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ICPC-3 User Manual

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Guidance on how to code health data in Primary Health Care

Short Introduction

The Use of ICPC-3 in a standardized way

The ways of coding information using ICPC vary somewhat according to the type of information being recorded, for example reason for encounter, health problem, functioning, functioning related or intervention. To promote consistent recording and therefore better comparability of data between centers, the following standards are suggested.

The rules for coding are based on the rules for coding the classes in the ICPC-2 and supplemented by the rules for coding the classes of the new chapters in the ICPC-3.

We recommend that you open the browser with the classification while studying the ICPC-3 manual (https://browser.icpc-3.info/) on the website https://icpc-3.info/.

For more information on the ICPC-3, please consult the complete version of the ICPC-3 User Manual and Classification: https://www.routledge.com/ICPC-3-International-Classification-of-Primary-Care-User-Manual-and-Classification/Boven-Napel/p/book/9781032053394

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01 What are the unique characteristics of ICPC?

Unique characteristics

Chapters

ICPC is divided into 19 chapters. Fourteen body chapters representing the localisation of the problem and / or disease. This makes it easy to use for healthcare providers. As well as chapters for the different body systems, there are chapters for general issues, for prevention, family planning and general examination, for social problems, for functioning and functioning related issues and a chapter for interventions. The ability to capture prevention/family planning, unspecified issues, social problems and information about activities and participation is extremely important to understand what happens in primary care. The choice of classes is based on the framework that combines RFEs with diseases / health problems, participation, activities, functions, interventions / procedures and environmental factors. It is a classification tailored to Primary Health Care using primary care concepts linked to the other classifications (inclusive of ICD-10, ICD-11, ICF, ICHI and Snomed CT)

Symptoms, complaints and diseases

The organ chapters B - W and chapter A are divided into two components. The components deal with (S) symptoms and complaints; and (D) diseases. A great deal of attention is paid to the patient's symptoms and complaints in the first component of each chapter as the reason for encounter (RFE), which is not captured by ICD. Linkage of codes from the beginning of an encounter, with the RFE to its conclusion is possible with ICPC.

Functioning and Functioning related

This chapter allows a description of the functioning and functioning related aspects of all persons (first and follow-up) contacts with the Health Care system in Primary- and Community Care settings. They provide an overview of a person in a person-in-context approach, on a certain moment in time.

Functioning (of a person) is determined by and depends on: 1. physiological functions (including psychological functions), divided into classes 2F71 to 2F99, 2. by the performance of tasks or actions by that person, the classes under activities and participation 2F01 to 2F69.

Functioning related factors describe the context in which the functioning takes place and how or with which support, the functioning is performed. They consist of Environmental factors in which the person lives (the things outside the person and Personality functions in which one person differs from the other person. Personality functions require the personal perception and expression of (and is indicated by the patient himself), and to what extent, a personal characteristic plays a role in the context of the person's health.

Unique characteristics - continued -

Interventions and processes

Beside diagnostic processes and therapeutic policy, program related to conditions, referrals and administration can be recorded with the classes from this chapter.

Interventions in the sub-components:

1 Diagnostic interventions

2 Therapeutic and preventive interventions

3 Programs related to reported conditions and

6 Administrative procedures are used in the process of medical care.

The following sub-components cannot be used in the same way but still are more or less interventions:

4 Results and some classes in:

5 Consultation, referral and other reasons for encounter, such as:

- —501 Encounter or problem initiated by provider
- —502 Encounter or problem initiated by other than patient/provider
- —503 Clarification and discussion of patient's RFE, demand for care

02 Standard for use of reason for encounter

Reason for Encounter (RFE)

Patients normally start the consultation with a spontaneous verbal statement on why they visit the health professional (HP). This is called the Reason for Encounter (RFE). It is the beginning of the interaction and precedes the interpretation by the HP's. The RFE is the literal expression of the reason(s) why a person enters the consultation room, translated into an ICPC code by the HP. It represents the need for care by that person. The RFE can be presented in the form of symptoms and complaints (‘*abdominal pain, a rash’*) but also as self-diagnosed diseases (‘*I’ve got the flu’*), a problem in an activity (‘*I cannot work’*) or requests for a particular intervention.

The primary care provider should identify and clarify the reason for the encounter (RFE) as stated by the patient without making any judgments as to the correctness or accuracy of the reason. The patient statement is translated into a classification term and coded. This use of the classification is guided by three *principles:*

Three principles:

1. The reason for encounter should be understood and agreed upon between the patient and the provider and should be recognized by the patient as an acceptable description.
2. The ICPC class chosen should be as close as possible to the original statement of the reason given by the patient and must represent a minimal or no transformation by the provider. However, clarification of the patient's reasons for encounter within the framework of ICPC is necessary so that the most appropriate class in the classification can be applied.
3. The description and inclusion criteria listed for classes for use in recording health problems are NOT to be used, since the reason for encounter is to be documented from the patient's point of view, based entirely on the patient's statement of the reason.

Almost all parts of the classification are applicable as patients can describe their reasons for seeking health care in the form of symptoms or complaints, as requests for services, as activities and participations problems or as health problems.

02-2 Standard for use of reason for encounter

Choosing the Chapter code

To code the RFE it is necessary to first select the appropriate chapter, assign the correct one or two-digit alpha code, and then the two or three-digit numeric code in the relevant (sub)component such as a symptom or complaint, a diagnosis, activities and participations limitations or an intervention. The search terms in the online ICPC-3 should be used when there is uncertainty about the chapter or (sub)component in which a specific reason for encounter should be placed.

Chapter A1 is used for reasons for encounter which relate to need for immunization or a screening, family planning, patient preferences or case finding. Chapter A is used for RFE's which relate to unspecified or multiple body systems, chapters B-W to RFE's related to body systems and chapter Z to RFE related to social problems. RFE's related to processes of care are to be found in Chapter I and RFE related to limitations in activities and participation in chapter II.

When ICPC is used for recording RFE five rules apply for the use of chapters. Those rules are listed below with examples for the application of those rules.

Rule 1

Whenever the patient makes a specific statement use his or her terminology.

Example: Jaundice, in the form of a diagnostic descriptive term can be found in Chapter D (digestive system) but the patient may present this symptom as a yellow discoloration of the skin (Chapter S). If the patient expresses the problem as 'jaundice', the ICPC code is DS13. If, however, the patient states 'my skin has gone yellow' the correct code would be SS07 (skin color change), although the health care provider is positive that the diagnosis is some form of hepatitis.

Rule 2

The reason for the encounter should be coded as specifically as possible and may require some clarification by the HP.

Example: Chest pain can be coded as AS12 (chest pain), or as KS01 (pain, pressure, tightness of heart), or as RS01 (pain respiratory system), or as LS04 (musculoskeletal chest symptom or complaint). The decision as to the correct selection is not based on the opinion of the provider as to the type of chest pain but, rather, to the way the patient expresses his/her reason for encounter when clarification is sought by the provider.

'*Its all over my chest..*' AS12, '*My chest hurts when I cough*' RS01, '*I have chest pain…I think its my heart*' KS01,'*I have chest pain after falling down stairs*' LS04.

02-3 Standard for use of reason for encounter

Rule 3

When the patient is unable to describe his/her complaint, the reason given by the accompanying person is acceptable as that stated by the patient (e.g., a mother bringing in a child or relatives accompanying an unconscious patient).

Rule 4

If the patient indicates a limitation in activities or barrier in participation, the degree of limitation must also be asked by using the problem scale value.

Rule 5

Any problem whatsoever presented verbally by the patient should be recorded as a reason for encounter. Multiple coding is required if the patient gives more than one reason. Code every reason presented at whatever stage in the encounter it occurs.

***Examples*:**

'*I need my asthma tablets. Also, my knee hurts*' -R201, LS14.

If afterwards the patients asks, '*What is this lump on my skin?*' or '*I can't climb stairs'* these are also coded as a reason for encounter —SS04 and 2F28-PSV3.

Choosing the (sub)component from the Chapters

Symptoms and complaints from Chapters A - Z

The most common reasons patients reported for seeking health care are presented in the form of symptoms and complaints. This implies that the component symptoms and complaints of the chapters A-Z will be used extensively. These symptoms are specific for each chapter; nausea is found in the Digestive chapter (DS09), while sneezing (RS09) is in the Respiratory chapter. While most of the entries in this component are symptoms specific to the chapter in which they are found, some standardization has been introduced for ease of coding

Standardisation of classes in symptoms and complaints from Chapters A - W

Throughout most of the chapters, except for Chapter A1, Chapter Z, Chapter I and Chapter II, the content within the -S component is organized as follows:

- —S01 - —S49 Symptoms and complaints
- —S50 - —S89 Abnormal results and physical findings
- —S90 - —S98 Concern or fear a disease or condition (cancer included)
- —S99 Other specified symptoms, complaints, or abnormal findings

The first class in every chapter relates to the symptom pain. Examples of these are ear pain or ache (HS01) and headache (NS01).

Codes —S50 and sometimes also a few others, are used when the patient indicates an abnormal physical finding in themselves. Examples are:

'I think my blood pressure is low' KS50, '*I have underweight'* TS50

Codes —S90 and sometimes also a few others, are used when the patient expresses concern about or fear of cancer or some other condition or disease. Examples are:

'*I'm afraid I have TB*' AS90, '*I'm worried that I have cancer of the breast*' GS93,'*I'm scared of venereal disease*' GS92

Even though the provider thinks that such an expressed fear is unwarranted or not logical, it presents the patient's reason for encounter.

Choosing the (sub)component from the Chapters - continued -

Standardisation of classes in symptoms and complaints from Chapters A - W - continued -

In each Chapter the component and subcomponent code ——99 are the residual or 'rag-bag' class for that (sub)component. This contains uncommon and unusual classes which do not have a separate class or are not part of the inclusion terms of other classes and can also be used for classes which are not clearly stated. It is avoided to use the class 'not specified' because in all cases it is necessary to be as specific as possible. At all times the index terms should be consulted for synonymous terms in other classes before using this class.

Limitations in Activities and barriers in Participation, Subcomponent 2F0 from Chapter II

Classes 2F01-2F69 should be used when the patient's reason for encounter is expressed in terms of limitations or barriers which affects activities and participation of daily life and social functions.

Always use the problem scale value.

Examples:

'*I cannot climb stairs because of the cast they have put on my leg for my fractured ankle'* 2F28 & PSV.3 and LD36 (Component D, diagnoses, and diseases).

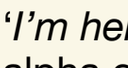
'*I can't work in the office because I can't sit for any length of time because of my hemorrhoids*' 2F58 & PSV.3 and 2F21 PSV.3 and DD84 (Component D, diagnoses and diseases).

Choosing the (sub)component from the Chapters

Components from the interventions and processes (Diagnostic, therapeutic and preventive interventions, programs related to reported conditions, test results, referrals or administrative)

The reasons included in this concept are those in which the patient:

a. seeks some sort of procedure, such as '*I'm here to have a blood test*' (—105)



See Chapter 05 for the Rule on the use of a dash.

Examples:

The patient may request a particular procedure in connection with an expressed problem or as a single demand, such as:

'*I want the doctor to examine my heart*' K102, or

'*I think I need to have my urine tested*' (—106), or

'*I need a vaccination*' (—202)

Clarification by the provider is necessary to find out why the patient thinks he or she needs a urine test to select the appropriate alpha code. If it is because of a possible bladder infection the code is U106 if because of diabetes T106. If the result of an X-ray which is being requested refers to a barium meal D401. The code for a request for vaccination against rubella is A202.

b. requests a treatment or when the patient refers to the physician's instructions to return for specific treatment, procedure, or medication as the reason for encounter.

Further clarification by the provider is often necessary to identify the most appropriate code.

***Examples*:**

'*I need my medication'* (—201). If the patient expresses the reason why he is taking the medication or the provider knows the reason, select the appropriate alpha code, e.g. for a sinus infection the code would be R201

'*I'm here to have my cast removed'* (—207). If it is evident that, for instance, the patient had a fracture of the left arm the correct alpha code to select would be L.

'*I was told to come for removal of the stitches today*' (—207). Although at first one might assume that all suture removal would be in the Skin chapter, the patient might have stitches from eyelid surgery F207 or from a phimosis operation G207.

Choosing the (sub)component from the Chapters

Components from the interventions and processes (Diagnostic, therapeutic and preventive interventions, programs related to reported conditions, test results, referrals or administrative) - continued -

c. may request a care programme. A care programme consists of a combination of various interventions related to a reported condition.

Example:

'*I've come for my diabetes programme*' (T308).

d. is specifically requesting the results of tests previously carried out.

This subcomponent should be used when the patient is specifically requesting the results of tests previously carried out. The fact that the results of the test may be negative does not affect the use of this component. Often the patient will request the test result and its consequences and seeks more information on the underlying problem. In that case, also consider using the additional code —203 (health education, advice).

Examples:

'*I've come for the result of my X-ray of my ankle*' (L401).

'*I need the results of my blood test*'. If the test was for anemia code B401, if for hypercholesterolemia T401, if the patient cannot specify A401.

'*I am supposed to pick up the result of my urine test and take it to the urologist. I also want to know what he will do and which examinations and treatment I can expect*' (U401, U203).

'*I want to know the test results done by the specialist*'

—402. The class —402 should be used when the patient asks the result of an examination or test from another provider.

e. the reason for encounter is to be referred to another provider

If the patient's reason for encounter is to be referred to another provider —506, referral to other primary care provider, —507, referral to specialist, clinic, or hospital, and —599, other specified consultations, referrals and reasons for encounter can be used for this purpose. If the patient states his/her reason for the encounter is '*being sent by someone else...*', use —502.

Choosing the (sub)component from the Chapters

Components from the interventions and processes (Diagnostic, therapeutic and preventive interventions, programs related to reported conditions, test results, referrals or administrative) - continued -

f. the reason for encounter for a problem initiated by the provider

When a provider initiates an episode or takes the initiative for the follow-up of an already existing episode of a health problem such as hypertension, obesity, alcoholism, or a smoking habit, it will be appropriate to code the reason for encounter as —501, encounter or problem initiated by provider. If the provider has advised the patient to come back for a control visit, this code is not to be used. Often the use of —102 "come for check" is the appropriate code.

Examples:

A patient presenting with a blocked ear due to earwax, which is removed. The provider measured his blood pressure (so not a RFE mentioned by the patient) and found it to be high, and the patient also receives advice about smoking. The patient's reasons for encounter and the related problems and treatment would be recorded as follows:

HS06 (plugged feeling in ear), HD66 (excessive ear wax), H204 (removal of earwax).

K501 (provider initiated), KS51 (raised blood pressure), K102 (checking of blood pressure).

P501 (provider initiated), PS14 (tobacco smoking problem), P203 (advice to stop smoking).

g. administrative reasons for encounter with the health care system include things such as examinations required by a third party (someone other than the patient), insurance forms which require completion, and discussions regarding the transfer of records.

Examples:

'*I need this medical insurance form completed*' (A601).

'*My fracture has healed, and I need a certificate to go back to work'* (L601).

Choosing the (sub)component from the Chapters

Diagnosis and problems from Chapter A – W

Only when the patient expresses the reason for encounter as a specific diagnosis or disease should it be coded in Component D from the Chapters A – W.

The reason for encounter of a patient who is known having diabetes but comes in complaining of weakness should not be coded to diabetes but to the problem expressed: '*weakness'* (AS04). However, if the patient states that he has come about his '*diabetes*' the diagnosis 'diabetes' should be coded as his reason for encounter (TD72 or TD71).

If the patient names a reason for encounter in the form of a diagnosis which the provider knows is not correct, the 'wrong' RFE of the patient is coded rather than the 'correct' one of the physicians; for example, a patient presenting with a reason for encounter of '*migraine*', when the provider knows it is tension headache, or a patient who is known to have nasal polyps presenting with '*hay fever*'.

Examples:

'*I am here because of my hypertension*' (KD73).

'*I come every month for the arthritis of my hip*' (LD78).

General rule

Rule

Classes from more than one component, or more than one class from the same component, can be used for the same encounter if more than one reason is presented by the patient.

Examples:

'*I've had abdominal pain since last night and I vomited several times*' DS01, DS10.

'*I have some abdominal pain and I think that I may have appendicitis'* DS06, DD72.

03 Standard for use of health problems and non-disease related care episodes

General rules for coding health problems and non-disease related care

Health problems

After anamnesis and physical examination, the health provider makes a diagnosis / assessment that indicates the care episode in which the encounter takes place. The diagnosis / assessment is the health provider's point of view. The episode label can be a symptom, a disease or problem, a problem in activity or participation or a non-disease related care episode such as visits related to need for immunization, to special screening examination and to public health promotion. The episode title can never be a process, intervention, function, or function related class.

To improve reliability of coding health problems using ICPC-3, almost all the classes have additional information classes as to guide their use: descriptions, inclusion and exclusion terms, index terms and sometimes coding hints and notes. These are explained in Chapter 4 of the book: ICPC-3 Manual and Classification.

General rules for coding health problems and non-disease related care episodes

Users are encouraged to register, during each encounter, the full spectrum of problems and care episodes managed in this encounter, including organic, psychological, social health problems, problems in activities and participation in the form of episode(s) of care. Registering should be at the highest level of diagnostic refinement for which the user can be confident, and which meets the description or inclusion for that class. In any data system it is necessary to have clear and specific criteria for the way in which health problems or episodes of care are registered. This applies particularly to the relationship between the underlying condition and manifestations when both may be available as classes in the classification and is best illustrated by an example:

A patient with ischemic heart disease may also have atrial fibrillation and resulting anxiety.

It should be policy to include as separate episodes of care manifestations which require different management, and in the above example; the atrial fibrillation and anxiety would be recorded as additional episodes of care.

Some electronic systems accept that problems be coded with an intervention/process code. **This is not recommended or correct.** Interventions always take place in an EoC and as indicated earlier, the care episode can e.g., relate to the need for immunization or screening. Interventions carried out in these episodes of care should be coded with the Intervention Codes in Chapter I - Interventions and Processes, not with the classes in Chapter A1.

General rules for coding health problems and non-disease related care -cont.-

In ICPC ***localization*** within a body system takes precedence over ***etiology***, so that when coding a condition which because of its etiology can be found in several chapters (for example, trauma) the appropriate chapter should be used.

All not health problem related care episodes e.g., family planning, prevention, routine examination etc. are listed in chapter A1.

- Chapter A (general) should be considered only if the site is not specified or if the disease affects more than two body systems.
- The Chapters B - W provide specific classes based on the body system or organ involved in the disease and the etiology.
- Conditions accompanying and affecting pregnancy, or the puerperium are usually coded to Chapter W, but a condition is not coded to Chapter W merely because the patient is pregnant; it should be coded to the appropriate class in the chapter representing the body system involved.
- All social problems, whether identified as a reason for encounter or as a problem, are listed in component (ZC) of Chapter Z.
- Problems in Participation and Activities are listed in Sub-component 2F0 of Chapter II.

Specific rules for coding health problems using inclusion criteria (see also Chapter 4 from the book: ICPC-3 Manual and Classification):

Rule 1

Coding of diagnoses should occur at the highest level of specificity possible for that patient encounter.

Rule 2

The description contains the information necessary to permit coding to that class.

General rules for coding health problems and non-disease related care -cont.-

Rule 3

Consult the description and inclusion after the diagnosis has been formulated. They are **not** guidelines for diagnosis, **nor** are they intended to be used as a guide to therapeutic decisions.

Rule 4

If the description and inclusion do not fit, search in the browser by entering the term(s) in the search box.

Rule 5

For those classes without a description, consult the list of inclusion and index terms in the class, and consider any exclusion terms.

Double Coding

Double coding is only advised for a few classes if recording the manifestation or cause is clinically important. For example, in the class FD67 it is recommended to also code the known causative agent, e.g. diabetes TD71 – TD72 or hypertension KD73 - KD74.

The double coding is advised in the *Note* of these classes.

In the ICPC-3 browser there is an option to search and select more than one code, including extensions of specific codes. These codes can be copied to the clipboard and pasted in a document or electronic system.

04 Standard for use of Functioning and Functioning Related

Enriching ICPC-3 with a Functioning perspective

With the classes from Chapter II it is possible to describe functioning and functioning related aspects of all persons (first and follow-up) contacts with the health care system in primary- and community care settings. The classes acquire meaning when the patient makes a statement about them, for example if the patient experiences a barrier in participation or a limitation in an activity. Or if the patient experiences a functioning problem (impairment) in his/her energy, memory, balance.

The classes from chapter II are person-related and do not relate to one EoC specifically. The registration of the Functioning and Functioning related classes can take place both inside and outside the EoC. All registered functioning classes must always be involved in the analysis of care episodes.

Functioning and Functioning Related together offer a descriptive ‘picture’, or ‘snapshot’ of the person at a certain moment in time. The relation between Functioning and Functioning Related and other components can only be understood in the broader context of the ICPC-3 Framework.

Selection of classes

The Functioning and Functioning Related items are a selected subset of categories from the WHO International Classification of Functioning, Disability and Health (ICF), which provides an overview of a person in a person-in-context approach, at a certain moment in time.
Where indicated in the references of the classes, a specific set of items is available in the form of a tool for the assessment of functioning (and disability). These sets can be regarded as implementations of ICF within a specific use case.

- In the first instance there is the World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) from WHO, which is available at www.psychiatry.org/dsm5. The WHODAS 2.0 is a general applicable tool for the assessment of difficulties due to health/mental health conditions. This assessment tool is advised to be used for the collection of disability data for adults aged 18 years and older.
- For specific use in primary health care settings the Primary Care Functioning Scale (PCFS) has been developed and validated for patients in primary care with chronic morbidity and multi-morbidity of 50 years or older. The PCFS is available at the ICPC-3.info website. The psychometric properties of the PCFS have been established and the PCFS can also be used as a valid reliable measurement instrument. Further research with the PCFS is needed to study whether the PCFS is also a feasible, efficient and practical instrument for use in the full domain of primary care [1,2].

04-2 Standard for use of Functioning and Functioning Related

Selection of classes - continued -

- In addition, the 'Arrêts de Travail en médecine générale à partir de la Classification Internationale de Fonctionnement' (ATCIF) has been developed for sick leave prescription. In many countries sick leave prescriptions are frequently used in primary health care/general practices. Using ICPC-3 for sick leave prescriptions, instead of the traditional medical approach, supports and changes the way health professionals and patients communicate in the work-related context.

The questions from these three questionnaires have been itemized as classes in the Chapter II and their use is encouraged whenever relevant, as separate items or scored with the WHODAS 2.0, the PCFS, or the ATCIF.

If greater detail on Functioning and functioning related aspects is required than that available within the presented selection of items, the WHO ICF should be consulted.
Access to ICF classification: http://apps.who.int/classifications/icfbrowser/

The Component Functioning

Functioning of a person can be defined by the complexity of components such as the physiological functions of body systems and psychological functions, anatomical features of parts of the body such as organs, limbs and their components and the execution of tasks or actions by an individual as such or the involvement of a person in a life situation.

Physiological functions of body systems and psychological functions are referred to as **Body Functions** (body and body-system level).

Anatomical features of parts of the body such as organs, limbs and their components are referred to as **Body Structures** (body-level).

Anatomical structures as such are not classified in ICPC-3. In ICPC-3 anatomical terms are harmonised with the Foundational Model of Anatomy (FMA), and therefor with the same terminology in the ICF and ICD-11.

Execution of tasks or actions by an individual are referred to as **Activities** (person-level).

The involvement of a person in a life situation is referred to as **Participation** (person-in-social context level).

The component Functioning - continued -

From the Primary Health Care point of view, Activities and Participation are the ***core part for shaping a person-centered approach***. This means that in ICPC-3 the Activities and Participation subcomponent comes first, followed by the Functions subcomponent.

When ICPC is used for registering the component Functioning **5 rules** apply:

Rule 1

The classes from the subcomponent **participation and activities** can be coded as RFE, EoC / problem, information connected to a RFE and EoC or as part of linked questionnaires. Without the value score these classes are of little significance in the context of functioning and should not be used to code functioning. It is necessary to ask about the degree of severity of the problem if the patient does not express it spontaneously.

Example:

'*I can't write, I can't hold my pen anymore*' 2F25 Fine hand use with the extension PSV.3 complete problem.

Rule 2

The classes in subcomponent **functions** from the component **functioning** can be used to further explore a RFE or complaint and may **not** be used as RFE or EoC. The complaint dizziness, tired, forgetful uttered by the patient is coded with the symptom and complaint classes from the organ systems and not with a function class. Although some class names in Functions overlap with class names in the Symptoms, complaints and abnormal findings component and refer to the same phenomenon, they serve a different purpose or role.

The component Functioning - continued -

Example:

'*I am dizzy*' RFE NS09.

Exploring dizziness by the **provider**: '*Is it a heavy sensation of rotating or of tilting*?

Patient: '*it is more rotating but not all the time*' 2F83 Dizziness with the extension PSV.1 mild/moderate problem.

'*Dizziness*' as an **impairment** (problem in a function: 2F83) can be used in a descriptive way to understand to what extent a person's experiences dizziness as a problem. Without coding the (level of) impairment, the dizziness is just a textual element, that is difficult to trace. Coding as a function makes the dizziness, and the changes in it, traceable, available for discussion, and countable.

The component Functioning Related

Functioning related factors describe the context in which Functioning takes place, and how functioning is executed. They are made up by the **environmental factors** the person lives in (the things outside the person) and the **personal characteristics** in which one person differs from another person. Personality Functions require the persons own perception and expression of, and as to which extent a personal characteristic plays a role in the context of the persons health.

Rule 3

The classes from the component **functioning related** are only used to further explore a RFE or complaint or an EoC / problem.

Example

'My daughter has COVID-19, what should I do to avoid becoming infected myself?' **RFE AP203, asking advice for the EoC/problem AP50 Contact with and exposure to communicable diseases.**

And if the provider wants to register the **living conditions** in the context of infection prevention the code 2R04 Housing should be used with a scale.

The component Functioning Related - continued -

Rule 4

Personality Functions should only be used if provided by the person her- or himself and with consent for use or re-use. It is **not** to express the health provider's opinion about the person.

Rule 5

The classes from the subcomponent **Environmental factors** ***are not intended*** to code sociodemographic and contextual data. Of course, it can be important to know whether someone lives alone, what profession he / she has, lives in poverty, etc. However, the meaning of this information is more “background” information, sociodemographic. It describes the context of the patient and has the same value as, for example, age, gender, country of birth, etc.

Examples

Not having a paid job does not mean that this is a problem for the patient.

If it is a problem for the patient the class code is ZC17 Unemployment problem.

To explore the unemployment problem the class 2F58 Remunerative employment with the extension scale can be used.

If it is not a problem the **ICPC-3 is not used** to register this information.

The component Functioning Related - continued -

Case history

A 31-year-old woman comes in the evening for an unscheduled visit. Patient "I have pain in my ankle". History: She had trauma in the morning. On examination, a swollen ankle due to an extensive hematoma. To rule out a possible malleolar fracture an X-picture is advised. The patient refuses. She is unemployed, belongs to a low social class, poorly educated and has no health insurance. Furthermore, she is a single mother, with a young daughter, aged 12 to look after. In the end the patient and her doctor agree to put a simple bandage on her ankle hoping that this will be enough to solve the problem.

Coding this encounter:

The RFE is LS15 Ankle symptom or complaint. During the physical examination code L102, there are findings that indicate a malleolus fracture. The diagnosis is a possible *malleolus fracture LD36* and the policy is not an X ray as you would expect, but only a *bandage L211*. In this context, the registration and coding of not being insured *2R19 extension FBV.6 Social security, full barrier* due to lack of money is an important factor that explains the policy.

In this case, the patient's context is extensively reported, *single mother, poorly educated, low social class, unemployed, etc*. All this information is not related with her refusal to have an X-picture taken. What is directly related to this is that she is uninsured due to lack of money. And this fact is important for the care offered in this care episode. The other personal context: single mother, poorly educated, low social class, unemployed is not coded.

Functioning assessment and the ICPC

In earlier version of ICPC the class **Limited function / disability —28,** was a standard rubric in every chapter but almost never used. Functional status measured with COOP/WONCA charts could be coded in this rubric with the addition of an extra digit [3]. But this approach was experienced as problematic since functional status relates to the patient as a whole and not to the health problem in one chapter specifically. The relationship became difficult to interpret in case there is more than one active problem, because comorbidity complicates the interpretation.

In the ICPC-3 classes from the Component Functioning and Functioning related of the ICPC-3 gives the health provider the opportunity to describe functioning and functioning related aspects of all persons (first and follow-up) contacts related to the patient. There are references indicated to questionnaires such as the PCFS, WHO-DAS 2.0 and ATCIF that can be used outside an encounter with a specific RFE or EoC. For instance, the PCFS can be used for all patients over 50 year with multi-morbidity, WHO-DAS 2.0 as a general applicable tool for the assessment of difficulties due to health/mental health conditions for adults and ATCIF for sick leave prescriptions. They are all different applications of ICF classes in the context of the ICPC-3.

Quality of life or overall well-being is not assessed with the ICPC-3. However as described above, it is possible to describe a person's health related functioning outside the EoC. In that way functioning becomes available during every encounter and can inform decision making, goal setting and outcome measurement.

References

1. S.A.E. Postma, K. van Boven, H. ten Napel, D.L. Gerritsen, W.J.J. Assendelft H. Schers, T.C. olde Hartman. The development of an ICF-based questionnaire for patients with chronic conditions in primary care, Journal of Clinical Epidemiology, 103 (2018) p92-p100, Elsevier, Accepted 7 July 2018; Published online.
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3. van Weel C, Konig-Zahn C, Touw-Otten F W M M, van Duijn N P, and Meyboom-de Jong B. Measuring functional health status with the COOP-WONCA Charts: a manual. CIP-Gegevens Koninklijke Bibiliotheek, The Hague, 1995

05 Standard for use of processes of care (interventions)

Process of care, interventions

ICPC can be used to code the interventions in the process of health care with almost all classes from Chapter I. However, Component 4 Results and some classes of Component 5, Consultation, referral, and other reasons for encounter namely, —501 and —502, cannot be used as an intervention. They *can* be used as a RFE.

The process classes are broad and general, rather than specific. For instance, a blood test (—105), even if relating to only one body system (e.g., cardiovascular, K105), may encompass a great variety of different tests such as enzymes, lipids, or electrolytes.

In Components 1, 2 ,6 and the part of Component 5 which can be used to classify the process of care, the class codes are standard throughout the chapters at the three-digit level. The alpha code of the correct chapter must be added by the provider who is doing the coding. Although procedures may not be used as EoC, there are nevertheless some exceptions and those are a limited number of rubrics in chapter W that contain procedures such as delivery and induced abortion.

The following rule for use of each component of Chapter I will reinforce the description of the classes of the components.

Rule

Whenever a code is shown preceded by a dash (—), select the chapter code from the chapters A-Z. Use chapter A when no specific chapter can be selected. All codes must begin with an alpha code to be complete. If the episode is a class from Chapter A1, use the component's two-digit alpha code instead of A1.

Example:

Biopsy will be coded —108, for *digestive system* **D**108, for *skin* **S**108, Medication prescribed will be coded as —201. A patient requesting *medication* for *asthma* **R**201. A patient requesting *medication* for *oral contraception* **AF**201.

The most important principle in the coding process is to code all those interventions which take place during the encounter and which have a logical relation to the episode of care. For more specificity a fifth digit may be introduced, see the examples or a linkage to ICHI.

Process of care, interventions - continued -

Example 1

- —207 Repair/fixation/suture/cast
- L207.1 Application of cast or the ICHI code PZX.LC.AH
- L207.2 Removal of cast

→ **L** stands for the **Component Musculoskeletal system**

Convention for coding: **L207.1**

→ **—207** stands for **Repair/fixation/suture/cast**

→ **.1** stands for **Application of cast (only)**

ICHI code → PZX.LC.AH = Application of cast and splint

Example 2

- —112 Diagnostic endoscopy
- D112 Diagnostic endoscopy of the digestive system
- D112.1 Gastroscopy or the ICHI code KBF.AE.AD

→ **D** stands for the **Digestive system**

Convention for coding: **D112.1**

→ **—112** stands for **Diagnostic endoscopy**

→ **.1** stands for **Gastroscopy (only)**

ICHI code → KBF.AE.AD = Gastroscopy

Process of care, interventions - continued -

More than one process code may be used for each encounter, but it is extremely important to be consistent. For instance, measuring the blood pressure, which is routine for hypertension, can be coded as K102 on every occasion. Routine examinations, complete or partial, both for body systems and for the general chapter must also be coded with consistency. Further on are examples of definitions for complete and partial examinations which have been used in one setting. However, it is essential that each country develops a definition of what constitutes a 'complete examination-general' and a 'complete examination-body system' for that culture and that these definitions are used consistently. This will ensure that what is contained in each 'partial examination-general' or 'partial examination-body system', in that country will also have consistency.

Definitions:

Complete examination

The term '*complete examination'* refers to an examination which contains those elements of professional assessment which by consensus of a group of local professionals reflects the usual standard of care. This examination will be complete regarding either the body system (e.g., eye, Chapter F) or as a complete general examination (Chapter A).

Partial examination

The term '*partial examination*' in any chapter refers to a partial examination directed to the appropriate specific organ system or function. When more than two systems are involved in a limited or incomplete examination it is designated general (Chapter A). Most encounters will include a partial examination to evaluate acute and simple illnesses or return visits for chronic illnesses. The following are examples:

Complete examination-general, general check-up: **A101**

Complete neurological examination: **N101**

Partial examination-general, limited check on several body systems such as respiratory and cardiovascular and neurological: **A102**

Partial examination-body system, measuring blood pressure: **K102**

Process of care, interventions - continued -

The following procedures are regarded by the WONCA Classification Committee as being *included in* routine examinations to be coded in rubrics —101 and —102 rather than coded separately:

- inspection, palpation, percussion, auscultation
- visual acuity and fundoscopy
- otoscopy
- vibration sense (tuning fork examination)
- vestibular function (excluding calorimetric tests)
- digital rectal and vaginal examination
- vaginal speculum examination
- blood pressure recording
- indirect laryngoscopy
- height/weight

All other examinations are to be included in other rubrics.

Component -1 Diagnostic and Monitoring interventions

A diagnostic intervention is a clinical intervention intended to diagnose and monitor a patient's disease, condition, or injury.

Component -2 Therapeutic and preventive interventions

Preventive procedures cover a wide range of health care activities including immunizations, screening, risk appraisal, education, and counseling. Coding treatment and medications is used to classify those procedures done on site by the primary care provider. It is not intended that it be used to document procedures done by providers to whom the patient has been referred, for which a much more extensive list of procedures would be required.

Process of care, interventions - continued -

Component -3 Programmes related to reported conditions

These care programmes consist of a combination of various interventions such as asking questions during anamnesis, blood- and urine tests, spirometry, advice, and policy options, performed in Primary Care practice.

In general several health professionals are involved in a 'programme'. This implies that a care plan needs to reflect the integrated approach of all health professionals involved. This could also be referred to as the bio-psycho-social way of working and thinking.

To understand exactly what has been done in the context of the programme, the separate interventions in Component -3 should be coded.

The programmes in Component -3 already are provided with a prefix for the Chapters they apply to.

Component -4 Results

Component -4 does not relate to process or interventions.

Component -5 Consultation, referrals and other reasons for encounter

Consultations and referrals to other primary care providers, physicians, hospitals, clinics, or agencies for therapeutic or counseling purposes, are to be coded in this component. Also encounters and problems initiated by the provider **—501** or by other than the patient or provider **—502** are to be coded with classes from this component.

For more specificity, a fifth digit or preferable linkages to locally used referral tables could be added, for example:

—503 Consultation with a primary care provider
- —503.1 Nurse
- —503.2 Physiotherapist

—505 Referral
- —505.1 Nurse
- —505.2 Physiotherapist

—506 Referral to specialist, clinic or hospital
- —506.1 Internist
- —506.2 Cardiologist

Process of care, interventions - continued -

Component -6 Administrative

This component is designed to classify those instances where the provision of a written document or form by the provider for the patient or other agency is warranted by existing regulations, laws, or customs. Writing a referral letter is only considered to be an administrative service when it is the sole activity performed during the encounter, otherwise it is included in Component 5. Writing a care plan can be coded here with the rubric code —602.

06 Standard for use of Regional extensions, Emergency - and Extension codes

Regional extensions (Chapter III)

Although the ICPC previously has been developed to provide a classification for Primary Health Care on an International level, supplementing or completing required data elements in The World Health Organisation (WHO) suite of International classifications, it is also recognized that particularly Regional and National Primary Health Care needs must be met. ICPC-3 has extended its content therefore to answer to national and regional coding needs.

In the same manner the core ICPC-3 codes are selected based on international frequency, the Regional Extension codes are based on the frequency of classes and codes in National and Regional Primary Care registrations. In addition, classes, and codes from the Global Burden of Disease (GBD) list, needed to achieve the addressing of a world-wide coverage of health problems, have been included in the Regional Extensions. At the moment there are Regional extensions for Africa, Europe, and South America. Other Regions will be available when indicated by a specific Region.

In case a request for a new code for a class is submitted by more than two (large) regions, this class, after a thorough update procedure, can be accepted as a 4-digit code in the core classification.

In principle the national or regional classes/codes are part of the Inclusion of a Core version class (chapters A1-II) of ICPC-3, where the 6-digit code is already presented.

It is encouraged to use the 6-digit code, whenever the specific inclusion term is used. This will prevent the need to invent national codes for terms already in the ICPC-3 and support exchange of data.

Examples:

'*Lassa fever*' AD14.05 in the African extension and visible in the core ICPC as inclusion in AD14

'*Scarlet fever'* AD24.09 in the European extension and visible in the core ICPC as inclusion in AD24

'*Zika virus disease'* AD14.08 in the South American extension and visible in the core ICPC as inclusion in AD14

'*Hepatitis B carrier*' AP80.01 in the African and South-American extension and visible in the core ICPC as inclusion in AP80

To prevent the same complaints and illnesses from being assigned different codes in the regional extensions, the application for a new regional code is centrally coordinated.

06-2 Standard for use of Regional extensions, Emergency - and Extension codes

Emergency codes (Chapter IV)

The chapter contains classes with codes for new diseases that can be used in emergency situations of epidemiological importance, given the risk of (national or international) spread of infections. These codes are aligned with ICD codes. In the current version of the ICPC-3, there are 9 empty classes available.

Extension codes (Chapter V)

Extension Codes are provided as supplementary codes or additional positions to give more detail or meaning to the initial code, if so desired. The Extension Codes are not to be used without an initial code. In the present version of ICPC-3 there are three categories of which two apply to specific classes; **Scale Value and Temporality**

Scale Value

Currently 5 categories are used in ICPC-3:

- *The Consent Scale Value (CSV)* is used by a patient or client to express the level of agreement concerning Personality Functions (2R3). Without these values, the Personality Functions (psychic stability, confidence etc.) have no specific meaning.
- *The Facilitator or Barrier Value (FBV)* is used by a patient or client to express the level as facilitator or barrier of classes that made up of the environment the person lives in (housing, sanitation, immediate family etc.).
- *Forced Expiratory Volume (FEV)* is a calculated ratio for the indication of the volume of air exhaled under forced conditions in the first second of expiration (FEV1). It is also called the persons' vital capacity in persons with Chronic Obstructive Lung Disease.

  GOLD criteria or severity scale is developed by the Global initiative for chronic Obstructive Lung Disease.
- *New York Heart Association (NYHA)*, a scale that provides a simple way of classifying the extent of heart failure.
- *The Problem Scale value (PSV).* In the ICPC-3 no distinction is made between having a problem with a function or an activity or participation (reading, driving, dressing).

For the Functioning components the scale values are expressed in terms of the value level of the problem. Using these values at a certain point in time or over a period, informs about actual Functioning situation or 'snapshot' of the person. The values can also be used for goal setting and in between evaluation of progress.

Extension codes (Chapter V) - continued -

Temporality

Course

When indicating the duration of a disorder, a distinction is made between diseases with an acute, subacute, and chronic course. The demarcation between the 3 categories is not clear. Usually, a period of 4 weeks is used for acute conditions (WONCA dictionary less than 4 weeks), sub-acute for the duration between 1 month and 3-6 months, and chronic for a duration of longer than 3 - 6 months (WONCA dictionary an illness or disability lasting 6 months or longer).[1]

Causality

Causality

Is presented in Chapter V for informative purposes only to address the causality of classes within a component. A number of these Class Kinds have been attributed a specific color which is shown in the Classification. The coloring is also used for the paper desk version to increase the informative value of the sheet. Causality will be indicated in terms of:

- infection
- neoplasm
- trauma
- congenital
- other diagnosis

Reference

1. Bentzen N (ed.). An international glossary for general/family practice. Fam.Pract. 1995; 12:341-369.

07 ICPC - Important Concepts

Episode of Care

The full spectrum of problems (including organic, psychological, and social), prevention, screening, immunization and family planning, managed by the provider are recorded in the form of episodes of care. Reasons for encounter, functioning, health problems, diagnoses, family planning, prevention and process of care and interventions shape the core of an episode of care consisting of one or more encounters, including changes in their relations over time ('transitions'). An episode of care, consequently, refers to all care provided for a discerned health problem, prevention, immunization and family planning in a particular patient. If the episode consists of three encounters, then the episode title (for all three contacts in that episode) is the diagnostic label at the end of the episode (i.e. final diagnosis). See Figure 1. Changes in the diagnostic label during the episode are relatively infrequent, especially in symptom episodes (episodes of care in which the highest classifiable code is a symptom, not a disease). The EoC allows for grouping of information over time. Healthcare providers can use this to improve continuity and coordination of care. The ability to collect data using the EoC also creates more insight into the processes related to certain conditions over time, and so a greater understanding of what is needed and the costs associated with the condition.

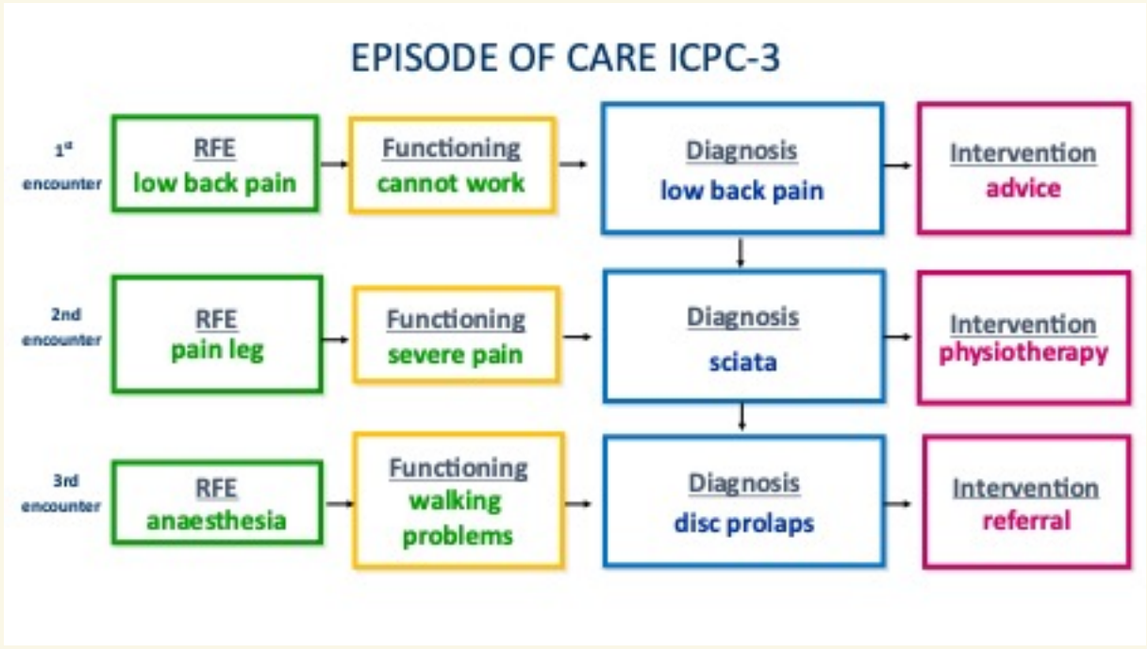

Figure 1

Symptom episodes

When the physician codes the episode of care as a symptom episode, this does not mean that the patient had a complaint about only one symptom within this episode. In a patient with the RFE 'tiredness', the physician takes the patient's history and examines the patient. During history taking the patient appears also to suffer from dizziness, trembling, and fatigued legs. The physician judges these complaints too belong to each other and chooses to label that episode with the episode title 'tiredness'.

08 Proposed structure for describing encounters

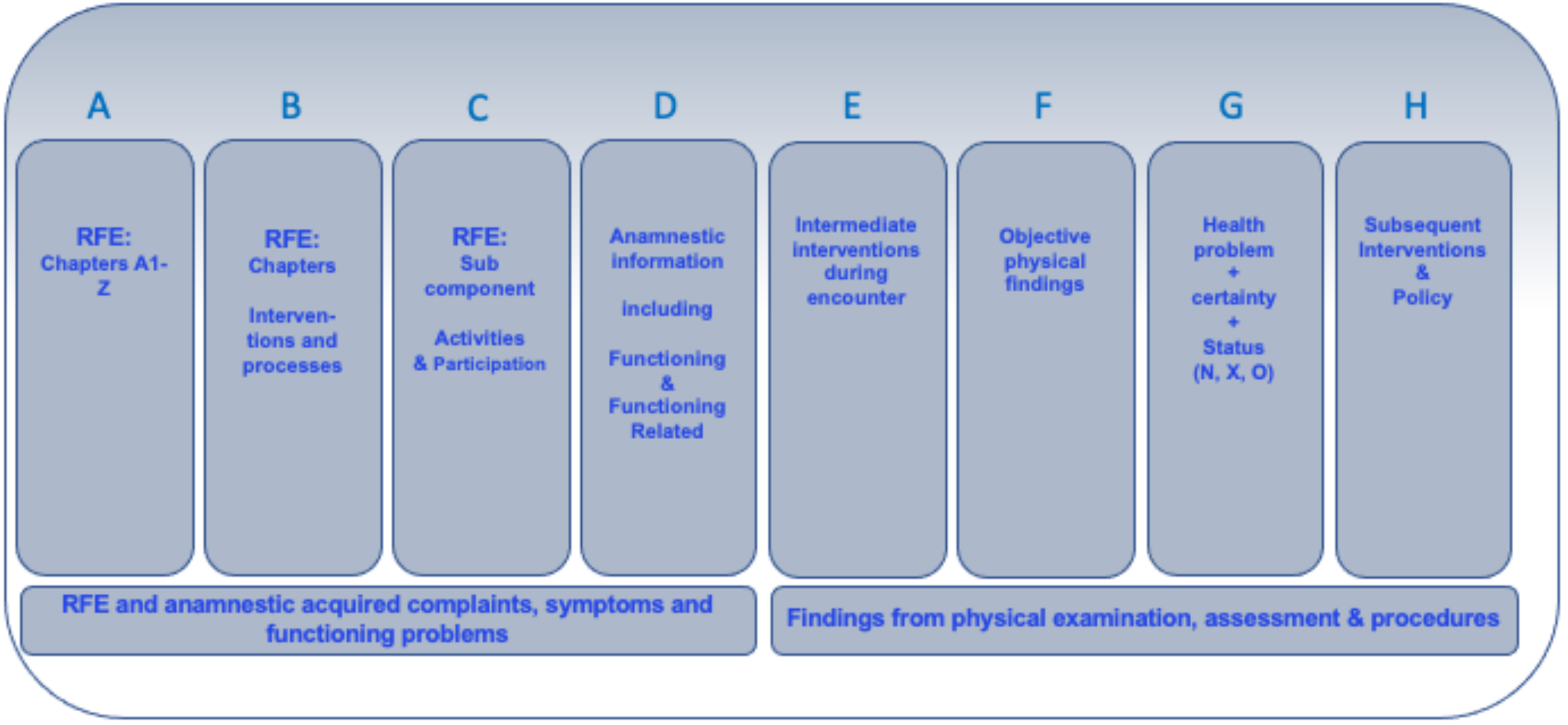

Figure 2. Proposed structure for describing encounters, an example how data in the core of a computer-based patient record can be coded with ICPC.

Proposed structure for describing encounters

Proposed structure - continued -

The original three basic elements of encounters to be coded with ICPC (**reason for encounter, health problem**, and **interventions**) enriched with a fourth element, **functioning and functioning related** have now been extended with eight data entry options (**A, B, C, D, E, F, G and H**) for computer-based patient records (Fig. 2). The reason for encounter is recorded in three sections: patient's symptoms and complaints, patient's requests for interventions and by the patient expressed limitations in activities and barriers in participation (**A, B and C**). Reasons for encounter in the form of symptoms, complaints or health problems / diagnoses should be distinguished explicitly from those in the form of requests for interventions such as a prescription, an X-ray, a referral, or advice and in the form of limitations in activities or barriers in participation. Why is this important: requests for a certain intervention are often followed by this intervention being performed: when patients ask for medication or a blood test, they often receive it. Since patients do actively influence the care provided by HP's, it is important to explicitly document this.

It seems useful for the future to also record the clinical anamnestic findings, including functions and functioning related information (**D**), separate from the RFE. All relevant classes can be used for this purpose. It should be noted that the ICPC-3 does not yet include a classification of objective physical findings by the HP (**F**).

Both new applications, coding anamnestic data and objective physical findings, could be included in the encounter and episode structure of a computer-based patient record.

The use of reasons for encounter and anamnestic data to estimate prior probabilities is clearly very useful. The difference *between* a symptom expressed by the patient as a reason for encounter *or* elicited by the physician is retained, and the probabilities can be calculated separately if required.

Processes of care are recorded as intermediate interventions (those occurring during the encounter, **E**) and, after the diagnosis or problem has been identified (**G**), as subsequent interventions (**H**). A diagnosis or problem could be identified as being 'certain', 'incidental' (*N* = New), 'prevalent' (*X* = first registration within an existing episode), or as a 'follow-up' (*O* = old problem). The difference between what in fact is being done by the health provider at the time of the encounter and what is expected to follow is important for the analysis of utilization data, inter-healthcare provider variation and application of guidelines. It also allows better understanding of the shift from prior probabilities in the first encounter of an episode of care to the posterior probabilities during follow-up.

For recording more specificity in interventions, not provided in ICPC-3, a more specific process classification can be used in addition and linked to ICPC. This could be ATC for —201 and —202, LOINC or a locally used list of laboratory tests, etc.

It is not feasible to include this level of detail in ICPC-3. Development of these relations is an ongoing activity.

End of Manual