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ICD-10

Specified or Unspecified?

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Coding Specificity - Overview

The use of "unspecified" codes has been a common topic of discussion in the industry. There seems to be a consensus that the use of these codes is bad and should be avoided. There is a sense that unspecified codes will corrupt the reliability of the data we compile based on these codes. While it is true that we should be as specific as possible to assure the best quality information, most of the discussions around unspecified codes don't really get at what "unspecified" means relevant to codes let alone when they should or shouldn't be used.

- Does the use of codes with 3-4 characters mean that they are less specified than codes with 7 characters?
- Does the use of the term "unspecified" mean that the code is not specific to the nature of the condition as observed?
- Is "not elsewhere classified" unspecified?
- Does specificity require more than one code?

Despite the fact that we make broad statements about not allowing or limiting the use of unspecified codes, we first need to understand what the concept of "unspecified" means in ICD-10.

ARE ICD-10 CODES MORE SPECIFIC?

There is a common assumption that ICD-10 is much more specific or detailed than ICD-9, but there are some exceptions.

Example: ICD-9 codes related to tuberculosis in general contain significantly more detailed information per code than ICD-10 codes.

- *01885 (ICD-9) - Other specified miliary tuberculosis, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically*

vs.

- *A198 (ICD-10) - Other miliary tuberculosis*

Example: Fractures of the skull coded in ICD-9, contain considerably more detail per code than similar codes in ICD-10.

- *80024 (ICD-9) - Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, with prolonged [more than 24 hours] loss of consciousness and return to pre-existing conscious level*

vs.

- *S020XXA (ICD-10) - Fracture of vault of skull, initial encounter for closed fracture*

There are other examples where ICD-9 codes used individually contain more detailed medical concepts than individual ICD-10 codes, but in general ICD-10 codes usually do include more detail.

WILL ICD-10 FORCE GREATER SPECIFICITY?

While it is generally believed that ICD-10 will require greater coding specificity, there are still many unspecified codes that providers could use within the selection of more specified codes.

Example: While ICD-10 provides the specificity of laterality, the coder could elect to not specify the side of the body

- *S52101A - Unspecified fracture of upper end of right radius, initial encounter for closed fracture*
- *S52102A - Unspecified fracture of upper end of left radius, initial encounter for closed fracture*
- *S52109A - Unspecified fracture of upper end of **unspecified** radius, initial encounter for closed fracture*

Example: ICD-10 provides specificity to anatomical sites, but the coder could elect not to specify the detail location or specify the site at all.

- *C7A020 - Malignant carcinoid tumor of the appendix*
- *C7A021 - Malignant carcinoid tumor of the cecum*
- *C7A022 - Malignant carcinoid tumor of the ascending colon*
- *C7A023 - Malignant carcinoid tumor of the transverse colon*
- *C7A024 - Malignant carcinoid tumor of the descending colon*
- *C7A025 - Malignant carcinoid tumor of the sigmoid colon*
- *C7A026 - Malignant carcinoid tumor of the rectum*
- *C7A029 - Malignant carcinoid tumor of the large intestine, **unspecified** portion*
- *C7A00 - Malignant carcinoid tumor of **unspecified** site*

While there are a number of examples of coding options where some level of specificity is enforced, in many situations, the code selection could be as vague in ICD-10 as in ICD-9.

MORE CODES, MORE SPECIFICITY?

Coding specificity is also more than just the detail of any given code. Specificity of the patient condition may require multiple codes to accurately illustrate the nature of the patient condition as completely as possible. For example, an injury may include codes related to the nature of the fracture, the cause of the accident, the location of the accident, comorbid conditions, associated injuries to tendons and ligaments or other associated injuries or complications of injuries in order to capture the more complete nature of the patient injury condition. More codes however, do not improve specificity

if they are redundant or at times contradictory to other codes used for the patient condition.

Specified vs. Unspecified

Getting to a definition of "unspecified" is a challenge. It may be tempting to define "unspecified" as some might define quality; "You know it when you see it". For the purpose of this paper however, "unspecified" will be defined as;

> Coding that does not fully define important parameters of the patient condition that could otherwise be defined given information available to the observer (clinician) and the coder.

Getting at the idea of "unspecified" becomes a bit more complex given this definition. Nonetheless, it does provide a more rational way to assess coding quality and completeness than broad statements about "unspecified codes". If we understand the parameters of what makes coding specific or unspecific (vague) then we should be able to assess the level of specificity with some degree of objectivity.

"UNSPECIFIED" VS "OTHER"

Traditionally ICD-9 has differentiated between "not otherwise specified" (NOS) and "not elsewhere classified" (NEC). In ICD-10 these two concepts are described as "unspecified" or "other"/ "other specified". In theory there is a difference, but for the data user, the details of the condition are unknown regardless of the choice.

Example: In looking at the following codes, it can be seen that there are a number of coding options including unspecified.

- *D640 (ICD-10) - Hereditary sideroblastic anemia*
- *D641 (ICD-10) - Secondary sideroblastic anemia due to disease*
- *D642 (ICD-10) - Secondary sideroblastic anemia due to drugs and toxins*
- *D644 (ICD-10) - Congenital dyserythropoietic anemia*
- *D6481 (ICD-10) - Anemia due to antineoplastic chemotherapy*
- *D6489 (ICD-10) - Other specified anemias*
- *D649 (ICD-10) - Anemia, unspecified*

In this example, "other specified" indicates that the anemia is not one of the categories listed above. In practice, coding frequently uses "other specified" and "unspecified" somewhat interchangeably. In the end, the data user does not know the specifics of the condition regardless of the choice of "unspecified" or "other specified".

WHICH CONCEPTS ARE UNSPECIFIED?

The combination nature of ICD-10 codes results in the inclusion of multiple medical concepts within the same code. Because of this a code can be very specific about a number of concepts, but unspecified about others. If we look at all ICD-10 codes over one third contain the term "Unspecified" within the description, but they may be more specific than other codes that do not contain the term "Unspecified".

Example: The following represent examples of some codes that include unspecified concepts in some areas but specified concepts in others.

- *S82202F – **Unspecified fracture** of shaft of left tibia, subsequent encounter for open fracture type IIIA, IIIB, or IIIC with routine healing*
    - In this case the type of fracture is unspecified but other aspects of the fracture are specified to a significant level of detail
- *S82199J - **Other fracture** of upper end of **unspecified tibia**, subsequent encounter for open fracture type IIIA, IIIB, or IIIC with delayed healing*
    - In this case the fracture is listed as "Other" and the laterality of tibia is listed as "Unspecified"
- *M84669G - Pathological fracture in **other disease, unspecified tibia and fibula**, subsequent encounter for fracture with delayed healing*
    - In this case the fracture type is defined but the cause is "other disease". It is not specified if the fracture involves the tibia, the fibula or both and the side involved is not specified, but other aspects of the encounter and healing level are specified.
- *O16.9 - **Unspecified** maternal hypertension, **unspecified** trimester*
    - In this case the type of maternal hypertension is unspecified and the trimester is unspecified

What's unspecified in these combination codes could be any number of the many concepts that belong to the combination code. In many instances the word "unspecified" or "other" is not used, but nonetheless the code leaves a number of potentially specifiable concepts undefined when the could be defined more completely with other codes selections.

WHEN ARE SPECIFIED CONCEPTS NOT VERY SPECIFIC?

The ultimate question comes down to; "Does the code reflect as accurately and precisely as possible the patient's condition or the services performed to maintain or improve that condition?" To get to this question we need to get past the notion that the use of codes that don't include the term "unspecified" or that have a greater number of characters necessarily implies greater specificity.

Example: Some codes that are only 3 characters are very specific while some that are 7 characters are very vague.

- *J60 - Coalworker's pneumoconiosis*
    - Both the type of pulmonary condition and the cause are quite specific even though there are only 3 characters
- *S069X9A - **Unspecified** intracranial injury with loss of consciousness of **unspecified duration**, initial encounter*
    - Even though this include seven characters, the nature of the injury and the duration of consciousness is not specified

Example: In some instances the use of "and" which can mean "and" or "or", creates a less than specific description of the nature of the injury.

- *M84439A - Pathological fracture, **unspecified ulna and radius**, initial encounter for fracture*
    - In this code, the type of pathologic fracture and the side are unspecified and additionally whether the fracture involved the ulna or the radius or both is also not specified
- *M84532A - Pathological fracture in neoplastic disease, left ulna, initial encounter for fracture*
    - In this code the type of pathologic fracture, the side of the body and the specific bone involved are all specified

Example: In many instances the description code may be very non-specific even though the word "unspecified" is not used

- *C7641 - Malignant neoplasm of right upper limb*
    - In this code, the type of neoplasm is not specified and even though the side of the body is specified, the location is only specified as somewhere in the upper limb
- *E088 - Diabetes mellitus due to underlying condition with **unspecified complications***
    - In this code the type of diabetes is not specified, the underlying condition is not specified and the complication is not specified but only the complication is described as "unspecified"

When is Less Specific Appropriate?

While some might state that "unspecified" codes should never be used, the concept of what is and is not specified is difficult to define. Additionally there are legitimate uses of less specified codes when the clinical information that is needed to be more specific has yet to be discovered or the observer does not have the level of skills needed to provide precise condition classification. Forcing coders to use a "specified" code, may result in the unintended consequence of creating misinformation that assumes something is true when there is no real evidence to support that level of specificity. A

number of providers will claim that they pick codes that are specific because the payer requires them even though they do not have sufficient data to support the more specific diagnosis they are coding. As a result the patient may be mislabeled with a condition that does not represent his or her real condition. Even if subsequent transactions report the correct diagnostic code, the previous diagnosis that was incorrect, persists in the historical data.

APPRORIATE USE OF NON-SPECIFIC CODES

As noted above there are some times that non-specific codes are appropriate and necessary to preserve the integrity of data.

Example: A patient is seen in a physician's office with complaints of upper abdominal pain that has been present intermittently for several months. Findings at that time are non-specific and the patient is referred for further work up of the conditions including laboratory studies and abdominal x-rays. At the time the patient is seen, an "unspecified" code is appropriately used.

- *R1010 - Upper abdominal pain, unspecified*
    - Considering the level of information available to the physician, this code would be more appropriate than a code that guesses at the fact that the patient may have cholecystitis or some other specific diagnosis, simply to report a more specific code.

Example: A primary care physician sees a child in the office and determines that the patient has had an apparent fracture of the forearm, but is uncertain of the type. There is a level of specificity that should be expected and a level that may not be expected given the level of training of the primary care physician in fracture diagnosis and treatment.

- *S5291XA - Unspecified fracture of right forearm, initial encounter for closed fracture*
    - In this case the physician has specified which side, that there is a fracture of the forearm, that the fracture is closed and but has not extended the description to the specific anatomical nature of type of the fracture

After referral to an orthopedic surgeon, the specialist comes up with a more specific code, based on his specialty knowledge of fracture diagnosis.

- *S52371A - Galeazzi's fracture of right radius, initial encounter for closed fracture.*
    - This code indicates that the fracture involved the shaft of the radius and included a dislocation of the distal radioulnar join as part of the fracture pattern.

INAPPRORIATE USE OF NON-SPECIFIC CODES

While there are a number of instances where less specificity is appropriate due to the nature of the information or knowledge of the clinician, there a many codes where it is difficult to justify the use of less specified codes.

Example: For codes that provide the option for left, right or unspecified side, any observer should be able to document right vs. left.

- *H02531 - Eyelid retraction right upper eyelid*
  - The clinician should be able to code the side and in this case whether it is the upper or lower lid
- *H02539 - Eyelid retraction **unspecified** eye, **unspecified** lid*
  - There is little justification for the use of this code since the specific eye and eyelid should be known to the clinician treating the patient

Example: In almost all cases the clinician should be able to document if the condition is acute or chronic.

- *J9601- Acute respiratory failure with hypoxia*
- *J9612 - Chronic respiratory failure with hypercapnia*
- *J9690 - Respiratory failure, **unspecified**, **unspecified** whether with hypoxia or hypercapnia*
  - There is little justification of the use of this code since the clinician should know if the patient's condition is acute or chronic and in most instances, if hypoxia or hypercapnia is present

Example: In most instances the type of neoplasm, anatomy and laterality should be identified

- *C4092 - Malignant neoplasm of **unspecified** bones and articular cartilage of left limb*
  - In this case the laterality is specified as left, but the nature of the malignant neoplasm, and more specific anatomical location is not defined
- *C4090 - Malignant neoplasm of **unspecified** bones and articular cartilage of **unspecified** limb*
  - In this case even the side involved is not specified.

Example: A number of codes represent very vague "disorders" that should be better defined.

- *D729 - Disorder of white blood cells, **unspecified***
  - There is little justification for the use of this code since the nature of the white blood cell disorder should be known in most cases.
- *E079 - Disorder of thyroid, **unspecified***
  - Similarly the nature of the thyroid should be known at some level of detail for the clinician to treat the patient.

- *E619 - Deficiency of nutrient element,* ***unspecified***
    - Rarely should this code be used since the nature of the nutritional deficiency should be known at some greater level of specificity

Example: There are many instances where the location should be specified at greater detail than in the code examples illustrated below

- *G9520 - Unspecified cord compression*
    - Both the nature of the cord compression and site should be defined
- *I809 - Phlebitis and thrombophlebitis of* ***unspecified site***
    - The site of the vascular condition should be defined
- *M2420 - Disorder of ligament,* ***unspecified site***
    - Both the nature of the ligament disorder and the joint involved should be defined
- *S59919D -* ***Unspecified injury*** *of* ***unspecified forearm****, subsequent encounter*
    - Both the nature of the injury and the site should be better defined particularly considering this is a subsequent encounter for the injury
- *Z969 - Presence of* ***functional implant, unspecified***
    - In this case both the nature of the location and type of implant should be defined

Measuring the Level of Specificity

THE GOAL OF CODING SPECIFICITY

Better coding specificity requires clinical documentation that includes the definition of specific medical concepts that are important to good patient care first, and coding requirements second. There is rarely an instance where documentation to support ICD-10 coding is not a part of information needed to support good patient care. Assuming good documentation is available, the codes should capture the important aspects of the patient condition that are needed to reflect the patient's condition in data as accurately as possible.

- More accurate and specific codes are critical to:
    - Proper claim processing and payment
    - Proper evaluation of quality and appropriateness
    - Consistent and reliable data for trending, stratification and comparisons
    - Assessment of patient safety
    - Evaluation of effectiveness and efficiency
    - Surveillance to identify potential population health risks
    - Understanding variable patterns of utilization
    - Establishing outcome markers

- Accurately defining causation, risk, severity, complexity, co-morbidities, complications and other important characteristics about patient conditions

ASSESSING DOCUMENTATION AND CODING SPECIFICITY

High quality healthcare data, regardless of use or purpose, requires high quality documentation and high quality coding. As noted, a key part of the quality of these codes is based on the degree to which they define the important specifics of the patient condition. Based on the prior discussion, for any instance of care, it may be challenging to understand if the code is more or less specific or even the level of specificity that should be required given the nature of the patient's evaluation and the provider evaluating the patient. Individual audits of each record can be time consuming and require considerable skill to make this assessment. There is however a reasonable way to identify comparable coding specificity patterns within larger sets of data by creating and measuring a specificity index.

ANALYSIS OF CODING SPECIFICITY THROUGH THE USE OF A "SPECIFITY INDEX"[1]

At a high level the "Specificity Index" involves the scoring of codes based on the level of specificity of the code. A higher or lower score (index value) is applied based on the degree to which the code(s) specify the important medical concepts about the patient's condition. While for any given patient or any given provider there may be considerable appropriate variability in the "Specificity Index", for a larger group of patients with similar conditions and similar provider taxonomies, there should not be a large variation in the average specificity score. Additionally for certain conditions like trauma, additional codes should be used on average to specify cause and location. The degree to which these codes are used in these conditions can also be measured and compared over larger data sets and against similar conditions and provider types.

Varying provider index values can help identify opportunities for improvement in specific clinical domains and potentially provide a basis for incentivizing documentation performance. While detailed audits will always be needed, the resource effort, cost, obtrusiveness and controversy around the audits could be minimized by focusing efforts based on analysis of specificity index comparison, normalized by clinical domains and provider types.

[1] A subsequent HDC paper will go into a bit more detail about the concept of the creation of the "Specificity Index". This paper will provide an analysis of coding patterns based on ICD-9 data from a 3 year payer set as well as examples of how the index value are created and defined.

Summary

Coding specificity is critical to assure that data about health care represents an accurate reflection of patient conditions and the procedures, goods or services required to improve or maintain those conditions. It is important to understand what "unspecified" means however in order to improve data quality and avoid the use of more specific codes for payment purpose rather than to reflect the patient condition as accurately as can be determined at any point in time.

There is no justification for "coding for payment". Documentation and coding should only represent the realities of the patient condition based on the assessment by the clinician, and only at the level supported by the assessment and the documentation of the details of that assessment.

This paper provides a perspective on the concept of "Unspecified" and introduces a proposed approach to measuring coding specificity.