Working Groups

Recommendations for coding Basis of Diagnosis

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Registries may choose to record all of the notifications which they receive for a given cancer case (including date, source, and basis of diagnosis). This permits calculations of the number of notifications per case, number of sources per case, and the number of death certificate notifications (DCN).

However, for comparison between registries, and as a measure of Validity, only the "most valid basis of diagnosis" is required.

The suggested codes are hierarchical, so that the higher number represents the more valid basis, and should thus be used for this purpose.

If there is no information on how the diagnosis had been made (information obtained from an automated source, for example) the code 9 (Unknown) should be used. Such cases are excluded from calculations of the percentage of cases diagnosed clinically, microscopically, by death certificate alone, etc.

Table 1

CODE	DESCRIPTION	CRITERIA
0	**Death Certificate Only**	The only information to the registry is from a death certificate.
Non Microscopic		
1	**Clinical**	Diagnosis made before death, but without the benefit of any of the following (2-7)
2	**Clinical investigation**	To include all diagnostic techniques, including x-ray, endoscopy, imaging, ultrasound, exploratory surgery (e.g., laparotomy) and autopsy, without a tissue diagnosis.
4	**Specific tumour markers**	To include biochemical and/or immunological markers which are specific for a tumour site (Table 2).
Microscopic		
5	Cytology	Examination of cells whether from a primary or secondary site, including fluids aspirated using endoscopes or needles. Also to include the microscopic examination of peripheral blood films and trephine bone marrow aspirates.
6	Histology of a metastasis	Histological examination of tissue from a metastasis, including autopsy specimens.
7	Histology of a primary tumour	Histological examination of tissue from the primary tumour, however obtained, including all cutting techniques and bone marrow biopsies. Also to include autopsy specimens of a primary tumour.
9	Unknown	

Table 2

Specific tumour markers	
Human Chorionic Gonadotrophin (HCG)	In diagnosis of choriocarcinoma (usually >100,000 iu in urine)
Prostate Specific Antigen (PSA)	In diagnosis of prostate carcinoma (usually >10 µg/l serum)
Alphafetoprotein (AFP)	In diagnosis of hepatocellular carcinoma (usually >200 ng/ml serum)
Catecholamine degradation products (HVA, VMA)	In diagnosis of neuroblastoma
Elevated serum immunoglobulins	Myeloma (IgG >35g/l or IgA > 20g/l) Waldenström's macroglobulinaemia (IgM > 10g/l)
Urinary immunoglobulins	Myeloma (light chain excretion > 1g/24hr)

"Specific" histology codes in absence of microscopic verification

The ICD-O M code is not allocated for the purpose of specifying the basis of diagnosis. However, it would be extremely unlikely (or impossible) for some specific morphological diagnoses to have been made without a histological (or cytological) examination.

Registries may therefore wish to establish some internal consistency checks, so that the combination of morphology codes 8001 - 9989 and basis of diagnosis code 0-4, or 9 are flagged for verification. However, certain combinations are exceptions to this general rule, as shown in Table 3.

Table 3

Combinations of specific morphology codes, and non-microscopic basis of diagnosis codes, which are considered acceptable

MORPHOLOGY		Most Valid	Other criteria
Code	Description	Basis	
8800	(Sarcoma NOS)	2	
9590	Lymphoma NOS	1 or 2	
9800	Leukaemia NOS	1 or 2	
8720	Melanoma	1 or 2	
9140	Kaposi's sarcoma	1 or 2	HIV positive (exc. Africa)
8960	Nephroblastoma	2	Age 0-8
9100	Choriocarcinoma	4	Female, and age 15-49
9500	Neuroblastoma	2 or 4	Age 0-9
9510	Retinoblastoma	2	Age 0-5
9732	Myeloma	4	Age 40+
9761	Waldenström's macroglobulinaemia	4	Age 50+
8170	Hepatocellular carcinoma	4	
8150-8154	Islet cell tumours, gastrinomas	4	
9380	Glioma	2	C71.7 (brain stem)

9384/1	Subependymal giant cell astrocytoma	2	Tuberous sclerosis patient
9530-9539	Meningioma	2	C70
9350	Craniopharyngioma	2	
8270-8281	Pituitary tumours	4	C75.1

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