Methodological guide for ICD-10 application

Interpretation of notations and abbreviations in the register of three-character items:

Parenthesis

Parenthesis is used to indicate synonyms, alternative expressions or interpretations. For example, "G91 Hydrocephalus".

"And" in titles

„And" stands for „and/or". For example, the entry "C40 Malignant neoplasm of bone and articular cartilage of limbs" shall be classified as malignant tumor of limb bone, malignant tumor of articular cartilage of limbs and malignant tumor of limb bone and articular cartilage of limbs.

"Unspecified"

This expression is intended for marking the "not otherwise specified" ("not specifically named") including non-specified and non-qualified. However, an unspecified term may occur in an item that represents a more specific type of condition. This is because in medical practice the most common form of a condition is the name of the condition itself, and only the less common types are classified separately. For example, aortic valve disease is used in place of non-rheumatic aortic valve disease. The encoder should apply the expression "unspecified" only if it is obvious that no information is available for the more accurate description.

"Not elsewhere classified"

"Not elsewhere classified", when it occurs in the title of a three-character item, indicates that certain specific occurrences of the condition in question are elsewhere in the classification. For example when using "J16 Pneumonia due to other infectious organisms, not elsewhere classified" you should be aware that in group X several other items are used to indicate pneumonia caused by the specified pathogen (ex.: J12–J15), but it can also be found in similar other Main groups (ex.: „P23 Congenital pneumonia").

Codes marked with an asterisk can always be used only as a supplement. This allows two codes to be used for diagnostic findings, the primary code denotes the disease in question, while its manifestation concerning a particular organ or localization, which is itself a clinical problem, should be provided with the additional code. This is needed when coding of the disease in question alone is not sufficient to meet the specific statistical criteria and secondary manifestations of that disease are important for health care.

Outside of starred codes there are **additional codes** for double coding that can more accurately describe the patient's condition. These items cannot be used for primary encoding either. These are the following:

- Group of items B95 - B98 (Bacterial, viral and other infectious agents) which, when necessary, are used to designate an infectious agent in diseases elsewhere classified. For example, cystitis from E. coli: the main condition is cystitis (N30), next to it additional code B96 indicates that the cause was E-coli infection.

- Two codes can be used to describe injury, poisoning or other harmful effects: a code from the XIX. Main group to indicate the nature of the injury and one from the XX. Main group to describe the external cause. Which code should appear as an addition depend on the purpose for which the data is being collected. In Death Statistics, the XX. Main group codes are preferred, while the XIX. Main group codes serve as supplement. For example, Fall on and from stairs and steps (W10), Fracture of femur (S72), W10 will be the primary reason that appears in the statistics. In Disease Statistics, however, the main state is derived from the XIX. Main group while the XX. Main group codes serve as supplement.
- Post-intervention disorders (E89, G97, H59, I97, J95, K91, M96, N99) cannot be used to encode the cause of death.

Rules and guidelines for mortality and morbidity coding

A brief description of the rules adopted by the WHO for the production of data on which death and health statistics are based.

Mortality statistics

To ensure international comparability of mortality data, the WHO provides guidance on data collection, coding and classification, and statistical reporting. Death records are collected on an International form of medical certificate of cause of death in accordance with international standards. Medical issues of the death certificate are divided into two parts: in the I. part must be listed the chain of diseases directly leading to death, in the second part the non-directly related, but contributing ones. The certificate shall contain all additional information needed to accurately codify the cause of death.

During **death cause coding**, an ICD code must be assigned to each of the items mentioned in the death certificate. Mortality statistics reports a single death cause for each dead person, no matter how many items were reported on the certificate. This is the underlying cause of death, which must be selected by applying international rules. There are two distinct steps for choosing the underlying cause of death. The first step is to determine the starting point, the disease or event that triggered the chain of events leading to death. The next step is to check if there is any specific guidance regarding the starting point. If so, the next step is to modify the starting point defined in step one.

How to determine the underlying cause of death:

1.) Determination of starting point:

Step SP1: If there is only one item on the certificate either in the I. or II. part, this is the starting point of death. The selection continues with step M4.

Step SP2: Only one completed line in the I. part of the certificate.

- If part I. of the certificate contains only one line but includes two or more items, the first mentioned item is the starting point.
- If only one item is reported in part I and one or more items are listed in part II, the item in part I is the starting point. The selection continues with step SP6.

Step SP3: **(General Principle)** If there are multiple items in part I of the certificate and each item is said to be caused by the first item of the bottom row of part I, then the first item of the

bottom row of part I is the starting point. The item first registered in the bottom row caused all those above, there is no need for causation to exist between the items above the bottom row. The selection continues with step SP6.

Step SP4: **(Selection Rule 1.)** The first mentioned item of the bottom line of part I does not explain the ones above, but there is a sequence that ends in the first state of part I. If the certificate contains more than one sequences, the starting point of the first sequence shall be sought. The selection continues with step SP6.

Step SP5: **(Selection Rule 2.)** If there is no sequence ending in the first item of part I, the first item of Part I is the starting point. The selection continues with step SP6.

Step SP6: **(Selection Rule 3.)** It should be checked that the starting point identified in steps SP1 through SP5 could not be obviously caused by another reason from the certificate. If the starting point is in part I, then this other reason should be searched in the same row or below or in part II. If the starting point is in part II then this other reason is in this part as well. Even with a newly defined starting point, must be checked that there is no item in the same row or below that could have been the obvious cause. This step must be repeated until you find a starting point for which there is no other obvious cause in the certificate. The selection continues with step SP7.

Step SP7: Must be checked whether the starting point is a badly defined condition. If the starting point determined in steps SP1 through SP6 is a well-defined condition, then step SP8 follows.

If the starting point determined in steps SP1 through SP6 is ill-defined, then:

- if all the death causes on the certificate are wrongly determined then step M1 follows.

- if there is at least one condition on the certificate that is not ill-defined, you need to go back to step SP1 and look for another starting point as if the ill-defined condition would not be on the certificate.

The ill determined condition affects the encoding: in this case, the ill-defined condition is ignored when determining the starting point but consider it when coding other conditions.

Step SP8: Must be checked whether the starting point is an implausible death cause. If the starting point determined in steps SP1 through SP7 is not an implausible one then step M1 follows.

If the starting point determined in steps SP1 through SP7 is an implausible death cause, then:

- if all death causes on the certificate are improbable ones, then step M1 follows.
- if death was caused by the complication of treatment of the selected improbable cause, the complication of treatment is the new starting point.
- if complication was caused by the selected improbable death cause, the improbable death cause must be accepted as starting point (unless the complication is an ill-defined death cause) then step M1 follows.
- if the complication caused by the selected improbable death cause is an ill-defined condition we need to return to step SP1 and search for another starting point.
- if there is no treatment and no complication of the selected improbable death cause , we need to go back to step SP1 and search for another starting point.

2. Modification of starting point:

Step M1: Must be checked if there is any coding specification regarding the starting point identified in steps SP1 through SP8.

- If so, the new starting point should be established accordingly.
  This new starting point should then be checked for specific requirements. Step M1 must be repeated as long as there is a modifying coding instruction. The selection continues with step M2.
- If not, the selection continues with step M2

Step M2: It should be checked that the starting point established in steps SP1 through SP8 and M1, also has a denomination in the certificate that more accurately reflects the nature of the condition.

- If so, the more precisely defined condition will be the starting point. It should then be checked that the new starting point cannot be further specified. So step M2 must be repeated as long as there is clarification for the selected condition. The selection continues with step M3.
- If not, the selection continues with step M3.

Step M3: the repeat of steps SP6, M1 and M2: must be checked if the starting point selected in steps SP1 through SP8 and steps M1 and M2 is different from the starting point selected in steps SP1 through SP8. If it differs and there is not the consequence of another reason, then steps SP 6, M1 and M2 need to be repeated.

Step M4: These regulations apply for medical procedures, intoxication, major injury and maternal death.

If the starting point selected through steps SP1-SP8 and M1-M3 is surgery or other medical procedure then we use the manual code method.

If the starting point selected through steps SP1-SP8 and M1-M3 belongs to the XX. Main group of ICD the determination of main injury is needed.

Instruction for coding multiple causes of death

Multiple (complex) death cause coding allows deeper analysis of this topic. This can be used to investigate, for example, serious but avoidable complications of underlying cause of death or the effect of co-occurring conditions on the course of disease. Therefore, during death cause coding besides the underlying cause, multiple death codes must also be recorded.

Health Statistics

Morbidity data are available from diseases that have received medical treatment. Patient records generated during the care event include a diagnosis of the patient's health. Medical history and symptoms are also documented during the pre-diagnosis examination. Health statistics report one medical condition for each medical treatment, no matter how many diseases are included in the patient documentation. This is the main condition that must be selected by the doctor who is treating the patient. It is also advisable to record other conditions related to medical care.

During **coding**, an ICD code must be assigned to the diseases, underlying conditions and other conditions listed in the patient documentation.

ICD defines pathological health conditions but an additional classification is the ICF (International Classification of Functioning Disability and Health) which includes the classification of functional and disability associated with pathological health condition.

OENO (International Classification of Procedures in Medicine) serves to identify medical procedures and activities in Hungary. The rules governing the use of the nomenclature are laid down in regulations on terms and conditions for eligibility for benefits which are financed by the Health Insurance Fund.