be considered as the outcome variable, and the independent variable as predictor variable.

DEPUTIZING SERVICE See EMERGENCY CALL SERVICE.

DEPUTY See LOCUM TENENS.

DESCRIPTIVE STATISTICS branch of statistics which involves displaying and describing data.

DESCRIPTIVE STUDY an observational study which does not test a specific hypothesis by performing an experiment. Measures the burden of a disease and its distribution in the population.

DETERMINANT anything that brings about changes in health status. See CAUSALITY.

DIABETES HEALTH PROFILE designed to assess psychosocial and behavioural dysfunction in patients with diabetes (DHP-1 for use with insulin dependent and insulin requiring patients, DHP-2 for use with non-insulin-requiring patients).

DIABETES QUALITY OF LIFE MEASURE used to evaluate the satisfaction, impact, and worries associated with the treatment of diabetes mellitus esp. patients taking insulin.

DIAGNOSIS the determination of the nature of a disease, a medical name given by the physician for the health problem presented by a patient, family, or community. This may be limited to level of symptoms. The term covers both the process and its outcome and, in the case of a patient, represents the formal medical establishment of an episode.

1. Principal diagnosis: (Main diagnosis) - the most important problem, as determined by the health care provider.
2. Associated diagnosis: Another diagnosis made at the same time as the principal diagnosis. See COMORBIDITY.
3. Concurrent diagnosis: One which exists at the time of the encounter, but which is not dealt with at the encounter.

DIAGNOSIS RELATED GROUPS (DRG) a CASE-MIX classification system meant for resource allocation to acute hospitals, based on statistically iso-resource and relatively clinically grouping of hospital stays.

DIAGNOSTIC of a sign or symptom: Characteristic or pathognomonic for a specific diagnosis.

DIAGNOSTIC CATEGORIES in general practice three diagnostic categories are used:

1. Symptom diagnoses using a symptom or complaint as the best medical label for the episode.
 2. Nosological diagnoses (Syn. syndrome) using a symptom complex based on consensus among physicians, but which lacks a proven pathological or pathophysiological basis or aetiology.
 3. Pathological/pathophysiological diagnoses having a proven pathological/pathophysiological substrate and/or proven aetiology.
- See DISEASE, SYNDROME, COMPLAINT.

DIAGNOSTIC CLUSTERING placing diagnostic categories in groups of discrete clinical conditions, which are clinically related and suited for comparative analysis. By reducing the confounding effect of coding practice by individual physicians clustering increases the comparability of data from different populations.

DIAGNOSTIC CRITERIA the symptoms, complaints, objective signs, and/or test results which are essential for labelling a health problem i.e. making a diagnosis.

DIAGNOSTIC INDEX a system in general practice recording diagnosis, date of presentation, patients' name (or number), age, and gender. The index is useful when retrieving medical records for cohorts of patients with similar health problems and facilitates follow-up.

DIAGNOSTIC PROCEDURE procedure used to arrive at a diagnosis. Can include the taking of the history and the performance of a physical examination, but usually refers to additional diagnostic procedures such as laboratory or radiologic procedures.

DIAGNOSTIC SERVICE (Syn. investigative services) the assessment of any problem by history, physical examination, laboratory, imaging, or other examinations performed either inside or outside the office setting. See ASSESSMENT.

DIAGNOSTIC TEST ideally a diagnostic test always gives a positive result for patients, who have

the disease in question, and always gives a negative result among those who do not. The usual case is that the test will miss some patients with the disease (called FALSE NEGATIVES) and wrongly identify some, who do not have the disease (called FALSE POSITIVES). See STATISTICAL SIGNIFICANCE TEST.

DICHOTOMOUS SCALE See BINOMINAL SCALE

DIDACTIC an authoritarian method of teaching where the teacher imparts information and expresses opinions and where the learner is a passive listener.

DIET 1. Usual components of food intake of an individual or group.
2. Prescribed list of foods to be eaten for a specific health problem.

DIETETICS is the branch of medical science concerned with the application of the principles of nutrition to the selection of food and the feeding of individuals and groups.

DIFFERENTIAL DIAGNOSES the determination of which of two or more diagnoses with similar signs and/or symptoms is the one the patient suffers from.

DIMENSION distinct component of a multidimensional construct that can be specified, e.g. physical and mental health are dimensions of overall health.

DIPLOMA a certificate awarded for passing an examination or completing a course or an education.

DIRECT PROVISION OF MEDICAL CARE with no persons as intermediaries between health care provider and patient.

DIRECT CAUSAL ASSOCIATION where a causative factor can be directly related to a disease process with no other intervening factors.

DIRECT OBSERVATION in patient care the patient is observed directly, patient and physician are in the same room. In teaching the student or trainee is observed directly by the teacher in the same room (classroom) or through a one-way screen. The student/trainee is observed when performing e.g. a consultation or an examination of a patient.

DISABILITY any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal. Developmental disability is disability due to congenital abnormality, trauma, deprivation, or disease with onset before the age of 18 that interrupts or delays the sequence and rate of normal growth, development, and maturation.

DISABILITY ADJUSTED LIFE YEARS (DALY) a measure of the burden of disease on a defined population and the effectiveness of interventions. DALYs are advocated as an alternative to

QUALITY ADJUSTED LIFE YEARS (QUALYs) and claimed to be a valid indicator of population health.

DISCHARGE (FROM HOSPITAL) the process by which the patient is sent home from hospital.

DISCHARGE SUMMARY a resumé of the condition of a patient, course of illness, management, and recommendation for treatment after hospitalization.

DISCOVERY LEARNING See LEARNING.

DISCRIMINATION may be used generally or in relation to research.

1. Treating a person or a group differently from others..(Positive or negative discrimination).
2. A test used to differentiate between results or health problems.

DISEASE a biological dysfunction on basis of well-known pathological or pathophysiological processes or with a well-known etiology. Disease is a concept of reality and can therefore exist without a physician's judgement. Disease can be discerned from:

1. SYNDROME which is a presumed biological dysfunction of which the knowledge of causative pathological or pathophysiological processes is not accepted as conclusive for seeing it as a disease, according to the literature. A dysfunction or health problem is considered a disease by professional consensus. If this does not exist it is a syndrome.
2. COMPLAINT is not part of a disease or syndrome.

Disease is a concept of reality and can therefore exist without a physician's judgement. Disease, syndrome and complaint are congruent with diagnostic categories.

See ILLNESS, SICKNESS, and DIAGNOSTIC CATEGORIES.

DISEASE CENTRED CARE a type of care which emphasizes the health problem rather than the patient (compare PATIENT CENTRED CARE). The difference between the two types of care has to do with the "distance" between the carer and the patient. In primary care, where the care is based on a personal and long lasting relationship, the care tends to be patient centred, while in hospitals with a big daily turn over of doctors and nurses, many patients, high activity, many acute and sometimes serious health problems the care tends to be disease centred.

DISEASE LABEL a diagnosis which describes the health state of a person. See DIAGNOSIS.

DISEASE, SUBCLINICAL OR PRECLINICAL a health problem which can be detected by special tests but does not reveal itself by signs or symptoms.

DISORDER disturbance of the normal health status. It is used in an attempt to generalize rather than use the more specific term disease. See CONDITION, DISEASE.

DISTANCE EDUCATION, DISTANCE LEARNING an educational system which allows a student or a physician to remain at home and receive teaching material and supervision via mail,

telephone, internet, or similar systems. The student and teacher do not meet face to face. See EDUCATION, LEARNING.

DISTRIBUTION the manner in which a characteristic is dispersed among the members of a class or population.

DISTRICT NURSE a qualified nurse employed by a local authority to provide nursing services to patients in their homes often at the request of GPs/FPs. See COMMUNITY NURSE.

DISTRICT PHYSICIAN a primary physician who accepts continuing responsibility for the general health care of all persons living in a defined geographical area. In addition to his function as a GP/FP he often functions as a COMMUNITY PHYSICIAN with certain administrative duties for the organization of primary medical services in the district. He is usually employed by a government agency (local or central) either on a full-time or part-time basis.

DIVERGENT QUESTION See QUESTIONS.

DIVERGENT THINKING is a way of thinking or style of learning which produces several possible solutions to a problem.

DOCTOR is a term commonly used when addressing members of the medical profession and when speaking about such members. The term physician however is more precise, excluding e.g. doctors of philosophy. Doctor is kept in well established terms like doctor-patient relation. The word means teacher. See PHYSICIAN.

DOCTOR OF FIRST CONTACT the first physician seen by a patient during an episode of illness or injury, or for preventive and/or health education matters.

DOCTOR-PATIENT COMMUNICATION See COMMUNICATION.

DOCTOR-PATIENT RELATIONSHIP See PATIENT-DOCTOR RELATIONSHIP.

DOMAIN a defined field of thought, knowledge, or activity.

DOMICILIARY CONSULTATION a consultation at a patient's home. See HOME VISIT.

DOUBLE-BLIND TRIAL a trial involving two study groups, one receiving active drug the other placebo, where neither the patients nor the clinicians know which is which. This eliminates bias from the assessment of the results of the trial. See **BLIND(ED) STUDY, RANDOMIZED CONTROLLED TRIAL**.

DRG abbr. for **DIAGNOSIS RELATED GROUP**.

DROPOUT a person who has been enrolled in a study, but leaves it for any reason.

DRUG any substance, organic or inorganic, used for medical purposes. In addition to its chemical designation it will have an approved name, the generic name, but it may also have several proprietary names given by the manufacturer.

DRUG COST the total cost of drugs consumed in a region (country, county or institution) during a defined time period, usually a year.

DRUG PRESCRIBING the physician's right to order drugs to the patient from a pharmacy.

DRUG STATISTICS a listing of all drugs consumed in a region (country, county, or institution) during a specific time period. In some countries only prescribed drugs are listed, in other countries prescribed as well as over the counter drugs are included.

DRUG UTILIZATION REVIEW a method of auditing a physician's general prescribing habits or auditing individual patients' medication.

DSM-IV (abbr. for Diagnostic and Statistical Manual of Mental Disorders IV) a coding system for accurate classification of psychiatric disorders for both in-patient and out-patient populations.

DSM-PC DSM for Primary Care. See above.

DUKE HEALTH PROFILE developed to produce a brief but reliable and valid measure of health status that can be understood easily by a broad cross-section of patients in the primary care setting. It is designed to assess the effect of primary medical care services on the self-reported functional status and feelings of patients.

DURATION OF AN ENCOUNTER, OF A CONSULTATION the time spent in face to face contact with the physician during a patient/physician encounter or consultation.

E

EARLY DISEASE DETECTION See SCREENING, CASE FINDING.

EARLY INTERVENTION See INTERVENTION STUDY.

EARLY INTERVENTION PROGRAM a service targeted to people in a high risk group.

EBM abbr. for EVIDENCE-BASED MEDICINE.

ECHOING (Syn. repetition) the communication technique where the interviewer repeats the last few words that the patient or student has said to encourage him to keep talking and elaborate on the subject.

ECOLOGICAL SURVEY is a survey based on aggregated data for some population as it exists at some point or points in time; to investigate the relationship of an exposure to a known or presumed risk factor for a specified outcome.

EDIFACT abbr. for Electronic Data Interchange For Administration Commerce and Transport.

EDUCATION, MEDICAL is the life-long process of developing and maintaining medical abilities and behaviour. It starts in medical school and ends, when the physician stops practicing medicine.. It comprises:

1. Undergraduate medical education is the primary education in medical school leading to a first degree in medicine e.g. a bachelor's degree or a master's degree.
2. Postgraduate (syn. graduate) medical education is the education after the first degree in medicine. Leads to a master's degree or a doctorate. See CONTINUING MEDICAL EDUCATION.
3. Ongoing medical education. See CONTINUING MEDICAL EDUCATION.

EDUCATIONAL ASSESSMENT has two meanings. 1. An evaluation of a learner's educational achievements.

2. A subjective judgement of a learner's educational potential.

EDUCATIONAL TRIANGLE contains three aims:

1. What the student is intended to learn.
2. The methods to meet the AIMS.
3. The assessment of whether the AIMS have been met.

EFFECTIVENESS a measure of the success in achieving a clearly stated health objective in

relation to a patient or a defined population.

EFFICACY the extent to which a specific intervention, procedure, regimen, or service produces a beneficial result under optimal conditions. Ideally, the determination of efficacy is based on the results of a randomized controlled trial.

EFFICIENCY the effects or end-results achieved in relation to the effort expended in terms of money, resources, and/or time. See **COST-EFFECTIVENESS**.

ELDERLY See **AGED**.

ELECTIVE MEDICAL STUDIES the study of topics which the learner may choose to study, and which are not compulsory for all learners.

ELECTRONIC MEDICAL RECORD (EMR) See **COMPUTERIZED MEDICAL RECORD**.

EMERGENCY CALL SERVICE a service which provides urgent medical care out of hours for patients whose primary physician is off duty.

EMERGENCY DEPARTMENT (Syn. accident and emergency department, casualty department) a hospital department which provides medical care to people with emergencies. Can be "open", which means that patients can enter directly from the street on their own account or "closed", which means that the patients have to be referred by a GP/FP or physician on duty in primary care.

EMERGENCY MEDICAL SERVICE See **EMERGENCY CALL SERVICE**.

EMERGENCY MEDICINE the field of medicine which deals with urgent care. In some countries it is a specialized field in its own right.

EMPATHY the ability to appreciate and accept the emotions and experiences of another person (without becoming personally emotionally involved). An important professional skill in general practice. See **SYMPATHY**.

EMPIRICAL based on clinical observation or experience, rather than theory.

EMPIRICAL STANDARDS standards derived from statistical averages.

EMPOWER to enhance the capabilities of a person by giving him information, new skills, and a possibility to make decisions

EMR abbr. for **ELECTRONIC MEDICAL RECORD**. See **COMPUTERIZED MEDICAL RECORD**:

ENABLING FACTOR circumstance affecting the nature of a medical problem and its meaning for

the patient, which facilitates the presentation of the problem.

ENCOUNTER (Syn. CONTACT) any professional interchange between a patient and a health care provider, be this provider a single professional or a health care team. One or more health issues (problems or diagnoses) may be dealt with at each encounter. When more than one health issue is addressed during one encounter, this encounter relates to more than one episode of care. See also CONTACT.

1. Direct encounter: An encounter in which there is face to face meeting of patient and professional. This can be further divided into:
 - 1.1. Office encounter: (Surgery encounter, consultation) A direct encounter in the health care provider's office or surgery.
 - 1.2. Home encounter: (House call, home visit) A direct encounter occurring at the patient's residence (this includes home or a friend's home where a patient is visiting, hotel, room, etc.)
 - 1.3. Hospital encounter: A direct encounter in the hospital setting. One encounter is counted for each patient visit. Hospital encounters are further subdivided:
 - 1.4. In-patient encounter: A direct encounter with a patient admitted to the hospital.
 - 1.5. Out-patient encounter: A direct encounter with a patient not admitted to the hospital, either in the emergency room or in the out-patient clinic.
2. Follow-up encounter: An encounter between patient and physician in which an episode, previously initiated, is followed up.
3. Indirect encounter: An encounter in which there is no physical or face to face meeting between the patient and the health care professional. These encounters may be subdivided by the mode of communication, e.g. by telephone, letter, or through a third party.

ENCOUNTER ELEMENT is that part of an encounter that deals with a single health problem among others, thus resulting in the fact that an encounter element is part of only one episode of care. See CONTACT.

ENCOUNTER RATES the number of encounters per patient in a practice population.

ENDEMIC continuously present within a given area or population group.

ENVIRONMENT all external conditions which can influence the individual or the population. It is subdivided into physical, social, cultural, natural, artificial etc.

ENVIRONMENTAL HEALTH branch of medicine which deals with the relationship between the environment and health.

EPIDEMIC an outbreak of a disease that affects many people, the number of cases increasing rapidly over a certain period of time (day, week, month or year) and spreading from place to place. When it occurs worldwide, it is referred to as a pandemic, e.g. AIDS.

EPIDEMIOLOGICAL SURVEY a method of data collection applied systematically to a

population defined geographically, by demographic characteristics or life circumstances (e.g. women of childbearing age).

EPIDEMIOLOGY the study of the distribution and determinants of health related states or events in specified populations, and the application of this study to control of health problems.

EPISODE OF CARE as used in the ICPC is the period from the first presentation of a health problem or illness to a health care provider until the completion of the last encounter. An episode of care is distinct from an **EPISODE OF DISEASE** and an **EPISODE OF ILLNESS**. A new episode begins with the first encounter for the initial occurrence of an illness or recurrence of an illness following a disease-free interval.

EPISODE OF DISEASE period in which a health problem exists from its onset to its resolution or until the patient's death.

EPISODE OF ILLNESS (from the patient's point of view) an episode of illness extends from the onset of symptoms to their complete resolution.

It can be subdivided according to its course over time:

1. **ACUTE:** (Short-term) an episode of care with a duration of four weeks or less.
2. **SUBACUTE:** An episode of care with a duration of between four weeks and six months.
3. **CHRONIC:** (Long-term) an episode lasting six months or more. See **ENCOUNTER**.

EQ-5D (previously **EUROQOL**) a measure designed as a non-disease specific instrument to describe and value health states. It was developed by the **EUROQOL** group, which has a special interest in comparing cross national health state valuations.

ERGONOMICS the study of people in relation to work and work environments. Involves the application of psychological and physiological principles in the design of tools, equipment, workplaces, machines, buildings, and of the home.

ERGOTHERAPY work therapy, individually designed therapy in which work training and psychological support aim at restoring ability to work or coping with daily needs.

ERROR a false result obtained in a study e.g. due to bias. The error can be:

1. A random error, which is the portion of variation in a measurement that has no apparent connection with any other measurement or variable, generally regarded as due to chance.
2. A systematic error, which often has a recognizable source, e.g. a faulty measuring instrument or pattern, i.e. it is consistently wrong in a particular direction. See **BIAS**.

ERROR, TYPE I (Syn. alpha error) The error of rejecting a true null hypothesis. See **STATISTICAL SIGNIFICANCE TEST**.

ERROR, TYPE II (Syn. beta error) the error of failing to reject a false null hypothesis. See

STATISTICAL SIGNIFICANCE TEST.

ESTIMATION in medical statistics is one way of analysing data (the other is HYPOTHESIS TESTING). Here we measure the aspect of interest in the sample and infer, that the same applies in the population of similar subjects. A crucial aspect is, that each estimate is accompanied by a measure of its uncertainty. Thus a range of values is obtained extending either side of the observed value, which is highly likely (usually 95 per cent) to include the true population value. This range of values is known as a CONFIDENCE INTERVAL

ETHICS See MEDICAL ETHICS.

ETHICS, CODE OF general rules of professional practice regarding moral, behaviour, inter- and intra-professional conduct. See CODE OF MEDICAL ETHICS.

ETHICS COMMITTEE 1. A professional committee dealing with problems of physicians' conduct with patients.

2. A committee charged with ensuring the privacy, safety, and wellbeing of human subjects involved in research.

ETHNIC GROUP a social group characterized by sharing a distinctive social and cultural tradition maintained through generations, a common history and origin, shared experiences, and often a common genetic heritage.

ETIOLOGY See AETIOLOGY.

ETIQUETTE, MEDICAL the forms, manners, and conduct established by convention as acceptable or required in the medical profession.

EUROPEAN ORGANIZATION FOR RESEARCH AND TREATMENT OF CANCER QLQ-C30 a cancer-specific self-administered questionnaire for assessing quality of life. A core instrument for use with cancer patients in (international) clinical trials.

EUTHANASIA the act of shortening life to relieve suffering. Euthanasia may be voluntary (the sufferer asks for measures to end his life), active (e.g. by administration of a drug), or passive (by deliberate withholding of treatment).

EVALUATION a process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in the light of their objectives.

EVENT RATE the proportion of patients in a group in whom the event is observed. Control event rate and experimental event rate are used to refer to this in control and experimental groups of patients, respectively. The patient expected event rate refers to the rate of events we expect in a patient who received no treatment or conventional treatment.

EVIDENCE-BASED HEALTH CARE extends the application of the principles of EVIDENCE-BASED MEDICINE to all professions associated with health care, including purchasing and management.

EVIDENCE-BASED MEDICINE is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

EXAMINATION, CLINICAL may be

1. Complete: The term "complete examination" refers to the examination which contains those elements of professional assessment, which, by consensus of a group of local physicians, reflects the "usual standard of care".
2. Partial: The term "partial examination" refers to the examination of a specific organ, system, or function or to a general examination, which is limited and incomplete.

EXAMINATIONS in medical education are methods assessing ability, achievement, or performance in medicine. Various methods can be applied depending on the aim of the examination:

1. Essay involves writing to a specified length on a given topic. It is used to test ability, to discuss, evaluate, analyse, summarize, or criticize.
2. MULTIPLE CHOICE QUESTIONS (MCQ) are questionnaires in which the learner chooses his answer to each question from a list of alternative responses, of which only one is correct. Is used to test KNOWLEDGE and ATTITUDES.
3. MODIFIED ESSAY QUESTIONS (MEQ) are questions raised in a sequence on different pages. The learners usually answer the questions in essay form on the first page and continue to the next page, where new questions are asked regarding the same clinical problem. The way the problems are presented resembles the daily clinical problem-solving situation and is very effective and useful in activating the learners in general/family practice.
4. OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS (OSCE) a method of assessing a learner's clinical competence which is objective rather than subjective, and in which the standard areas tested and the check list of required answers are carefully planned by the examiners. The clinical competence to be tested is broken down into its various components, e.g. taking a history, measuring a blood pressure, or making clinical decisions on the basis of physical findings on a patient. The learners rotate from one station to another. At each station they have to perform a task or solve a problem.
5. Oral examination by spoken word and answers.
6. CLINICAL EXAMINATION a. Examination of patients by a physician. b. An examination where a patient presents the clinical problem, which the learner or trainee discusses and suggests solutions for. The patient may be present during part of the examination, or the learner-patient interaction may be presented as a video recording of a consultation or observed through a one-way screen.

7. Short answers is a form, where the learner in essay form writes a few words or lines as an answer to each question.

EXHAUSTIVE (Syn. comprehensive) quality requested for a classification in order to be able to accept all the terms useful to reach its purpose.

EXIT PROBLEM (Syn. "By the way, doctor", door knob problem) the more sensitive problem which is left to the end of the consultation and which often is the main reason for the patient's visit.

EXPERIMENT a controlled study where the investigator changes one or more conditions and records the effect.

EXPERIMENTAL LEARNING See LEARNING.

EXPERIMENTAL STUDY a study where all the conditions can be controlled by the investigator. In general practice it often refers to a study where certain environmental factors are changed, and the effect on the patients is measured.

EXPERT SYSTEMS a computer program that uses expert knowledge to attain high levels of performance in a problem area. For medicine this program should be symbolically encoded concepts derived from experts in the field of health care.

EXPERT WITNESS a physician who has special knowledge about a subject for legal proceedings. An expert witness is entitled to give an opinion on the subject of the proceedings, i.e. he is not limited to giving factual evidence.

EXPLANATORY STUDY a study which tries to explain, rather than just describe, certain aspects of health behaviour, disease pattern, or human interaction. The research is often referred to as QUALITATIVE as opposed to QUANTITATIVE. The research method uses the interview as a method of retrieving the necessary information.

EXTERNAL AUDIT critical assessment of performance carried out by persons or authorities not personally involved in the activity under review. See AUDIT.

EXTRAPOLATE to predict a value of a variable outside the range of observed variables.

F

FACE VALIDITY See VALIDITY.

FACILITATOR a person who enhances or reinforces a process. A GP/FP is often a facilitator for his patients in health care, but the term can also comprise the solving of problems in family or work. A teacher facilitates the learning process for the student or trainee.

FACTOR ANALYSIS a statistical method of combining variables into underlying constructs. It measures which variables weigh together on the same factor.

FACULTY 1. Group of related departments in a university. May also refer to university teachers as a group.

2. Regional branch of a professional association.

3. A particular ability, especially mental ability.

FAIRNESS giving or having equal opportunities irrespective of age, sex, or social status. When used in health care it refers to the patients' right to receive care which fulfil these requirements. This characterizes a health care system of high standard.

FALSE NEGATIVE a negative test result in a person who has a condition which the test is designed to detect. The person is thus mistakenly labelled as unaffected, when in fact he is affected. See SCREENING, SENSITIVITY, SPECIFICITY.

FALSE POSITIVE a positive test result in a person who does not have a condition which the test is designed to detect. Thus the person is mistakenly labelled as having the condition when he is actually unaffected. See SCREENING, SENSITIVITY, SPECIFICITY.

FAMILY a group of individuals related by blood, legal agreement, and/or social obligation.

FAMILY, EXTENDED a family group consisting of members beyond the nuclear family. See FAMILY, NUCLEAR

FAMILY MEDICINE (Syn. GENERAL PRACTICE) is the branch of medical practice provided by the family physician (FP) or general practitioner (GP). Is a part of the primary medical care. See

FAMILY PHYSICIAN.

FAMILY, NUCLEAR a family of one or at the most two generations, usually husband, wife and children, united through blood, marriage, adoption, or equivalent ties. See FAMILY, EXTENDED.

FAMILY PHYSICIAN (FP) (Syn. GENERAL PRACTITIONER (GP), family practitioner, family doctor) a medical practitioner who provides primary and continuing care to patients and their families within their community. WONCA further defines the family physician as, "The physician who provides care for both sexes of all ages, for physical, behavioural, and social problems". See FAMILY PRACTICE, JOB DESCRIPTION.

FAMILY PLANNING a couple's use of any method (usually contraception) to limit or space out the births of children.

FAMILY PRACTICE (Syn. GENERAL PRACTICE) a specialized branch of medical practice provided by FPs/GPs. The use of the terms general practice and general practitioner has come under some criticism. Many medical practitioners in the primary health care prefer the terms family physician and family medicine in order to emphasize the recognition of their branch of medical practice as a speciality in its own right. In some countries the speciality of family medicine is named "general medicine" (e.g. in Germany "Allgemeinmedizin", in Denmark "Almen Medicin"). See FAMILY PHYSICIAN.

FAMILY PRACTICE ADMINISTRATOR, PRACTICE MANAGER an employed skilled administrator who is in charge of the administrative, economic, and personnel aspects of a general practice. In private practice he is employed by the GPs/FPs themselves and in publicly owned and run health centres he is employed by the respective authority.

FAMILY PRACTICE CLASSIFICATION a system of classifying family/general practices with regard to size, location, number of partners, type of patients, or other relevant variables for use in health planning and description of the primary health care sector.

FAMILY PRACTICE CLERKSHIP a period during the undergraduate medical education in which the medical student stays in a general practice as an apprentice, seeing patients and participating in the work of the practice, supervised by the GP/FP and his staff.

FAMILY PRACTICE EDUCATION the teaching and learning which takes place in family medicine and in family practice and which emphasizes "whole person"- medicine, personal acquaintance, continuity, coordination, and the use of simple examination procedures and tests.

FAMILY PRACTICE METHODS the special methods which are applicable in general practice when obtaining history and examining, testing, and treating a patient.

FAMILY PRACTICE ORGANIZATION 1. The professional body of family practice, which deals with the public authorities or the insurance companies in order to obtain satisfactory working and

payment conditions.

2. Methods of arranging the work in a family practice itself.

FAMILY PRACTICE TRAINING the postgraduate training of young physicians in teaching practices. Includes teaching knowledge, skills, and attitudes related to the role of the family physician.

FATALITY RATE the number of deaths from a health problem recorded during a defined period, divided by the total number of cases with that health problem during the same period (incidence), usually expressed as the rate per 100 cases per year.

FEASIBILITY STUDY a preliminary study performed to determine the practicability of a larger study or health program. See **PILOT STUDY**.

FEEDBACK an evaluation method in which the person (student, physician, or scientist) expresses what he found he did well and what he might do better. The supervisors or members of the audience then express what they found was good and what might be better. Feedback is an educational approach designed to emphasize the positive aspects of a performance and yet point out areas, which might be improved.

FEEDBACK EVALUATION is important to ensure that the communicating persons understand each other. In education it enables the teacher to follow the student's/trainee's learning and progress.

FEE FOR SERVICE a method of reimbursement based on payment for each service rendered or patient encounter provided, e.g. a consultation, a test, or a home visit. Reimbursement may be from the patient and/or a third party such as an insurance company or a government program.

FEE SCHEDULE a listing of accepted fees or established allowances for specified medical procedures.

FELLOW 1. Member of a learned society or college. Depending on the society the title may require passing a professional examination or may be bestowed as an honour.

2. Holder of a scholarship for a certain period for postgraduate study in a special field.

FERTILITY RATE number of pregnancies per 1,000 population over a given time period (usually one year).

FETAL DEATH death prior to the expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy. Fetal deaths are classified by a WHO expert committee into three categories:

1. Early fetal deaths (up to and including 500 g approximately corresponding to a gestational age of 20 weeks).

2. Intermediate fetal deaths (over 500 g up to and including 1,000 g i.e. approximately 28 weeks).
3. Late fetal deaths (over 1,000 g).

The concept of fetal deaths thus supersedes the older terms abortion, miscarriage and still birth.

FETAL MORTALITY RATE the number of fetal deaths (28 weeks or older) per 1,000 live births over a given time period (usually a year).

FIELD TRIAL, FIELD TEST testing an instrument (e.g. a health outcome measure, a blood sugar meter) in the conditions it was meant for, to see if it is a valid and reliable measure.

FOCUS GROUP a small, relatively homogenous group of people (often 8-12), who are interviewed by a researcher. The ensuing discussion provides the basis for collecting comprehensive, qualitative, and evaluative information.

FLOW CHART an agreed diagrammatic representation of the steps taken in an **ALGORITHM** or **PROTOCOL** for the investigation of a clinical problem as a result of more clinical information being sought or becoming available.

FOLLOW-UP regular observation of the health problem or health related characteristics of an individual or a group, for whom the physician has a continuing responsibility. May also be used about patients enrolled in a study.

FOLLOW-UP ENCOUNTER an encounter between patient and physician in which an episode of care, previously initiated, is followed up.

FOLLOW-UP STUDY a study in which an individual or group is followed over time to see the effect of a certain intervention on their health status.

FORENSIC MEDICINE the medical speciality which deals with any aspect of medicine, which has an interface with the law. See **JURISPRUDENCE**.

FORMAL CARE maintenance and assessment of health, education, health promotion, and prevention provided through the system of qualified and registered health professionals and organizations. See **HEALTH CARE**.

FRAIL ELDERLY PEOPLE have very little resistance to physical, psychological, or social strain, and they exercise little control over their living conditions and thus need special attention or care.

FRAUD See **MISCONDUCT**.

FREE ORAL COMMUNICATIONS (Syn. free standing papers) session at a **CONFERENCE** or **CONGRESS** consisting of 5-6 short presentations on related topics. Each presentation usually lasts 10-15 minutes and is often followed by a short discussion or questions.

FREE STANDING PAPERS See FREE ORAL COMMUNICATIONS.

FRENCHAY ACTIVITIES INDEX was developed to provide accurate information of the premorbid lifestyle of stroke patients and to record changes in activities following stroke.

FREQUENCY DISTRIBUTION the number of items or persons studied, who score at each level of a scale. The distribution can be presented cumulatively or categorically, in numbers per category or graphically. A distribution can be normal or skewed. See NORMAL DISTRIBUTION, SKEWNESS.

FUNCTION for individuals the manner in which tasks and roles required for everyday living are performed. See COOP/WONCA CHARTS.

FUNCTIONAL CAPACITY an individual's ability to perform in the role, which he has been trained for and is expected to master. E.g. a physician's ability to function as a GP/FP.

FUNCTIONAL INDICATOR a variable susceptible to direct measurement, which reflects the level of function of persons in a community (these measures may be used as components in the calculation of a function index).

FUNCTIONAL STATUS the ability of a person to perform and adapt to his environment, measured both objectively and subjectively over a stated period of time. See CLINICAL STATUS, HEALTH STATUS, HEALTH-RELATED QUALITY OF LIFE, HEALTH OUTCOME MEASURE.

FUNCTIONAL STATUS INDEX a measure designed to describe the level of function. The index assesses physical function, emotional well-being, social function, activities of daily living, feelings, etc. Examples are the Dartmouth COOP Functional Health Assessment Charts (COOP) which have been developed into the Dartmouth COOP/WONCA Charts, Duke-UNC Health Profile (DUHP), the Duke Health Profile (DUKE), the Nottingham Health Profile (NHP), the Sickness Impact Profile (SIP), and the SF-36 Health Survey (SF-36). See HEALTH OUTCOME MEASURES.

FUNCTIONAL SYMPTOMS have no discernable organic or structural cause and are considered to be psychogenic.

FUNDHOLDING an organizational arrangement for health care where a family practice is responsible for managing a health service budget with the aim of ensuring that the resources are used effectively. Any profits made by the fundholding practice are kept by the physicians to maintain or improve their practice.

G

GATEKEEPER the function of a GP/FP to decide on referring to SECONDARY (specialized) CARE.

GENERAL HEALTH QUESTIONNAIRE (GHQ) designed to be a self-administered questionnaire identifying respondents with non-psychotic psychiatric conditions by assessing the severity of their psychiatric disturbance. It has been used in a number of different settings.

GENERAL HEALTH RATING INDEX designed to assess the respondent's perception of health in general. Developed for use in randomised controlled trials to estimate the effects of different health care financing arrangements on health status.

GENERAL POPULATION refers to the total population including all persons irrespective of the state of their health. Consists both of the healthy population and the patient population.

GENERAL PRACTICE See FAMILY MEDICINE.

GENERAL PRACTICE REGISTRAR (GPR) See TRAINEE

GENERAL PRACTITIONER See FAMILY PHYSICIAN.

GENERAL RESISTANCE RESOURCES (GRRs) are defined as any characteristic of the person, the group, or the environment that can overcome the stressor or facilitate effective tension management and thus prevent tension from being transformed into stress. By definition GRRs provide the individual with sets of meaningful coherent life experiences.

GENERIC HEALTH OUTCOME MEASURES are measures applicable to all types of patients as well as to the general population in contrast to disease or function specific outcome measures, which are only relevant for use with selected patients. See FUNCTIONAL STATUS INDEX.

GENERIC NAME the non-proprietary, unbranded name of a drug or a pharmaceutical preparation.

GENETIC COUNSELLING the procedure by which patients and their families are given advice

about the nature and consequences of inherited disorders, the possibility of being affected or having affected children, and the various options available to them for the prevention, diagnosis, and management of such conditions.

GERIATRIC ASSESSMENT an assessment of an elderly person's ability to function physically, psychologically, and socially. In some countries it is used for deciding where the geriatric patient can live and most often for deciding what kind of support he needs.

GERIATRIC DAY CARE health service for elderly patients, who attend a **DAY CARE CENTRE** during the daytime for an agreed number of days per week. They are usually cared for through activities, meals, and simple health care like medication and nursing care. The elderly patients still live at their own homes, where they spend the nights and some days.

GERIATRICS the medical discipline concerned with care of old patients

GERONTOLOGY the science of ageing. Can be divided into social and biological gerontology.

GLOSSARY (Syn. vocabulary) list of technical or special words explaining their meanings.

GNP abbr. for **GROSS NATIONAL PRODUCT**.

GOAL ORIENTED CARE care where the aims and objectives and the time to achieve them are specified.

GOALS in teaching the end result aimed for by a teacher. Can be high levelled generalisations (**AIMS**) or specific statements of behaviour, which the students are expected to meet (**OBJECTIVES**).

GOLD STANDARD the optimal structure, procedure, or outcome of the GP's/FP's professional work. Often used to indicate what peers regard as good professional standard in general practice. As such it acts as the ruler with which a given structure, procedure, or outcome is compared when estimating the **QUALITY OF HEALTH CARE**. See **AUDIT**.

GRADUATE STUDENT a student who already holds a degree - especially the first or bachelor's - from a university.

GRADUATE STUDIES are studies carried out after the basic studies which led to the first degree. See **GRADUATE STUDENT**.

GRADUATE STUDENTS have completed a course for a degree.

GRAPH a visual display of the relationship between variables. The values of one set of variables are plotted along the horizontal or x axis, the values of another set along the vertical or y axis.

GRIEF in the medical context is a deep sense of sorrow and suffering usually occasioned by bereavement, to which it is a normal though painful emotional response.

GROSS NATIONAL PRODUCT (GNP) the total sum in a country of three major components:

1. Personal expenditure on goods and services.
2. Government expenditure on goods and services, and
3. Investment expenditure.

GROUNDING THEORY a theory that is discovered, developed, and provisionally verified from data that have been gained systematically and analysed during the course of research.

GROUP LEARNING a learning method which is based on group work as the method to solve problems, acquire new knowledge and skills, and appreciate the possibilities and limitations of the social interaction in a group. See LEARNING, TEACHING.

GROUP PRACTICE (Syn. associated practice) a medical practice in which the patient population is cared for by a number of associated/affiliated physicians. The principal responsibility for subgroups of the population may be assigned to one or more physicians, but the group accepts the responsibility for continuity of patient care. In a legal sense, however, the individual physician usually has the ultimate responsibility for each patient. A group practice usually implies some degree of partnership.

1. Single-speciality group: A group practice in which all physician members belong to the same speciality.
2. Multi-speciality group: A group practice in which the physician members belong to more than one speciality.

GROWTH RATE OF POPULATION a measure of population growth comprising the addition of newborns to the population and subtraction of deaths.

GUIDELINES See PRACTICE GUIDELINES.

GUTTMAN SCALE a cumulative scale in which each item consists of increasingly more severe or extreme items (Can you climb the stairs? Can you walk one km?). In a perfect Guttman Scale, each person's response to items in the scale can be determined from the total scale score. See SCALES OF MEASUREMENT.

H

HANDICAP a disadvantage for a given individual resulting from an impairment or a disability that limits or prevents the fulfilment of a role that is normal (depending on age, sex, social, and cultural factors) for that individual.

HAWTHORNE EFFECT the effect (usually positive or beneficial) upon persons being studied of simply being under study. The effect may influence the behaviour of such persons and must be taken into consideration, when studies are designed e.g. in action research. The name derives from work studies carried out in the Western Electric Plant, Hawthorne, Illinois, USA, 1949.

HAZARD (Syn. risk) a factor or exposure that may adversely affect health.

HEALTH as defined by WHO (1961): A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. (WONCA's definition has been modified so that "complete" is replaced by "optimal".) In his book *Limits to Medicine* Ivan Illich defines **HEALTH** as: The ability to adapt to changing environments, to growing up and to ageing, to healing when damaged, to suffering and to the peaceful expectation of death.

HEALTH BEHAVIOUR the way the individual combines knowledge, practice, and attitudes to influence health. It can be positive, thus preserving or even promoting good health, or negative, causing deterioration in the health of the individual or population.

HEALTH BELIEFS values, attitudes, and concepts held by individuals or cultural groups regarding the cause, nature, and treatment of illness which need to be taken into consideration in formulating the management plan by any health professional.

HEALTH CARE assessment and maintenance of health, management of disease, education, promotion of health, prevention of health problems, and related activities provided by qualified professionals to improve or maintain health status. See **SELF CARE**.

HEALTH CARE ECONOMICS with limited resources choices are required how to allocate resources for health care to minimize **OPPORTUNITY COSTS**. Economics has an important role to

play in health care in that economic choices on how to distribute health resources will affect health outcomes of a population. See COST-BENEFIT ANALYSIS, COST-CONTAINMENT, COST-EFFECTIVENESS ANALYSIS, COST-UTILITY ANALYSIS.

HEALTH CARE EVALUATION control of quality. See AUDIT.

HEALTH CARE NEEDS (Syn. health needs, perceived needs, professionally defined needs, unmet needs) has a varying meaning in the context of public health. When referring to specific indicators of disease needs may be measured numerically, but social, cultural, economical health care accessibility and political value judgements are usually implied even in such cases.

HEALTH CARE PROCEDURES (Syn. medical procedures) activities directed at, or performed on an individual with the object of improving health or relieving a health problem or injury, or making a diagnosis.

HEALTH CARE PROVIDER (Syn. health care professional) a person, a team, or an organization which delivers health care services to a patient or a subject of care. In the majority of instances this will be a professional such as a GP/FP, a nurse, a midwife, a physician assistant, a medical social worker, a physiotherapist, an occupational therapist, a dietician, or other allied health personnel. In some cultures the provider may be a lay person with limited or no medical training but with health care responsibility.

HEALTH CARE REFORM a change in the organization, structure, or allocation of resources with the aim of increasing accessibility, quality, and/or efficiency of the health care system.

HEALTH CARE RESOURCES financial and human resources which are allocated to health care.

HEALTH CARE STATISTICS aggregated data describing and enumerating attributes, events, behaviour, services, resources, outcomes, and costs related to health care or health services.

HEALTH CARE SURVEYS systematic collection of data in a population in order to obtain information about the utilization of the health care system, the quality of the care delivered, the patients' satisfaction, or any other data which give information about the health care system and can be used in the planning and implementation of health care.

HEALTH CARE SYSTEM the organizational structure through which health care is provided. See HEALTH SERVICES.

HEALTH CARE TEAM See PRIMARY CARE TEAM.

HEALTH CARE TRENDS refer to changes in the provision of health care services by qualified health care providers over a designated period of time.

HEALTH CENTRE a building housing personnel, who provide a number of health care services e.g. GPs/FPs, community nurses, dentists, antenatal and child health clinics etc. Social services may also operate from such a centre.

HEALTH DIMENSION a theoretical component of health such as physical or mental health.

HEALTH EDUCATION the provision of information, advice, counselling, and training in activities that can promote health.

HEALTH EDUCATOR a person who provides health education as a professional career, a specialist in health education.

HEALTH EXPENDITURE any expense, which the individual, the municipality, or the state has to pay for health.

HEALTH FRACTION denotes the balance between strains and resources. A person can become sick, when strains are larger than resources, if the person is unable to restore the balance by reducing strains or increasing resources. The model is derived from theories of stress, psychosomatics, and psychotherapy. The GP's/FP's task is to assist people in restoring the balance, not only by diminishing the negative sides but perhaps even more by strengthening the positive sides.

HEALTH INDEX the health of a population expressed by a numerical figure derived from a validated composite, which can be composed of infant mortality, sickness leave, consumption of medicine, mortality rates, disease frequencies, and other health indicators or vital statistical information.

HEALTH INDICATOR a recorded single variable, which gives important information about the health of a given population. Examples are infant mortality rates, incidence of notifiable diseases, absentee days.

HEALTH INSURANCE a system of social insurance devoted solely to health related benefits. It may be private (voluntary) or public (compulsory to certain categories or to the whole population).

HEALTH MAINTENANCE ORGANIZATION (HMO) a prepaid health care program of group practice with comprehensive medical care being provided with an emphasis on preventive medicine.

HEALTH OUTCOMES are changes in the numerically measured health status of an individual, a group, or population which are attributed to an intervention or series of interventions.

HEALTH OUTCOME MEASURES measurement instruments to assess the health status, functioning, well-being, and/or health related quality of life of persons. Most instruments are standardized and validated research tools, but a few can be used in daily practice. **HEALTH**

OUTCOME MEASURES can be generic or disease-specific. Most measures require the assessment by the patient. Examples of generic instruments are: Dartmouth COOP/WONCA charts, the Duke-UNC Health Profile (DUHP), the Duke Health Profile (DUKE), the Nottingham Health Profile (NHP), the Sickness Impact Profile (SIP) and the SF-36 Health Survey (SF-36). Examples of disease-specific measures are: The Arthritis Impact Measurement Scale (AIMS) and the Functional Living Index: Cancer (FLIC). See FUNCTIONAL STATUS INDEX, HEALTH STATUS, COMPOSITE SCALE.

HEALTH PLANNING the orderly process of defining community health problems, identifying unmet needs, and surveying the resources to meet them, establishing priority goals that are realistic and feasible, and projecting administrative action to accomplish the purpose of the proposed program.

HEALTH PROBLEM any concern in relation to the health of a patient as determined by the patient and/or the HEALTH CARE PROVIDER. Problems should be recorded at the highest level of specificity determined at the time of an encounter. GPs/FPs see patients with HEALTH PROBLEMS which are not diseases and may not develop into disease.

1. New problem: The first presentation of a problem, including the first presentation of a recurrence of a previously resolved problem but excluding the presentation of a problem first assessed by another provider.
2. Continuing problem: A previously assessed problem which requires ongoing care. It includes follow-up for a problem or an initial presentation of a problem previously assessed by another provider.

HEALTH PROFILE all the elements indicating the health status of a population as well as the various means used for the delivery and evaluation of health care.

HEALTH PROMOTION seeks to better health at the individual and population level. Refers to a range of practices including health education, community development, preventative services, policy advocacy, and regulation. It includes but goes beyond disease prevention.

HEALTH-RELATED QUALITY OF LIFE functional status, perceptions of well-being, and life satisfaction which are related to a person's health. See CLINICAL STATUS, FUNCTIONAL STATUS, HEALTH STATUS.

HEALTH RESOURCES/RISK BALANCE MODEL is a clinical model for general practice with SALUTOGENIC perspective and a patient-centred approach to the consultation. The model intends to shift the attention of the GP/FP from objective risk factors to self assessed personal health resources in patients. The physician is encouraged to identify and combine the agendas of pathogenesis and risk factors with salutogenesis and health resources as well as the agendas of physician-assessment with patient-assessment. The health resources as observed by the GP/FP and the patient's self-assessed health resources are the bases of individual salutogenesis in practice. See PERSONAL HEALTH RESOURCES.

HEALTH RISK APPRAISAL method of describing an individual's chance of falling ill or dying of a specified condition.

HEALTH SERVICES the services which are delivered by health care providers or others under their responsibility to maintain, promote, or restore the health of a patient or the population.

HEALTH SERVICE RESEARCH the study of all aspects of the health care system in order to understand its influence on need, demand, cost, outcome, etc. Analysis is often divided into:

1. Structure: Analysis of resources, facilities, training, and manpower.
2. Process: Analysis of where, by whom and what is provided.
3. Outcome: Analysis of the results for the patients, to what degree they benefit from the intervention.
4. Output: Analysis of the number of patients treated as in-patients and as out-patients, number of staff etc.

HEALTH STATISTICS all data which describe aspects of health in a population. See VITAL STATISTICS.

HEALTH STATUS the defined health levels of a person or population in terms of physical, mental, and social condition or function. See CLINICAL STATUS, FUNCTIONAL STATUS, HEALTH-RELATED QUALITY OF LIFE.

HEALTH STATUS INDEX See HEALTH OUTCOME MEASURES, FUNCTIONAL STATUS INDEX.

HEALTH SURVEY a survey providing information about the health status of a population. It may be descriptive, explanatory, or exploratory.

HEALTH VISITOR (Syn. PUBLIC HEALTH NURSE) a qualified nurse who has special qualifications in preventive medicine and health promotion. She may also have experience in other medical specialties. The health visitor does not carry out practical nursing care, but gives advice about care of young children, persons suffering from illness, expecting and nursing mothers and their relatives.

HEART SINK PATIENT difficult or problematic patient with insoluble multiple, often changing, health problems usually due to emotional or personality disorder, who causes in the physician an uncomfortable feeling of despair and/or frustration, every time he enters the consulting room, often frequently.

HELSINKI, DECLARATION OF World Medical Association Declaration of Helsinki: Recommendations Guiding Medical Doctors in Biomedical Research Involving Human Subjects. Adopted by the 18th World Medical Assembly, Helsinki, 1964, and revised in Tokyo 1975, in

Venice 1983, and in Hong Kong 1989.

It states that, "In the field of biomedical research a fundamental distinction must be recognized between medical research in which the aim is essential diagnostic or therapeutic for a patient, and medical research, the essential object of which is purely scientific and without implying direct diagnostic or therapeutic value to the person subjected to the research." It consists of 13 basic principles and 6 principles concerning medical research combined with professional care (clinical research) and 4 principles concerning non-therapeutic biomedical research involving human subjects (non-clinical biomedical research).

HEURISTIC INQUIRY a method of reasoning that emphasizes personal insights and experiences of the researcher. It asks, "What is my experience of this phenomenon and the essential experience of others who also experience this phenomenon intensely?"

HIERARCHICAL the characteristic of entities being arranged in a graded series. The ICPC is organized on the basis of three digits, alpha numerical rubrics which are defined by chapters and components. More precisely defined elements from five digit categories can be lumped together to the three digit level, and elements from a three digit level can be split into a four or five digit level.

HIGH RISK PATIENT a patient at considerable risk for a special health problem e.g. cardiovascular disease or cancer. The risk can be caused by genetic and/or life-style factors e.g. exercise, drinking and/or smoking.

HIPPOCRATIC OATH the oath taken by a physician that binds him to observe the code of behaviour and practice followed by the Greek physician Hippocrates (460 - 370 BC), called the "Father of Medicine", and the students at the medical school in Cos, where he taught.

The original HIPPOCRATIC OATH:

"I swear by Apollo the healer, by Health and all the powers of healing, and call to witness all the gods and goddesses that I may keep this oath and promise to the best of my ability and judgment.

I will pay the same respect to my master in the science as to my parents and share my life with him and pay all my debts to him. I will regard his sons as my brothers and teach them the science, if they desire to learn it, without fee or contract. I will hand on precepts, lectures and all other learning to my sons, to those of my master and to those pupils duly apprenticed and sworn, and to none other.

I will use my power to help the sick to the best of my ability and judgment; I will abstain from harming or wronging any man by it.

I will not give a fatal draught to anyone if I am asked, nor will I suggest any such thing. Neither will I give a woman means to procure an abortion.

I will be chaste and religious in my life and in my practice.

I will not cut, even for the stone, but I will leave such procedures to the practitioners of that craft.

Whenever I go into a house, I will go to help the sick and never with the intention of doing harm or injury. I will not abuse my position to indulge in sexual contacts with the bodies of women or men, whether they be freemen or slaves.

Whatever I see or hear, professionally or privately, which ought not to be divulged, I will keep secret and tell no one.

If, therefore, I observe this oath and do not violate it, may I prosper both in my life and in my profession, earning good repute among all men for all time. If I transgress and forswear this oath, may my lot be otherwise".

HISTORY, MEDICAL comprises not only earlier and actual diseases but also hereditary disposition, habits, family relations, work, and social status. An elaborate case history is an important tool in diagnostics and treatment, but in general/family practice a problem focused history may be sufficient to solve a problem.

HOLISTIC CARE an approach to patient care in which all the patient's physical, mental, and social factors are always taken into account, rather than just the diagnosed disease with or without psychosocial factors that influence the disease or the result. It allows a total care of the patient. The term is applied explicitly to a range of orthodox and unorthodox methods of patient care.

HOMEBOUND/HOUSEBOUND PATIENT is a patient who due to ill health or physical disability cannot leave his home.

HOME CARE health care given by all members of the primary or home care team (physician, nurse, social worker, physiotherapist) at the patient's home because of severe disability or illness.

HOME HELP a person - skilled or unskilled - who helps the patient making food, cleaning, and doing other domestic work. See SOCIAL SERVICES.

HOME NURSE See COMMUNITY NURSE.

HOME VISIT (Syn. house call) the GP's/FP's visit to a patient at his own home rather than seeing the patient in the surgery. In the Western world the number of HOME VISITS has declined in the last decade (better communications and transport facilities) and thus a very important source of information about the patient, his family, and living conditions is in danger of being lost.

HORIZONTAL INTEGRATION in health care services means that different units on the same organizational level work together coordinating activities, functions, and operating units at a given time in the service delivery process. See VERTICAL INTEGRATION.

HOSPICE CARE a program or concept, where professionals provide palliative care and attend to the emotional, spiritual, physical, social, and financial needs of terminally ill patients and their relatives at an in-patient facility or at the patients' home. It is often used in the later stages of palliative care. See PALLIATIVE CARE, TERMINAL CARE.

HOSPITAL DEPARTMENTS OF GENERAL PRACTICE See HOSPITAL PRACTICE

HOSPITAL DISCHARGE PLANNING activities involved when a patient leaves hospital. Includes

assessment of medications required and aftercare.

HOSPITALIZATION admission to hospital.

HOSPITAL PRACTICE a practice conducted by a GP/FP within the confines of a hospital. The source of patients, method of reimbursement, and relationships with ancillary staff are extremely variable and should be defined in each specific instance.

HOUSE CALL See HOME VISIT.

HOUSEHOLD a person or group of persons occupying the same house:

1. A one person household, i.e. a person living alone in a room, a suite of rooms, or a housing unit.
2. A multiperson household, i.e. a group of two or more persons who live together. The group may be composed of a family or of unrelated persons or both, who generally share expenses.

HOUSE OFFICER See INTERN, REGISTRAR.

HYPOTHESIS an idea based on observation or reflection which predicts certain relations, structures, or occurrences. It should be tested for verification on empirical data to verify or falsify the HYPOTHESIS. See NULL HYPOTHESIS.

HYPOTHESIS TESTING in medical statistics is a way of analysing data alternative to ESTIMATION. First a NULL HYPOTHESIS is set up. The second step is to calculate the probability of getting the observed data, if the null hypothesis was in fact true. If the probability (p) is very small, the null hypothesis is rejected in favour of the alternative. By convention a p -value of 0,05 (i.e. 5 per cent, or 1 in 20) is taken as the cut off point for such an interpretation, so that if the p -value is less than this level ($p < 0,05$) the difference is termed "statistically significant". See STATISTICAL SIGNIFICANCE TEST.

I

IATROGENIC caused by any of a physician's diagnostic or therapeutic activities, e.g. adverse side effects of drugs and unintended sequels of surgical operations.

ICD abbr. for INTERNATIONAL CLASSIFICATION OF DISEASE.

ICEBERG PHENOMENON refers to the situation where only a part of the health problems is detected, specifically because of people not being seen by health care providers, and because patients deliberately do not present all their health concerns when attending. The "visible" part is the detected health problems, and the "submerged" part is health problems not yet diagnosed or medically attended to.

ICHPPC abbr. for International Classification of Health Problems in Primary Care.

ICIDH abbr. for International Classification of Impairments, Disabilities, and Handicaps.

ICPC abbr. for INTERNATIONAL CLASSIFICATION OF PRIMARY CARE.

IDENTIFICATION NUMBER many countries have developed special codes by which they can identify each individual. The codes can consist of digits from date of birth, gender, etc.

ILLNESS the subjective state of the person who is aware of having a health problem and not feeling well. Includes the feelings, thoughts, concerns and effect on life that any episode of sickness induces. See DISEASE, HEALTH PROBLEM, SICKNESS.

ILLNESS BEHAVIOUR the conduct of a person in response to abnormal mental and physical signals. Such behaviour influences the manner in which a person monitors, defines, and interprets bodily symptoms, takes remedial actions, and uses the health care system. See HEALTH BEHAVIOUR.

ILLNESS DIVERSITY the number of different episodes of care presented to the GP/FP by a patient in a year.

IMPACT EVALUATION the initial step in testing a program's performance when completed. It focuses on immediate program effects.

IMPAIRMENT any reduction or abnormality of psychological, physiological, or anatomical structure or function. The loss of part of a function (WHO).

IMRAD abbr. for the sections of a scientific publication: Introduction, Methods, Results, Analysis, and Discussion.

INCEPTION COHORT a designated group of persons, assembled early in the development of a specific health problem (e.g. at the time of first exposure to the putative cause or at the time of initial diagnosis), who are followed thereafter. See COHORT.

INCIDENCE the number of new instances of a health problem or of persons falling ill during a given period of time in a specified population (usually per 1,000 population per year). See PREVALENCE, LONGITUDINAL STUDY..

INDEPENDENT VARIABLE See VARIABLE.

IN-DEPTH INTERVIEW an interview method used in qualitative research which aims at understanding the experience from the informant, interpreted by the interviewer. Repeated encounters often help the interviewer (i.e. the researcher) to understand the informant's perspective

on his situation and life, as expressed by himself.

INDEX an aggregation of two or more distinct health measures into an overall summary measure. In functional status assessment index means a rating scale derived from a number of measurements on different functional assessment scales which have no internal relationship. See **FUNCTIONAL STATUS INDEX**, **HEALTH OUTCOME MEASURES**, **HEALTH STATUS INDEX**.

INDEX CONDITIONS selected health problems or diagnoses chosen for measurement in an audit or research program as indicators of the overall quality of care.

INDICATOR a measurable element of practice performance for which there is evidence or consensus that it can be used to assess the quality of care provided.

INDIVIDUAL CARE PLANS programs for individual patients to ensure a comprehensive and patient centred care.

INDUSTRIAL PRACTICE a practice conducted within the confines of an industrial organization. Usually the physician is reimbursed by salary, or according to terms of a specific contract. Ancillary staff are usually employees of the industry.

INFANT a child less than one year of age.

1. Neonate: Birth to 28 days.
2. Post-neonate: 29 days to 1 year.

INFANT DEATHS deaths occurring in the first year of life.

INFANT MORTALITY RATE the number of infant deaths in a year divided by the total number of live births in that year and stated as number per 1,000 live births. This rate is used as an indicator of the health standard of a society. See **PERINATAL MORTALITY**.

INFERENCE (clinical or scientific) conclusions drawn on evidence from clinical research by the professional community, readers of literature or by the investigator who presents the empirical evidence. Inference thus implies judgment on the basis of evidence.

INFORMAL CARE is care provided by non-professionals.

INFORMATICS the study of information and the ways to manage it, especially by means of Information Technology (IT) (e.g. computers and other electronic devices).

INFORMATION data which have been recorded, classified, organized, related, or interpreted within a framework, so that meaning emerges.

INFORMATION MANAGEMENT a process involving the planning, management, and control of

how information is created and its flow and dissemination within an organization. See INFORMATICS.

INFORMATION RETRIEVAL a method by which collected information is accessed usually from libraries or electronic information storing systems.

INFORMATION SERVICE the provision of information for customers, clients, patients, and professionals about a particular program or activity. In health care a computerized information service may be available to give introductory information and guidance and answer questions about the functioning of a health care service or facility.

INFORMATION STORAGE a system by which information is stored. More often information is now stored in computerized information systems.

INFORMATION SUPERHIGHWAY the electronic transmission of data, information, ideas, and pictures via modems, fiberoptic cables, satellite communication etc. The network of computers is the internet, and a popular method of use is electronic mail, e-mail.

INFORMATION SYSTEM a system by which information can be exchanged, referring especially to different types of fast and/or electronic systems.

INFORMATION TECHNOLOGY (IT) See INFORMATICS, INFORMATION SUPERHIGHWAY.

INFORMATION TRANSFER See INFORMATICS, INFORMATION SUPERHIGHWAY.

INFORMED CONSENT consent given by a person who is to undergo medical or surgical treatment with possible significant side effects or complications or is invited to participate in a research project or a teaching session after being well informed of the aims, consequences, burden, time, risk etc. He must be offered the option of not participating, if so desired, without detriment to the continuity of care. (See HELSINKI, DECLARATION OF).

INJURY a condition of sudden onset with tissue damage caused by a physical trauma.

IN-PATIENT (Syn. admitted patient) a patient who is admitted to a hospital.

IN-SERVICE TRAINING the KNOWLEDGE, SKILLS, and ATTITUDES obtained during the professional's work. See TRAINING.

INTEGRATED HEALTH CARE (COORDINATED CARE) involves strengthening administrative arrangements between organizations in joint cooperation. Refers to the components in the health care system, that work together to create a continuum of health care to a defined population. It includes health promotion and curative and preventive interventions and also refers to the extent to

which activities are coordinated across units to maximize the value of service delivery to patients.

INTEGRATION See HORIZONTAL INTEGRATION and VERTICAL INTEGRATION.

INTEGRITY a physician must respect the physical, psychological, and social privacy of the patients by actively and explicitly treating them as equal human beings, whose opinions about their own health are important.

INTERACTION EFFECT an effect in which one variable x (e.g. health status) is a function of another y (e.g. perceived health), and in which variation in y associated with a given change in x is effected by the value assumed by a third variable z (e.g. diagnostic category).

INTERACTIVE TEACHING allows the student to influence the learning process so that it is in accordance with his background, knowledge, and skills and allows a two way transfer of information between the student and the teacher or computer. See TEACHING.

INTERN (Syn. house officer, house physician) a physician holding a preregistration hospital appointment in medicine or surgery and working under supervision of a specialist generally for a year immediately after graduation from medical school.

INTERNAL CONSISTENCY the degree to which all items in a clinimetric index measures the same underlying concept.

INTERNAL VALIDITY See VALIDITY.

INTERNATIONAL CLASSIFICATION OF DISEASE (ICD) an international one-axis classification designed for encoding of mortality and morbidity purposes. It was developed under the auspices of WHO and published periodically as a complete book on diagnostic entities. It is organized in 17 chapters containing more than 12,000 different categories. Each entry is given a numerical code of up to four digits. This publication is called: "Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death". The 10th Revision (ICD-10) was introduced on January 1, 1993.

INTERNATIONAL CLASSIFICATION OF HEALTH PROBLEMS IN PRIMARY CARE (ICHPPC) a classification of diseases and conditions in primary care. First produced by the WONCA Classification Committee (WCC) it has been revised once under the name ICHPPC-2-defined. Is now replaced by the much more practice orientated ICPC. ICHPPC is structured in the same way as the ICD-9 classification.

INTERNATIONAL CLASSIFICATION OF IMPAIRMENTS, DISABILITIES, AND HANDICAPS (ICIDH) was published by WHO in 1980 as a taxonomy of the consequences of injury and disease. It uses the following definitions:

1. Impairment: "Any loss or abnormality of psychological, physiological or anatomical structure or

function". Impairments represent disturbances at the organ level.

2. Disability: "Any restriction or lack (resulting from an impairment) of ability to perform an activity in a manner or within the range considered normal for a human being". Disability represents disturbances at the level of the person.

3. Handicap: "A disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual". It reflects the adaptation of the individual to his surroundings.

INTERNATIONAL CLASSIFICATION OF PRIMARY CARE (ICPC 1-2) a classification which characterizes the domain of GPs/FPs and takes best into account the way the GP/FP works. In this classification the reason for the encounter (REF) is classified as well as the diagnostic processes, interventions, preventions, administrative procedures, and the diagnosis. It has a biaxial structure and is built up in 17 chapters, each divided in 7 components. It has been extensively tested and found to be very practicable and reliable for use in general practice with less than 3% recording error. It was published by the WONCA Classification Committee in 1983 and a second edition, ICPC-2, was published in 1998.

INTERNSHIP See INTERN.

INTER-OBSERVER VARIATION discrepancies between different observers of the same phenomenon. See INTRA-OBSERVER VARIATION, RELIABILITY.

INTERPERSONAL SKILLS are abilities that individuals have for dealing with others.

INTERPOLATE to estimate a value within the range of observed values.

INTERPROFESSIONAL RELATIONS are relations between different professions - e.g. professional relations between physicians and nurses. See INTRAPROFESSIONAL RELATIONS.

INTER-RATER RELIABILITY the extent to which results obtained by different raters or interviewers using the same method will agree. The agreement is calculated using a correlation coefficient, appropriately the intra-class correlation when several raters are involved.

INTERSUBJECTIVITY implies a shared understanding between human beings of meaning and knowledge. In research intersubjectivity depends on the researcher's intention and ability to account for his paths towards knowledge. In clinical work it deals with empathic mutuality, giving the physician a special responsibility to take part in the story the patient is sharing.

INTERVAL SCALE (Syn. dimensional scale) a scale in which the distances between all levels along the scale have known numeric values and with no zero level. See **RATIO SCALE**.

INTERVENTION STUDY study where the effects of a procedure carried out by medical staff in prevention, diagnosis, and treatment on patients are measured before and after an intervention, e.g. a drug treatment or an operation, in order to investigate the possible benefit of the intervention and compare different interventions.

INTERVIEW is a process of communication, both verbal and non-verbal, with an individual for a specific purpose.

INTERVIEW METHODS different methods applied to obtain a case history from a patient. The methods can facilitate or inhibit the communication between the physician and the patient and thereby strongly influence their mutual understanding of the patient's health problem.

INTRA-OBSERVER VARIATION discrepancies between repeated observations of the same phenomenon by the same observer. See **INTER-OBSERVER VARIATION**, **RELIABILITY**.

INTRAPROFESSIONAL RELATIONS are relations between members of the same profession. See **INTERPROFESSIONAL RELATIONS**.

INTUITION the immediate recognizing and understanding of something without the conscious use of reasoning.

IT abbr. for Information Technology. See **INFORMATICS**.

ITEM OF SERVICE PAYMENT covers well defined services which are not included in the **CAPITATION FEE**. Varies from country to country and may account for as little as 10% to as much as 70% of the GP's/FP's income.

J

JOB DESCRIPTION OF A GP/FP: "The GP/FP is a licensed medical graduate who gives personal, primary, and continuing care to individuals, families, and a practice population, irrespective of age, sex and illness. It is the synthesis of these functions which is unique. He will attend his patients in his consulting room and at their homes and sometimes in a clinic or a hospital. His aim is to make early diagnoses. He will include and integrate physical, psychological, and social factors in his considerations about health and illness. This will be expressed in the care of his patients. He will make an initial decision about every problem which is presented to him as a physician. He will undertake continuing management of his patients with chronic, recurrent, or terminal illnesses. Prolonged contact means that he can use repeated opportunities to gather information at a pace appropriate to each patient and build up a relationship of trust which he can use professionally. He will practice in co-operation with other colleagues, medical, and non-medical. He will know how and when to intervene through treatment, prevention and education to promote the health of his patients and their families. He will recognize that he also has a professional responsibility to the community".

JOB SATISFACTION the extent to which a job fulfills important needs and desires for employees. There are several characteristics that contribute to job satisfaction: Autonomy, responsibility, accountability, feedback, and undertaking significant tasks. These all contribute to work being meaningful.

JOINT CONSULTATIONS are consultations in which two (or more) professionals see the same patient at the same time while one observes the interaction between the other and the patient.

JURISPRUDENCE, MEDICAL the science concerned with the relations between medicine and law. See **FORENSIC MEDICINE**.

K

KAPPA (K) is a coefficient of agreement between two raters expressing the level of agreement, that is observed beyond the level that would be expected by chance alone.

KEY QUESTION the vital component of a communicative strategy in which the patient is invited to share with the physician the conception of illness and health on a specific theme. The key question is a focused and problem oriented speech act. It is based on sociolinguistic theory and developed through a systematic procedure based on the clinician-researcher's previous successful communicative experiences with the topic in question.

KEY WORD describes a topic area in articles being searched in computerized databases.

KNOWLEDGE everything that is known or should be known in learning. One of the three objectives: **KNOWLEDGE**, **SKILLS**, and **ATTITUDES**.

LATENT PERIOD delay between exposure to a disease-causing agent and the appearance of manifestations of the disease.

LEAD TIME the time gained in treating or controlling a disease when detection is earlier than usual, e.g. in the presymptomatic stage as when screening procedures are used for detection especially of cancer.

LEADING QUESTION See QUESTIONS.

LEAD TIME BIAS overestimation of survival time due to the backward shift in the starting point for measuring survival that arises when diseases such as cancer are detected early as by screening procedures.

LEARNING is the process by which an individual acquires a relatively permanent change in behaviour as a result of past experience, which may be incidental or by TEACHING. Learning need not be correct, deliberate, or overt. Institutional learning can be performed in many ways, named after the method by which the learner becomes knowledgeable, skillful, or considerate.

1. ACTION LEARNING in medicine involves the learner in tackling real patient problems under supervision.
2. ACTIVITY LEARNING comprises project work which involves the active participation of the learner as opposed to passive learning/teaching (as in lectures or demonstrations).
3. AFFECTIVE LEARNING acquisition of feelings, tastes, emotions, will, values, and other aspects of social and psychological development gained through feelings rather than rationalization.
4. CASE METHOD (CM) is a learning method in which the teacher presents a situation or a clinical problem. The number of learners may be from a few to 50-60. The problem is discussed among the learners and with the teacher and possible ways of solving the problem are examined. These possible solutions are analysed with regard to their feasibility, practicability etc.
5. DISCOVERY LEARNING in which the learner must decide what he needs to learn in order to solve a special problem. The degrees of "freedom" may vary from teacher guided discovery to completely unstructured learner-initiated learning.
6. EXPERIMENTAL LEARNING here knowledge is acquired from experience in medicine and in life contrary to formal academic learning.
7. PROBLEM BASED LEARNING (PBL) which presents 8-10 learners to a situation or a clinical problem, which they are going to identify and explain. Their task is to find out which further information they need to understand the problem. One learner is chairing the group, and one is a secretary taking notes on a board. The teacher acts as a consultant and helps the learners to define learning objectives and to acquire further information. A learning session may need two or three hours once or twice a week for one or two weeks.

LEARNING CONTRACT an agreement between a teacher and a student about what should have been achieved at the end of the teaching period by the methods employed.

LEARNING GROUP, DISCUSSION GROUP a small group of adult learners who meet regularly with the aim of being educational for each member, helping to achieve knowledge, skills, and attitudes according to the objectives of the group. It is a widely used method in **CONTINUING MEDICAL EDUCATION** among GPs/FPs.

LEARNING STYLES the preferred mode of problem-solving, thinking or learning used by an individual. The active learning styles can be divided into:

1. Experience. The learner learns from being active and doing things, that are relevant for professional development (practical, extrovert).
2. Observation the learner learns by observing others. He is passive and reflective (quiet, introvert).
3. Analysis. The learner learns through theories, models, and principles, values logic and rational thinking, which he prefers to subjective topics and **AFFECTIVE LEARNING**.
4. Testing and result seeking. Here the learner learns through experiment and new ideas. He is fascinated by the challenges.

LECTURE situation where a teacher confers information to an audience or a class. It is often deductive in form and leaves little room for interaction between teacher and students. Formerly regarded as a rational way of teaching, but it generally has very little impact on the individual student's **KNOWLEDGE, SKILLS, and ATTITUDES**.

LEGAL LIABILITY the state of being legally bound to compensate for damages.

LIAISON structured co-operation and communication between health institutions or professional persons who support each other.

LICENCE See **MEDICAL LICENCE**.

LIFE EVENTS changes or disruptions of life caused by socio-economic conditions or other external factors, which have an effect on health. Can be positive or negative for the individual. Rating scales have been constructed to measure the effect of life events on people's lives. See **SOCIAL ADJUSTMENT**.

LIFE EXPECTANCY the average number of years a given person is expected to live, given the mortality rate is unchanged. Life expectancy is a hypothetical measure which gives information about the health status of a population at a given time.

LIFE-STYLE the way an individual lives with respect to eating, working, smoking, drinking, socialising, exercising, and other habits which have a profound effect on the person's health and well-being.

LIFETIME RISK the risk to an individual that a given health effect will occur at any time after exposure without regard for the time at which that effect occurs.

LIKERT SCALE a scale evaluated and scored according to the method of summated ratings in which items are summed or averaged to obtain an overall score. See **SCALES OF MEASUREMENT**.

LIKELIHOOD RATIOS are another way of expressing how good a test is for increasing the probability of a diagnosis. The likelihood ratio for a positive result is the odds that a test will be positive in a patient with the disease, in contrast to a patient without the disease. The likelihood ratio for a negative result is the odds that a test will be negative in a patient with the disease, contrasted with a patient without the disease.

LINKAGE (Syn. conversion structure) in a classification system the linkage is the manner in which parts of separate classifications can be compared.

LITERATURE SEARCH a systematic search for literature on a specified subject of interest. One can perform a literature search by hand with the help of a library and references of retrieved publications, or by computer with the help of a retrieval system which can search in medical data banks, e.g. through CD-Rom or internet connection using data bases such as Medline or Embase. See **REVIEW, META-ANALYSIS**.

LIVE BIRTH is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which after such separation breathes or shows any other evidence of life.

LIVING WILL a will in which the signer requests not to be kept alive by medical life support systems in the event of terminal illness.

LIVING WITH ASTHMA QUESTIONNAIRE a measure of asthma-related quality of life designed to evaluate the effects of behavioural or drug treatment programs on the life style of adult asthmatics. See **HEALTH OUTCOME MEASURES**.

LOCUM TENENS a practitioner employed for a stated period of time by a physician to assume responsibility for the care of his practice population during his absence.

LOCUS OF CONTROL (LOC) refers to the perceived source of control over one's behaviour. The LOC ranges from highly "internal" to highly "external". An internal person is one who tends to take responsibility for his own actions and views himself as having control over his destiny. An external person is one who tends to see control as residing elsewhere and to attribute success or failure to outside forces.

LOGISTICS the management of the details of an operation or procedure.

LONGEVITY living to a great age.

LONGITUDINAL STUDY study in which the same individuals or group of individuals are examined on a number of occasions over a long period of time. May show that exposure to some factor is associated with an increased incidence of a particular outcome (e.g. maternal age is a risk factor for a Down syndrome birth). A risk factor is a predictor: it may be a cause or just a coincidental association. See COHORT, RISK FACTOR.

LONGITUDINALITY long-time personal relationship between practitioners and the patients in their practice regardless of the type of HEALTH PROBLEM or even presence of a health problem.

LONG-TERM CARE involves CONTINUITY OF CARE but differs conceptually from it.

1. Management of health problems of patients over a long period of time that characterizes general practice/family medicine.
2. Health care provided to aged and/or disabled patients usually in hospitals or nursing homes.

LOW BIRTH WEIGHT a weight of 2500 g or less of a liveborn infant. See PREMATURITY.

M

MALPRACTICE improper or negligent professional care of a patient by a physician.

MANAGED CARE refers to health care provision based on a system of costing plans of projected patient care (managed care plans) and the assumption of financial risk by the provider related to adherence to the planned budget. This transfer of risk to the provider is a key aspect of managed care and may increase the freedom to choose appropriate care for patients.

MANAGED COMPETITION refers to a health care purchasing strategy to obtain maximum value for money. It uses rules for competition derived from rational microeconomic principles to reward (through an external purchasing agent or sponsor) those who do the best job of improving quality, cutting cost, and satisfying patients. Managed competition occurs at the level of integrated financing and delivery plans, not at the individual provider level. Its goal is to divide providers in each community into competing economic units and to use market forces to motivate them to develop efficient delivery systems.

MANAGEMENT See **PRACTICE MANAGEMENT**.

MANUAL MEDICINE a branch of medicine which deals with musculoskeletal problems which can be diagnosed and treated by manipulative procedures. The therapist uses his hands on the patients' muscles or joints.

MASS SCREENING systematic screening of large populations. See **SCREENING**.

MATCHING in research the deliberate process of making a study group and comparison group comparable with respect to factors that are extraneous to the purpose of the investigation, but that might interfere with the interpretation of the findings of the study (e.g. in case control studies, individual cases might be matched or paired with a specific control on the basis of comparable age, gender, clinical features, or a combination).

MATERNAL MORTALITY (RATE) the ratio of women who die from causes related to childbirth to the total number of women giving birth in a given area during a given period, most often a year. Maternal death is defined by WHO as the death of a woman while pregnant or within 42 days of termination of pregnancy, if this cause is not accidental or incidental but related to or aggravated by the pregnancy or its management.

MATERNITY CARE aims at ensuring that every expectant mother maintains good health, learns the art of child care, has a normal delivery, and bears healthy children. Includes ante-, peri-, and postnatal care, guidance in parent-craft and in problems associated with infertility and family planning.

MATERNITY LEAVE legitimate and frequently compensated leave from work for a limited period due to pregnancy and birth.

McGILL PAIN QUESTIONNAIRE is a generic instrument developed to specify the qualities and intensities of pain.

MCQ abbr. for **MULTIPLE CHOICE QUESTIONNAIRE**. See **EXAMINATIONS**.

MEAN the average calculated by summing all measures and dividing by the number of measures.

See MEDIAN, MODE.

MEASURE a single-item or multi-item scale or index.

MEASUREMENT SCALES See SCALES OF MEASUREMENT.

MEDIAN the midpoint of a score distribution which divides it into two parts containing 50% each. See MEAN, MODE.

MEDICAID a USA program jointly funded by the states and the federal government that reimburses hospitals and physicians for providing care to qualifying people who cannot finance their own medical expenses. See MEDICARE.

MEDICAL ANTHROPOLOGY the study of mankind, its origin, development, customs, and beliefs in relation to medicine.

MEDICAL ASSISTANT (Syn. barefoot doctor) a health worker who has received appropriate training and who in the field of promotion, protection, and restoration of health has certain clearly defined duties and responsibilities. He is employed within an organized health service under the supervision of qualified physicians.

MEDICAL AUDIT See AUDIT.

MEDICAL CARE the application of knowledge embodied in medicine and public health to the benefit of individuals or a community. Sometimes applied to the range of health services available. See HEALTH CARE.

MEDICAL CERTIFICATE a certificate stating the physician's assessment of a patient's medical condition or fitness to work.

MEDICAL EDUCATION See EDUCATION, MEDICAL.

MEDICAL ETHICS moral and ethical standards for conduct or evaluation of medical practice.

MEDICAL FACULTY a division of the university which is responsible for the undergraduate teaching and training of students aiming at the medical degree. See FACULTY.

MEDICAL GRADUATE a physician who has passed the final examination in medical school and has been granted a licence to practice medicine often under supervision for a certain period before the licence to practice independent medicine can be obtained.

MEDICAL INFORMATICS medical information science. See INFORMATION TECHNOLOGY (IT).

MEDICAL INTERVIEW See HISTORY.

MEDICAL JURISPRUDENCE See JURISPRUDENCE, MEDICAL.

MEDICAL LICENCE an official document authorizing a person to work as a physician.

MEDICAL PRACTITIONER See PHYSICIAN.

MEDICAL PSYCHOLOGY part of psychology which deals with the medical aspect of behaviour and its related mental processes.

MEDICAL RECORD paper files or electronic documentation containing the patients' demographic data (name, date of birth, sex, address, occupation), the medical history obtained by a physician or other professionals, opinions and other relevant health information (laboratory tests, physical findings, X-ray results, and special investigations). Helps to ensure continuity and comprehensive care.

MEDICAL REGISTRATION See REGISTRATION.

MEDICAL SCHOOL the term includes all higher education institutions (university level) offering a prescribed course of medicine. The names of such institutions vary from country to country (e.g. faculty of medicine, college of medicine, medical institute).

MEDICAL SOCIETIES, MEDICAL COLLEGES groups of physicians who share a professional interest in a branch of medicine or in a specific medical problem. See chapter ACRONYMS OF MEMBER ORGANIZATIONS OF WONCA.

MEDICAL SPECIALITIES special branches of medicine defined by disease categories, body systems, certain age groups or populations or technical interventions.

MEDICAL STANDARDS the criteria that specify an acceptable level of care. They are established by consensus and approved by a recognized medical body that provides, for common and repeated use, rules, guidelines, or characteristics for activities or their results, aimed at the achievement of the optimum degree of medical practice.

MEDICAL STATISTICS systematically gathered numerical information from the health care sector.

MEDICARE in the USA a government-operated health insurance program for citizens aged 65 and over. See MEDICAID.

MEDLARS abbr. for Medical Literature Analysis and Retrieval System.

MEDLINE a computer based literature retrieval system for world wide indexed medical literature.

MENTOR an experienced counsellor or guide.

MEQ See MODIFIED ESSAY QUESTION.

MESH (abbr. for Medical Subject Headings) is a standardized medical vocabulary of medical knowledge, a part of MEDLARS (Medical Literature Analysis and Retrieval Systems) used in MEDLINE. MESH contains standardized medical terms organized hierarchically and is the most comprehensive electronic database.

META-ANALYSIS a review performed in a formal way using methodological criteria to select reliably performed and documented studies on methods of management of medical problems, analyse the evidence, and come to conclusions regarding the scientific value of the results. See REVIEW, COCHRANE COLLABORATION.

METHOD 1. In learning, the way in which the selected learning situations are used, choosing those which are most suitable for achieving particular educational objectives within particular learning experiences.

2. In research, the way a research project is performed and procedures defined, described as accurately as possible.

METAPHORS are words or phrases that indicate a theme or a problem which is different from the literal meaning of the word or phrase. It is placing the strange in the context of the familiar in order to express the underlying problem.

MIDDLE AGED in late adulthood, aged 40-60.

MINIMUM BASIC DATA SET (Syn. minimum data set) standardized data which may include demographic data, coded diagnoses, and procedures, admission and discharge data, or other data. The definition of this data set is typically produced by agreement among groups of users.

MISCARRIAGE See FETAL DEATH.

MISCONDUCT in medicine has a wide spectrum. Ranges from "sloppy" science and inappropriate authorship, through self delusion and failure to declare a conflict of interest, to "piracy", plagiarisme and fraud (deliberate deception involving invention of data). See MALPRACTICE.

MODE the most frequently occurring value in a class or group. See MEAN, MEDIAN.

MODEL design, structure, person, or thing which serves as an object lesson, or proposed for imitation.

MODIFICATION, DIAGNOSTIC the revision of a preliminary diagnosis as an episode of care evolves.

MODIFIED ESSAY QUESTION (MEQ). See EXAMINATIONS.

MODULE part of the whole, a section or separate unit. In the "family of classifications" concept, modules have been described as "separate classifications which may be united through a common conversion structure".

MONITORING reminding, giving warning, and checking e.g. in the follow-up of a patient: ECG recording, blood pressure or laboratory results, or in the performance of a student or trainee physician.

MORAL in medicine, the capability of making the distinction between right and wrong in medical conduct.

MORBIDITY all the health problems presented by a group of patients or a practice population during a defined period of time, usually a year.

MORTALITY RATE See DEATH RATE.

MOS SF-36/RAND 36-ITEM HEALTH SURVEY 1.0/HSQ a generic self-completed questionnaire measuring health related quality of life in larger populations and different subgroups e.g. patients.

MOS 20-ITEM SHORT-FORM GENERAL HEALTH SURVEY designed as a multidimensional general health measure short enough to be practical for use in large scale studies of patients in practice settings.

MOTIVATION those factors which arouse, sustain, and channel people's behaviour. It is not the same as behaviour or performance. People can be motivated to undertake tasks a number of different ways, from using financial incentives to intrinsic rewards such as increased responsibility and opportunities for achievement.

MULTIPLE CHOICE QUESTION (MCQ) examination which tests KNOWLEDGE and/or clinical problem solving SKILLS (e.g. diagnostic and therapeutic plans in the form of a clinical case study presented stepwise) by providing several possible answers from which the correct one must be chosen.

MULTIVARIATE ANALYSIS, MULTIPLE REGRESSION a statistical method to evaluate the relationship between a continuous outcome and the linear combination of two or more predictor variables.

N

NARRATIVE the freetext part in a medical record.

NARRATOLOGY is the study of stories. The objective is to understand the meanings of a story, partly from the context in which the story first happened or was told, partly from the individual perspective of the storyteller.

NATIONAL HEALTH SERVICE (NHS) (in Britain) is a comprehensive service offering therapeutic and preventive medical and surgical care including dispensing of medicine and medical and dental appliances. Exchequer funds pay for the service of doctors, nurses, and other professionals as well as residential costs in NSH hospitals. Such universal health protection may be conceived as an ultimate extension of social security and is a declared goal in several countries.

NATURAL HISTORY OF DISEASE the course of an disease episode from onset to resolution. Many disease episodes have well defined stages:

1. Stage of pathological onset.
2. Presymptomatic stage from onset to the first appearance of symptoms and/or signs. **SCREENING** may detect the disease at this stage.
3. Clinically manifest disease, which may regress spontaneously leading to recovery, or may be subject to remissions and relapses or progress to a fatal termination.

Detection and intervention has the aim of altering the natural history of the health problem so that it has the least impact on the person's health.

NATURALISTIC ENQUIRY an unobtrusive qualitative method for conducting social enquiry. It does not involve manipulating a research setting. It focusses on activities and changes that take place in social settings, programs, interventions, and treatments as they occur naturally.

NEAR PATIENT TESTING (NPT) simple laboratory examinations e.g. special sticks used to perform analysis of urine or blood sugar, which can be easily carried out by the physician in the consulting room or even by the patient's bedside on a home visit.

NEED/DEMAND in medicine may be defined as scientifically determined deficiencies in health that call for preventive, curative, and eventually control or eradication measures. Health demands are usually measured in terms of the actual utilization of health services. All needs established in any form in a population cannot be translated into expressed need or demand (e.g. in case of lack of information, health services, or funds).

NEEDS ASSESSMENT the initial step in planning any health intervention; the process of identifying and analysing the priority health problem and the nature of the target group for the purpose of planning an intervention. This entails understanding types of needs and the health profiles of the target group. Needs can be: normative (expert opinion); expressed (current use of services by a community); comparative (current use of services in a comparative population predicts target group requirements) and felt needs (wants of those who will use the services). Health profiles can include disease, illness, sickness, and disability models according to the objectives of service delivery.

NEGATIVE PREDICTIVE VALUE the proportion of a population who were identified by a measurement or screening test as apparently not having the disease, who actually do have it. See PREDICTIVE VALUE.

NEGLIGENCE, MEDICAL See MALPRACTICE.

NEONATAL DEATHS the number of deaths of infants under 28 days of age in a given period (e.g. a year) per 1000 live births in the same period.

NEONATAL MORTALITY RATE in VITAL STATISTICS describes the number of deaths in infants under 28 days of age in a given period (e.g. a year) per 1,000 live births in the same period.

NEONATAL PERIOD this period includes the first 28 days after birth.

NOCEBO EFFECT unpleasant effect after a medication or other intervention known to be devoid of any physical therapeutic effect. See PLACEBO EFFECT.

N-of-1 TRIALS in such trials the patient undergoes pairs of treatment periods organized so that

one period involves the use of the experimental treatment and the other involves the use of an alternate or placebo therapy. The patient and physician are blinded, if possible, and outcomes are monitored. Treatment periods are replicated until the clinician and patient are convinced that the treatments are definitely different or definitely not different.

NOMENCLATURE (Syn. TERMINOLOGY) classified system of technical or scientific names.

NOMINAL SCALE a scale in which the numeric values assigned to the scale levels are arbitrary and have no numeric value and do not represent a ranking order (e.g. male=1, female=2). A BINOMINAL SCALE consists of two divisions. See SCALES OF MEASUREMENT.

NON-EXPERIMENTAL STUDY a study of phenomena using non-intervention. The influence of one or more variables is measured on outcome variable(s) as they naturally occur. See OBSERVATIONAL STUDY.

NON PARAMETRIC TEST a distribution-free method not depending on the underlying distribution of data.

NON-PARTICIPANTS, NON-RESPONDERS members of a population or a study group who do not take part in an activity or study designed to include them.

NORM has two distinct meanings:

1. It can mean "what is usual" in a given society at a given time regarding treatment of a certain health problem, behaviour etc.
2. It can mean "what is desirable". What one finds to be a desirable standard for treatment of a certain health problem, behaviour etc. In this latter sense norms can be used in AUDIT as a GOLD STANDARD, against which performance, investigations, or results of treatment can be measured.

NORMAL this term has three different meanings:

1. Within the usual range of variation in a population, within a range extending from two standard deviations below to two standard deviations above the mean, that is, includes 95% of observations, or between the 10th and the 90th percentiles of the distribution.
2. In good health. For a diagnostic or screening test, a "normal" result is in a range where the probability of a health problem is low.
3. With regard to distribution see NORMAL DISTRIBUTION.

NORMAL DISTRIBUTION (Syn. Gaussian distribution) the continuous frequency distribution of infinite range which have the following properties:

1. It is a continuous, symmetrical distribution where both tails in a graphic representation extend to infinity.
2. The arithmetic mean and the median are identical.
3. Its shape is completely determined by the mean and standard deviation.

NOSOCOMIAL denoting a new health problem arising in relation to being in hospital and unrelated to the patient's primary reason for being there.

NOSOLOGY the classification of diseases into groups by whatever criteria, based on agreement as to the boundaries of the groups.

NOTIFIABLE DISEASE a disease of public health importance that by statutory requirements must be reported to the public health authority in the pertinent jurisdiction, when the diagnosis is made.

NOTTINGHAM HEALTH PROFILE a generic, short, self-completed questionnaire for the assessment of perceived distress in relation to severe or potentially disabling health conditions.

NULL HYPOTHESIS the hypothesis that no difference exists between the value of a parameter determined from the sample studied and a value specified prior to performing the statistical test. If the NULL HYPOTHESIS is rejected it means that it is unlikely that the groups are equal. This is evidence that it is worthwhile considering that the two groups are different with regard to the variable which was compared.

See PROBABILITY (p), STATISTICAL SIGNIFICANCE TEST, HYPOTHESIS TESTING.

NUMBER NEEDED TO TREAT (NNT) the number of patients in a given time period who need treatment in order to prevent an unwanted episode of disease or death.

NUMERATOR the upper portion of a fraction used to calculate a rate or a ratio. See DENOMINATOR.

NUMERICAL DATA data which can be expressed in numbers in contrast to qualitative data.

NUMERUS CLAUSUS (closed number) limited access to the profession in order to control the plethora of providers and its negative effects.

NURSE a person who has completed a program of basic nursing education and is qualified and authorized to provide nursing care for the sick.

NURSE AID See NURSING PERSONNEL.

NURSE PRACTITIONER a nurse with advanced education permitted to make simple diagnoses and prescribe simple medication that a nurse is not authorized to do.

NURSING HOME is an institution providing facilities and services primarily for in-patient care of individuals who require skilled nursing care and related medical services, but who do not require hospital care, now usually including only chronically ill or frail, especially elderly patients.

NURSING PERSONNEL three categories of nursing personnel are distinguished by WHO: 1.

Fully qualified nurses,

2. Practical nurses able to provide generalized patient care of a simpler nature requiring both technical and interpersonal skills, and

3. Nurse aids able to perform specified tasks related to patient care that require considerably less use of judgment. The importance of distinguishing these categories vary from country to country. In many developed countries the distinction is between qualified nurses and auxiliary nursing personnel.

NURSING SERVICE is that part of the total health organization which aims to satisfy the nursing needs of the community. The objective is to provide

1. The nursing care required for the prevention of disease and the promotion of health.
2. The nursing care in the interest of the individual patient's physical and mental comfort and by reason of the disease from which he is suffering.

O

OBJECTIVE 1. The precisely stated end purpose to which efforts are directed, specifying the population outcome, variables to be measured, or educational goals to be reached.

2. Factual, not influenced by personal feelings or opinions. In the SOAP (See PROBLEM ORIENTED MEDICAL RECORD) recording system used to describe the part of the physicians clinical examination of the patient where the findings should be described objectively.

OBJECTIVES in education are specific statements of observable behaviour, which a learner is able to display as a result of a successful teaching.

OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE). See EXAMINATIONS.

OBSERVATIONAL MATERIAL can be collected from participant observation or indirectly and retrospectively through the collection of material representing a natural event which has happened. Material can be collected through audiotape or videotape recordings e.g. from patient-physician interactions.

OBSERVATIONAL STUDY a study in which nature is allowed to take its course and changes or differences in one characteristic are studied in relation to changes or differences in another characteristic, without the intervention of the investigator(s). Identifies associations but does not prove causations. See NON-EXPERIMENTAL STUDY.

OBSERVER BIAS systematic difference between a true value and that actually observed due to OBSERVER VARIATION.

OBSERVER VARIATION (ERROR) variation or error due to the failure of the observer to measure or identify a phenomenon accurately. All observations are subject to variation. See RELIABILITY, INTER-OBSERVER VARIATION, INTRA-OBSERVER VARIATION.

OCCUPATIONAL HEALTH, OCCUPATIONAL MEDICINE the branch of medicine dealing

with all aspects of the relationship between the work environment and the health of workers.

OCCUPATIONAL MORTALITY rates and causes of death in relation to different jobs, occupational and socioeconomic groups, or social class.

OCCUPATIONAL STRESS refers to the negative effects of stressors or pressures from the workplace.

OCCUPATIONAL THERAPY the treatment of physical and psychiatric conditions by educating and reeducating patients in specific selected activities that will help them to reach their maximum level of function and independence in all aspects of life. Most commonly in physical disability, it deals with improving finer motor skills particularly of the arms, hands, and fingers. Often complements physiotherapy which deals with total body movement.

OCCURRENCE (Syn. frequency) a general epidemiological term describing the frequency of a health problem or event in a population, without distinguishing between INCIDENCE and PREVALENCE.

ODDS is the ratio of the probability of occurrence of an event to that of nonoccurrence, or the ratio of the probability that something is so to the probability that something is not so.

OFFICE (Syn. SURGERY) in general practice the room(s) or building where the physician sees, examines, and treats patients.

OFFICE VISIT the patient's consultation at the physician's office.

OLD AGE usually refers to persons over 60 or 65 years old.

OLD OLD over 80 or 90 years old.

OPEN QUESTION (Syn. OPEN-ENDED QUESTION) usually refer to questions to patients by a physician or in questionnaires. The persons questioned answer in any way they choose without unduly shaping or focusing the content of the response. The questions may still direct the patients to a specific area but allow them to elaborate on the topic. See QUESTIONS.

OPEN-TO-CLOSED CONE describes an interview technique which starts with open questions and later moves to closed questions.

OPERATIONAL RESEARCH the systematic study, by observations and experiment, of the health services or general practice, with the aim of improving some aspects of patient care.

OPPORTUNISTIC PREVENTION the physician's taking the opportunity of the patient's presence in the surgery to give advice on, examine for, or prevent diseases other than those which the patient

presents to the physician - e.g. taking a blood pressure of or discussing the harmful effects of smoking with a patient seeing the physician because of fever.

OPPORTUNITY COSTS when a decision is made to take one course of action, such as using a particular health program there are certain costs. Opportunity costs refer to benefits that may have accrued due to taking another course of action, but because it was not taken, the benefits were not gained.

OPTIMAL (Syn. ideal) the best possible, taking into account the level of investigation, treatment, or care which can be reached under the given conditions.

OPTIONS IN CARE choices available to patients founded on the information they need about their condition, investigation, and treatment together with risks and benefits, the identity and skills of carers and likely outcomes.

ORDINAL SCALE a scale in which the numbers reflect levels ordered from "most" to "least" with respect to some attribute. The relative distance between each level differ, and the number assigned to each level does not reflect an exact quantity. For example "No, Maybe, Yes" or "Never, Rarely, Often, Always" are ordinal scales. See **SCALES OF MEASUREMENT, RANKING SCALE**.

ORGANIZED DELIVERY SYSTEM an organizational network that provides a range of services to a population and is held responsible financially and clinically for the health status and outcomes of that population.

OSCE See **OBJECTIVE STRUCTURED CLINICAL EXAMINATION**.

OSTEOPATHY a school of medicine founded by Still in the USA emphasizing the importance of the normal body mechanisms and manipulative methods detecting and correcting faulty structure. In recent years it has come closer to using also orthodox medical treatment so that now osteopaths can participate in their own recognized programs of family medicine specialization.

OUTCOME the measurable result over time of the natural course of a health problem, or of an intervention to prevent, detect, or manage a health problem. See **FUNCTIONAL STATUS INDEX, HEALTH OUTCOME MEASURES, HEALTH STATUS**.

OUTCOME ASSESSMENT in medical practice an evaluation of the utility of an intervention with regard to the effect of the intervention on the patients' health.

OUT OF HOURS times other than the usual scheduled working hours of the health care provider. See **EMERGENCY CALL SERVICE, TIME OF ENCOUNTER**.

OUT OF HOURS SERVICE See **EMERGENCY CALL SERVICE**.

OUT-PATIENT a patient who attends an out-patient clinic in a hospital. Patients are usually recently discharged in-patients or referred from general practice or accident and emergency services, but in some countries may be self-referred.

OUT-REACH VISIT See REACHING OUT VISIT.

P

p, PROBABILITY See PROBABILITY (p)

PALLIATIVE CARE is the active, total care of patients at a time when their disease is no longer responsive to curative treatment and when control of pain, other symptoms, and of psychological, social and spiritual problems are paramount. The overall goal of palliative care is the highest possible quality of life for the patient and family. Palliative care affirms life and regards dying as a normal process. Palliative care emphasises relief from pain and other distressing symptoms, integrates the physical, psychological and spiritual aspects of patients care, offers a support system to help the patient live as actively as possible until death, and a support system to help the family cope during the patients' illness and in bereavement. (WHO) Palliative care is an aspect of the HOSPICE concept, but is also an important part of the care provided by GPs/FPs at the patients' homes. See HOSPICE CARE, TERMINAL CARE.

PANEL STUDY a study in which a group of people undergo continuous or repeated CROSS-SECTIONAL STUDIES. The group of people have agreed to take part in the study over a specific period of time.

PARADIGM a broad pattern of thought or conceptualization within which professionals work, which serves as a model, and from which they try to explain and interpret their findings. Paradigms may change due to the influence of new research, physicians or therapists.

PARAPHRASING restating in words the content or feelings behind the patient's message with the intention of sharpening understanding by being more specific than the patient was in his original message. The aim is to check whether the physician's interpretation of what the patient actually means is correct.

PARAMEDICAL PROFESSIONS all professions allied to medicine which together make up the team of health personnel e.g. nursing and midwifery, physiotherapy, dietetics, occupational and speech therapy.

PARAMETER in biostatistics a measureable characteristic of a population. Often misused by biologists to indicate a variable.

PARAMETRIC TEST a statistical test that depends upon the assumption that the data are normally

distributed. See NORMAL.

PARTICIPANT OBSERVATION a method of research used in qualitative studies to get a better understanding of the way in which patients act in certain situations.

PARTNERSHIP in general practice is an association between two or more GPs/FPs based on a sharing of professional responsibilities, expenses, and remuneration. See **GROUP PRACTICE**.

PASSIVE LEARNING teaching situations which are teacher directed, and in which the student plays little or no role in the learning process. See **LEARNING**.

PATERNALISM in medicine a mode of authoritarian medical practice where the physician approaches the patient in a fatherly way, by providing him with what he needs but giving him no responsibility or freedom of choice.

PATIENT a person who requests, receives or contracts for medical advice or services from a **HEALTH CARE PROVIDER**.

1. Registered patient: A patient who is enrolled with a practice, but may or may not be receiving ongoing health care.
2. Active patient (Syn. attending patient, regular patient): A patient who has received services from the practice at least once in the last two years.
3. Inactive patient: A patient who has received no services from the practice within the last two years.
4. Temporary patient (Syn. transient patient): A patient who receives one or more services, but who is enrolled with, or usually receives health care from another practice.
5. Formerly registered patient: A patient other than a temporary or transient patient, who has been removed from the register either by the practice or by personal choice.
6. Standardized patient: A patient who has certain symptoms and clinical signs and who is willing to let students question and/or examine him on several occasions.
7. Simulated patient: A person used in teaching, who has learned to play a certain sick role using knowledge of the health problem, her own experience and her intuition to perform as a patient with that health problem. Useful to teach students communication with patients.

PATIENT ADVOCACY giving support to the patient or acting on his behalf.

PATIENT AT RISK. See **HIGH RISK PATIENT**.

PATIENT CARE TEAM See **PRIMARY CARE TEAM**.

PATIENT CENTRED CARE is an approach in which the GP/FP relates to the patient as a whole person and not only the health problem. This allows the patient to tell about his expectations, thoughts, feelings, and fears, while the GP/FP relates to all aspects of the patient's life situation. This helps the physician to understand each patient as a unique individual. See **DISEASE CENTRED CARE**.

PATIENT CHARTER a charter outlining patients' rights and informing patients of how to enforce those rights.

PATIENT-DOCTOR RELATIONSHIP (Syn. PATIENT-PHYSICIAN RELATIONSHIP) communication and rapport between patient and physician.

PATIENT EDUCATION teaching the patient to understand his health problems with regard to prevention, care, and compliance in order to influence his life style, risk behaviour and SELF CARE.

PATIENT HEALTH CARE RECORD comprehensive record aiming at gathering all health data or information regarding a given patient whichever HEALTH CARE PROVIDER has supplied the information. See COMPUTERIZED MEDICAL RECORD.

PATIENT HELD RECORD a record which accompanies the patient in the health care system. It can be used by the patient as a recording booklet and by the HEALTH CARE PROVIDERS as a communication tool. It should contain updated information on personal data, medication, allergies etc. See SMART CARD.

PATIENT LIST See PRACTICE REGISTER.

PATIENT OUTCOME see OUTCOME.

PATIENT PARTICIPATION a form of problem solving, in which the patient is treated as an equal to the HEALTH CARE PROVIDER and is responsible for his own care. See PATIENT CENTRED CARE.

PATIENT RIGHTS recognition that patients using health or medical services have needs met relating to information about medical practices and services, consent, confidentiality, dignity, and the right to quality medical and health services.
See INTEGRITY.

PATIENT SATISFACTION judgement by the patients of the extent to which their needs are met by a medical or health service.

PBL abbr. for PROBLEM BASED LEARNING. See LEARNING.

PEER GROUP a group of people of equal standing (or age) e.g. groups of physicians belonging to the same speciality and with a shared professional rank or background.

PEER REVIEW a critical study by professional colleagues of mutual performance, aspects of medical practice, research protocols, manuscripts submitted for publication, or abstracts submitted

for presentations at scientific meetings. See AUDIT.

PENDLETON'S RULES are useful when analysing a consultation.

1. The presenting physician explains the situation of the consultation.
2. The consultation is watched in silence.
3. The presenting physician answers questions about matters of fact.
4. The presenting physician then identifies what he thought the physician did well in the consultation.
5. The group members and the tutor identify what they found was done well.
6. The presenting physician next identifies what the physician in his opinion might have done to improve the consultation.
7. The group members and the tutor identifies what the physician in their opinion might have done to improve the consultation.
8. The presenting physician is given necessary support from the group and the tutor.

PERCEIVED NEED a felt NEED. It usually refers to health care requirements that are felt by the person or community concerned, but which may not be recognized by or submitted to health professionals.

PERCENTILE the set of divisions that produce exactly 100 equal parts in a series of continuous values, such as children's median height and weight. The 50th percentile indicates the median height and weight of children in that age group.

PERFORMANCE INDICATOR see INDICATOR.

PERINATAL MORTALITY the sum of fetal deaths, 28 weeks or more, and the deaths of liveborn infants aged under 1 week. The perinatal mortality rate refers to the number of deaths per 1,000 total births where the birth weight is 500 g or more. See STILLBORN, NEO-NATAL DEATHS, INFANT DEATHS.

PERINATAL PERIOD from 28th week of pregnancy to 7 days after birth.

PERIODIC MEDICAL EXAMINATION (Syn. CHECKUP EXAMINATION) assessment of health status conducted at predetermined intervals. It usually follows a formal protocol with structured questions, topics to be discussed, and laboratory tests to be undertaken.

PERSONAL HEALTH CARE those services to patients that are performed on a one-to-one basis by a HEALTH CARE PROVIDER, e.g. a GP/FP, for the purpose of maintaining or restoring health.

PERSONAL HEALTH RESOURCES the individual's subjective experience and perception of personal qualities or strategies, which he thinks maintain his health. Examples of personal health resources are

1. Internal strength mobilized by external strain.

2. Interactive networks within and outside the family.
3. Life style practices.
4. Physical and social activity.
5. Acceptance and facilitation of the natural course of disease and
6. Constitution. See HEALTH RESOURCES / RISK BALANCE MODEL.

PHARMACOEPIDEMOLOGY the study of the distribution and determinants of drug-related events in populations and the application of this study to efficacious and safe drug treatment.

PHC See PRIMARY HEALTH CARE.

PhD, DOCTOR OF PHILOSOPHY a postgraduate research education in which the postgraduate student (e.g. physician) follows a special course, performs his own research and writes a thesis. Following the approval of the thesis the academic degree "PhD" is conferred to the student.

PHYSICIAN, MEDICAL PRACTITIONER, DOCTOR person qualified by medical education and authorized by law to practice medicine. In this dictionary used throughout the text when no more specific description is warranted e.g. general practitioner (GP)/family physician (FP), surgeon, or other specialist.

PHYSICIAN ASSISTANT a person with a limited training in specific medical tasks. He assists the physician performing routine medical work. See NURSE PRACTITIONER.

PHYSICIAN INCENTIVE PLAN health care initiatives (financial, educational and other) in medically underprivileged regions with the aim of attracting physicians.

PHYSICIAN OFFICE STANDARDS See PRACTICE STANDARDS.

PHYSICIAN OF FIRST CONTACT See DOCTOR OF FIRST CONTACT.

PHYSICIAN-PATIENT RELATION see PATIENT-DOCTOR RELATION

PHYSIOTHERAPY (Syn. physical therapy) therapeutic concept that employs physical methods for the restoration of function and prevention of disability.

PILOT STUDY a small study or project, usually of a convenience sample, to test preliminary measurement decisions and identify unanticipated problems in applying a special method in a study. See FEASIBILITY STUDY.

PLACEBO a medication or treatment known to be devoid of any physical therapeutic benefit but used for its psychological effect on the patient. Also used in the double blind technique or in controlled studies of drugs in therapeutic trials as the alternative to the active drug tested. See NOCEBO.

PLANNING a process by which provision is made for resources required in future on the basis of available knowledge and through specialized methods and techniques.

PLENARY SESSION session for all attendees at a **CONFERENCE** on a topic of major interest. There are usually no other activities during plenary sessions.

PODIATRY a medical profession originating in the USA concerned with the treatment of foot disorders including surgery e.g. for hallux valgus. Commonly included in diabetic care teams.

POLYCLINIC the origin of the word is not poly, multi, but polis, town. Originally a policlinic thus is a clinic serving a town, an area. See **PRACTICE TYPES**.

POPULATION 1. All inhabitants in a given country or area.
2. In research relates to the total group of persons or items studied i.e. an artificial and not a natural population for the purpose of study only e.g. all the patients seen by a physician in one particular period, or all diabetic patients in a practice. It may be the whole collection of units from which a sample is drawn. Units may also be institutions, events etc.

POPULATION AT RISK all persons at risk for the health problem under consideration.

POPULATION ATTRIBUTABLE RISK the incidence of all cases in the population which can be attributed to the risk factor and is dependent both on the extent of the exposure and the incidence of the disease. It is indicated by the difference between the incidence of the disease in the whole population and the incidence in those not exposed to the factor.

POPULATION BASED pertaining to a general population defined by geographical, political or other boundaries.

POPULATION, PRACTICE See **PRACTICE POPULATION**.

POPULATION SURVEILLANCE See **SURVEILLANCE OF DISEASE**.

POSITIVE PREDICTIVE VALUE See **PREDICTIVE VALUE**.

POSTER PRESENTATION large placard display of a scientific or organizational topic, where the presenter is present. This facilitates discussion of the topic, results, methods etc.

POSTGRADUATE EDUCATION education after the basic professional degree. In medicine includes both **VOCATIONAL TRAINING** and **CONTINUING MEDICAL EDUCATION**.

POSTNATAL CARE the care and support given to mother and infant after birth.

POSTNEONATAL MORTALITY RATE the number of infant deaths between 28 days and one year in a given year per 1,000 live births that year. It is an important rate to monitor in developing countries where older infants frequently die of infections and malnutrition.

POST-TEST ODDS the ODDS that the patient has the target disorder after the test is carried out (pre-test odds x LIKELYHOOD RATIO).

POST-TEST PROPABILITY the proportion of patients with that particular test result who have the target disorder (post-test odds/[1 + post-test odds]). See ODDS, PROBABILITY.

PRACTICE the professional work of a GP/FP, the place of work, organizational structure, geographical area or population which is served by one or more medical practitioners.

PRACTICE GUIDELINES those guidelines agreed upon by the GPs/FPs and the practice staff to act as a standard for the daily work in their own practice, e.g. management of urinary tract infection or administration procedures.

PRACTICE MANAGEMENT the way a practice is organized and run.

PRACTICE MANAGER a person employed by the GPs/FPs to administer the practice.

PRACTICE NURSE undertakes nursing duties in the practice, which may include home visits. See NURSE PRACTITIONER.

PRACTICE POPULATION the total number of registered patients in a practice. In health care systems without registration of patients (i.e. patient lists) it is the estimated number of persons served by the practice. See REGISTERED POPULATION. A practice population may be further described:

1. Rural: A practice population where the majority are located in a rural area or a town with a population less than 2,000.
2. Semi-urban: A practice population where the majority is located in a town or city with a population between 2,000 and 50,000.
3. Urban: A practice population with the majority is located in a town or city with a population of 50,000 or more.

PRACTICE REGISTER (Syn. PATIENT LIST) the list of all registered patients in a practice.

PRACTICE SETTING the premises of the practice e.g. a purpose-built clinic, an old town house or a flat.

PRACTICE STANDARDS a culturally specific approved list of minimal requirements for a physicians office with regard to accessibility, staff, rooms, medical and diagnostic equipment etc.

PRACTICE TYPES e.g.

1. Private office: (Syn. SURGERY, CLINIC, or consulting room) The premises in which a physician conducts his practice. More than one practitioner and paramedical services may be accommodated in these premises.
2. Residential office: (Syn. residential surgery, clinic, rooms). An office which is located in a physician's home.
3. Satellite office: (Syn. satellite or branch surgery or clinic) An office located at a distance from the main practice site. Staffing and the provision of health services is the responsibility of the main practice administration.
4. Health centre: A centre which emphasizes both total medical care and preventive personal health services. Staffing is varied and may include a group of GPs/FPs, a multidisciplinary team, ancillary staff, other specialists, and other health care providers. The centre may be owned by private physicians, government, or public agencies.
5. Polyclinic: A clinic providing both medical care and personal preventive services staffed by GPs/FPs and/or other medical specialists. It can be attached to a hospital.

PRECEPTOR used in USA for a trainer for family medicine trainees in a family practice.

PRECISION the extent to which a measure is capable of detecting small differences. See ACCURACY.

PRECONCEPTIONS the personal and professional beliefs and hypotheses with which any researcher enters a research project. Experiences, hypotheses, professional perspectives, and theoretical frames of reference constitute the preconceptions, which may be more or less consciously known by the researcher. Preconception does not inherently imply bias, unless the researcher neglects the responsibility to clarify these personal presuppositions and discuss their potential impacts on the study.

PREDICTIVE VALUE in screening and diagnostic tests the POSITIVE PREDICTIVE VALUE is the probability that a person or a proportion of a population with a positive test has the disease. The NEGATIVE PREDICTIVE VALUE is the probability that a person or a proportion of a population with a negative test does not have the disease. The predictive value of a screening test is determined by the SENSITIVITY and SPECIFICITY of the test, and by the PREVALENCE of the condition for which the test is used. This explains why the predictive value of the same test is very different in general practice and in hospital.

PREDISPOSING CONDITIONS patient characteristics which already existed before the decision whether or not to see the GP/FP for a health problem. See ENABLING FACTORS.

PREMATURITY relate to a liveborn infant with a birth-weight of 2500 g or less, or specified as immature. WHO recommends that the term "prematurity" should be replaced by "low birth weight" on the ground that some infants weighing less than 2500 g were not prematurely born (i.e. after less than 37 weeks of gestation). See LOW BIRTH WEIGHT.

PRENATAL CARE See ANTENATAL CARE.

PREPAID INSURANCE schemes in which the insured person pays in advance regardless of the health care services delivered.

PRE-TEST ODDS the ODDS that the patient has the target disorder before the test is carried out (pre-test probability/[1 + pre-test probability]).

PRE-TEST PROBABILITY/PREVALENCE the proportion of individuals with the target disorder in the population at risk at a specific time (point prevalence) or time interval (period prevalence).

PREVALENCE the number of persons with a specific health problem in a defined population at one point in time (point prevalence) or during a defined period of time (period prevalence). Usually expressed per 1,000 or 10,000 persons. Used of chronic diseases as opposed to INCIDENCE for acute diseases. See CROSS SECTIONAL STUDY.

PREVENTION action to avoid occurrence or development of a health problem and/or its complications. Can be divided into four categories:

1. Primary prevention: Action taken to avoid or remove the cause of a health problem in an individual or a population before it arises. Includes health promotion and specific protection (e.g. immunization).
2. Secondary prevention: Action taken to detect a health problem at an early stage in an individual or a population, thereby facilitating cure, or reducing or preventing it spreading or its long-term effects (e.g. methods, screening, case finding and early diagnosis).
3. Tertiary prevention: Action taken to reduce the chronic effects of a health problem in an individual or a population by minimizing the functional impairment consequent to the acute or chronic health problem (e.g. prevent complications of diabetes). Includes rehabilitation.
4. Quaternary Prevention: Action taken to identify patient at risk of overmedicalisation, to protect him from new medical invasion, and to suggest to him interventions, which are ethically acceptable.

PREVENTIVE MEDICINE the application of preventive measures. A field of medical practice composed of distinct disciplines that utilize skills focusing on the health of defined populations in order to promote and maintain health and well-being and prevent disease, disability, and premature death.

PREVENTIVE SERVICES include health education, immunizations, risk assessment, pre- and post-natal checkups, well baby care, family planning, screening, and other similar services.

PRIMARY CARE is the provision of integrated, accessible health care services by GPs/FPs who are accountable for addressing a large majority of personal health care needs, developing a substantial partnership with patients and practicing in the context of family and community.

PRIMARY CARE TEAM a group of health care providers and ancillary staff serving the same population or geographical area sometimes occupying the same building and working together to provide different, but complementary services, which are directly available on demand.

PRIMARY HEALTH CARE (PHC) (SYN. first contact care, PRIMARY CARE). WHO (Alma Ata 1978) defined primary health care as follows: "Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part of the country's health care system, of which it is the nucleus, and of the overall socio-economic development of the community". Primary health care can be delivered by PHC nurses, physicians or health professionals with a shorter medical training ("barefoot doctors", physician assistants).

PRIMARY MEDICAL CARE, PRIMARY CARE See PRIMARY HEALTH CARE (PHC).

PRIMARY NURSING CARE see COMMUNITY NURSE.

PRIVATE NURSE a trained nurse who is hired to provide professional nursing care to a patient on a private, contractual bases as opposed to a nurse, who is permanently employed.

PRIVATE PRACTICE a practice where physicians are paid by patients on the basis of FEE FOR SERVICE. The patients may insure themselves against such expenses.

PROBABILITY (p) the likelihood of the occurrence of a specific event, a number between 0 and 1, that corresponds to the long run frequency at which the event occurs in a sequence of independent trials under identical conditions. Probability used to express SENSITIVITY, SPECIFICITY, and PREDICTIVE VALUE is the proportion of people in whom a particular characteristic, such as a positive test, is present. ODDS is the ratio of two probabilities. They contain the same information but express it differently.

$$\text{Odds} = \frac{\text{Probability of event}}{1 - \text{probability of event}}$$

$$\text{Probability} = \frac{\text{Odds}}{1 + \text{odds}}$$

p is a quantity statement of the probability that observed differences in a particular study could

have happened by chance alone, assuming there is no difference between the groups.

p is the answer to the question: If there were no difference between treatments and the trial was repeated many times, what proportion of the trials would lead to a conclusion that the treatment is effective? See ODDS.

PROBING QUESTION See QUESTIONS.

PROBLEM BASED LEARNING (PBL). See LEARNING.

PROBLEM BEHAVIOUR the conduct of a person with a problem of living, which is distinct from ILLNESS BEHAVIOUR.

PROBLEM CASE ANALYSIS (PCA) is a case analysis based on a problem perceived by the presenter. The presenter defines the problem as he sees it, but careful analysis by the group may reveal that the obvious problem is not always the actual one. See RANDOM CASE ANALYSIS.

PROBLEM, HEALTH See HEALTH PROBLEM.

PROBLEM ORIENTED MEDICAL RECORD (POMR) a medical record in which the patient's history, physical findings, laboratory results, etc. are organized to give a cumulative record of problems. This distinguishes it from the chronological record where encounters are organized in a time sequence. The management of each individual problem dealt with over the successive encounters may be described within each record entry according to the SOAP grid. (Subjective (S), Objective (O) including significant negative information and an Assessment (A) which includes a discussion and conclusion. This is followed by diagnostic and treatment Plans (P). This format (SOAP) is applied to each problem the patient presents.

PROCESS (Syn. procedure). In MEDICAL CARE constitutes the actions undertaken by a physician to promote the health of his patient. Includes preventive and administrative activities, investigation, diagnosis, treatment, rehabilitation, and cooperation.

PROFESSIONAL COMPETENCE adequacy of knowledge, attitudes, and skills of a physician enabling him to do his work properly.

PROGNOSIS an assessment of the future outcome of a patient's health problem based on knowledge of the course of the health problem in other patients and knowledge of the particular patient.

PROGRAM EVALUATION the effectiveness of a program is assessed. It establishes the extent of a program's success in meeting objectives and the consequence of effects that are not intended.

PROPORTION a type of ratio in which the numerator is included in the denominator. See RATIO.

PROSPECTIVE STUDIES studies following groups of patients studying their experiences and characteristics as they enter successive ages and time periods. It is a method where subsets of a population can be identified as having been exposed, or may be exposed in the future, to factors influential in disease occurrence. See **COHORT**.

PROTOCOL a precise and detailed plan for the investigation of a clinical problem, an experiment, or a regimen of therapy. In the first case it may be presented as an **ALGORITHM** or in the form of a **FLOW CHART**.

PROVIDER See **HEALTH CARE PROVIDER**.

PSYCHOTHERAPY a psychological method to resolve mental disorders and psychological problems. See **COUNSELLING**.

PUBLIC HEALTH the protection, promotion, and restoration of health in the population or groups through collective and social actions, usually provided by state or local authority health services. The term has now been superseded by **COMMUNITY HEALTH** and **COMMUNITY MEDICINE**.

PUBLIC HEALTH NURSE the nurse most directly concerned with giving health education and care to individuals and families in the community. See **HEALTH VISITOR**.

PUBLIC HEALTH OFFICER (Syn. community health officer). See **COMMUNITY PHYSICIAN**.

PUBLIC HEALTH PHYSICIAN See **COMMUNITY PHYSICIAN**.

PUBLIC HEALTH PRACTICE See **COMMUNITY HEALTH**.

PUBLIC HEALTH, SCHOOL OF an academic institution that provides public health training for members of health and other professions.

PURPOSEFUL SAMPLING (Syn. strategic sampling, theoretical sampling) a strategy intended to increase the validity of qualitative research studies by deliberately selecting pre-established groups in the population for study. Does not claim statistical representation or allow for generalizations.

p-VALUE. See **HYPOTHESIS TESTING**.

Q

QUALITATIVE DATA in medical literature the term can have two meanings:

1. Information characterizing a patient, or whatever unit under study, on a NOMINAL SCALE, e.g. gender, hair colour, death or nationality. Characteristics on an ORDINAL SCALE could be called QUALITATIVE DATA, as opposed to quantitative data on interval or RATIO SCALES.
2. Within research qualitative data are descriptive information about a person's social life or individual perception. The data are derived through IN-DEPTH INTERVIEW, designed as a dialogue between researcher and informant.

QUALITATIVE DATA ANALYSIS means the systematic approach needed to organize and interpret qualitative material on a scientific level.

QUALITATIVE METHODS are research strategies used to obtain knowledge of phenomena. They are also called human science methods, interpretative, ethnographic, or naturalistic approaches. The material is often observations or texts. These research methods are suited to study specific human matters as experiences, interactions, emotions, beliefs, motives, or processes. The intention is for the researcher to understand experiences from the perspective of those being researched.

QUALITATIVE RESEARCH the associated methods include participant studies, observational techniques, IN DEPTH INTERVIEWING and field studies with data that are not particularly structured ("often designed to describe the qualities of particular social phenomena"). See FIELD TRIAL, OBSERVATIONAL STUDY.

QUALITATIVE RESEARCH INTERVIEWS are specific conversations intended to generate material for qualitative analysis and subsequent development of knowledge through research. A qualitative research interview is different from the standardized interview of survey studies, where identical questions are asked to all subjects. The dynamics of a research interview is different from the medical interview and requires specific training.

QUALITY in family medicine means the best outcomes that are possible, given available resources, and that are consistent with patient values and preferences.

QUALITY ADJUSTED LIFE EXPECTANCY (QALE) a model for clinical decision making in which estimates of IMPAIRMENT or DISABILITY are included in the calculation of LIFE EXPECTANCY.

QUALITY ADJUSTED LIFE YEARS (QUALY) an adjustment of LIFE EXPECTANCY that reduces the overall life expectancy by amounts which reflect the existence of chronic conditions causing IMPAIRMENT, DISABILITY, and/or HANDICAP.

QUALITY ASSESSMENT the measurement and judgment of the technical and interpersonal elements in the process of care.

QUALITY ASSURANCE (QA) process of planned activities based on performance review and enhancement with the aim of continually improving standards of patient care. See **QUALITY DEVELOPMENT**.

QUALITY CIRCLES small groups of peers (e.g. GPs/FPs) who analyse their work and compare their findings with set standards. See **AUDIT**.

QUALITY CONTROL the supervision and control of all operations originating in industry involved in a process, usually involving sampling and inspection, in order to detect and correct systematic or excessively random variations in quality. Lately introduced in the health care sector in order to make better use of resources and improve the overall quality of care. Quality control is static, **QUALITY ASSURANCE** is dynamic.

QUALITY CORRECTION CYCLE a method for registration, analysis, intervention, and evaluation with the aim of improving the quality of health care.

QUALITY DEVELOPMENT a continuous process of planned activities based on performance review and setting of explicit targets for good clinical practice with the aim of improving the actual quality of patient care. See **QUALITY ASSESSMENT**.

QUALITY MANAGEMENT the process of ensuring high levels of health care provision.

QUALITY OF HEALTH CARE the degree to which health services for individuals and the population are consistent with current professional knowledge and increase the likelihood of desired health outcomes. See **AUDIT**.

QUALITY OF LIFE a measurement considering physical, social, and emotional function, attitudes to illness, adequacy of family interactions and cost of illness to the individual.

QUALY acronym for **QUALITY ADJUSTED LIFE YEARS**.

QUANTITATIVE DATA data in numerical quantities, such as continuous measurements or counts.

QUATERNARY PREVENTION action taken to identify patient at risk of overmedicalisation, to protect him from new medical invasion, and to suggest to him interventions, which are ethically acceptable. See **PREVENTION**.

QUESTIONNAIRE a predetermined set of questions used to collect data, clinical, socio-economical, functional etc. See **INTERVIEW METHODS**.

QUESTIONS can be classified according to the type of answers they provoke.

1. Closed questions give a choice between a restricted number of defined answers like "Yes", "No", or "I do not know". Useful in the consultation when the physician wants specific information.
2. Divergent questions lead to new topics rather than continuing to elicit information about the topic which is discussed. Are often disturbing for the patient and ensure that the physician remains in control.
3. Open-ended questions invite the person asked to tell his story with few restrictions. A very useful type of question at the beginning of a consultation. It may be phrased something like, "Please tell me about..."
4. Probing questions ask for more specific information about the matter discussed and further investigate answers.
5. Leading questions direct the reply in such a way, that it is difficult for the person asked not to follow the lead e.g. "You don't smoke, do you?".. Such questions are invalid in history taking because the information obtained is unreliable.

R

RANDOM governed by a formal chance process in which the occurrence of a previous event is of no value in predicting future events e.g. the probability of assignment of a given subject to a specified treatment group is fixed and constant (typically 0.50) but the subject's actual assignment cannot be known until it occurs.

RANDOM ALLOCATION, RANDOMIZATION allocation of individuals to groups by chance, e.g. for experimental and control regimens. Within the limits of chance variation random allocation should make the control and experimental groups similar at the start of an investigation and ensure that personal judgment and prejudices of the investigator do not influence allocation.

RANDOM CASE ANALYSIS (RCA) is a case analysis of a consultation chosen at random from the list of patients seen on a specific day. See PROBLEM CASE ANALYSIS.

RANDOMIZED CONTROLLED TRIAL (RCT) (Syn. Controlled Clinical Trial (CCT)) an epidemiologic experiment in which subjects in a population are randomly allocated into groups, usually called "study" and "control" groups, to receive or not receive an experimental, preventive, or therapeutic procedure, manoeuvre, or intervention. Randomized, controlled trials are generally regarded as the most scientifically rigorous method available in medical research.

RANDOM SAMPLE a sample derived by selecting sampling units (e.g. individual patients) so that each unit has an independent and fixed (generally equal) chance of selection. Whether a given unit is selected is determined by chance (e.g. by a table of randomly ordered numbers).

RANKING SCALE (Syn. **ORDINAL SCALE**) a scale that arrays the members of a group from high to low according to the magnitude of the observations, assigns the numbers to the ranks, and neglects distances between members of the array.

RATE (rate of occurrence) the number of events or conditions occurring in a population in a given period of time (numerator), divided by the number in the population (denominator). Rates per hundred or thousand are typical, but this may change to per 10,000 or per 100,000 as the frequency of the event decreases. See **ENCOUNTER RATES**, **DEATH RATES**.

RATIO (e.g. **RISK RATIO**) the value obtained by dividing one quantity by another. The numerator and the denominator are usually separate and distinct quantities, neither being included in the other. To be distinguished from "proportion" where the numerator is included in part of the denominator. See **PROPORTION**.

RATIO SCALE a scale in which the distances between all levels along the scale have known numeric values and start from zero, e.g number of children.

REACHING OUT VISIT visit paid by a member of primary care team, often a nurse, to high risk individuals e.g. elderly or patients, who have not appeared for follow-up visits for prevention purposes.

READ CODES are a structured hierarchy of medical terms (a nomenclature) designed by Read. Designed in response to requirements generated by three new terming initiatives in the United Kingdom, the Clinical Terms Project, the Professions allied to Medicine Project and the Nursing Terms Project. The Challenge was to cope with the detail required by clinical specialists for maintaining a computerised record, to capture the natural language used by clinicians in their every day work and to support efficient analysis across medical records to extract information from clinicians' individual patient data.

REASON FOR ENCOUNTER the agreed statement of the reason(s) why a person enters the health care system, representing the demand for care by that person. The terms written down and later classified by the provider clarify the reason for encounter and consequently the patient's demand for care without interpreting it in the form of a diagnosis. The reason for encounter should be recognized by the patient as an acceptable description of the demand for care. See **ICPC-2**.

REASSURANCE restoration of confidence, removal of doubts and fears.

RECALL BIAS 1. A systematic error due to differences in accuracy or completeness of recall to

memory of past events or experiences.

2. Follow-up studies showing a non-random or unrepresentative sample compared to the subjects in the previous stage(s).

RECEPTIONIST office worker who receives patients at the GP's/FP's practice and has administrative responsibilities. Is often the first contact with the health care system.

RECORD LINKAGE a method for assembling the information contained in two or more records and a procedure to ensure that the same individual is counted only once. Record linkage makes it possible to relate significant health events that are remote from one another in time.

RECORD, MEDICAL a file of information relating to contacts in personal health care, comprising data on health status together with personal identifying data including administrative and economic data.

RECORD REVIEW use of past medical records for studying particular aspects of health care.

RECURRENCE the reappearance of a particular entity, e.g. a clinical condition.

REDUCTIVE THEORY, ONTOLOGICAL THEORY theory according to which diseases are entities, caused by external agents, with an existence almost separate from the people who suffer from them. The physician's task is to place the patient's illness in its correct disease category and prescribe a remedy that will remove or neutralise the causal agent.

REFERRAL the process by which the responsibility for part or all of the care of a patient is temporarily transferred to another HEALTH CARE PROVIDER. Patients may be referred for a specific service, a general opinion, or for other reasons.

REFERRAL LETTER a letter written for the purpose of onward referral of the patient to another HEALTH CARE PROVIDER.

REFERRAL THRESHOLD the level at which a doctor during a consultation is stimulated to refer a patient.

REFRAMING to put the hard facts of experience in a better light, call them something less threatening, and nudge the patient's imagination into a different network of associations.

REFUSAL TO TREAT decision by a health care provider not to give specific treatment to a patient.

REGISTER OF DISEASES a list of patients suffering from significant specific diseases in a practice usually for purposes of follow-up, e.g. diabetes, hypertension.

REGISTERED PATIENT a person listed with a particular general practitioner or practice.

REGISTERED POPULATION the total number of registered patients in a practice, taken at the mid-point of a study. If the patients are not registered in a list, the exact number of this population is not known. It may be possible to calculate the population from encounter data; if this is done, the method used should be specified. See PRACTICE POPULATION.

REGISTERED PRACTITIONER listed on a register of those entitled to practice medicine.

REGISTRAR a senior physician in training under the supervision and responsibility of a general practitioner or a consultant.

REGISTRATION statutory recognition of a health professional after fulfilment of training requirements.

REGRESSION ANALYSIS involves finding the best mathematical model to describe a dependent variable (y) as a function of one or more independent variables ($x_1, x_2 \dots x_n$).

REHABILITATION the restoration of normal form or function after illness or injury by active medical treatment and/or employment retraining. See ERGOTHERAPY.

REIMBURSEMENT MECHANISMS repayment to the patient for health care expenses by insurance organizations.

REINFORCEMENT 1. Giving further emphasis to advice regarding health care.
2. The process of enhancing reflex response by physical or mental exertion.

RELATIONSHIP 1. In medicine the interaction between two individuals. Generally used with reference to that between patient and health care professional. See PATIENT-DOCTOR RELATIONSHIP.

2. In research the interaction between different aspects of a study, e.g. confounding factors. See CONFOUNDER.

RELATIVE RISK (Syn. RISK RATIO) See RISK.

RELIABILITY the extent to which the same measure will provide the same results under the same conditions, i.e. is free of measurement error. A study of reliability may consist of the following forms of variability: inter- and intra-observer, test-retest or temporal, and inter-item or internal consistency.

RELIABILITY, TEST OF the consistency with which an instrument measures a given variable.

REMUNERATION See FEE FOR SERVICE.

REPEATABILITY See REPRODUCIBILITY.

REPRESENTATIVE SAMPLE a sample resembling the population in some defined ways, most often age and gender, but it can also include social class and other socio-economic background variables.

REPRODUCIBILITY (Syn. repeatability) the ability to produce similar results by repeating a study, preferably in a different clinical setting.

RESEARCH critical or scientific investigation to acquire deeper knowledge or new information.

RESEARCH DESIGN the format, including aims and methods, of a planned research project.

RESEARCH ETHICS the process of ensuring that a research project is ethically sound, that it will not harm patients, that the patients know that they are partaking in a trial, and that the data produced result from accurate and flawless methods. See HELSINKI, DECLARATION OF.

RESEARCH HYPOTHESIS. See NULL HYPOTHESIS, HYPOTHESIS TESTING.

RESEARCH NETWORK a group of practices in which the physicians have volunteered to participate in research projects agreed upon by the group.

RESIDENCY originally a requirement for a junior physician to be living in the hospital or on call. Now it is the name given to the early postgraduate period of hospital based training. (In Canada and the USA it is also used for family practice based training.)

RESOURCE a source of support or expertise which can be drawn upon, a service or a person to whom one can refer. Also used as financial provision e.g. financial resources for a program or service.

RESPONDENT a person answering questions or completing a survey.

RESPONSE BIAS a systematic error in observed scores caused by the tendency of some respondents to agree with any statement regardless of content or by giving only answers which are socially desirable.

RESPONSE RATE the percentage of persons who were asked to participate in a survey, who actually participated.

RESPONSIVENESS the ability of a clinimetric measure to detect change, if change occurs.

RETROSPECTIVE STUDY a study of case histories or events after they have occurred. See **CASE CONTROL STUDY**.

REVIEW a publication which contains an overview of information on a subject based on the literature and expert knowledge. See **META-ANALYSIS**, **COCHRANE COLLABORATION**.

RIGHTS OF PATIENTS see **PATIENT RIGHTS**.

RIGHT TO PERSONAL ACCESS the right of the individual to access information from his medical record.

RISK (Syn. hazard) the probability that a health problem will occur, e.g. that an individual will become ill or die within a stated period of time. A risk can be a

1. Relative risk: the ratio of the incidence of a health problem among those with a risk factor to the incidence in those without it, or an
2. Absolute risk: the observed or calculated probability of an event in a population under study as contrasted with the relative risk.

RISK ANALYSIS a method of assessing risk. This may be used to subsequently compare the cost of achieving something against the risk of losing something.

RISK EPISODE the period from the first presentation of a risk to have a health problem or illness to a **HEALTH CARE PROVIDER** until the completion of the last encounter for that risk.

RISK FACTOR an aspect of personal behaviour or lifestyle, exposure, or individual characteristic, which may be inherited, and which is known to be associated with ill health or considered important in prevention of health problems. See **LONGITUDINAL STUDY**.

RISK INCREASE can be a

1. Relative Risk Increase (RRI): the proportional increase in rates of bad outcomes between experimental and control patients in a trial, accompanied by a 95 per cent **CONFIDENCE INTERVAL**, used when the experimental treatment increases the **PROBABILITY** of a bad outcome. Is also used as the attributable risk among the exposed in assessing the impact of risk factors for disease or other outcome, or it can be an
2. Absolute Risk Increase (ARI): the absolute arithmetic difference in rates of bad outcomes between experimental and control patients in a trial, accompanied by 95 per cent confidence interval, used when the experimental treatment increases the probability of a bad outcome. Is also used as the excess risk among the exposed in assessing the impact of risk factors for disease or other outcome.

RISK RATIO ratio of the disease frequency in the group exposed to a risk factor compared to that in the unexposed group.

RISK REDUCTION can be a

1. Relative Risk Reduction (RRD): the proportional reduction in rates of bad outcomes between experimental and control participants in a trial, accompanied by a 95 per cent CONFIDENCE INTERVAL, used when the experimental treatment reduces the PROBABILITY of a bad outcome, or it can be an
2. Absolute Risk Reduction (ARR): the absolute arithmetic difference in rates of bad outcomes between experimental and control participants in a trial, accompanied by a 95 per cent confidence interval, used when the experimental treatment reduces the probability of a bad outcome.

ROLE MODEL demonstration of good practice by example.

ROLE PLAYING acting a pattern of behaviour considered appropriate to a social, educational, or professional situation or current health status. Used in teaching, problem solving, and to enhance communicative skills.

ROUNDS review of patients under clinical care with a view to following their progress, including a teaching and learning element for the health care professionals involved.

RR abbr. for Relative Risk. See RISK.

RUBRIC item, section, or chapter heading. Used in classifications e.g. of diseases.

RURAL HEALTH aspects of medical problems encountered in the population living in the country i.e. outside of towns e.g. in agricultural or sparsely populated areas.

RURAL HEALTH SERVICES the range of health services available to populations outside metropolitan areas. There are a number of health services specific to rural areas such as tele health (tele medicine) facilities which use information technology to provide health facilities and overcome some of the problems caused by the long distances to major service centres. See PRACTICE POPULATION.

RURAL PRACTICE POPULATION See PRACTICE POPULATION.

S

SALARY monthly payment made by an employer to a physician for rendering medical care, irrespective of items of service or list size. Conditions of payment and work requirements are regulated by contract, individually, or collectively agreed.

SALUTOGENESIS (saluto=health; genesis=origin) the origins of health compared to the origins of disease (pathogenesis). A shift from the study of relationships between stress and disease to the study of successful tension management. Health is attained through a healthy environment, balanced diet, and physical fitness as well as the fostering of coping skills, self-confidence, and self-control.

SAMPLE a selected subset of a population. A sample may be random or non-random and may be representative or non-representative. A sample can be described with regard to the way it has been selected: e.g. stratified random sample, probability sample, systematic sample.

SAMPLING the process of selecting a subset of a population for study. See PURPOSEFUL SAMPLING, REPRESENTATIVE SAMPLE.

SAMPLING BIAS systematic error due to study of a non-random sample of a population.

SAMPLING ERROR that part of the total estimation error of a parameter caused by the random nature of the sample.

SAMPLING UNIT one of the units into which an aggregate is divided for the purpose of sampling, each unit being regarded as individual and indivisible, when the division is made.

SAMPLING VARIATION the results of analysis from two or more samples will differ because the inclusion of the individuals in each sample is determined by chance. The samples can never be identical.

SATELLITE CLINIC (Syn. branch office) small health care facility run under the direction of a larger institution located some distance away.

SATISFACTION See **PATIENT SATISFACTION**.

SCALES OF MEASUREMENT the mathematical qualities of numerical measurement scales vary and are of four main types.

1. **Nominal scales.** Numbers are assigned arbitrarily with no implication of an inherent order to their categories, as in telephone numbers. Such scales may only be used as classifications; no statistical analyses may be carried out that use the numerical characteristics of the scale.
2. **Ordinal scales.** Classification into a scale that implies a distinct order among the categories (such as house numbers on a street), but where there is no natural assumption concerning the relative distance between adjacent values. Statistical methods such as rank order correlations may be used.
3. **Interval scales.** Interval scales are so named because the distance between numbers in one region of the scale is assumed to be equal to the distance between numbers in another region of the scale (as in Fahrenheit or Celsius scales). Addition and subtraction are permissible, but not multiplication or division of such scales. Statistical analyses such as the Pearson correlation, factor analysis or discriminant analysis may use interval scales.
4. **Ratio scales.** A ratio scale is an interval scale with a true zero point, so that ratios between values are meaningfully defined. Examples include weight, height, and income, as in each case it is meaningful to speak of one value being so many times greater or less than another value. All arithmetical operations, including multiplication and division, may be applied, and all types of statistical analysis may be used.

SCENARIO a possible expected or/and professed sequence of events.

SCHEDULE FEES a list of fees or charges for specific medical services usually determined in cooperation between physicians and funders or patients.

- SCHOLARSHIP**
1. Grant of money for education of a person.
 2. A high level of learning in a particular subject.

SCHOOL HEALTH SERVICES health facilities, usually preventive only, provided within an institution of learning.

SCHOOL HEALTH SERVICES health facilities, usually preventive only, provided within an institution of learning.

SCIENCE systematic observation and/or experiment on natural phenomena aimed at establishing,

enlarging, or confirming knowledge.

SCIENTIFIC MISCONDUCT improper or unprofessional behaviour in the conduct or reporting of scientific research.

SCREENING (Syn. screening test) the activity to identify an unrecognized health problem or risk factor in an individual or population by means of tests and/or other methods which discriminate between those, who probably have or are at risk for a given health problem, and those who are not affected. This can be split into:

1. Mass screening: Large scale screening of whole population groups.
2. Selective screening: Screening of selected high risk groups in the population.

SCREENING LEVEL the normal limit or cut-off point at which a screening test is regarded as positive, i.e. is uncovering an unrecognized health problem.

SEASONAL VARIATION change in physiological status or in the occurrence of health problems that conforms to a seasonal pattern.

SECONDARY CARE one of two levels of referred care (secondary and tertiary). Usually refers to care provided by a broadly skilled specialist such as a general surgeon, general internist or obstetrician, to whom the patient may be referred by the GP/FP. See PRIMARY CARE, TERTIARY CARE, QUATERNARY PREVENTION.

SECOND OPINION an assessment or evaluation of a patient by a physician who is not the attending physician, often initiated by the patient because of dissatisfaction with the first opinion or by the primary physician when there is doubt regarding the diagnosis of a specialist or when there are different treatment possibilities.

SELECTION BIAS error due to systematic differences in those included or excluded from a study.

SELF-ADMINISTERED QUESTIONNAIRE respondents read and answer questions without the help of others.

SELF CARE personal and medical care undertaken by patients for themselves.

SELF DIRECTED LEARNING. See LEARNING.

SELF-HELP GROUP a group of people who meet to discuss a shared health concern with the view of improving their health. Such groups are not led by a health professional.

SEMINAR. See TEACHING METHODS.

SEMI-URBAN PRACTICE POPULATION a practice population where the majority are located in

a town with 2,000 to 50,000 inhabitants. In countries where this is not appropriate the range should be stated, e.g. in countries with a small population, the range may be from 2,000 to 10,000.

SENSE OF COHERENCE (SOC) a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected.

SENSITIVITY the extent to which a measure detects the true differences or changes in a construct being measured. The sensitivity of a diagnostic or screening test is the proportion of people who truly have a designated disorder and are so identified by the test. The test may consist of or include clinical observations. A test with high sensitivity detects a high proportion of true cases.

SENTINEL PRACTICE a general practice which undertakes to maintain surveillance of and report certain health problems such as adverse drug reactions or other notifiable health events.

SERVICE 1. An action taken by the provider in order to improve or maintain the health and well-being of the patient and/or family.

2. An institution or organization doing this. See **DIAGNOSTIC SERVICE, PREVENTIVE SERVICES, COMMUNITY CARE.**

SETTING in research means the conditions under which the study has been carried out, e.g. the population from which the study population has been sampled.

SEVERITY OF ILLNESS the degree to which health problems impact the health of persons, individually or in groups. Severity can be measured by instruments such as the Karnofsky Performance Scale or the Duke Severity of Illness Checklist (DUSOI). See **CASE-MIX.**

SEX RATIO the ratio of one sex to the other, usually males to females.

SHARED CARE where more than one health professional takes part in the care of a patient e.g. in shared health care psychiatrists, general practitioners, and mental health nurses may all contribute to ongoing care. In some cases shared care involves the sequential transfer of care from one provider to another and back e.g. obstetric management may be initiated by a GP, handed over to an obstetrician for delivery, and then the mother and baby return to the GP's/FP's care in the postnatal period.

SHELTERED WORKSHOP an institution or program that provides vocational experience in a caring environment for people with a disability or handicap.

SIBLING brother or sister.

SICK 1. Mentally or physically unwell. In this association refers to the subjective feeling of the

patient.

2. Nauseous. See ILLNESS, DISEASE.

SICK BAY room or cabin with beds for people who are ill in a school, ship, or institution.

SICK LEAVE absence from work or study due to illness either certified by a physician or self certified by the individual.

SICKNESS a state of social dysfunction, i.e. a role that the individual assumes when having a health problem.

SICKNESS IMPACT PROFILE a multidimensional, general health status instrument which measures perceived changes in behaviour judged by a patient as the consequence of being sick.

SICK ROLE a behavioural pattern in which a patient shows the symptoms of a physical or mental problem, which may result in receiving care from others.

SIDE EFFECT an undesirable effect caused by a procedure or medication.

SIGN in medicine is an objective finding during a physical examination of a patient.

SIGNIFICANCE the importance of a health problem considering a diagnostic, therapeutic, or prognostic decision in clinical care.

SIGNIFICANCE LEVEL a finding that is probably not the result of chance. See STATISTICAL SIGNIFICANCE TEST, NULL HYPOTHESIS.

SILENT DISEASE a disease which has caused no clinically obvious signs or symptoms.

SIMULATED PATIENT reproducing the situation of a consultation with a GP/FP using a model patient or actor in a role play. Commonly used in teaching.

SIMULATION the use of models in situations where experimentation is impossible or impracticable, in order to determine the effect of changes in the variables or objectives.

SKEWNESS the extent of asymmetry in a frequency distribution.

SKILL is a systematic and coordinated pattern of mental and/or physical activity involving senses and effector organs to provide responses. Skills may be perceptual, motor, manual, intellectual, or social according to the context and dominant aspect of the skill pattern.

SKILL LABORATORY is a clinical training centre, where learners can train various clinical skills e.g. resuscitation, intubation, communication, suturing, not on patients, but on phantoms or on

themselves. Such centres are very popular in medical schools and in postgraduate centres, and at the same time they express respect for patients' rights and medical ethics.

SMART CARD a small, electronic data carrier in the size of a credit card, that can hold substantial amounts of information e.g. medical record, allergies, risk factors etc.

SNOMED abbr. for Systematized Nomenclature of Human and Veterinary Medicine. A coded medical nomenclature that allows the recording of all disease entities and all observations related to a particular disease. The coding is multi-axial (11 axes).

SOAP See **PROBLEM ORIENTED MEDICAL RECORD**.

SOCIAL ADJUSTMENT the process of adapting following a disruption in one's life. Usually measured by the Social Readjustment Scale, which lists 43 common life events. The most eruptive event of the scale is the death of a spouse.

SOCIAL CLASS a stratum in society composed of individuals and families of equal standing measured by social characteristics such as income, education, or occupation. See **SOCIO-ECONOMIC CLASSIFICATION**.

SOCIAL INSURANCE constitutes a mandatory contribution from persons, usually workers or employees, to be used for specific social purposes, such as personal health services, sickness allowance, and disability pensions. The funds so raised may be supplemented by government funds or by taxation.

SOCIALIZED MEDICINE a system for health care delivery in which the expenditure totally or partly is effected by the government, usually through taxation.

SOCIAL MEDICINE the branch of medicine concerned with the health of the population and its impact on society. Social medicine is based on the study of heredity, environment, social structures, and cultural values. As such the term fell into disuse being considered an academic pursuit with no practical counterpart. It has preceded community medicine, which integrates the provision of health including curative services. See **COMMUNITY HEALTH**.

SOCIAL NETWORK INDEX a measure of the extent to which individuals or groups are connected to or isolated from others, e.g. family, friends, and colleagues. Health status is positively associated with the extent of the social network. The social network is part of an individual's resources.

SOCIAL SECURITY a government supported system of health and welfare programs.

SOCIAL SERVICES advice and practical help with problems due to social circumstances. In many countries local authorities are responsible for establishing and staffing social service departments.

SOCIAL SUPPORT can be defined as the availability of people on whom the patients feel that they can depend. Social integration and optimized psychosocial resources act as direct or indirect buffers against stress, adverse life events, morbidity, and mortality. This positive effect of social support is thought to operate by improving self-esteem and enabling individuals to exercise greater control over their environment.

SOCIAL WORK organized social service dealing with the broad range of people's social problems through case work or other specialized techniques.

SOCIAL WORKER a professional dealing with social, emotional, and environmental problems to help clients readapt and function in society. Medical social workers (with or without additional training) participate in team work in many health services in hospitals and in the community. See **SOCIAL SERVICES**.

SOCIO-ECONOMIC CLASSIFICATION arrangement of persons into groups according to such characteristics as prior education, occupation, and income. This usually reveals a strong correlation with health related characteristics such as average length of life and risk of dying from certain specific causes. Occupation are often classified into five groups - the five social classes:

1. Professional occupations.
2. Intermediate occupations.
- 3a. Non-manual skilled occupations.
- 3b. Manual skilled occupations.
4. Partly skilled occupations.
5. Unskilled occupations.

SOCIO-ECONOMIC STATUS a person's position in society measured by such criteria as income, educational level, occupation, value of dwelling place etc.

SOCIOLOGY the scientific study of social problems, human society, and group behaviour in a society.

SOCRATIC TEACHING a dialectic style of teaching using questions to lead the learner to correct conclusions as determined by the teacher. (Socrates, Athenian philosopher).

SOLO PRACTICE a practice consisting of one physician providing medical care for patients.

SPECIALIST a medical practitioner who by his approved training and/or experience is specially competent in one particular field of medicine, which is recognized as a speciality. General practice/family medicine is presently in many countries obtaining recognition as a speciality, giving GPs/FPs status as specialists.

SPECIALITY an area of medical expertise in which physicians undertake postgraduate or

vocational training. Can be grouped according to organs, e.g. ophthalmology; to population, e.g. paediatrics; to procedure, e.g. radiology; to disease entity, e.g. oncology.

SPECIAL SESSION occasions where patients of similar type or suffering from the same health problem are grouped together for supervision, examination, treatment, discussion, or advice. Appointments may or may not be required. The type of clinic should be specified, e.g. obstetric clinic for antenatal and postnatal care, child health clinics for care of children and babies, special clinics for obesity, old age, diabetes, and other conditions.

SPECIFICITY the specificity of a diagnostic or screening test is the proportion of people who are truly free of a designated disorder and are so identified by the test. The test may consist of or include clinical observations. A test with high specificity has few false positives.

STANDARD any established measure of extent, quantity, quality, or value.

1. Absolute is based on mastery or perfect performance.
2. Criterion-related requires explicit specification of the level of performance required, but differs in that it may be set at any chosen level.
3. Relative where the performance of one is compared with that of another.

STANDARD DEVIATION a measure of variation of a frequency distribution. It is equal to the positive square root of the variance. The standard deviation tells how widely the values are dispersed around the mean, which is the centre for a group of values.

STANDARD ERROR the standard deviation of an estimate.

STANDARDIZATION recalculation or weighting of data to correct for unequal distributions between groups or classes like age or gender. Can be performed in two different ways:

1. Direct method: The specific rates in a study population are averaged, using as weights the distribution of a specific standard population. The direct standardized rate represents what the crude rate would have been in the study population if they had been equally distributed with regard to the variable for which the population is standardized.
2. Indirect method: This is used to compare populations where the specific rates are unknown or unstable. The specific rates in the standard population are averaged, using as weights the distribution of the study population.

STANDARDIZED MORTALITY (MORBIDITY) RATIO (SMR) the ratio of the incident number of deaths (patients) observed in the study group or population to the number that would be expected, if the study population had the same specific rates as the standard population, multiplied by 100.

STANDARDIZED PATIENTS simulated role playing patients who have been trained and assessed to perform reliably and reproducibly over a number of occasions.

STATE-TRAIT ANXIETY INVENTORY a self-report symptom-mood inventory for evaluating levels of generalized anxiety.

STATISTICAL POWER the probability of detecting an effect of a given size under the conditions of a particular study.

STATISTICAL SIGNIFICANCE TEST a test which allows an estimate to be made of the PROBABILITY of whether the NULL HYPOTHESIS can be accepted or rejected, i.e. whether there is equality between two groups or not. This statistical test has a SPECIFICITY of 95% or higher, if the SIGNIFICANCE LEVEL is set on <0.05 . The SENSITIVITY of this test to diagnose inequality depends on the sample size. The prior probability in clinical diagnostics is conform to the prior belief in inequality between groups in STATISTICAL SIGNIFICANCE TESTING. The complement of specificity (1-specificity) in clinical diagnostics is conform to a type I error (alpha, significance level) in significance testing. The complement of sensitivity (1-sensitivity) in clinical diagnostics is conform to type II error (beta, power). Alpha is set beforehand on 0.05 or 0.01 by convention or choice, or calculated. Beta is set beforehand on 0.20 or 0.10 by convention or choice, or calculated. Sample size, alpha, and beta are mathematically related. If two of the three values are known or chosen, the third can be calculated. All formulas contain a measure for variation of the data (STANDARD DEVIATION) and a measure for the minimal difference to be detected between groups that is judged to be clinically relevant (MIREDF). See ERROR, PROBABILITY (p), NULL HYPOTHESIS.

STATISTICAL TEST a mathematical method used to decide whether the NULL HYPOTHESIS should be accepted or rejected. The test can be parametric and non-parametric.

STATISTICS a mathematical science concerned with measuring, classifying, and analysing objective information. Parametric statistics assess significance assuming that the parent population has a normal distribution, e.g. the t-test. Non parametric statistics (also called distribution-free statistics) make no assumptions about the parent population. See t-DISTRIBUTION.

STILLBORN (Syn. intermediate and late fetal death) babies of 500 g or more, who are born dead. See FETAL DEATH.

STRATIFICATION separating a sample into several sub-samples according to specified criteria, such as age, SOCIO-ECONOMIC STATUS, etc.

STRUCTURE may be broadly defined as the framework, within which health services are provided. Comprises resources, premises, equipment, personnel, qualifications, economy, and leadership.

STRUCTURED ABSTRACT summary of an article written in agreement with an internationally recognized format for abstracts. The topics to be included in a structured abstract are: objective, design, setting, patients/participants, interventions, measurements, and results, key conclusions and

outcome measures.

STUDY POPULATION all persons on whom a study is carried out.

SUBACUTE longer than 4 weeks and shorter than 6 months. See ACUTE, CHRONIC.

SUBJECTIVITY the emotional or mental perception of an experience by a person.

SUBJECT OF CARE person or defined group of persons receiving or having received HEALTH CARE. "Person", "population", "family", "group" are subordinate concepts for subject of care.

SUBSIDIARITY the application of the principle of subsidiarity allows realisation of that process of care, which is most efficient to the patient by a provider or an institution near the patient.

SUPERVISOR in medical teaching an experienced clinician who in any field monitors a process or study and ensures that the work is done properly.

SUPPORTIVE CARE treatment which promote the maintenance of bodily functions and psychological well-being, but is generally not considered to be curative.

SURGERY 1. Branch of medicine related to operative procedures.
2. Physician's consulting room or office.

SURVEILLANCE OF DISEASE the continuing scrutiny of all aspects of occurrence and spread of a disease, that are pertinent to effective control. GPs/FPs taking part in surveillance schemes are asked to report the number of cases of specified diseases over a period of time.

SURVEY observational or descriptive, non-experimental study in which individuals are systematically examined for the absence or presence (or degree of presence) of characteristics of interest.

SURVIVAL CURVE a curve that starts at 100% of the study population and shows the percentage of the population still surviving at successive times for as long as information is available.

SURVIVAL RATE the proportion of survivors in a group, e.g. of patients, studied and followed over a period of time.

SYMPATHY expressed interest, concern, and compassion for another person's problems. See EMPATHY.

SYMPOSIUM a session with 4-5 contributors presenting scientific findings or considerations about a particular subject. SYMPOSIA can be

1. Integrated i.e. part of the program of the CONFERENCE or CONGRESS or

2. Satellite i.e. taking place after the normal working hours of the meeting or congress. A satellite symposium is often sponsored by a drug company, which provides the symposium with its title and invites contributors, but the organizers must approve the final program.

SYMPTOM any expression of disturbed function or structure of the body and mind by a patient. Cough, pain, and tiredness are symptoms.

SYNDROME a symptom complex in which a combination of symptoms and signs occurs more frequently than would be expected on the basis of chance alone. The term is used in three different ways:

1. The symptomatic presentation of a health problem or group of health problems e.g. the hyperthyroid syndrome. This use of the term is prevalent in general practice as many health problems are met in an early phase, or cannot or need not be diagnosed by additional diagnostic procedures. See DIAGNOSIS.
2. As synonymous jargon on basis of a historical vocabulary. Example: Down's syndrome which is in fact a well-known disease (trisomy-21).
3. As synonym for the concept behind the term nosological diagnosis. A prerequisite for considering a set of symptoms and signs as a SYNDROME is its clinical utility for understanding, diagnosis, prognosis, or treatment. See DISEASE.

SYSTEMATIC REVIEW (Syn. overview). A summary of the medical literature which uses explicit methods to perform a thorough literature search and critical appraisal of individual studies and which uses appropriate statistical techniques to combine these valid studies.

T

TARGET an aspired outcome that is explicitly stated, e.g. what a health promotion program will achieve by a specified date.

TARGET PAYMENT a payment given to a practice when reaching certain targets e.g. 80% for cervical cytology and 90% for for child immunizations.

TARGET POPULATION group of persons for whom an intervention is planned.

TASK ORIENTED TEACHING See TEACHING METHODS.

TAXONOMY OF DISEASES a systematic classification of health problems into related diagnostic groups. See CLASSIFICATION OF DISEASES.

t-DISTRIBUTION (t-TEST) the distribution of a quotient of independent random variables, the numerator of which is a normal variate and the denominator of which is the positive square root of the quotient of a chi-square distributed variate and its number of degrees of freedom. The t-test uses a statistic that, under the NULL HYPOTHESIS, has the t-distribution, to test whether two means differ significantly, or to test linear regression or correlation coefficients. See STATISTICAL TEST.

TEACH to instruct or impart SKILLS or KNOWLEDGE to another person. Teach is used in both formal and informal situations. Lecture often refers to universities. Educate is often used about the development of practical and intellectual skills, especially in children. Train means to give somebody the instruction needed to learn a job or skill. Coach is often used to describe informal teaching of an academic subject or a sport.

TEACHING the work of a teacher, a person whose aim it is to facilitate the learner's learning.

TEACHING METHODS are standard procedures in the presentation of material, the content of activities, and the role of the teacher and the learner. Some are teacher-centred others student-centred. In medicine many methods can be used to facilitate learning, some of which are unique to medicine. Examples are listed here:

1. BEDSIDE TEACHING is the teaching which takes place with the patient present, usually in his bed. The possibility of demonstrating clinical signs on the patient and of asking more questions is obvious. Bedside teaching ideally should be with the patient as a participant.
2. CLINICAL TEACHING take offspring in patients with a health problem or in case histories. See CASE METHOD, PROBLEM BASED LEARNING.
3. Lecturing is a didactic teaching method in which facts or principles are presented to the learner, who does not participate actively. See LECTURE.
4. SEMINAR a method of teaching with small group discussions following a presentation or a conference with a number of sessions with a high degree of participation and and discussion between seminar contributors and participants.
5. WORKSHOP is a working session which allows detailed discussion and sometimes practical work on a scientific or organizational topic. The number of participant may typically be 10-50. They share their knowledge and experience and thus improve their skills.
6. Tutorial teaching is personal face-to-face teaching in small groups. The discussion is often based on a presentation, oral or written, made by one of the learners.
7. Coaching is teaching with a specific purpose e.g. an examination or an assignment.
8. Project teaching a method of teaching in which the learners must identify the problem, study the available knowledge and seek new, organize the work, and present it in writing and/or orally. The participants are very active, and the teacher acts as a consultant.
9. Demonstration in teaching means that the teacher points out clinical signs and pathological findings to the learners.
10. PROBLEM BASED LEARNING. See LEARNING.
11. Problem solving uses a real problem as a basis for the teaching. Several possible solutions are discussed, and the experience gained may be useful, when new problems are met.
12. Role play is a widely used teaching method. The learners act out the roles of the involved individuals (patients and physicians) and discuss possible ways of solving problems.
13. Case-discussion is a teaching technique, in which real patients' problems are identified and discussed.
14. Deductive teaching is transfer by a teacher of knowledge from general principles leading to particular examples.
15. Task oriented teaching in which attention and energy are centred upon the satisfactory

completion of a task rather than upon social and emotional objectives.

TEACHING PLAN a short description of the aim, goals, methods, content, audience, timeframe, teaching material, and evaluation of the planned teaching.

TEACHING PRACTICE an approved practice in which teaching of medical students, trainees and/or registrars take place and is an integral part of the practice.

TEACHING STYLES are often defined by their impact on motivation and engagement in learners.

1. **DIDACTIC** teaching is teacher-centred and teacher-directed. The teacher decides topics and contents. He is active, while the learners are relatively passive. See **LECTURE**.
2. Socratic teaching originally contrived by Zeno of Elea and later developed by Socrates, the Greek philosopher. It consists of a logical series of questions, which expresses the knowledge held by the learner. The teacher asks coaching questions, which guide the learner to rational answers.
3. **COUNSELLING** is a supportive approach encouraging the learner to find the information he needs.
4. Heuristic teaching is a "find out for yourself" approach which encourages the learner to identify his own learning needs and the laws and principles for this process.

TEACHING THEORIES there is no single theory that fully explains how learning takes place. There are several theories which try to do it:

1. Transfer theory. **KNOWLEDGE** can be transferred from one person to another by different methods.
2. Shaping theory. Learners can learn by being in a teaching environment where they can adapt principles and ideas and draw their own conclusions from them.
3. Travelling theory. Learning is like a journey where the teacher is the guide, who may lead, show, or point the way.
4. Growing theory. Ideas can be sown, nurtured, and shaped depending on the learner and on the **SKILLS** of the teacher.
5. Building theory. Knowledge is transferred and shaped so that the concept or the idea develops involving complex thought patterns and new **ABILITIES**.

TEAM in primary care a team is a group of people with different professional backgrounds who work together to provide patients and families with the most practical, comprehensive health care.

t-DISTRIBUTION See **STATISTICAL TEST**.

TELECONFERENCE a conference using telecommunication technology. The participants are geographically separated but electronically connected.

TELEMEDICINE any form of medical procedure taking advantage of telecommunication technology e.g. consultation or diagnosis of imaging using television.

TELEPHONE CONSULTATION a consultation by a patient of a physician, typically a GP/FP being asked for advice. A set time for telephone consultations may be advertized.

TERM(S) a word or group of words which labels concepts in a defined way. Terms are narrower than concepts. In primary care terms are concerned with broader concepts than in more specialized disciplines, because of the clinical utility. See **DIAGNOSIS**, **DISEASE**, **TERMINOLOGY**.

TERMINAL CARE the care provided to patients in the last phase of incurable disease and their families. Terminal care is designed to meet physical, spiritual, psychological, and social needs and is often performed by a team of professionals. Can be provided in special wards, in institutions, or at the patient's home. See **HOSPICE CARE**, **PALLIATIVE CARE**.

TERMINOLOGY all terms of a professional domain are called the terminology of that domain. See **TERM(S)**.

TERTIARY CARE one of two levels of referred care: **SECONDARY CARE**, **TERTIARY CARE**. Usually refers to highly specialized care provided in a hospital setting such as neuro surgery or heart surgery to which the patients usually are referred by a hospital consultant and only occasionally by the GP/FP.

TEST HYPOTHESIS See **NULL HYPOTHESIS**.

TEST OBJECTIVITY the extent to which the test items and their scoring are free from subjective bias.

TEST OF SIGNIFICANCE See **PROBABILITY (p)**, **STATISTICAL SIGNIFICANCE**.

TEST-RETEST RELIABILITY a method of estimating reliability by correlating scores for two different administrations of the same test, separated by a short time interval.

TEST VALIDITY the accuracy with which a test measures what it purports to measure. See **VALIDITY**.

THEORETICAL MODELS statistical/mathematical models developed to explain occurrences, procedures etc.

THERAPEUTIC INDEX in general practice a system recording treatment (drugs) by date of presentation, patient's name (or number), age, and gender. The index is useful when retrieving medical records for cohorts of patients with similar treatment and facilitates follow-up.

THERAPEUTIC INDEX a measure for a drug's safety. The lower the index the more dangerous is the drug and the narrower the therapeutic interval (the difference in plasma concentration between therapeutic effect and toxicity).

TIME MANAGEMENT the review of workload priorities on a regular basis, and the allocation of time based on these plans. Priorities can be reviewed up to several times per day.

TIME OF ENCOUNTER the time at which the encounter occurs.

1. Encounter during scheduled hours: Encounter which occurs during usual or posted working hours of the health care providers.
2. Encounter during unscheduled hours: Encounter which occurs during times other than the usual working hours of the health care providers but excluding night encounters.
3. Night encounter: Encounter made during "night hours" as defined by the health care providers or the health care system.

TRACER CONDITION a health problem used to monitor the effects of health care interventions on other health problems e.g. diabetes or hypertension. Tracer conditions are easily diagnosed illnesses or health states whose outcomes are believed to be affected by health care and which should reflect the gamut of patients and health problems encountered in medical practice.

TRAINEE in general/family practice is a young physician who is working under supervision in a practice in order to acquire and develop jobrelated skills. See **TRAINING**.

TRAINER in general/family practice is a principal GP/FP, who directs the **TRAINEE**'s practice of skills towards immediate improvement.

TRAINING the systematic development in oneself or another in the performance of certain skills and attitudes.

TRAINING PRACTICE a approved practice in which one or more of the principals provide professional training in general/family practice to medical students, trainees and/or registrars.

TRAINING, VOCATIONAL See **VOCATIONAL TRAINING**.

TRANSVERSAL STUDY See **CROSS-SECTIONAL STUDY**.

TREATMENT OUTCOME the result of a medical or surgical intervention usually assessed after a set period of time.

TREND a consistent change in value of a variable, event, or outcome measure over a long period, which can be irregular in the short term. It is also sometimes used to indicate an association which is consistent in several samples but not statistically significant.

TRIAGE the process of selecting for care or treatment those of highest priority or, when resources are limited, those thought most likely to benefit, e.g. in case of major catastrophies meaning that the lethally injured victims have secondary priority compared to those, who may survive.

TRIAL See CLINICAL TRIAL.

t-TEST See t-DISTRIBUTION.

TUTORIAL TEACHING. See TEACHING METHODS.

TUTORING is teaching small groups or teaching in one to one situations. Important in tutoring are

1. Listening, showing awareness of what the student is saying, using verbal and non verbal cues.
2. Orientation, willingness to discuss topics brought up during the tutorial and accepting as a teacher, that one does not necessarily have the right answers. The tutor must ensure the direction of the learning and redirect it if necessary.
3. Reflection. The teacher must allow time for the student to come up with his or her own answers and accept these as a basis for discussion.
4. Feedback, a two way process from teacher to student and vice versa. Can effectively include feedback about feelings, thoughts, and opinions.

TWO-TAIL TEST a statistical significance test based on the assumption that the data are distributed in both directions from some central value(s).

TYPE I ERROR See STATISTICAL SIGNIFICANCE TEST.

TYPE II ERROR See STATISTICAL SIGNIFICANCE TEST.

U

UNDERGRADUATE a student at a university, college, or medical school, who has not yet received the first, or bachelor's, degree.

UNDER-REPORTING failure to identify and/or count all cases, leading to reduction of numerator in a rate. See ERROR.

UNDERSERVED AREA is an area deprived of the services obtainable in the rest of the region or regarded normal in the country as a whole.

UNDIFFERENTIATED ILLNESS relates to symptoms, which the physician may be unable to ascribe to a specific diagnosis. This may be because of objective difficulties, particularly in the early phase of the illness, to match the incomplete clinical picture with a definite diagnosis, or as often in the case of vague and generalized symptoms, it may be due to the inability of the patient to function or cope in a stressful situation, and his need to adopt sick-role behaviour. This is one of the unique characteristics of morbidity as encountered by the GP/FP in contrast to that encountered by hospital physicians. The picture usually becomes clearer with the passage of time, emphasizing the importance of continuity in general/family practice.

UNIFIED MEDICAL LANGUAGE SYSTEM (UMLS) a long term project to enhance MeSH (See there) to translate among existing vocabularies such as SNOMED, ICD, ICPC 1-2 etc. Aims at providing a uniform interface to current and future biomedical information resources. The Metathaurus, a kind of browser, contains information about biomedical concepts and terms. In addition UMLS comprises an Information Sources Map and a Semantic Network.

UNIT any fixed amount, quantity, measure, distance etc. used as a standard e.g. an individual or group of persons distinguished from others or as part of a whole.

URBAN comprising a city or town with a population of 50.000 or more.

URBAN PRACTICE POPULATION See PRACTICE POPULATION.

UTILIZATION REVIEW (UR) programs that attempt to determine whether specific services are medically necessary and delivered at an appropriate level and cost.

V

VALIDATION the process of establishing that a method is sound.

VALIDITY STUDY the degree to which the inference drawn from a study, especially generalizations extending beyond the study sample, are warranted when account is taken of the study methods, the representativeness of the study sample, and the nature of the population from which it is drawn.

VALIDITY the extent to which a particular instrument measures what it is intended to measure and does not measure what it is not supposed to. Can be divided into several subgroupings:

1. Concurrent validity: A form of validity in which the measure being tested and the comparison measure are administered at the same point in time.
2. Construct validity: A process in which validity is evaluated as the extent to which a measure correlates with variables in a manner consistent with theory.
3. Content validity: The extent to which a measure or battery represents the universe of measurements, objects, or domains, avoiding over-emphasis of some and under-emphasis of others.
4. Convergent validity: The strength of association between two methods of measuring the same construct.
5. Criterion validity: The extent to which a measure corresponds to an accurate or previously validated measure of the same concept.
6. External validity: Ability to generalize results.
7. Face validity: The extent to which a measure "looks like" what it is intended to measure.
8. Internal validity: Refers to the degree of confidence in the conclusions drawn in relation to the research methods used.
9. Predictive validity: Test performance related to subsequent performance in practice.

VALIDITY STUDY the degree to which the inference drawn from a study, especially generalizations extending beyond the study sample, are warranted when account is taken of the study methods, the representativeness of the study sample, and the nature of the population from which it is drawn.

VARIABLE any quantity which changes. A variable can be an attribute, a phenomenon, or an event which characterizes an object. A variable can be dependent or independent. A dependent variable is dependent on the effect of other variables.

An independent variable is not influenced by the event or manifestation but may cause or contribute towards its variation. As an example, in a study of lung cancer and smoking, the disease is the dependent, and the risk factor the independent variable.

VARIANCE a measure of the variation shown by a set of observations, defined by the sum of the squares of deviations from the mean divided by the number of degrees of freedom in the set of observations.

VERTICAL INTEGRATION the shift from single level organizations (e.g. in health care these could be acute care hospitals; in education undergraduate education at universities) to organizations, that embrace various phases and levels (e.g. undergraduate, postgraduate, and CONTINUING MEDICAL EDUCATION). See HORIZONTAL INTEGRATION.

VIDEO ANALYSIS of consultations requires that the patient has given his full consent, that he is fully informed, understands the information, gives his permission freely, and is guaranteed confidentiality. The patient should also be informed who is going to see the videotape.

VIDEOTAPE REVIEW used in teaching is a strong educational tool when teaching communication and problem solving skills.

VISIT See ENCOUNTER.

VISUAL ANALOGUE SCALE a method for obtaining a response to a question by getting the respondent mark a labelled line to reflect the distance from the endpoints. See SCALES OF MEASUREMENT.

VITAL RECORDS those dealing with births, deaths, stillbirths, fetal deaths, marriages, adoptions, divorces, and separations. The events listed are known as vital events.

VITAL STATISTICS systematically tabulated information concerning births, marriages, divorces, and deaths based on registration of these vital events.

VOCABULARY (Syn. GLOSSARY) a set of defined terms from a discipline.

VOCATIONAL TRAINING in general/family practice is a training, which is designed to contribute to occupational proficiency, and which helps the trainee to discover, define, and refine his talents and to use them in working towards a career in genral practice/family medicine.

W

WAITING LIST list of patients in the health care system, usually in hospital, waiting for examination and/or treatment, often for special procedures or operations.

WAITING TIME in medical context time spent on the WAITING LIST or the time a patient has to wait for a consultation in general practice.

WEIGHTED AVERAGE an average that has been adjusted to allow for the relative importance of the quantities it comprises.

WEIGHTED SAMPLE a sample that has been adjusted to include larger proportions of some rather than other parts of the total population, usually because those parts given greater "weight" are considered to be more important, more interesting, or more worthy of detailed study etc.

WELL-BEING an individual's subjective state of mind with regard to bodily, emotional, psychological, and spiritual feelings.

WHO abbr. for World Health Organization.

WHOLE PERSON MEDICINE See HOLISTIC CARE.

WICC abbr. for WONCA International Classification Committee, a standing committee dealing with classification problems and tools that are useful for performing research in general/family practice, e.g. ICPC, COOP/WONCA-Charts, DUSOI/WONCA.

WILCOXON RANK SUM TEST a non-parametric test which determines whether two independent samples have been drawn from the same population or from two different populations.

WOMEN'S HEALTH the full range of health issues that affects women encompassing the particular health problems and health service needs arising from the position, role, and responsibility of women in society and from biological differences.

WONCA abbr. for World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians, now shortened to World Organization of

Family Doctors. See chapter ACRONYMS OF MEMBER ORGANIZATIONS OF WONCA.

WORKSHOP. See TEACHING METHODS.

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