GLOSSARY
FOR THE USE OF EFP
AND
THE ICPC2-ICD10 THESAURUS

This glossary lists, explains or defines terms necessary to understand ICPC, the ICPC2-ICD10 Thesaurus, the Transition Project's methodology and its database: EFP, Episodes of care in Family Practice, included on this CD-Rom.
Many terms are used in accordance with the usual definitions. Example:

- **denominator** The lower portion of a fraction used to calculate a rate or ratio.

Several terms are explained according to their use within the context of ICPC and the Transition Project, which may differ from their use elsewhere. Examples:

- we use standard **age groups** according to the rules of ICPC (0-4, 5-14, 15-24, 25-44, 45-64, 65-74, 75 and over);
- **cells** with less than 6 observations are considered to be of little practical use, and if such an age/sex specific cell occurs in a distribution, no standard errors (95%) are calculated.

For reasons of convenience, we sometimes use terms as 'synonyms' that do, from a more purist perspective, in fact differ. Example:

- **linkage, mapping, crosswalk, conversion structure**, and **cross reference** are treated as synonyms.

Finally, this glossary explains terms that have no general meaning outside the context of this CD-Rom. Example:

- **blue term** is a term marked in blue in the ICPC2-ICD10 Thesaurus. These are 'see-terms' indicating either the existence of a more appropriate regular term, or being a term for a neoplasm, which requires localization and further characterization of the type of tumour.

For some entries, a longer explanatory text or table is added, that opens upon clicking on
More..

Note: We write: ICPC-2, and ICD-10, but: ICPC2-ICD10 Thesaurus.

We have borrowed and/or adapted terms from:

1. Lamberts H, Wood M, eds. ICPC. International Classification of Primary Care. Oxford: Oxford University Press, 1987.
2. Bentzen, N, ed. Wonca Dictionary of General/Family Practice. Wonca International Classification Committee: Copenhagen, 2003.
3. Last JM, ed. A Dictionary of Epidemiology. Fourth Edition. Oxford: Oxford University Press, 2001.
4. Vogt WP. Dictionary of Statistics and Methodology. A Nontechnical Guide for the Social Sciences. Newbury Park etc: Sage Publications, 1993.
5. Academy-Health. Glossary of Terms commonly used in Health Care. 2003 Edition. Washington, DC: AcademyHealth, 2003.

Index

A

absolute number The actual number of times a particular value occurs in a distribution, as opposed to its relative frequency or the proportion of times it occurs.
See also: Top20; EFP.

active patient See: patient.

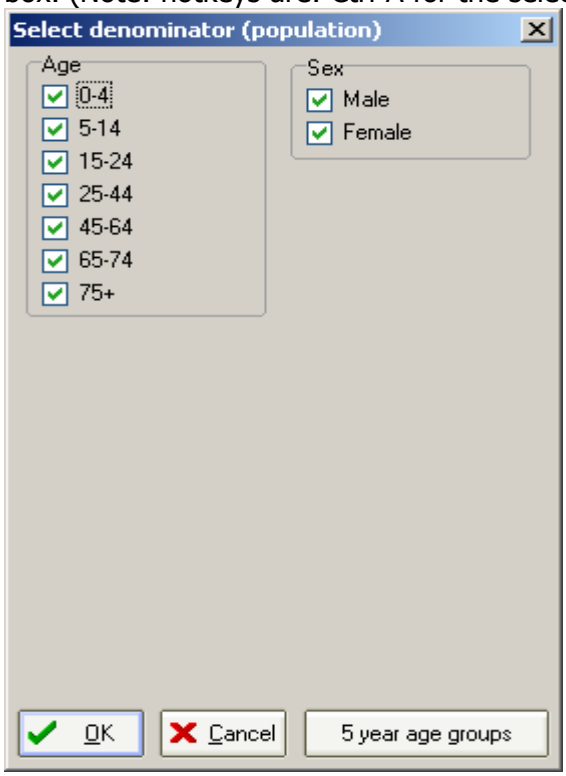
acute disease A disease that is characterized by a single episode of a relatively short duration from which the patient returns to his/her normal or previous level of activity. While acute diseases are frequently distinguished from chronic diseases, there is no standard definition or distinction.

aetiology The cause of a specific disease (e.g. causality, pathogenesis). In the classification of diseases both aetiology and manifestation may be used as a guiding principle.
See also: classification system; ICPC; ICD-10; manifestation.

age The age in years of a person at the middle of the registration year/period.

age (and sex) distribution The distribution of a practice population across age (and sex) groups.

age (and sex) groups The division of the practice population into groups according to age (and sex). Standard age groups are: 0-4 years; 5-14 years; 15-24 years; 25-44 years; 45-64 years; 65-74 years; 75 years and over. The common subdivision of children into 0-1 years and 1-4 years has not been applied, because the way age is calculated would lead to too many errors.
For specific purposes, 5-years groups can be used, while the standard division points are retained (e.g.: 5-9 years, 10-14 years, 65-69 years, 70-74 years, 75+), by clicking the '5 years age group' box. In the EFP program, for any Top20 distribution, one or more sex/age groups may be (de)selected in the combo box. (Note: hotkeys are: Ctrl-A for the selection of all age groups, Ctrl-N for none).



See also: Top20.

age-sex register The list of all patients registered in the participating practices arranged by age and sex. Its purpose is to provide a defined practice population against which rates of observed occurrence of defined events may be calculated.
See also: denominator; patient.

age (and sex) specific rate A rate for a specified age (and sex) group. The numerator and denominator refer to the same age (and sex) group. The rate is expressed per 1000 observations or per 1000 patient years.
See also: Top20.

age (and sex) standardization (Synonym: age (and sex) adjusted rates) A procedure for adjusting rates, in order to minimize the effects of differences in age (and sex) composition when comparing rates for different populations. In the EFP program, data can be adjusted for the age (trends over time), and the age/sex (ICPC code related information) distribution of the Dutch population in various years, and for the 2000 US population.
See also: standardization.

all In the Top20 menu of the EFP program, when clicking 'All', the Top20 will expand into the complete distribution, including all ICPC-codes included in that distribution.
See also: Top20.

alphanumeric variable A variable that is expressed as a combination of letters and numbers. ICPC codes are alphanumeric: they consist of an alpha (indicating the chapter), followed by numbers referring to the component.
However, in the EFP program, a combo box allows for process codes (component 2-6) to be searched with or without the alpha. This means that data can be retrieved on, e.g., blood tests in episodes in a single chapter, e.g. D(igestive), as well as data on 'all blood tests' (regardless of the chapter).
See also: ICPC; Top20; combo box.

ambulatory care All types of health services that are provided on an outpatient basis, in contrast to services provided in the home or to patients who are inpatients.

Anatomical Therapeutic Chemical Classification See: ATC.

ATC Anatomical Therapeutic Chemical Classification. The international standard classification of pharmaceutical drugs. The drugs are divided into different groups according to the organ/system on which they act, and according to their therapeutic, chemical and pharmacological properties.
In order to measure drug use, it is necessary to have both a classification system (ATC) and a unit of measurement. For the latter, a technical unit of measurement called Defined Daily Dose (DDD) is added to the classification.
See also: ICPC Drug Classification.

average (Synonym: mean) The numerical result obtained by dividing the sum of two or more quantities by the number of quantities.

axis One of the reference lines or directions within a classification system. The International Classification of Primary Care (ICPC) is biaxial. Its primary axis represents 17 body system/problem areas (chapters), while the other represents 7 components (1: symptoms and complaints, 2-6: process components, and 7: diseases).
See also: ICPC; chapter; component.

B

baseline data The set of data collected at the beginning of a study.

basic population In the 'basic population' only patients are included that have been on the practice list every day of the one-year registration period; i.e.: newborns, patients that died, entered or left the practice during that year are excluded.

Bayes' theorem Formula used to obtain the posterior probability of a disease (in the Transition Project: an episode of care) in a group of patients given a specific attribute (a symptom or a comorbid episode of care), on the basis of the overall rate of that disease/episode of care (the prior probability), and the likelihood of that specific attribute in patients with and without that disease/episode of care.
It takes into account that the posterior probability of a diagnosis given a certain symptom not only depends on the extent to which the symptom is characteristic of the diagnosis, but also on the frequency of the disease/episode of care in the practice population (the prior probability). The probability of the disease/episode of care given the symptom or comorbidity is the posterior probability. Posterior probabilities are expressed as an odds ratio; the same applies to the analysis of the comorbidity of 2 episodes of care.
Bayes' theorem is applied in the EFP program as:

$$P(D|S)= \frac{P(S|D)P(D)}{P(S|D)P(D)+P(S|\overline{D})P(\overline{D})}$$

where D=disease (episode of care), S=symptom, and $\overline{D}$ =no disease (episode of care). The standard presentation is calculated for the complete database with 201.337 patient years. In the combo box, a specific sex/age selection can be made for the calculation of posterior probabilities.

The standard presentation in the EFP is based on: *Altman DG, Machin D, Bryant TN, and Gardner MJ. Statistics with Confidence. Second Edition. BMJ books, Bristol: Arrowsmith Ltd, 2000, with CIA software,* and looks like this:

Crosstab of new episode with start-RFE

Word Excel Print

		Row %		Row %	
	Episode P76		Other epi		Total
with RFE A04	233	2,0	11187	98,0	11420
with other RFE	1429	0,8	188288	99,2	189717
Total	1662	0,8	199475	99,2	201137
Sens: 0,14	LR+: 2,50	LR-: 0,91	PV+: 0,02	Odds: 2,74	Pretest 0,01
Spec: 0,94	int.: 2,22-2,82	int: 0,89-0,93	PV-: 0,99	int.: 2,39-3,16	Posttest: 0,02
	Episode A04		Other epi		Total
with RFE P76	2	0,7	302	99,3	304
with other RFE	5702	2,8	195131	97,2	200833
Total	5704	2,8	195433	97,2	201137
Sens: 0,00	LR+: 0,23	LR-: 1,00	PV+: 0,01	Odds: 0,23	Pretest 0,03
Spec: 1,00	int.: 0,06-0,91	int: 1,00-1,00	PV-: 0,97	int.: 0,06-0,91	Posttest: 0,01

See also: sensitivity and specificity; crosstab.

bias (Synonym: systematic error) Any trend in the collection, analysis, or interpretation of data that can lead to conclusions systematically different from reality.

blue term In the ICPC2-ICD10 Thesaurus, a term presented in blue is a 'see term': it indicates that

there is either a more appropriate regular term (which will show up upon clicking on the blue term), or that it represents a neoplasm which requires a localization and a further characterization of the type of tumour (a selection will show upon clicking).
See also: neoplasm localization and type.

C

capitation A method of payment for health services in which an individual or institutional provider is paid a fixed amount for each person served, without regard to the actual number or nature of services provided to each person in a set period of time. In the Transition Project, the FPs are capitated for over 60% of their patients.

case An instance of a particular reason for encounter, episode of care, or intervention in the practice population.

case study A study of patients in the practice population with a particular reason for encounter, episode of care, or intervention.

catchment area A geographical area from which a particular practice population is drawn or for which health services are provided.

cell The number of observations in a Top20 distribution according to age and/or sex groups. When in an EFP probability table, an age/sex specific cell has less than 6 observations, no standard errors (95%) are calculated, and, instead, a question mark (?) shows.

certain diagnosis A diagnosis is called 'certain' if a patient meets the inclusion criteria for coding (when available), or when the FP is otherwise certain of the diagnosis. In the Transition Project, first the inclusion criteria of ICHPPC-2-Defined, and later those of ICPC-2 were used. In the EFP program, the certainty of the diagnosis for data retrieval can be selected in a combo box:

See also: criteria; ICHPPC; mental health disorder.

child A person less than 15 years of age (0 - 14 years).

chart A representation of data in a standard figure, based on seasons, absolute numbers or rates per 1000 observations/patient years. In EFP, chart representations may be selected in a combo box.

chapter Main division within ICPC-2 and ICD-10. ICPC has 17 chapters representing body systems and problem areas. ICD-10 has 21 chapters based on aetiology and body systems.
In the ICPC2-ICD10 Thesaurus, the ICD-10 chapters V, W, X, and Y are not included since they refer to external causes and injuries, and are, therefore, not easily linked to ICPC.

chronic disease Disease with 1 or more of the following characteristics: is permanent; leaves residual disability; is caused by nonreversible pathological alternation; requires special training of the patient for rehabilitation; or may be expected to require a long period of supervision, observation, or care.

classification of diseases The arrangement of diseases with common characteristics into classes by cause and/or organ system. Examples are: ICPC and ICD-10.

classification system Arrangement of each concept in a domain into classes according to established criteria. Prerequisites for a classification are:

1. naturalness: the classes correspond to the nature of the thing being classified;
2. exhaustiveness: every concept in the domain will fit into a class;
3. mutual exclusiveness: a concept included in one rubric cannot be included in another;
3. usefulness: the classification is practical;
4. simplicity: the subclasses are not excessive.

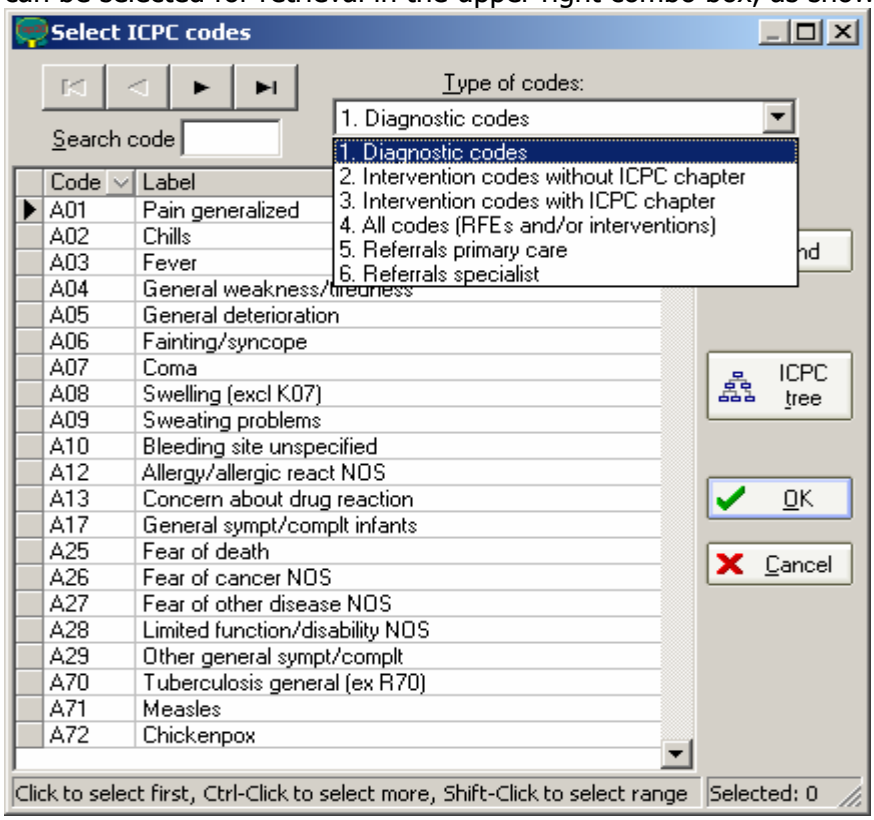
classify To aggregate concepts from a domain into classes for a purpose.
See also: ICPC; ICD-10.

clinical epidemiology The methodology and practice of research in occurrence, diagnosis, prognosis, therapy, or determinants of health problems of patients in health care settings.

clinical significance A difference considered to be important for clinical decisions.

cluster The occurrence of events or diagnoses in numbers greater than expected by chance. Example: cluster-comorbidity.
See also: comorbidity.

code A fixed sequence of alphabetical and/or numerical characters, designating a concept or term. In ICPC, the codes are alphanumeric. Furthermore, they are significant and mnemonic: they describe the position of the concept in a hierarchy, and are, therefore, easy to remember (ICPC-tree). In ICD-10, the codes are non-significant in that they are not related to the concept's meaning. In EFP, 6 types of codes can be selected for retrieval in the upper right combo box, as shown in the example below:



coding diagnoses Occurs at the highest level of specificity possible at the time of the encounter. For coding diagnoses, ICPC components 1 (symptoms and complaints) and 7 (diseases) can be used. See also: criteria.

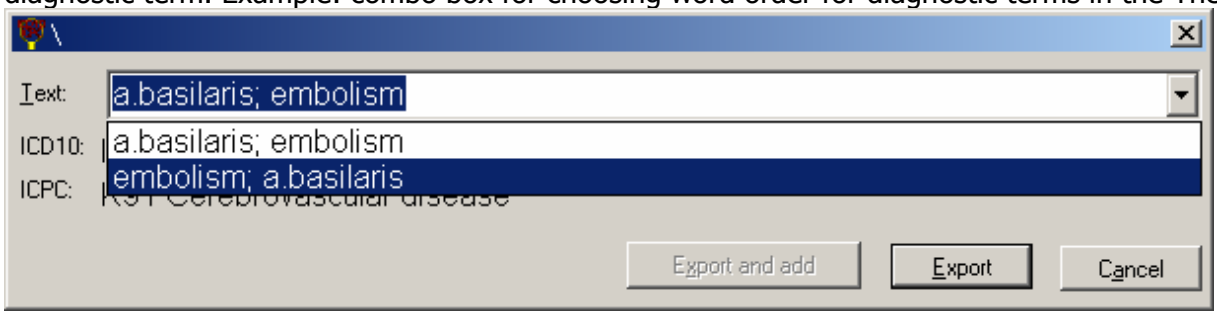
coding reasons for encounter Its definition dictates the rules for its coding. RFEs should be coded as specifically, and as close to the patient's own words as possible. For coding RFEs, all ICPC components may be used. In the Transition Project, a distinction is made between RFEs from components 1 and 7 (symptoms, complaints and diseases), and those from components 2-6 (requests for interventions). See also: reason for encounter; SOAP; initiative of the FP.

coding process/interventions For coding the process of care, ICPC's components 2-6 can be used. In the Transhis part of the Transition Project (1995-ongoing), a distinction is made between 'intermediate' interventions (in fact performed by the FP him/herself during the encounter, e.g. a BP), and 'resulting interventions' such as referral or prescribing, of which it is not sure whether the action in fact occurs (patients may decide not to see a specialist, or not to pick up their prescribed medication).

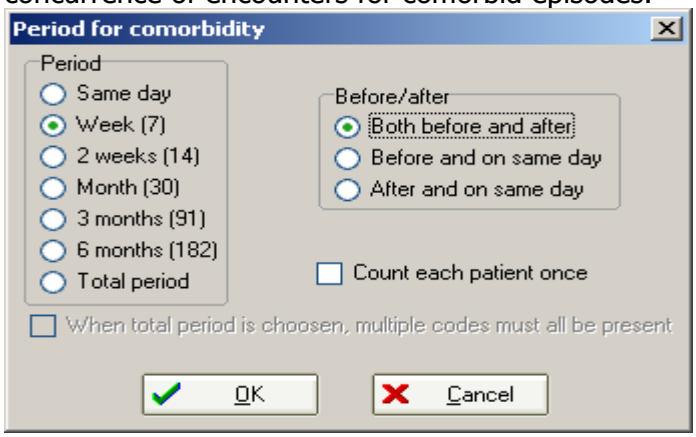
coding system A system that allocates codes to concepts and terms, e.g. reasons for encounter, diagnoses, and interventions, using a finite set of numerical, alphabetical or alphanumerical identifiers.

cohort A designated group of persons followed for a period of time.

combo box Box within a computer program that allows making choices. In the Thesaurus and in the EFP program, combo boxes allow choosing a rate (per 1000 observations, per 1000 patient years), a standardization, a type of ICPC code (component, with or without an alpha) or a word order in a diagnostic term. Example: combo box for choosing word order for diagnostic terms in the Thesaurus:



comorbidity All other episodes of care co-existing with an episode of care in a defined time period. Comorbidity in a patient implies that one or more diseases coexist (are concurrent) with an index condition. Cluster comorbidity in a group of patients means that episodes of care coexist more often than could be expected from chance. Comorbidity that does not cluster in a population is concurrent comorbidity. In the EFP program, various observation periods can be chosen to calculate the concurrence of encounters for comorbid episodes.



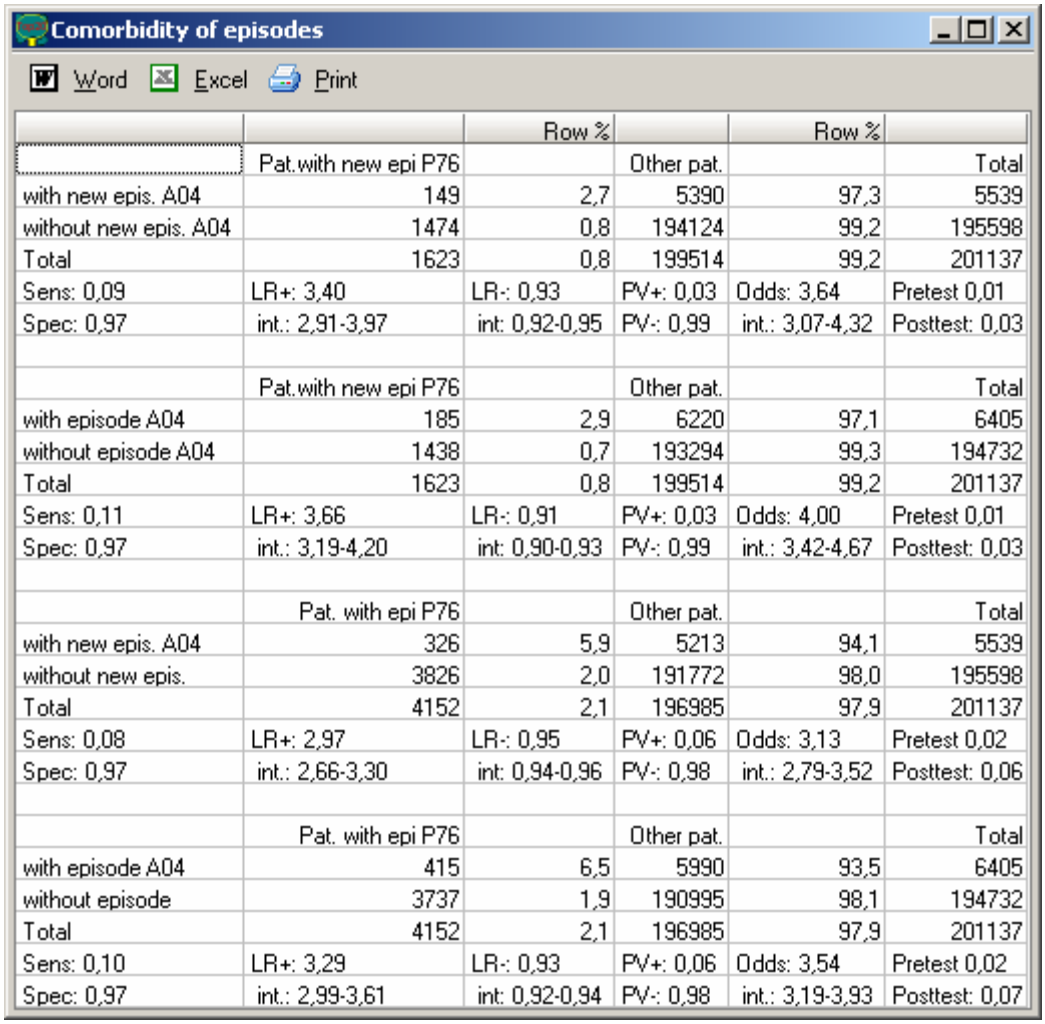
Example: when requesting the comorbidity of new episodes in all (N,X, and O) episodes of A04 (tiredness) on the same day and within a period of 30 days before and after the encounter for A04, the following tables shows:

	Code	Label	Total	0-4	5-14	15-24	25-44	45-64	65-74	75+
1	K86	Uncomplicated hypertension	476	0	0	0	62	160	111	143
2	A97	Prevention/no disease	456	6	10	36	151	128	49	76
3	P76	Depressive disorder	265	0	1	7	84	72	37	64
4	R78	Acute bronchitis/bronchiolitis	208	15	17	12	35	47	22	60
5	R74	URI (head cold)	200	12	10	21	59	34	28	36
6	T90	Diabetes mellitus	186	0	0	0	2	43	49	92
7	U71	Cystitis/other urin infect NOS	185	4	7	16	35	26	15	82
8	W11	Family plan/oral contraceptive	162	0	0	75	81	6	0	0
9	P06	Disturbances of sleep/insomnia	160	1	1	5	36	23	30	64
10	L03	Low back complt excl radiation	160	0	3	28	58	28	12	31
11	A85	Adv effect med agent proper dose	159	1	1	25	40	18	29	45
12	D87	Disorder stomach function	140	0	4	10	31	50	31	14
13	K76	Ischemic heart disease	134	0	0	0	0	30	25	79
14	R75	Sinusitis acute/chron	123	0	6	16	57	27	8	9
15	D12	Constipation	123	2	12	5	15	14	14	61
16	N01	Headache (excl N02 N89 R09)	122	0	16	18	37	17	20	14
17	K77	Heart failure	122	0	0	0	0	2	29	91
18	R96	Asthma	120	4	11	16	48	31	6	4
19	L89	Osteoarthritis	113	0	1	0	2	10	40	60
20	L01	Neck symptcomplt excl headache	108	1	1	13	33	30	11	19
		Total	11899	164	416	1120	3158	2585	1595	2861

Note: one may choose to include or exclude episodes of the same title in the comorbidity of one person by ticking the box 'Count each patient once'.
On the level of individual patients, both cluster and concurrent comorbidity are important. On the level of a population, cluster comorbidity is of special interest: it can be 'causal', 'complicating' or 'other'.
In 'causal' cluster comorbidity, the first episode may be the cause of the second one: e.g. arteriosclerosis and aortic aneurysm. 'Complicating' comorbidity exists, e.g., in patients with hypertension complicated by heart failure.
In 'other' cluster comorbidity, two episodes of care coexist more often than could be expected without direct evidence of an aetiological or pathofysiological relation. Clinical explanations may, however, have a high face validity in many of these cases: e.g. in a patient with coxarthrosis who lived in an apartment without an elevator who presents with 'problems with housing'.
Evidently, in all comorbidity age and sex are important, but especially in 'other' cluster comorbidity. Therefore, comorbidity should be specified by sex and age.
See also: once; comorbidity of 2 episodes of care.

comorbid new episodes All incident (new) episodes of care comorbid with a chosen incident episode of care in a defined period of time.

comorbidity of 2 episodes of care The EFP program allows the calculation of the posterior probability of the co-existence of 2 episodes of care. Four types can be selected: incident-incident (new-new), incident-prevalent (new-all), prevalent-incident (all-new), and prevalent-prevalent (all-all), which is illustrated here for the comorbidity between A04 (tiredness) and P76 (depressive disorder):



Comorbidity of episodes

Word Excel Print

		Row %		Row %	
	Pat.with new epi P76		Other pat.		Total
with new epis. A04	149	2,7	5390	97,3	5539
without new epis. A04	1474	0,8	194124	99,2	195598
Total	1623	0,8	199514	99,2	201137
Sens: 0,09	LR+: 3,40	LR-: 0,93	PV+: 0,03	Odds: 3,64	Pretest 0,01
Spec: 0,97	int.: 2,91-3,97	int: 0,92-0,95	PV-: 0,99	int.: 3,07-4,32	Posttest: 0,03
	Pat.with new epi P76		Other pat.		Total
with episode A04	185	2,9	6220	97,1	6405
without episode A04	1438	0,7	193294	99,3	194732
Total	1623	0,8	199514	99,2	201137
Sens: 0,11	LR+: 3,66	LR-: 0,91	PV+: 0,03	Odds: 4,00	Pretest 0,01
Spec: 0,97	int.: 3,19-4,20	int: 0,90-0,93	PV-: 0,99	int.: 3,42-4,67	Posttest: 0,03
	Pat. with epi P76		Other pat.		Total
with new epis. A04	326	5,9	5213	94,1	5539
without new epis.	3826	2,0	191772	98,0	195598
Total	4152	2,1	196985	97,9	201137
Sens: 0,08	LR+: 2,97	LR-: 0,95	PV+: 0,06	Odds: 3,13	Pretest 0,02
Spec: 0,97	int.: 2,66-3,30	int: 0,94-0,96	PV-: 0,98	int.: 2,79-3,52	Posttest: 0,06
	Pat. with epi P76		Other pat.		Total
with episode A04	415	6,5	5990	93,5	6405
without episode	3737	1,9	190995	98,1	194732
Total	4152	2,1	196985	97,9	201137
Sens: 0,10	LR+: 3,29	LR-: 0,93	PV+: 0,06	Odds: 3,54	Pretest 0,02
Spec: 0,97	int.: 2,99-3,61	int: 0,92-0,94	PV-: 0,98	int.: 3,19-3,93	Posttest: 0,07

See also: Bayes' theorem; sensitivity and specificity.

comparability The state of being equivalent or similar. Classifications are comparable when their rubrics allow mapping/linkage of identical concepts.

comparison group See: control group.

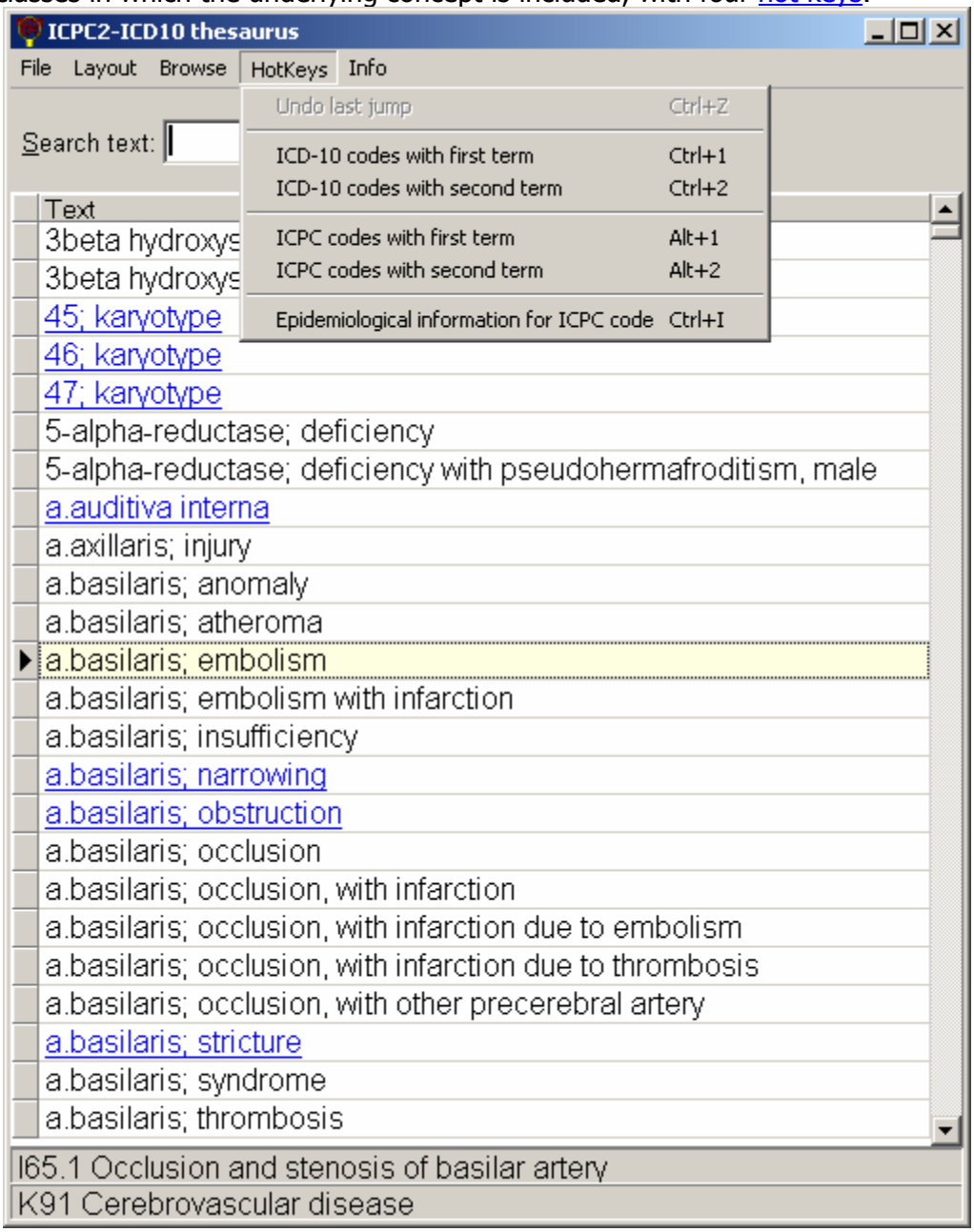
compatibility The ability to exist together in harmony. Classifications are compatible when they are interrelated in an established and consistent manner through a mapping/linkage, e.g. the mapping between ICPC-2 and ICD-10.

complaint A symptom, disorder, or concern expressed by a patient when seeking care.

component A part of a larger concept or construction. In the International Classification of Primary Care (ICPC), all 17 chapters (except chapter Z: Social problems) contain 7 identical components:
1: symptom and complaint component;
2: diagnostic, screening, and prevention component;
3: medication, treatment, procedures component;
4: test results component;
5: administrative component;
6: referrals and other reasons for encounter component;
7: disease component.
Chapter Z has no 7th component.

computer-based patient record See: CPR.

concept Unit of thought constituted through abstraction on the basis of properties common to a set of data. Concepts are, within a domain, arranged into classes according to established criteria. In the ICPC-ICD10 Thesaurus, most diagnostic terms consist of two or more concepts divided by a semicolon (;). The program allows searching on the basis of terms from the Thesaurus in ICPC-2 or ICD-10 for all classes in which the underlying concept is included, with four hot keys:



concurrence In the EFP program, the simultaneous occurrence of two or more episodes of care, encounters for two episode of care, reasons for encounter, interventions (co-interventions) or another unit of measurement in a defined period of time (to be selected from the menu on the basis of an episode of care, an encounter, or a sub-encounter).
See also: comorbidity.

confidence interval A range of values for a variable, e.g. a rate, so that this range has a specified probability (95%) of including the true value of the variable.

See also: Bayes' theorem; sensitivity and specificity.

confidence limits The upper and lower boundaries of the confidence interval.

consultation See: encounter.

contact See: encounter.

continuing problem See: episode status.

continuity of care The care by one FP devoted to the follow-up of patients over the course of time, either calculated per episode of care (episode continuity) or for all care for a patient (e.g. patient/FP continuity in one year). Continuity of information refers to the quality and completeness of the CPR. More..

control group (Synonym: comparison group) The group of patients (in a comparison group) that do not suffer from the disease, or do not receive the intervention studied.

controlled medical vocabulary A dictionary containing multiple terminologies of related subject fields in medicine, e.g. diseases, reasons for encounter, external causes, interventions, prevention, laboratory tests, drugs, environmental factors, living conditions, body functions, etc. SNOMED is a controlled medical vocabulary.

consider See: criteria.

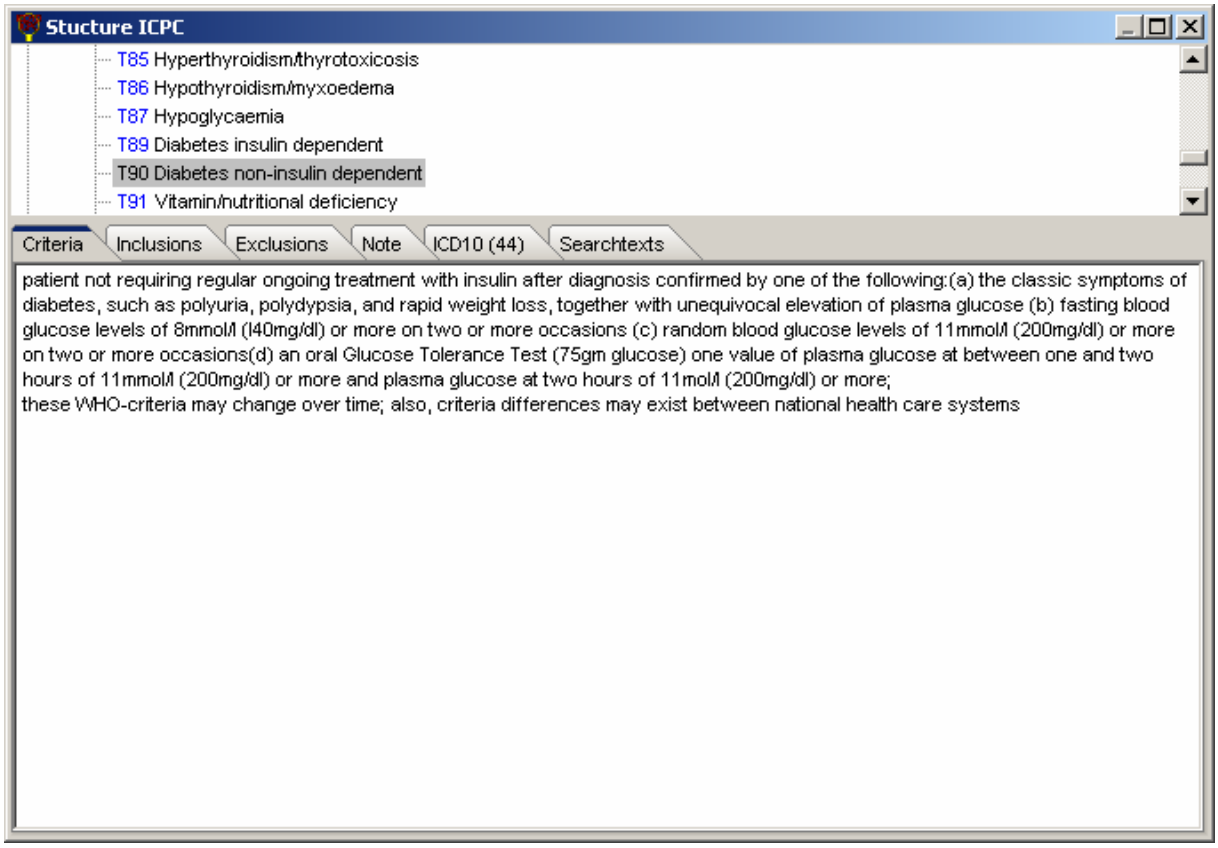
conversion structure See: linkage.

CPR Computer based patient record. An electronic patient record designed to support users by providing access to complete and accurate data, alerts, reminders, and clinical decision support. A CPR in family medicine is an Electronic Patient Record (EPR) in that it is the repository of information about a single patient as a direct result of interaction with and personal knowledge of that patient. An Electronic Health Record (EHR) is based on electronically stored information about an individual's lifetime health status and health care, that meets all legal and administrative requirements and it supports management of health care delivery in all institutional settings (physician's office, emergency room, hospital). Transhis is an EPR.

criteria The predetermined requirements in a classification for selecting a code. In ICPC, these criteria only apply to the coding of diagnoses. ICPC has the following criteria:

1. Inclusion criteria: minimum requirements for coding a specific class;
2. Exclusions: list of similar conditions that should be coded elsewhere;
3. Inclusions: list of synonyms/alternative descriptions included in that rubric;
4. Consider: list of rubrics with their codes, usually less specific, that might be considered if the patient's condition does not meet the inclusion criteria.

In the ICPC2-ICD10 Thesaurus, under Browse ICPC, ICPC-Tree, and Structure ICPC, for each code, all criteria are given:



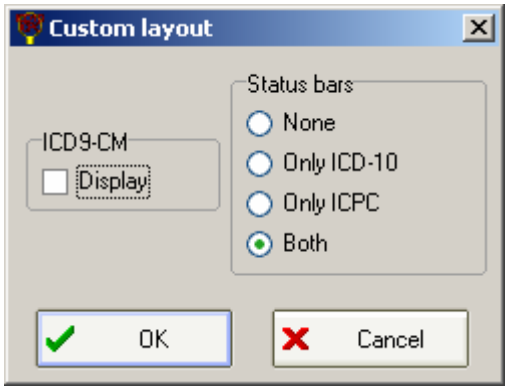
See also: certain diagnosis.

cross reference See: linkage.

crosstab In the EFP program: a cross tabulation between a presenting symptom and a final diagnosis, or between two comorbid diagnoses. It usually requires the selection of two ICPC codes. An exception is a symptom that, presented as an RFE, frequently results in the same symptom disgnosis (e.g., R05, A04).
See also: Bayes' theorem; sensitivity and specificity.

cross walk See: linkage.

custom mode In the Thesaurus, the standard mode automatically presents the ICPC-2 and ICD-10 code for a diagnostic term. In the custom mode, also the ICD-9-CM can be selected, in addition to ICPC and ICD-10 on the status bar:



See also: standard mode.

D

data A collection of items of information about patients.

database An organized set of data that can be used for a specific purpose and usually enables the data to be retrieved quickly and efficiently.

data collection Any systematic gathering of information ordered according to a predetermined plan.

data interpretation A critical review of all relevant available data in order to reach a conclusion, given the conditions of the predetermined plan.

DDD Defined Daily Dosis. For each drug, the developers of ATC have established a defined daily dosis based on its normal use in adult patients.

defensive medicine Medical behaviour that deliberately deviates from the clinical norm in order to protect the FP from (fear of) patient dissatisfaction or litigation.

demand for health services The willingness and/or ability to seek and use health services, subdivided in:
1. Expressed demand, which equates to use;
2. Potential demand, which equates to potential/maximal use.

See also: need; iceberg phenomenon.

demographic data Personal attributes of a patient like:
1. Patient identification;
2. Residence: address, telephone number, zip code, etc.;
3. Date of birth;
4. Sex;
5. Form of health insurance: private or public.

Note: In the Transition Project, people living together at one address are considered a family or household, regardless of their age/gender/marital status.

denominator The lower portion of a fraction used to calculate a rate or ratio (see: numerator). In EFP, the total practice population can be used as a denominator, including inactive patients, which is essential for optimal analysis. In the Transition Project, 68% percent of listed patients consult with their FP in an observation year, and are, therefore, 'active patients'.
See also: denominator problem; incidence; prevalence; EFP.
More..

denominator problem A term referring to the difficulty in precisely defining the practice population, which results in problems calculating comparative rates and ratios. This occurs when a practice population is not listed, and the only approximation for rates and ratios is the list of active patients in a defined period of time (often a year). In that case, the number of inactive patients is unknown, and has to be estimated.
See also: denominator; patient.

dependent variable A variable that depends on another variable (the independent variable) in a study. The dependent variable is analyzed in relation to independent (explanatory) variables. The dependent variable can be considered as the outcome variable, and the independent variable as the predictor variable.

diagnosis Formal statement of the provider's understanding of the patient's health problem, representing the establishment of an episode of care. It may be a symptom diagnosis or a disease diagnosis.
See also: diagnostic categories.

diagnostic A sign or symptom, characteristic or pathognomonic of a specific diagnosis.

Diagnostic and Statistical Manual See: DSM.

diagnostic categories Family practice uses three diagnostic categories:
1. pathological/pathophysiological diagnoses with a proven aetiology and/or pathological/pathophysiological substrate (e.g.: carcinoma, hypertension);
2. symptom diagnoses that label a patient's symptom or complaint as the diagnosis (e.g.: diarrhoea, tiredness, anxiety, work problems);
3. nosological diagnoses (synonym: syndrome) that label the diagnosis as a symptom complex based on consensus between physicians, without (as yet) a proven aetiology and/or pathological/ pathophysiological basis (e.g.: migraine, depressive disorder, IBS).

diagnostic criteria The symptoms, complaints, objective signs, and/or test results essential for labelling a health problem with a specific diagnosis.
See also: criteria.

diagnostic index A system in family practice for recording the diagnosis, 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 health problems, and facilitates follow-up.

diagnostic procedure The action or series of actions used to arrive at a diagnosis. Can include history taking and physical examination, but usually refers to additional diagnostic procedures such as laboratory or imaging procedures.

diagnostic service A service where patients are referred to by FPs with a request for additional (technical) examinations, e.g. laboratory, EKG, imaging or endoscopic investigations.

diagnostic test An examination carried out with the purpose of determining whether or not a patient has a particular disease. Ideally, a diagnostic test always gives a positive result for patients who have the disease in question and always gives a negative result for those who do not. Usually, a test will miss some patients with the disease (false negative) and wrongly identify some who do not have the disease (false positive).
See also: Bayes' theorem; sensitivity and specificity.

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

disease Physiological or psychological dysfunction on the basis of well-known symptoms and signs or with a well-known aetiology. To be distinguished from illness (the subjective state of not feeling well), and from sickness (state of social dysfunction, i.e. the role an individual assumes when feeling ill).

disorder A disturbance of the normal health status. It is used in an attempt to generalize rather than use the more specific term disease.
See also: disease.

distribution The complete summary of frequencies of values or categories of a measurement in a group. The distribution is either based on the numbers or the properties of the group with each value.

domain A defined field of thought, knowledge, or activity. Its borders are defined from a purpose-related point of view.

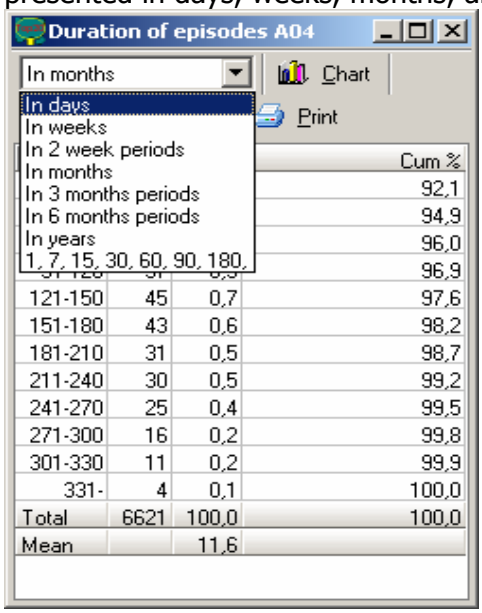
drug prescribing The ordering of drugs from a pharmacy for patients by an FP or health professional acting as such, e.g. nurse practitioner.

drug statistics Data relating to all drugs consumed in a country/setting during a specific period. May include prescribed drugs only, or also over the counter drugs.

DSM Diagnostic and Statistical Manual, developed by the American Psychiatric Association, aiming at systematized and standardized definitions of mental disorders, listing all psychiatric diagnoses with their criteria. Latest edition: DSM-IV, 1994.
See also: mental health disorder.

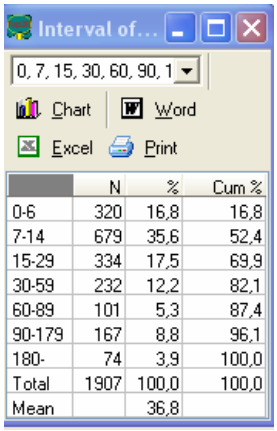
duration of encounter The time spent in contact with the FP during a patient/physician encounter.

duration of episode of care The duration of an individual episode of care, or the duration distribution of a specific episode of care in EFP. For the latter, a combo box allows selecting the distribution to be presented in days, weeks, months, and/or as a combined standard distribution:



			Cum %
			92,1
			94,9
			96,0
			96,9
121-150	45	0,7	97,6
151-180	43	0,6	98,2
181-210	31	0,5	98,7
211-240	30	0,5	99,2
241-270	25	0,4	99,5
271-300	16	0,2	99,8
301-330	11	0,2	99,9
331-	4	0,1	100,0
Total	6621	100,0	100,0
Mean		11,6	

duration of interval The duration of an individual interval between encounters in an episode of care, or the duration distribution of intervals between encounters in a specific episode of care in EFP. For the latter, a combo box allows selecting this distribution to be presented in days, weeks, months, and/or as a combined standard distribution, in the same vein as for duration of episode of care.



	N	%	Cum %
0-6	320	16,8	16,8
7-14	679	35,6	52,4
15-29	334	17,5	69,9
30-59	232	12,2	82,1
60-89	101	5,3	87,4
90-179	167	8,8	96,1
180-	74	3,9	100,0
Total	1907	100,0	100,0
Mean		36,8	

E

EFP Episodes of care in Family Practice. Computer program allowing standardized epidemiological retrievals from the Transition Project, a database collected in family practice based on the comprehensive use of ICPC. In the EFP data on this CD-Rom, only data from the Netherlands are included. Databases from several other countries (Japan, Poland, Malta, Serbia) are available, but have (as yet) a limited size. In a later stage, when also the data on prescriptions will be included, an international comparative dataset will be made available on a CD-Rom or a website.
See also: code; Top20; Transition Project; denominator; patient.

EHR Electronic Health Record. See: CPR.

Electronic Health Record. See: CPR.

Electronic Patient Record. See: CPR.

encounter (Synonym: contact, consultation) The professional interchange between a patient and a FP (or other members of the team). One or more episodes of care may be dealt with at an encounter. When more than one episode is dealt with during an encounter, there are two or more sub-encounters.
See also: health problem; episode status.

encounter, direct An encounter in which a face-to-face contact between patient and FP occurs.

encounter, follow-up An encounter in which an episode of care that has already started before, is again dealt with.

encounter, home (Synonym: house call, home visit) A direct encounter occurring at the patient's home.

encounter, indirect An encounter without face-to-face contact between patient FP/other member of the team (e.g. telephone call, letter, e-mail, repeat prescription, or through a third party).

encounter, office (Synonym: surgery encounter) Encounter in the FP's office.

encounters per episode The number of encounters in a defined period of time (e.g. one year) in which a specific episode of care was dealt with (as a sub-encounter).

encounter rates The number of encounters per patient in a practice population in a one-year period.

episode of care A health problem from its first presentation by the patient to the FP (or other provider) until the completion of the last encounter for it. It encompasses all contact elements related to that health problem; its name (the diagnostic label) may be modified over time.
See also: episode of disease; episode of illness; episode status.

episode of disease The period in which a demonstrable health problem exists: from its onset to its resolution or until the patient's death. Disease episodes often have well-defined stages:

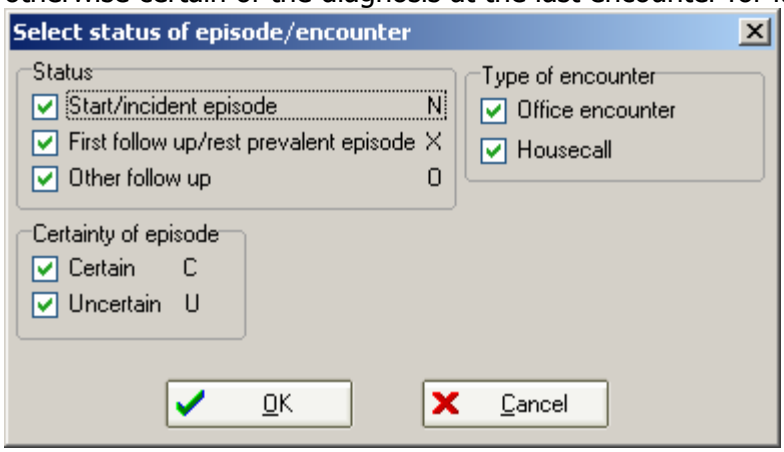
1. Stage of pathological onset: pre-symptomatic stage before the first appearance of symptoms and/or signs. The episode of disease has started, and in some cases, screening may reveal it; in that case, it may lead to an episode of care. In this stage, no episode of illness exists.
2. Symptomatic stage: the patient may experience an episode of illness and present the symptoms to an FP, thus starting an episode of care;
3. Clinically manifest disease: the period from the moment the diagnosis has labelled the episode of

care. The disease may regress spontaneously or by treatment, or may be subject to remissions and relapses or progress to a fatal termination. The episode of care ends with the last encounter for that episode of care (because the patient has recovered, died, or hasn't visited for it, for whatever reason).

Even though the episode of care may have (temporarily) come to an end, the episode of disease and the episode of illness may continue. Depending on many variables (the disease, the patient, the FP, the health care system), later on, the episode of care can be 'revived' (even after years).
See also: episode of care; episode of illness.

episode of illness An episode of illness experienced by the patient, from onset of symptoms until their resolution or until the patient's death. A patient may or may not consult an FP, there may or may not follow an episode of care, and there may or may not be an episode of disease.
See also: episode of care; episode of disease.

episode certainty An episode is 'certain' when a patient meets the inclusion criteria, or when the FP is otherwise certain of the diagnosis at the last encounter for it. In EFP, certainty can be (de)selected:



See also: criteria.

episode list The list in a CPR/EHR/EPR containing all episodes of care of a patient over time.
See also: problem list.

episode status The epidemiological status of the episode of care. A new episode of care (N) is incident in the registration period (in EFP: a year); if the episode has a follow-up encounter in the same registration period, the episode is called O (old). An episode of care coded 'X' is rest-prevalent ('roll-over'): it already existed before the registration period, and was followed up within the observation period. Episodes marked 'N' and 'X' together form the prevalent episodes in a registration period.
For retrievals in the EFP program, the status of the episode/encounter for a Top20 can be (de)selected:

Episodes of care in Family Practice See: EFP.

EPR Electronic Patient Record. See: CPR.

error A false result obtained in a study. An error can be:
1. A random error, which is the portion of variation in a measurement, regarded as due to chance (standard error);
2. A systematic error with a recognizable source, e.g. a faulty measuring instrument or pattern, i.e. it is consistently wrong in a particular direction.

error rate In the Transition Project, two sources of errors in coding with ICPC have been identified.
1. Misclassification of diagnoses occurs in approx. 2% of all episodes of care. The distribution of these errors over the available ICPC codes is skewed towards rag-bag codes, where the error rates are relatively high (approx. 15%).
2. Missing data. Approx. 2% of encounters (including house calls and out of hours encounters) are not entered into the database.

etiology See: aetiology.

event rate See: rate.

evidence-based medicine The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. This approach must balance the best external evidence with the desires of the patient and the clinical expertise of health care providers.

exclusions See: criteria.

exhaustiveness A quality required for a classification system.

F

false negative A qualifier used for a negative test result in a person who has a condition, which the test was meant to detect. The person is thus mistakenly labelled as unaffected, while, in fact, s/he is.
See also: sensitivity and specificity.

false positive A qualifier used for a positive test result in a person who does not have a condition that the test was meant to detect. Thus the person is mistakenly labelled as having the condition when s/he is actually unaffected.
See also: sensitivity and specificity.

family (Synonym: household) A person or group of persons occupying the same house. In the Transition Project, people living together at one address are considered a family/household, regardless of their age/gender/marital status.
See also: demographic data.
More..

family practice / medicine A form of specialty practice in which physicians provide continuing comprehensive primary care within the context of the family unit.

FIC Family of International Classifications. The WHO description of complementary classifications developed or adopted by WHO. Included are the ICD-10 (for secondary and tertiary care), ICF (for functional impairments) and ICPC (for primary care). ICPC is considered intrinsic to FIC both as a reason for encounter and as a diagnostic classification.

Family of International Classifications See: FIC.

find In the EFP program, and the ICPC2-ICD10 Thesaurus, this term indicates the possibility to find a term by typing in the first letters. For the search, a down- or upward direction can be selected.

follow-up See: health problem.
See also: episode status.

font In the EFP program and the ICPC2-ICD10 Thesaurus menus, this indicates the possibility to present tables and texts in a selected font, thus allowing a customized presentation (e.g. for prints, or PowerPoint presentations, or presentation by LCD projector).
See also: rowheight table.

formerly registered patient See: patient.

frequency distribution See: distribution.

frequency principle Principle of ICPC. The rule of thumb is that an entity occurring ≥1 per 1000 patient years is frequent enough to allow further analysis, and, therefore, deserves a separate code. The table presents the frequency distribution of the use of ICPC codes in the Transition Project (episode title/ reason for encounter, incident/ prevalent):

frequency of codes p1000 py → ⇩ used as:	≥10	1-10	0,5-1	<0,5	0	Total available codes
episodes incident	44	286	99	196	1	625
reasons for encounter incident	45	202	73	291	14	625
episodes prevalent	69	306	93	158	1	625
reasons for encounter prevalent	66	259	89	207	4	625

It appears that the majority of ICPC codes in the Dutch EFP database are frequently used.
A substantial group of codes is used less than 0,5 per 1000 patient years, and are, therefore, practically useless for further analysis. Most of the 139 rag-bag codes (that were expected to occur infrequently) were, in fact included in this group.
Codes occurring between 0.5 and 1,0 per 1000 patient years may sometimes allow further analysis, also depending on the age/sex distribution and other characteristics of the class, including an estimation of the reliability.
See also: rag-bag

G

gatekeeper The primary care practitioner in an organizational structure who determines whether the presenting patient needs to see a specialist or requires other non-routine services. The goal is to guide the patient to appropriate services while avoiding unnecessary and costly referrals to specialists. The FPs in the Transition Project serve as gatekeepers.

general population The total population (including persons belonging to the practice population), e.g. the Dutch, or the US population in a selected year.

glossary (Synonym: vocabulary) A list of defined technical or special words from a discipline.
See also: controlled medical vocabulary.

H

health condition Any state of ill health, such as disease, disorder or injury.

health issue Any topic in relation to the description of health. A health problem is a specific type of health issue.

health problem A 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 the encounter. The status of the health problem can be:

1. New problem (N): the first presentation of a problem, including the first presentation of a recurrence of a previously resolved problem;
2. Continuing problem (X, O) : a previously assessed problem that requires follow-up/ongoing care.

hierarchical Adjective used to characterize entities being arranged in a graded series. ICPC is organized on the basis of three-digit alphanumerical rubrics, hierarchically defined by chapters and components. More precisely defined elements from ICD-10 categories can be lumped together to the three-digit level, and elements from a three-digit level can be split into the four-digit level of ICD-10.

home visit See: encounter, home.

hot key In both the EFP and the ICPC2-ICD10 Thesaurus, specified key combinations result in more complex functions, e.g. Alt-W for selecting presentation in Word.

house call See: encounter, home.

household See: family.

I

ICD-9-CM International Classification of Disease, ninth revision, Clinical Modification. Still widely used in the USA, and therefore, made available in the ICPC2-ICD10 Thesaurus in the custom mode. This mapping is, however, incomplete in that it only contains the mapping of ICD-9-CM to ICD-10 (and consequently to ICPC-2) as made available by WHO in order to enhance the switch from ICD-9 to ICD-10 in information systems. In the ICPC2-ICD10 Thesaurus,in the custom mode ICD-9-CM is also available.
See also: ICD-10.

ICD-10 International Statistical Classification of Diseases and Related Health Problems. A classification of health and health related concepts, classifying diseases, symptoms, other reasons for encounter, and external causes of injury; developed by the WHO, now in its tenth revision: ICD-10 (1992). ICD-10 has 21 chapters and uses alphanumerical codes in order to provide a larger coding frame than previously, leaving room for future expansion. Some chapters are based on aetiology (e.g. Infective and Parasitic Conditions), others relate to body systems (e.g. Circulatory System) and classes of a condition (e.g. Neoplasms, Injury).
More..
More..

iceberg phenomenon Term referring to the situation where only a part of the health problems in a population is detected, either because people do not seek care, or because not all conditions are recognized by the FP. The 'visible' part consists of the detected health problem, and the 'submerged' part of the undetected ones. Within the Transition Project, this is considered a confusing and outdated concept.
More..

ICF International Classification of Functioning, Disability and Health (previously ICIDH). A systemic coding scheme which defines components of health and some health related components of well-being in two basic lists: (1) body function and structures (2) activities and participation (WHO 2002). Supersedes the now non-functioning International Classification of Impairments, Disabilities and Handicaps.

ICIDH International Classification of Impairments, Disabilities and Handicaps. See: ICF.

ICHPPC International Classification of Health Problems in Primary Care. A classification of diseases and conditions in primary care. First produced by the Wonca Classification Committee in 1975 and revised in 1983 under the name ICHPPC-2-Defined. It then had inclusion criteria to reduce miscoding and coding variability. In 1987 it was replaced by the much more practice orientated and comprehensive ICPC. The ICHPPC is structured in the same way as the ICD-9 classification.

ICPC International Classification of Primary Care. (ICPC, 1st ed. 1987, ICPC-2, 2nd ed.1998, ICPC-2-E, electronic ed. 2000, ICPC-2-R, 2005). The official classification of the World Organization of Family Doctors (Wonca) published and updated by the Wonca International Classification Committee (WICC), which characterizes the domain of Family Practice and typifies the way the FP works. In this classification the reason for encounter (RFE) is classified as well as the diagnostic processes, interventions, preventions, administrative procedures, and the diagnosis. It has a biaxial structure and consists of 17 chapters, each divided into 7 components dealing with symptoms and complaints, diagnostic and therapeutic interventions, administrative procedures and diseases.
ICPC contains a number of diagnostic rubrics that are quite different from other classifications. Especially, a great deal of attention is paid to the patient's symptoms and complaints in the first component of each chapter. Usually, the first component opens with one or more rubrics for 'pain'. For

example, in chapter D(igestive), abdominal complaints are subdivided into generalized abdominal pain, stomach pain and localized abdominal pain. Pain ascribed to the heart is distinguished from an oppressed or constricted feeling in the chest. In the muskuloskeletal chapter L, some twenty rubrics for different localizations of pain or other complaints are available; in chapter S(kin), a distinction is made between painful skin and itching. In chapter X, painful menstruation, pain in between menstruations, pain during intercourse and vulva pain are distinguished.

Furthermore, ICPC allows patients' problems to be classified as fear of a malignancy or other serious illnesses. Also, the fact that a patient can no longer perform a 'normal' function can be recorded in all chapters (*28: limitations in function). That means that e.g. a patient's problem walking the stairs can be regarded, regardless of what causes that problem.

The importance of a particular diagnosis for the patient is specifically taken into account. For instance, for a woman who presents with a missed period, a distinction can be made both between *confirming* an unwanted or a wanted pregnancy and *ruling out* an unwanted or a wanted pregnancy. A normal delivery is distinguished from a complicated delivery, and also a stillborn baby can be coded.

Since FPs can use symptom diagnoses when coding, they need not diagnose a patient with respiratory complaints with, for instance, 'upper respiratory tract infection'; the symptom diagnoses 'sneezing' may suffice. Shortness of breath or wheezing may be coded, and the diagnosis 'painful breathing' may be used without an additional diagnosis. There are also symptom diagnoses for coding patients' moods and feelings (nervous, tense, irritated or sad), without attributing such complaints to nosological diagnoses such as 'depression' or 'anxiety disorder'. Chapter Z (social problems) offers the possibility to code the particular problems a patient is facing (problems with him/herself, with peers or within a wider social circle).

Finally, ICPC allows the classification of 'prevention' (A98), and 'no disease' (A97). The latter code is used as a diagnosis in case a patient presents with a question or symptom that leads to the diagnostic interpretation that there is 'no disease or illness'. Both categories are essential, since they preclude the patient's inclusion in a diagnostic category indicating a problem or disease. In the Transition Project's ICPC-TP, A97 and A98 have been combined and coded as A97 (no disease/prevention).

ICPC has been extensively tested and found to be very practicable and reliable for use in family practice. ICPC has been linked to ICD-10 through a mapping.
See also: frequency principle; Top20; chapter; component; alphanumeric variable; mental health disorder.
More..

ICPC Drug Classification ICPC classification of drugs (1993); compatible with the Anatomical Therapeutic Chemical Classification Index (ATC), but following the ICPC's chapter structure and frequency principle in that classes were selected according to their epidemiological relevance for family practice.

ICPC Multilingual Collaboratory See: IMC.

ICPC-TP ICPC-Transition Project. The version of ICPC used in the Transition project and the EFP program. In 1985 the Transition Project started with this version, that precedes the first official version of ICPC published in 1987. In fact, the experiences from the first two years of the Transition Project resulted in a number of changes included in the official 1987 version.
In 1995, introducing Transhis, the switch was made to ICPC-1, and in early 2003 to ICPC-2, together with the linkage to ICD-10. In order to allow uniform retrieval, all data included on the EFP program are presented with ICPC-TP (after converting, if necessary, from ICPC-1).
The differences as to the availability of codes for the clinically most relevant classes between the three versions are not substantial. We present (click om More..) the differences in numbers of codes (all and by component), and the conversion between ICPC-2 and ICPC-TP.
More..

ICPC-tree See: ICPC-structure.
See also: code.

IC-Process-PC International Classification of Process in Primary Care. Produced by the Wonca International Classification Committee (1986) to classify and code the diagnostic and therapeutic elements in the process in primary care.

ICPC-structure In several menus and combo boxes, the user of the EFP program and the Thesaurus can directly access the hierarchically ordered ICPC-2 (or the ICPC-TP) structure by clicking through the 'ICPC-tree', or the 'ICPC-structure'.

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 disease induces.
See also: disease; health problem; sickness.

illness behaviour The conduct of a person in response to abnormal mental and physical signals.

illness diversity The number of different episodes of care of a patient in a defined period, usually one year.

IMC ICPC Multiligual Collaboratory. Unicode based website for the proliferation and upkeep of ICPC in over 20 languages, developed by the US National Library of Medicine, in cooperation with the Department of Family Medicine. Described in Bibliograpy #8, and to be viewed at:
http://etg.nlm.nih.gov/project
http://www.digitalis.nl:8080/IMC/login.html

inactive patient See: patient.

incidence (Synonym: incidence rate) The rate at which new events occur in the practice population in a defined period (usually one year expressed per 1,000 patient years). Since the population is dynamic, the incidence rate per 1000 patients per year are presented as per 1000 patient years.
See also: prevalence.

inclusion criteria See: criteria.

inclusions See: criteria.

infant A child less than one year of age.

initiative of the FP When a patient visits an FP with one or more reason(s) for encounter, it may well happen that the FP brings up another problem. That may be the follow-up of an old problem ('now that you're here, let me check your blood pressure again'), or a new problem ('you look a bit tired today, is anything wrong?'). In ICPC, a separate code (-64 in each chapter) allows for the coding of this 'reason for encounter'. Thus, the RFE code D64 indicates that is was the FP who started the discussion of a problem in chapter D(igestive).
More..

inter-doctor variation The variation between FPs (practices) in the number of reasons for encounter, diagnoses and interventions coded per 1000 patient years. Inter-doctor variation is defined as the variation in rates computed in a patient database, which cannot be explained by differences in the sex/age distributions of the various practices.
More..

intermediate intervention See: intervention.

International Statistical Classification of Diseases and Related Health Problems. See: ICD-10.

International Classification of Functioning, Disability and Health See: ICF.

International Classification of Health Problems in Primary Care See: ICHPPC.

International Classification of Impairments, Disabilities and Handicaps. See: ICF.

International Classification of Primary Care See: ICPC.

International Classification of Process in Primary Care See: IC-Process-PC.

interval of encounters in episodes See: duration of interval.

intervention (Synonym: process) Any procedure carried out by the FP or a member of the team in the course of the management of a reason for encounter, problem or disease, including prevention, diagnosis, treatment, administrative activities, or a surgical or obstetric procedure. The process of care can be classified using ICPC and is covered in component 2 to 6. Its use depends to a considerable extent on national conditions.
When Transhis was used within the Transition Project (1995-ongoing), separate coding occurs for 'intermediate' and 'resulting' interventions:

- intermediate interventions: those actually performed by the FP during the encounter, such as examination, BP, injection;
- resulting interventions: those advised by the FP, of which it is uncertain that they have actually have led to the intended action, since patients may well refrain of following their FP's advice: referral, medication, advice for a lab blood test or an X-ray, etc.

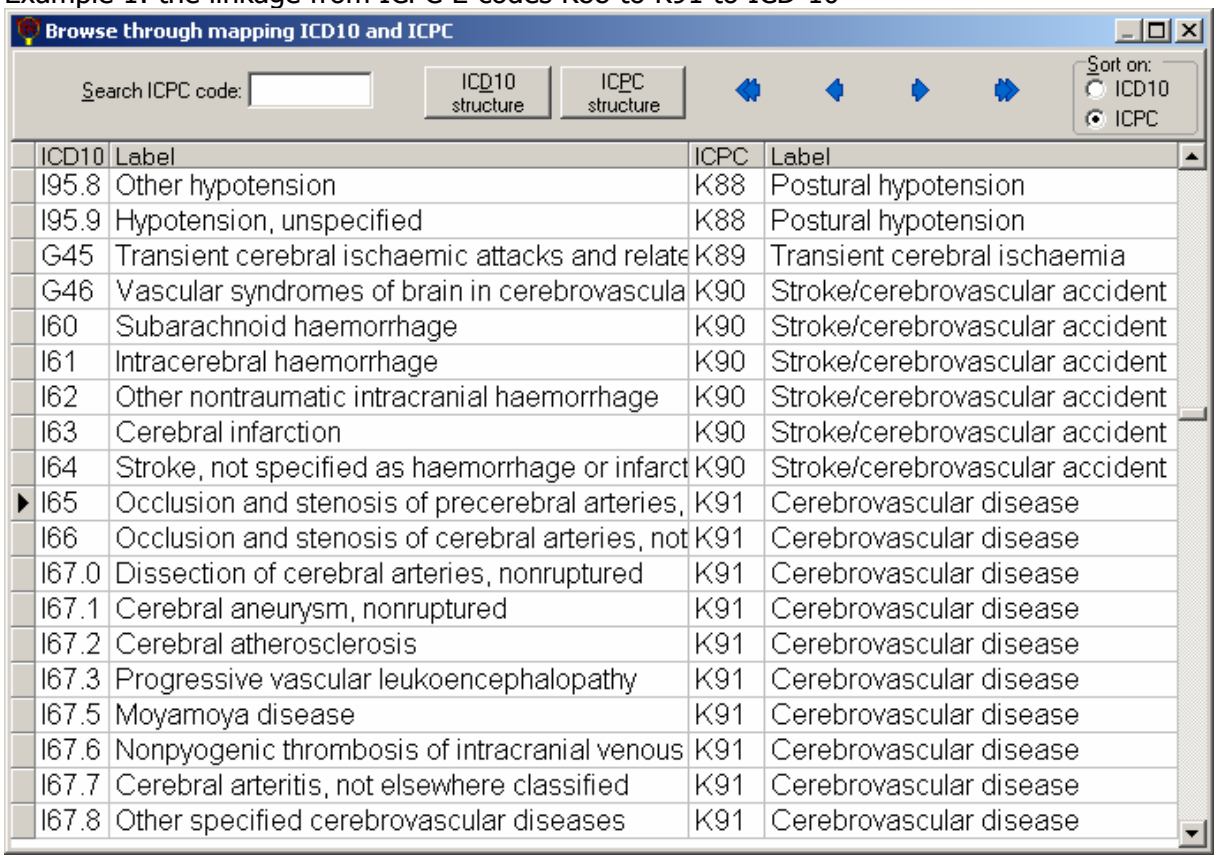
In the EFP program, a combo box allows for process codes (component 2-6) to be searched with or without the Alpha (so that the user may find data on blood tests in episodes in a single chapter, e.g. chapter D(igestive), as well as data on 'all blood tests', regardless of the chapter).

interventions per episode all interventions (in all sub-encounters) for an episode of care.

L

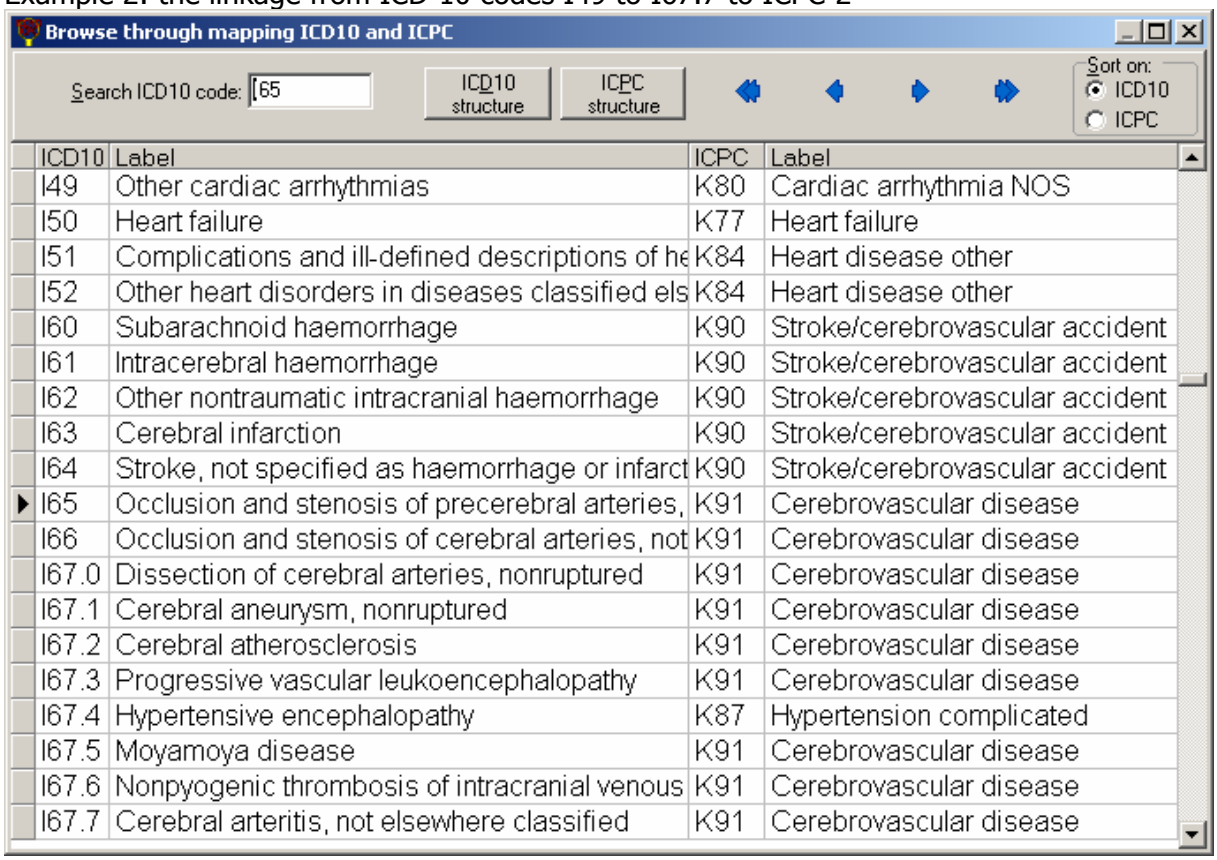
likelihood ratio An expression of the extent to which a symptom increases the probability of a diagnosis. The likelihood ratio for the existence of the symptom is the odds that it will exist in a patient with the disease, in contrast to a patient without the disease. The likelihood ratio for absence of the symptom (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. The likelihood ratio for the comorbidity of two episodes of care is calculated in an identical way.
See also: sensitivity and specificity; Bayes' theorem.

linkage (Synonyms: mapping, crosswalk, cross reference, conversion structure). The establishment of a relation between a concept in one classification to the most similar concept in another classification, i.e. the manner in which parts of separate classifications can be compared, such as in the linkage between ICPC-2 and ICD-10.
Example 1: the linkage from ICPC-2 codes K88 to K91 to ICD-10



ICD10	Label	ICPC	Label
I95.8	Other hypotension	K88	Postural hypotension
I95.9	Hypotension, unspecified	K88	Postural hypotension
G45	Transient cerebral ischaemic attacks and relate	K89	Transient cerebral ischaemia
G46	Vascular syndromes of brain in cerebrovascula	K90	Stroke/cerebrovascular accident
I60	Subarachnoid haemorrhage	K90	Stroke/cerebrovascular accident
I61	Intracerebral haemorrhage	K90	Stroke/cerebrovascular accident
I62	Other nontraumatic intracranial haemorrhage	K90	Stroke/cerebrovascular accident
I63	Cerebral infarction	K90	Stroke/cerebrovascular accident
I64	Stroke, not specified as haemorrhage or infarct	K90	Stroke/cerebrovascular accident
I65	Occlusion and stenosis of precerebral arteries,	K91	Cerebrovascular disease
I66	Occlusion and stenosis of cerebral arteries, not	K91	Cerebrovascular disease
I67.0	Dissection of cerebral arteries, nonruptured	K91	Cerebrovascular disease
I67.1	Cerebral aneurysm, nonruptured	K91	Cerebrovascular disease
I67.2	Cerebral atherosclerosis	K91	Cerebrovascular disease
I67.3	Progressive vascular leukoencephalopathy	K91	Cerebrovascular disease
I67.5	Moyamoya disease	K91	Cerebrovascular disease
I67.6	Nonpyogenic thrombosis of intracranial venous	K91	Cerebrovascular disease
I67.7	Cerebral arteritis, not elsewhere classified	K91	Cerebrovascular disease
I67.8	Other specified cerebrovascular diseases	K91	Cerebrovascular disease

Example 2: the linkage from ICD-10 codes I49 to I67.7 to ICPC-2



ICD10	Label	ICPC	Label
I49	Other cardiac arrhythmias	K80	Cardiac arrhythmia NOS
I50	Heart failure	K77	Heart failure
I51	Complications and ill-defined descriptions of he	K84	Heart disease other
I52	Other heart disorders in diseases classified els	K84	Heart disease other
I60	Subarachnoid haemorrhage	K90	Stroke/cerebrovascular accident
I61	Intracerebral haemorrhage	K90	Stroke/cerebrovascular accident
I62	Other nontraumatic intracranial haemorrhage	K90	Stroke/cerebrovascular accident
I63	Cerebral infarction	K90	Stroke/cerebrovascular accident
I64	Stroke, not specified as haemorrhage or infarct	K90	Stroke/cerebrovascular accident
I65	Occlusion and stenosis of precerebral arteries,	K91	Cerebrovascular disease
I66	Occlusion and stenosis of cerebral arteries, not	K91	Cerebrovascular disease
I67.0	Dissection of cerebral arteries, nonruptured	K91	Cerebrovascular disease
I67.1	Cerebral aneurysm, nonruptured	K91	Cerebrovascular disease
I67.2	Cerebral atherosclerosis	K91	Cerebrovascular disease
I67.3	Progressive vascular leukoencephalopathy	K91	Cerebrovascular disease
I67.4	Hypertensive encephalopathy	K87	Hypertension complicated
I67.5	Moyamoya disease	K91	Cerebrovascular disease
I67.6	Nonpyogenic thrombosis of intracranial venous	K91	Cerebrovascular disease
I67.7	Cerebral arteritis, not elsewhere classified	K91	Cerebrovascular disease

See also: comparability; compatibility.

listed patient See: patient.

localization See: manifestation.

localization neoplasm See: neoplasm localization and type.

longitudinal study A study in which a group of individuals is followed over a long period of time. In the Transition Project the (basic) practice population can be analyzed in a one-year observation period, or in a longer observation period (not available on this CD-Rom).
See also: cohort.

M

manifestation In ICPC, manifestations and localizations take precedence over aetiology. In ICD-10, for one disease often two codes are available, of which one describes the manifestation/localization, marked with a dagger (†), and the other the aetiology, marked with an asterisk (*). The official WHO Guideline for ICD-10 states that in reporting with ICD-10, in principle, the dagger code is to be considered the primary code and must always be used; the asterisk code should never be used on its own.
See also: aetiology.

mapping See: linkage.

mean See: average.

medical record A collection of paper files or electronic documentation containing the patients' demographic data (name, date of birth, sex, address), the medical history obtained by the FP or another team member, opinions and other relevant health information (laboratory tests, physical findings, X-ray results, and special investigations) and a problem list (a list of solved and unsolved health problems). Helps to ensure continuity and comprehensive care.
See also: CPR.

mental health disorder A clinically significant psychological syndrome or pattern, with or without an association with stressors (such as disability, an increased risk or an important loss), which cannot be considered an expectable response to a particular event, but rather a manifestation of a behavioural, psychological or biological dysfunction. In the field of mental health, ICPC allows coding not only of disorders (such as depressive disorder, schizophrenia), but also, in chapter P, a variety of symptom diagnoses (e.g. feeling depressed, feeling anxious), and in chapter Z (potentially related) social problems.
More..

misclassification The erroneous classification of a disease, a reason for encounter, an intervention, or an attribute into a category other than that to which it should be assigned. The probability of misclassification may be the same in all study groups (non-differential misclassification) or may vary between groups (differential misclassification).

mode The way in which ICPC may be used: it can be used in the reason for encounter, the diagnostic, and the process mode. Comprehensive use of ICPC, as occurs in the Transition Project, includes its simultaneous use in all three modes.

modification, diagnostic The revision of a preliminary diagnosis in the course of an episode of care.

module A part of the whole, a section or separate unit. In the 'Family of International Classifications' (FIC) concept, modules are 'separate classifications which may be united through a common conversion structure'.

morbidity Any departure, subjective or objective, from a state of physiological or psychological well-being. In this sense, sickness, illness, and morbid conditions are synonymous.

mutual exclusiveness A quality required for classes in a classification system.

N

N See: episode status.
See also: encounter; health problem; incidence; prevalence; follow-up.

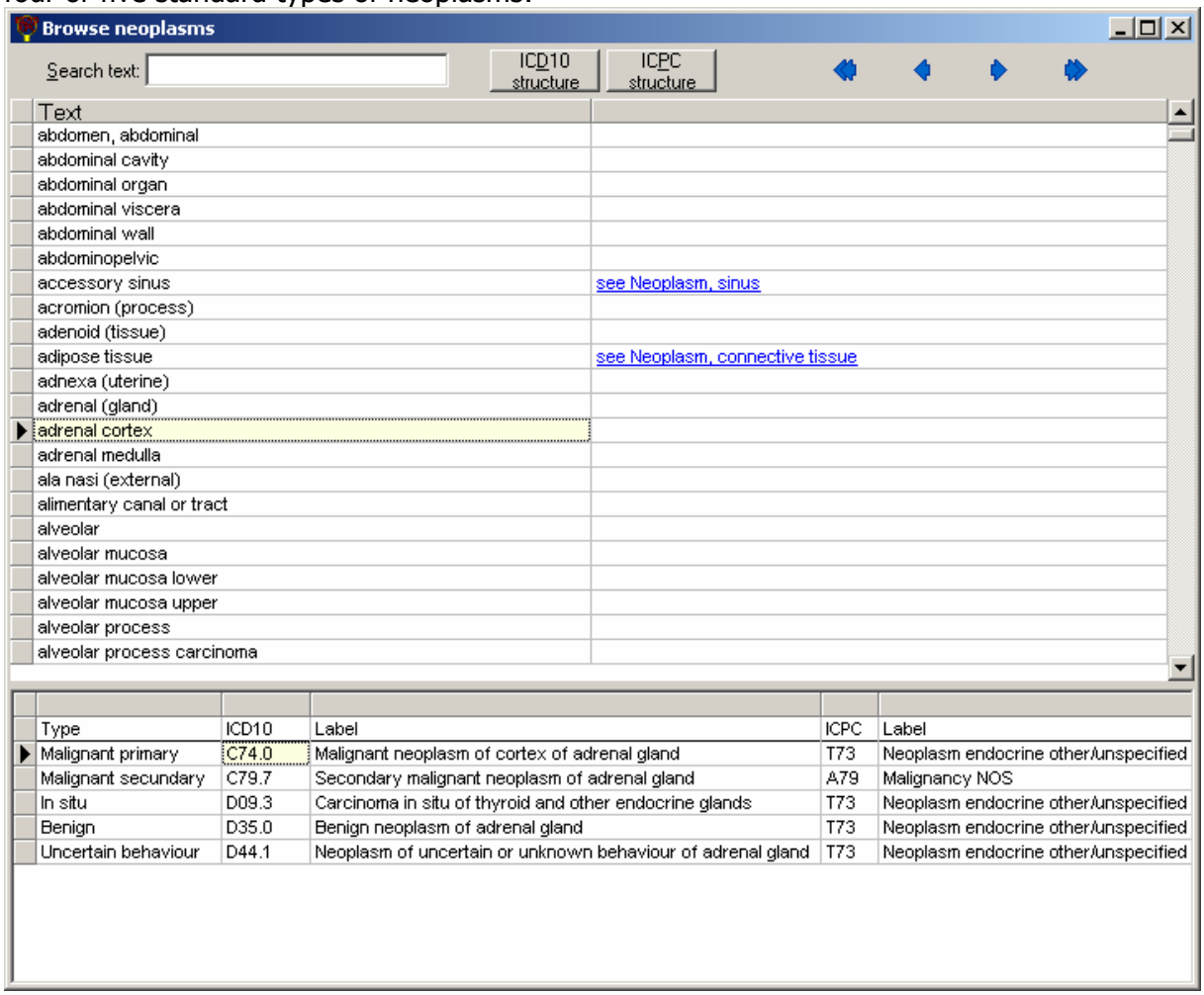
narrative The free text part in a medical record.

naturalness A quality required for a classification system.

need The professionally determined deficiencies in health that call for preventive or curative measures. Health demands are usually measured in terms of the actual utilization of health services. Not all needs established in any form in a population can be translated into expressed demand.

negative predictive value The proportion of a population that is identified by a measurement as apparently not having the disease, but which actually has it.
See also: sensitivity and specificity.

neoplasm localization and type In the ICPC2-ICD10 Thesaurus, blue diagnostic terms can refer to a neoplasm. Clicking the term provides the user access to a list of potential localizations and a choice of four or five standard types of neoplasms:



new problem See: episode status.
See also: incidence; prevalence; health problem.

no disease Rubric in ICPC (A97). It allows FPs to adequately code a 'diagnosis' in a patient who presents with a question or symptom that leads to the diagnostic interpretation that there is no disease or illness. Precludes the patient's inclusion in a diagnostic category indicating a problem or disease.

nomenclature A terminology that is systematically arranged according to pre-established rules.

NOS Not Otherwise Specified: the term to be coded cannot be classified to a more specific rubric.

nosology The classification of diseases into groups with explicit criteria, based on agreement as to the boundaries of the groups.

numerator The upper portion of a fraction used to calculate a rate or a ratio.
See also: denominator.

numerical data Any data that can be expressed in numbers, in contrast to qualitative data. See also: Top20.

O

O See: episode status.
See also: encounter; health problem; incidence; prevalence; follow-up.

objective See: SOAP.

occurrence The frequency of a health problem or event, without distinguishing between incidence and prevalence.

odds ratio The ratio of the probability of occurrence of an event to that of non-occurrence, or the ratio of the probability that something is true to the probability that something is not true.
See also: Bayes' theorem; sensitivity and specificity.

office (Synonym: surgery) The room(s) or building where the physician sees, examines, and treats patients.

office encounter See: encounter, office.

old See: episode status.
See also: health problem; encounter.

once
1. Patients may, over time, have more than one episode of care of the same diagnostic label. In the combo box for the calculation of comorbidity, the choice is offered to include such a patient only once.
2. In Transhis, the Transition project's EPR, an algorithm is included to ensure that FPs do not erroneously code two episodes of care of a disease that, by its nature, can occur only once in a patient (e.g. diabetes).
The list below (click on More..), presents the episode titles that are designated to occur once only in an individual patient; if an FP tries to create another episode of that same title in a patient, Transhis will refuse this.
See also: comorbidity.
More..

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.

outcome assessment In medical practice an evaluation of the utility of an intervention with regard to the effect of the intervention on the patient's health.

out of hours A time period other than the usual scheduled working hours of the health care provider, e.g. weekend, evening, night.

P

patient A person who requests, receives or contracts for medical advice or services from an FP or another member of the team. Within the Transition Project, a distinction is made between:
1. Registered or listed patient: a patient enrolled with a practice and receiving ongoing care;
2. Active patient (Synonyms: visiting, attending patient): a registered or listed patient who has received services from the FP's practice at least once in the last year (in a listed population, usually ±70% in one year, and ±90% in two years);
3. Inactive patient: a registered patient who has received no services from the FP's practice within the last year;
4. Temporary patient (Synonym: transient patient): a patient who receives one or more services, but who is enrolled with, or usually receives health care from another practice (data on these patients are not included in the Transition Project's data);
5. Formerly registered patient: a patient other than a temporary or transient patient who has been removed from the practice register for whatever reason.

patient health record A comprehensive record aiming at gathering all health data or information regarding a given patient whichever health care provider has supplied the information.
See also: CPR.

patient list See: practice register.

patient year The result of correcting the actual number of listed patients for the actual time that each listed patient was registered with the practice, so that a patient year in fact counts 365 days.

population at risk All persons at risk for the health problem under consideration.

population based A qualifier pertaining to a general population defined by geographical, national or other boundaries.

positive predictive value See: predictive value.
See also: sensitivity and specificity.

posterior probability See: probability.
See also: Bayes' theorem; sensitivity and specificity.

ppy, p1000 ppy See: patient year.
See also: Top20.

practice The professional work of an FP, the place of work, organizational structure, geographical area or population served by one or more FPs.

practice population The total number of registered patients in a practice. Both active and inactive patients are included. In health care systems without registration of patients (i.e. patient lists), it is the estimated number of persons served by the practice.
See also: registered population; patient.

practice register (Synonym: patient list) A list of all registered patients in an FP's practice.

predictive value The probability that a person or a proportion of a population with a positive test has the disease (positive predictive value). The probability that a person or a proportion of a population with a negative test does not have the disease is the negative predictive value. 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 the difference between the predictive value of the same test in the family practice setting and in hospitals.
See also: Bayes' theorem; sensitivity and specificity.

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).
See also: Bayes' theorem; sensitivity and specificity.

prevalence (Synonym: prevalence rate) The total number of persons with a specific health problem in a defined population at one point in time or during a defined period of time, usually 1 year. In the EFP program, it is expressed per 1.000 patient years (p 1000 py), and is referred to as a 'prevalence rate'. Point prevalence is the total number p 1000 ppy with the health problem at a specified point in time. Period prevalence is the total number of persons who have had the health problem during a specified period (a year, four years, a lifetime). See also: episode status; follow-up; health problem.

prevention Rubric in ICPC (A98). Precludes the patient's inclusion in a diagnostic category indicating a problem or disease when dealing with prevention only.
See also: ICPC; no disease.

prior probability See: probability.
See also: Bayes' theorem; sensitivity and specificity.

probability 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, indicates 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 in a different expression.

problem, health See: health problem.

problem list In Transhis, the EPR used in the Transition Project since 1995, FPs can look up their patients' episode list. However, since many patients are on the patient lists for years, their episode lists may become rather long, cluttered and full of less relevant information. Therefore, the program also generates a problem list that only contains episodes of care that by their nature should remain on the problem list forever.
The list of episodes below (click on More..), shows which episode titles are designated to stay on the problem list forever (unless the FP, of course, decides otherwise; also, the FP may decide to add a 'non-P-episode of care' to the problem list because s/he feels it is of remaining clinical importance).
More..

process See: intervention.

promillage Expression of the occurrence of a code per 1000 observations.

proportion The ratio of the numerator to the denominator when the numerator is a subgroup of the denominator.
See also: ratio.

R

rag-bag In ICPC: the rubric for a miscellaneous collection of symptoms, complaints, interventions or diseases not classified elsewhere. In ICPC all rare entities (roughly: <1 per 1000 patients years) are placed in a rag-bag rubric (in all chapters -29, -99, and several other rubrics; in total some 130), enhancing an increased usefulness of the rubrics for health problems frequently seen by the FP.
See also: frequency principle.

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).

range a continuous (sequential) list of ICPC codes selected with the hot key (Shift-Mouse click) to be included in the analysis in the EFP program.

ranking scale (Synonym: ordinal scale) A Top20 scale ranks a selection of ICPC codes from the highest to the lowest.
See also: Top20.

rate (Synonym: rate of occurrence) The number of events/conditions in a practice population in a given period of time (numerator), divided by the population (denominator). Rates are given per 1000 patient years or per 1000 observations.

ratio (e.g. odds ratio) A 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.

reason for encounter (RFE) An 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 also: ICPC; coding reasons for encounter; initiative of the FP.
More..

recurrence The reappearance of a particular entity, e.g. a clinical condition.
See also: once.

referral A process by which the responsibility for part or all of the care of a patient is temporarily transferred to another health care provider. Within the context of the Transition project, patients may be referred to a specialist or another primary care provider, and in the EFP retrieval program, the type of provider referred to is specified.

references All references refer to the Transition Project's Bibliography, included on this CD-Rom.

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 See: patient.

registered population The total number of registered patients in a practice, taken at the mid-point of a study year. 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, e.g. 'the yearly contact group'.
See also: practice population; patient.

registration period In the Transition project, several FPs/practices have contributed for a period of at least one year. Since they could start at any convenient moment, the registration year or period often did not coincide with (a) calendar year(s).
See also: Transition Project; patient year.

reliability The extent to which the same measure will provide the same results under the same conditions, i.e. is free of measurement error.

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 (Synonym: repeatability) The extent to which it is possible to produce similar results by repeating a study, preferably in a different clinical setting.
See also: reliability.

rest prevalence The number of 'roll-over' episodes of care with at least one encounter in the observation period.
See also: episode status; prevalence; health problem.

resulting intervention See: intervention.

risk The probability that a health problem will occur, e.g. that an individual will become ill or die within a stated period of time.

roll-over See: rest prevalence.
See also: episode status; health problem.

rowheight table In the EFP program and the ICPC2-ICD10 Thesaurus menus, this indicates the possibility to choose a rowhight in tables, thus allowing a customized presentation (e.g. for prints, or PowerPoint presentations, or presentation by LCD projector).
See also: font.

rubric Text string that describes a class in a coding system/terminology.

seasonal variation A change in the occurrence of reasons for encounter, episodes of care, or interventions that conforms to a seasonal pattern.

secondary care Services provided by medical specialists who generally do not have first contact with patients (e.g., cardiologists, urologists, dermatologists).

sensitivity and specificity The extent to which a measure detects the true differences being measured. The sensitivity of a diagnostic test is the proportion of people who truly have a disease (in the Transition Project: an episode of care) and are so identified by the test (in the Transition project: a symptom or a comorbid episode). A test with high sensitivity detects a high proportion of true cases. The specificity is the proportion of truly nondiseased persons who are so identified by the test. It is a measure of the probability of correctly identifying a non-diseased person with the test (synonym: true negative rate).
The relationships are classically shown in a fourfold table in which the letters a, b, c, and d represent the quantities specified below the table:

Symptom	True status		TOTAL
	Diseased	Nondiseased	
Positive	a	b	a+b
Negative	c	d	c+d
TOTAL	a+c	b+d	a+b+c+d

a: diseased individuals detected by the test (true positives)
b. nondiseased individuals positive by the test (false positives)
c. diseased individuals not detected by the test (false negatives)
d. nondiseased individuals negative by the test (true negatives)

Sensitivity = $\frac{a}{a+c}$ (Sens)

Specificity = $\frac{d}{b+d}$ (Spec)

Likelihood ratio+ (positive test result) = $\frac{sens}{1-spec}$ (LR+)

Likelihood ratio- (negative test result) = $\frac{1-sens}{spec}$ (LR-)

Predictive value+ (positive test result) = $\frac{a}{a+b}$ (PV+)

Predictive value- (negative test result) = $\frac{d}{c+d}$ (PV-)

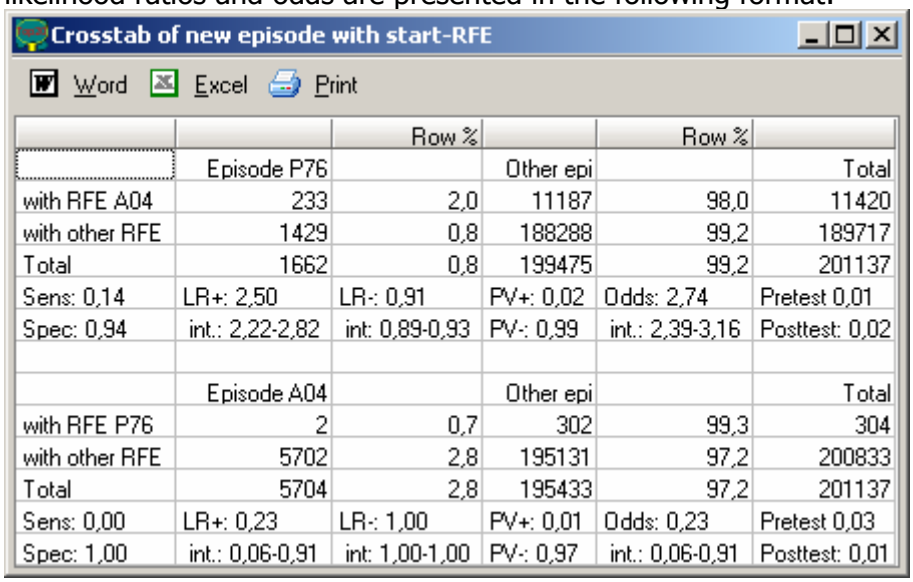
Prevalence = $\frac{a+c}{a+b+c+d}$

Pre-test (odds) = $\frac{prevalence}{1-prevalence}$

Post-test (odds) = pre-test odds x likelihood ratio+

Diagnostic odds ratio = $\frac{LR+}{LR-} = \frac{ad}{bc}$ (Odds)

In the Transition Project's EFP database, sensitivity, specificity, prior and posterior probabilities, likelihood ratios and odds are presented in the following format:



Crosstab of new episode with start-RFE

Word Excel Print

		Row %		Row %	
	Episode P76		Other epi		Total
with RFE A04	233	2,0	11187	98,0	11420
with other RFE	1429	0,8	188288	99,2	189717
Total	1662	0,8	199475	99,2	201137
Sens: 0,14	LR+: 2,50	LR-: 0,91	PV+: 0,02	Odds: 2,74	Pretest 0,01
Spec: 0,94	int.: 2,22-2,82	int: 0,89-0,93	PV-: 0,99	int.: 2,39-3,16	Posttest: 0,02
	Episode A04		Other epi		Total
with RFE P76	2	0,7	302	99,3	304
with other RFE	5702	2,8	195131	97,2	200833
Total	5704	2,8	195433	97,2	201137
Sens: 0,00	LR+: 0,23	LR-: 1,00	PV+: 0,01	Odds: 0,23	Pretest 0,03
Spec: 1,00	int.: 0,06-0,91	int: 1,00-1,00	PV-: 0,97	int.: 0,06-0,91	Posttest: 0,01

See also: Bayes' theorem; crosstab.

sex ratio The ratio of males to females.

sick leave The absence from work or study due to illness either certified by an FP 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.

sign In medicine, an objective finding on physical examination of a patient.

significance In statistics, a term that relates to a finding that is probably not the result of chance.

simplicity A quality required for a classification system.

site See: localization.

skew distribution Asymmetry in a frequency distribution.

SNOMED Systematized Nomenclature of Medicine. A coded, multiaxial (11 axes), concept based controlled medical vocabulary, developed by the College of American Pathologists that allows the recording of all disease entities and all observations related to a particular disease.

SOAP Since the late sixties, consensus has grown on the core elements to be distinguished in

encounters between doctors. This SOAP approach is known as problem orientation, and is made up out of four constituents:
1. Subjective complaints of the patient;
2. Objective findings of the doctor;
3. Assessment of the problem, or diagnosis by the doctor;
4. Plan for doctor's interventions (proposed or performed).

Within the context of the Transition Project, the SOAP approach in its pure form is considered outdated. More..

social problems In ICPC, social problems are included in the first component of chapter Z. They are considered symptoms and complaints, usually presented by the patient as a reason for encounter.
See also: mental health disorder.

specificity See: sensitivity and specificity.

standard deviation A measure of variation of a frequency distribution. The standard deviation tells how widely the values are dispersed around the mean, which is the centre for a group of values.
See also: cell.

standard error The standard deviation of an estimate. Is given in the EFP program in all prior probability tables for all cells, except with 6 or more observations.
See also: cell.

standard mode In the Thesaurus, the standard mode gives the ICPC-2 and the ICD-10 codes only. In the custom mode, also the ICD-9-CM codes are shown.

standardization The weighting of data to correct for unequal age and/or sex distributions when comparing two groups. In the EFP, the direct method is used: specific rates in the practice population are averaged, using as weights the distribution of a specific reference population (e.g. the Dutch population in 1990, 1995, etc, or the US population in 2000). The direct standardized rate represents what the crude rate would have been in the practice population if that would have had the sex/age distribution of the reference population.

status of episode See: episode status.

sub-encounter The part of an encounter that deals with one single episode of care. An encounter may have several sub-encounters.

subjective See: SOAP.

surgery encounter See: encounter, office.

symptom Any evidence of a health problem as perceived/experienced by the patient, e.g. cough, pain, or tiredness. In ICPC, symptoms are included in component 1 of each chapter.

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 family practice as many health problems are met in an early phase or cannot or need not be diagnosed by additional diagnostic procedures;
2. As synonymous jargon on the 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 also: disease; diagnosis.

synonymy Relation between or among terms in a given language representing the same concept.

Systemized Nomenclature of Medicine See: SNOMED.

T

telephone encounter An encounter of a patient and an FP by telephone, typically to ask for advice, (repeat) presciption, or for test results.

temporary patient See: patient.

term A word or group of words, which labels a concept in a defined way. The word for the concept and the term are often the same. Terms are narrower than the concept behind them. Terms can be defined differently in different professional domains, disciplines, or specialities if they serve different clinical utilities. In primary care, a term is concerned with broader concepts than in more specialized disciplines, because of the clinical utility.

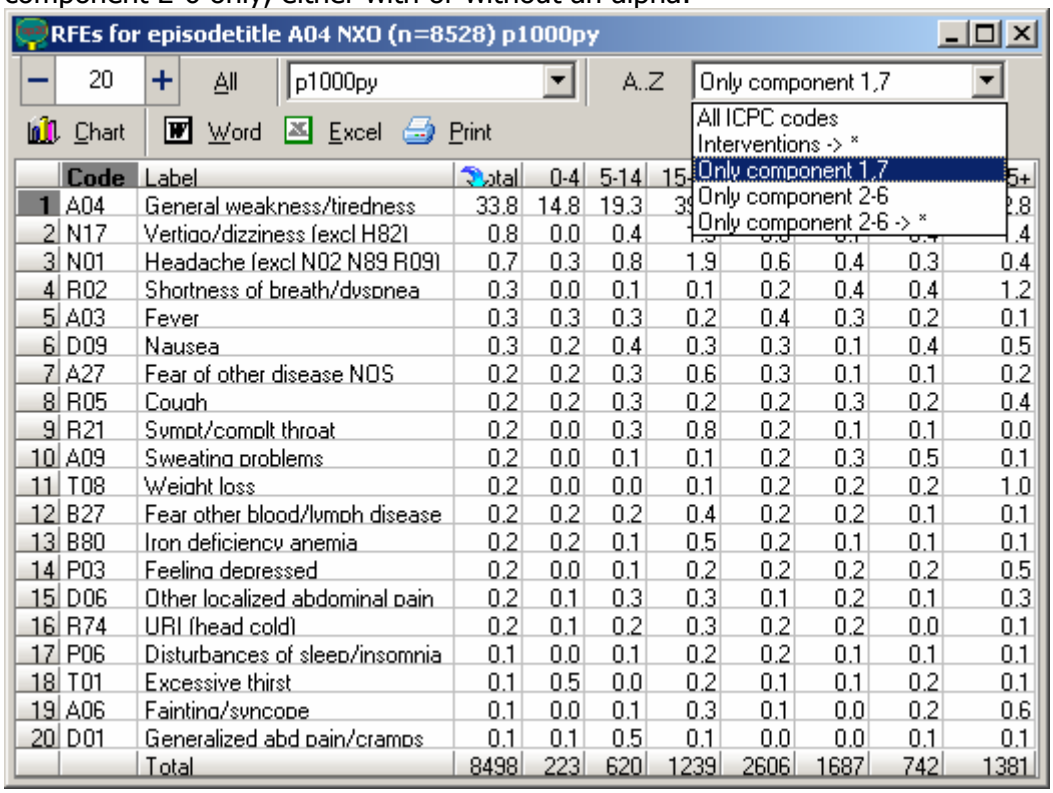
terminology List of terms referring to the concepts in a particular domain.

thesaurus Systematic set of professionally used words, including terms and jargon in which each word is represented with possible synonyms and related words designating broader or narrower concepts. A thesaurus may serve as a dictionary or as a translation from jargon to terminology.
The ICPC2-ICD10 Thesaurus is limited to the diagnostic terms belonging to components 1 and 7 from ICPC. The ICD-10 chapters V, W, X, and Y are not included since they refer to external causes and injuries, and are, therefore, not easily linked to ICPC.

time of encounter The time at which the encounter occurs. Three types are distinguished:
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.

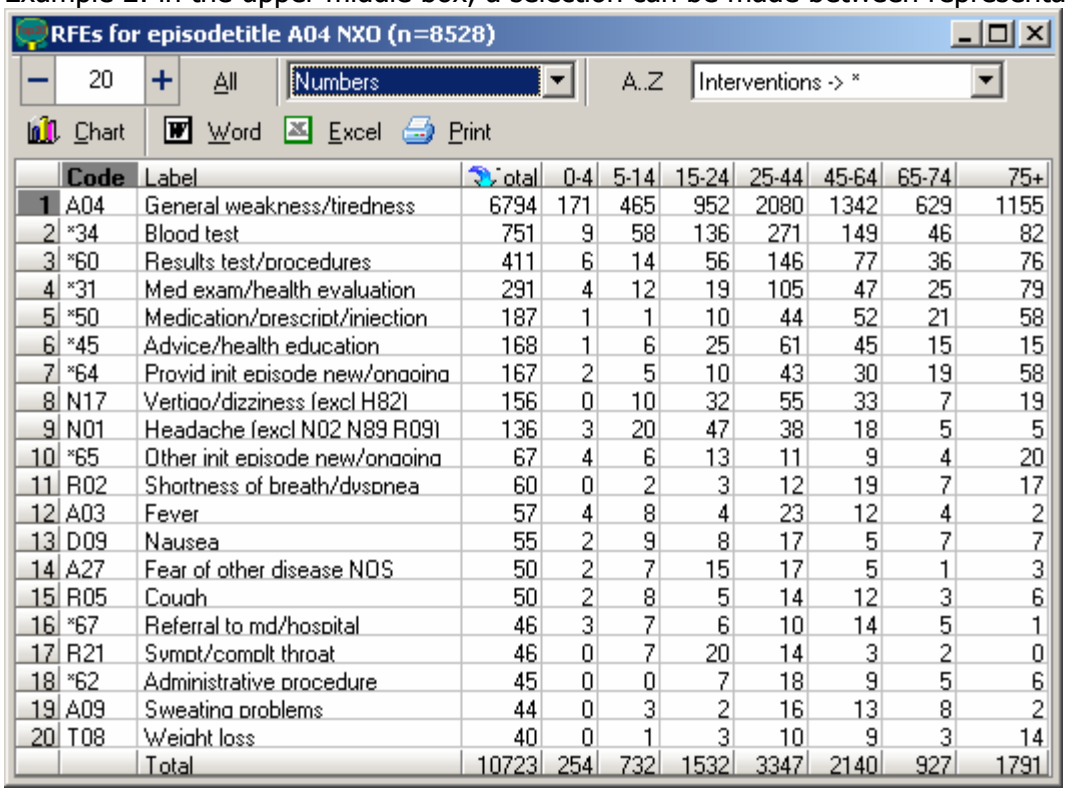
Top20 In the EFP program, Top20 ranking lists can be created of selected reasons for encounter, diagnoses, episodes of care, and interventions (including referrals), in their mutual relationships, and by sex, age, status of episode, encounter type, etc.
When creating Top20s, various choices can be made. We show 4 examples.

Example 1: in the top box, left, the Top20 can be expanded into a Top 40, Top 60, Top 80, etc.; in the top box, right, a selection can be made for the type of codes: all codes, component 1 and 7 only, component 2-6 only, either with or without an alpha:



	Code	Label	Total	0-4	5-14	15-				5+
1	A04	General weakness/tiredness	33.8	14.8	19.3	3				2.8
2	N17	Vertigo/dizziness (excl H82)	0.8	0.0	0.4					.4
3	N01	Headache (excl N02 N89 R09)	0.7	0.3	0.8	1.9	0.6	0.4	0.3	0.4
4	R02	Shortness of breath/dyspnea	0.3	0.0	0.1	0.1	0.2	0.4	0.4	1.2
5	A03	Fever	0.3	0.3	0.3	0.2	0.4	0.3	0.2	0.1
6	D09	Nausea	0.3	0.2	0.4	0.3	0.3	0.1	0.4	0.5
7	A27	Fear of other disease NOS	0.2	0.2	0.3	0.6	0.3	0.1	0.1	0.2
8	R05	Cough	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.4
9	R21	Symptom/complt throat	0.2	0.0	0.3	0.8	0.2	0.1	0.1	0.0
10	A09	Sweating problems	0.2	0.0	0.1	0.1	0.2	0.3	0.5	0.1
11	T08	Weight loss	0.2	0.0	0.0	0.1	0.2	0.2	0.2	1.0
12	B27	Fear other blood/lymph disease	0.2	0.2	0.2	0.4	0.2	0.2	0.1	0.1
13	B80	Iron deficiency anemia	0.2	0.2	0.1	0.5	0.2	0.1	0.1	0.1
14	P03	Feeling depressed	0.2	0.0	0.1	0.2	0.2	0.2	0.2	0.5
15	D06	Other localized abdominal pain	0.2	0.1	0.3	0.3	0.1	0.2	0.1	0.3
16	R74	URI (head cold)	0.2	0.1	0.2	0.3	0.2	0.2	0.0	0.1
17	P06	Disturbances of sleep/insomnia	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.1
18	T01	Excessive thirst	0.1	0.5	0.0	0.2	0.1	0.1	0.2	0.1
19	A06	Fainting/syncope	0.1	0.0	0.1	0.3	0.1	0.0	0.2	0.6
20	D01	Generalized abd pain/cramps	0.1	0.1	0.5	0.1	0.0	0.0	0.1	0.1
		Total	8498	223	620	1239	2606	1687	742	1381

Example 2: in the upper middle box, a selection can be made between representations by numbers…



	Code	Label	Total	0-4	5-14	15-24	25-44	45-64	65-74	75+
1	A04	General weakness/tiredness	6794	171	465	952	2080	1342	629	1155
2	*34	Blood test	751	9	58	136	271	149	46	82
3	*60	Results test/procedures	411	6	14	56	146	77	36	76
4	*31	Med exam/health evaluation	291	4	12	19	105	47	25	79
5	*50	Medication/prescript/injection	187	1	1	10	44	52	21	58
6	*45	Advice/health education	168	1	6	25	61	45	15	15
7	*64	Provid init episode new/ongoing	167	2	5	10	43	30	19	58
8	N17	Vertigo/dizziness (excl H82)	156	0	10	32	55	33	7	19
9	N01	Headache (excl N02 N89 R09)	136	3	20	47	38	18	5	5
10	*65	Other init episode new/ongoing	67	4	6	13	11	9	4	20
11	R02	Shortness of breath/dyspnea	60	0	2	3	12	19	7	17
12	A03	Fever	57	4	8	4	23	12	4	2
13	D09	Nausea	55	2	9	8	17	5	7	7
14	A27	Fear of other disease NOS	50	2	7	15	17	5	1	3
15	R05	Cough	50	2	8	5	14	12	3	6
16	*67	Referral to md/hospital	46	3	7	6	10	14	5	1
17	R21	Symptom/complt throat	46	0	7	20	14	3	2	0
18	*62	Administrative procedure	45	0	0	7	18	9	5	6
19	A09	Sweating problems	44	0	3	2	16	13	8	2
20	T08	Weight loss	40	0	1	3	10	9	3	14
		Total	10723	254	732	1532	3347	2140	927	1791

Example 3: … or per 1000 observations (promillages)…

RFEs for episodetitle A04 NXO (n=8528), per 1000 observations

20 | All | Promillages | A..Z | Interventions -> * | Chart | Word | Excel | Print

	Code	Label	Total	0-4	5-14	15-24	25-44	45-64	65-74	75+
1	A04	General weakness/tiredness	634±9	673±58	635±35	621±24	621±16	627±20	679±30	645±22
2	*34	Blood test	70±5	35±23	79±20	89±14	81±9	70±11	50±14	46±10
3	*60	Results test/procedures	38±4	24±19	19±10	37±9	44±7	36±8	39±12	42±9
4	*31	Med exam/health evaluation	27±3	16±?	16±9	12±6	31±6	22±6	27±10	44±10
5	*50	Medication/prescript/injection	17±2	4±?	1±?	7±4	13±4	24±7	23±10	32±8
6	*45	Advice/health education	16±2	4±?	8±7	16±6	18±5	21±6	16±8	8±4
7	*64	Provid init episode new/ongoing	16±2	8±?	7±?	7±4	13±4	14±5	20±9	32±8
8	N17	Vertigo/dizziness (excl H82)	15±2	0±?	14±8	21±7	16±4	15±5	8±6	11±5
9	N01	Headache (excl N02 N89 R09)	13±2	12±?	27±12	31±9	11±4	8±4	5±?	3±?
10	*65	Other init episode new/ongoing	6±1	16±?	8±7	8±5	3±2	4±3	4±?	11±5
11	R02	Shortness of breath/dyspnea	6±1	0±?	3±?	2±?	4±2	9±4	8±6	9±4
12	A03	Fever	5±1	16±?	11±8	3±?	7±3	6±3	4±?	1±?
13	D09	Nausea	5±1	8±?	12±8	5±4	5±2	2±?	8±6	4±3
14	A27	Fear of other disease NOS	5±1	8±?	10±7	10±5	5±2	2±?	1±?	2±?
15	R05	Cough	5±1	8±?	11±8	3±?	4±2	6±3	3±?	3±3
16	*67	Referral to md/hospital	4±1	12±?	10±7	4±3	3±2	7±3	5±?	1±?
17	R21	Symot/complt throat	4±1	0±?	10±7	13±6	4±2	1±?	2±?	0±?
18	*62	Administrative procedure	4±1	0±?	0±?	5±3	5±2	4±3	5±?	3±3
19	A09	Sweating problems	4±1	0±?	4±?	1±?	5±2	6±3	9±6	1±?
20	T08	Weight loss	4±1	0±?	1±?	2±?	3±2	4±3	3±?	8±4
		Total	10723	254	732	1532	3347	2140	927	1791

Example 4…or per 1000 patient years:

RFEs for episodetitle A04 NXO (n=8528) p1000py

20 | All | p1000py | A..Z | Interventions -> * | Chart | Word | Excel | Print

	Code	Label	Total	0-4	5-14	15-24	25-44	45-64	65-74	75+
1	A04	General weakness/tiredness	33.8	14.8	19.3	39.2	31.7	30.2	36.8	82.8
2	*34	Blood test	3.7	0.8	2.4	5.6	4.1	3.4	2.7	5.9
3	*60	Results test/procedures	2.0	0.5	0.6	2.3	2.2	1.7	2.1	5.4
4	*31	Med exam/health evaluation	1.4	0.3	0.5	0.8	1.6	1.1	1.5	5.7
5	*50	Medication/prescript/injection	0.9	0.1	0.0	0.4	0.7	1.2	1.2	4.2
6	*45	Advice/health education	0.8	0.1	0.2	1.0	0.9	1.0	0.9	1.1
7	*64	Provid init episode new/ongoing	0.8	0.2	0.2	0.4	0.7	0.7	1.1	4.2
8	N17	Vertigo/dizziness (excl H82)	0.8	0.0	0.4	1.3	0.8	0.7	0.4	1.4
9	N01	Headache (excl N02 N89 R09)	0.7	0.3	0.8	1.9	0.6	0.4	0.3	0.4
10	*65	Other init episode new/ongoing	0.3	0.3	0.2	0.5	0.2	0.2	0.2	1.4
11	R02	Shortness of breath/dyspnea	0.3	0.0	0.1	0.1	0.2	0.4	0.4	1.2
12	A03	Fever	0.3	0.3	0.3	0.2	0.4	0.3	0.2	0.1
13	D09	Nausea	0.3	0.2	0.4	0.3	0.3	0.1	0.4	0.5
14	A27	Fear of other disease NOS	0.2	0.2	0.3	0.6	0.3	0.1	0.1	0.2
15	R05	Cough	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.4
16	*67	Referral to md/hospital	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.1
17	R21	Symot/complt throat	0.2	0.0	0.3	0.8	0.2	0.1	0.1	0.0
18	*62	Administrative procedure	0.2	0.0	0.0	0.3	0.3	0.2	0.3	0.4
19	A09	Sweating problems	0.2	0.0	0.1	0.1	0.2	0.3	0.5	0.1
20	T08	Weight loss	0.2	0.0	0.0	0.1	0.2	0.2	0.2	1.0
		Total	10723	254	732	1532	3347	2140	927	1791

Transhis EPR designed for the comprehensive use of ICPC and the documentation of episodes of care in the Transition Project, since 1995. It is a complete EPR, replacing all paper documentation, also serving all administrative purposes, including billing. The program was originally developed in CA Clipper (a Dos-driven program), and is still in use as such in The Netherlands, Poland and Malta. In Serbia, a, Acces-based Transhis is in use since 2003. A Windows based version is currently under development in

Amsterdam and is expected to have replaced the Dos-driven version by the end of 2004. Examples of several screens of this Windows version are included in the ICPC tutorial on this CD-Rom, in order to illustrate comprehensive coding with ICPC.

transition Process of change during episodes of care over time.

Transition Project The central goal of the Transition project (since 1984) is to formally characterize and describe the domain of international family practice, based on episode oriented epidemiology, and using the International Classification of Primary Care (ICPC) as the ordering principle.
The work focuses on the following areas:

1. the analysis of complete, longitudinal routine episode based epidemiological data bases from family practice;
2. the development of rules for the comparison of international data from family medicine;
3. the development of a reliable and feasible ICPC2-ICD10 conversion, and the development and implementation of an alphabetic ICPC2-ICD10 thesaurus (in Dutch, English, French, Serbian, and other languages) for use in EPRs in family practice;
4. the further development and refinement of a state of the art electronic patient record, allowing the detailed coding of morbidity and of care provided, and facilitating transmural communication with specialists;
5. a conversion between the International Classification of Primary Care and other classification systems/nomenclatures relevant for family medicine, such as SNOMED-CT;
6. the analysis and standardization of prescribing in family practice.

See also: ICPC-TP; EFP.
More..

type I error Also known as 'false positive' or 'alpha error'. An incorrect jusgment or conclusion that occurs when an association is found between variables where, in fact, no association exists.

type II error Also known as 'false negative' or 'beta error'. An incorrect judgment or conclusion that occurs when no association is found between variables where, in fact, an association does exist.

type of neoplasm See: neoplasm localization and type.

U

UMLS Unified Medical Language System. A controlled medical vocabulary, developed by the National Library of Medicine (USA) as a knowledge source with references to classifications (including ICPC-2 and ICD-10), and terminologies such as SNOMED.

uncertain diagnosis See: criteria.

undifferentiated illness The symptoms which the physician may be unable to assign a more complex diagnosis than a symptom diagnosis. This may be because of the need to wait for further development of the episode of care (with or without additional tests). Particularly in the early phase of a disease, it is often impossible to match the incomplete clinical picture with a definite diagnosis. The clinical picture usually becomes clearer with the passage of time, emphasizing the importance of continuity in general/family practice.

Unified Medical Language System See: UMLS.

unit A 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.

usefulness A quality required for a classification system.

validity The ability of a performance measure to capture what it purports to measure (e.g., a particular aspect of clinical care).

variable A quantity that changes. A variable can be dependent or independent:
1. A dependent variable is dependent on the effect of other variables;
2. An independent variable is not influenced by the event or manifestation but may cause or contribute towards its variation.

Variables can be categorical (e.g. eye colour: blue, brown, green), continuous (e.g. age), or dichotomous/binary (e.g. sex: male or female, test result: positive or negative).

visit See: encounter.

vocabulary A set of defined terms from a discipline.

W

White's square Primary care covers the vast majority of the population's health concerns. This has been graphically illustrated by Kerr White and colleagues ('White's square'), who analyzed community health data from the UK and the US. They found that in an adult population of 1,000 persons, 750 experienced some form of illness each month. Of these, 250 consulted a physician, 5 were referred to a consultant and just one was admitted to university medical centre. Yet most of teaching and research is based on this limited referred population that does not represent the health problems in the population at large.

WHO World Health Organization. See: http://www.who.int/about

WICC Wonca International Classification Committee, a standing committee of Wonca, dealing with classification and tools that are useful for performing research in general/family practice, e.g. ICPC and the Wonca Dictionary of General/Family Practice. The committee is the longest standing committee of Wonca. Its most extensive work has been the development of classifications for primary care: ICHPPC, IC-Process-PC, and ICPC; the latter is the most comprehensive.
See: http://www.globalfamilydoctor.com/WICC

Wonca World Organization of Family Doctors. See: http://www.globalfamilydoctor.com

Wonca International Classification Committee See: WICC.

World Health Organization See: WHO.

World Organization of Family Doctors See: Wonca.

X

X See: episode status.
See also: encounter; health problem; incidence; prevalence; follow-up.