

Field Epidemiology Training Program

Cancer Curriculum: Principles of Cancer Registries

**In-class Exercise:
Coding and Data Abstraction**

FACILITATOR GUIDE



In-class exercise Module 3: Coding

The exercise is divided in 3 parts: (I) Basic coding, (II) Intermediate coding, and (III) Study cases.

PART I: Basic Coding with ICD-O

Use the ICD-O-3 (book/pages) to identify the corresponding codes for site and morphology and complete the Tables I-III.

I. Basic Morphology Coding

| No | ICD-O-3 Site Code | ICD-O-3 Morphology Code | Morphology |
|----|-------------------|-------------------------|--|
| 1 | | 8140/3 | Adenocarcinoma, NOS |
| 2 | | 8070/3 | Squamous carcinoma in situ |
| 3 | | 8130/3 | Grade ii papillary urothelial carcinoma |
| 4 | | 8500/3 | Infiltrating duct carcinoma |
| 5 | | 9401/3 | Infiltrating anaplastic astrocytoma |
| 6 | | 9698/3 | Follicular lymphoma, grade 3 |
| 7 | | 8148/2 | Prostatic intraepithelial neoplasia, grade 3 |
| 8 | | 9962/3 | Idiopathic hemorrhagic thrombocytopenia |
| 9 | | 9761/3 | Waldenstrom macroglobulinemia |
| 10 | | 9270/1 | Odontogenic tumor |

II. Basic Topography Coding

| No | ICD-O-3 Site Code | ICD-O-3 Morphology Code | Topographic Site |
|----|-------------------|-------------------------|---|
| 11 | C18.0 | | Cecum |
| 12 | C42.1 | | Bone marrow |
| 13 | C16.0 | | Esophagogastric junction |
| 14 | C70.0 | | Cerebral meninges |
| 15 | C53.9 | | Cervix uteri |
| 16 | C50.6 | | Male breast, axillary tail |
| 17 | C77.8 | | Lymph nodes of axilla and scylene region |
| 18 | C76.0 | | Preauricular region |
| 19 | C71.7 | | Pontine angle |
| 20 | C26.8 | | Overlapping lesion of stomach and small intestine |

III. Basic Site and Morphology Coding

| No | ICD-O-3 Site Code | ICD-O-3 Morphology Code | Site and Morphology |
|----|-------------------|-------------------------|---|
| 21 | C50.9 | 8500/3 | Infiltrating duct carcinoma of breast |
| 22 | C42.1 | 9861/3 | Acute myelogenous leukaemia |
| 23 | C16.9 | 8490/3 | Signet ring adenocarcinoma of stomach |
| 24 | C01.9 | 8071/3 | Keratinizing squamous carcinoma, base of tongue |
| 25 | C34.9 | 8010/3 | Bronchogenic carcinoma |
| 26 | C44.5 | 9140/3 | Kaposi sarcoma, trunk |
| 27 | C71.1 | 9440/3 | Frontal lobe: glioblastoma multiforme |
| 28 | C75.1 | 8281/3 | Mixed acidophil-basophil carcinoma |
| 29 | C32.0 | 8052/3 | Squamous vocal cord papilloma |
| 30 | C09.9 | 9591/3 | Tonsillar B-cell lymphoma |
| 31 | C48.0 | 9050/3 | Retroperitoneal mesothelioma |
| 32 | C64.9 | 8312/3 | Renal cell carcinoma |
| 33 | C71.9 | 9470/3 | Medulloblastoma of brain |
| 34 | C40.2 | 8812/3 | Periosteal fibrosarcoma of lower leg |
| 35 | C44.9 | 8730/3 | Noninvasive amelanotic melanoma, face and forearm |

PART II: Intermediate Coding with ICD-O

Use the ICD-O-3 (book/pages) to identify the corresponding codes for site and morphology and complete the following table.

| No | ICD-O-3 Site Code | ICD-O-3 Morphology Code | Diagnosis |
|----|-------------------|-------------------------|---|
| 1 | C25.0 | 8500/3 | Poorly differentiated ductal carcinoma, head of pancreas |
| 2 | C73.9 | 8021/3 | Femoral metastases from anaplastic thyroid carcinoma |
| 3 | C54.9 | 8811/3 | Myxofibrosarcoma of corpus uteri |
| 4 | C07.9 | 8940/1 | Mixed tumor of uncertain behavior, parotid gland |
| 5 | C71.7 | 8000/1 | Infratentorial brain tumor (clinical diagnosis) |
| 6 | C44.6 | 8832/3 | Dermatofibrosarcoma of upper arm |
| 7 | C80.9 | 8001/3 | Malignant cells in pleural effusion |
| 8 | C22.1 | 8160/3 | Cholangiocarcinoma |
| 9 | C53.9 | 8077/2 | CIN III, cervix with microinvasion |
| 10 | C17.2 | 9699/3 | MALT lymphoma of ileum |
| 11 | C50.8 | 8503/3 | Infiltrating duct carcinoma, papillary type, 9:00 position, left breast |
| 12 | C44.9 | 9700/3 | Generalized mycosis fungoides |
| 13 | ----- | ----- | Odontogenic primordial cyst, second molar |
| 14 | C34.1 | 9827/3 | Adult T-cell lymphoma, right upper lobe of lung |
| 15 | C76.5 | 9364/3 | PNET (primitive neuroectodermal tumor) of thigh |
| 16 | C49.3 | 9130/3 | Malignant angioendothelioma, pulmonary artery |
| 17 | C15.2 | 8074/3 | Sarcomatoid squamous carcinoma of middle and abdominal esophagus |
| 18 | C62.9 | 9101/3 | Mixed terato- and choriocarcinoma, testis |
| 19 | C57.8 | 8462/1 | Papillary serous cystadenoma of borderline malignancy, involving ovary and fallopian tube |
| 20 | C34.1 | 8255/3 | Mixed Clara cell and large cell carcinoma, right upper lobe |
| 21 | C42.1 | 9732/3 | Multiple myeloma present in ilium, humerus, and calvarium |
| 22 | C50.9 | 8523/3 | Intraductal carcinoma, cribriform and comedo types, left breast |
| 23 | C06.9 | 8720/3 | Large malignant melanoma of lower gingival and retromolar trigone |
| 24 | C67.9 | 8120/3 | Urothelial carcinomas of dome, trigone and lateral wall of bladder |
| 25 | C70.0 | 9534/3 | Malignant angiomatous meningioma of frontal lobe |

PART III: Study Cases

We provide a series of cases to abstract the relevant information and register in the cancer registry, if appropriated.

Case Study 1

Staff of Mansa District Population-based Cancer Registry (PBCR) is collecting the cancer cases information of Mansa area. He comes across the following record in XXX Hospital, Bhatinda.

| | |
|------------------------|--|
| Name of the patient | Mrs. PQR |
| Address | A-34, Near District Administration office, Bhatinda District, Punjab State |
| Age and sex | 35 y/o female |
| Hospital record Number | AD-30 |
| Referred by | Dr. ABC |
| History | Case of brain cancer diagnosed on 15 June 2015 Histopathology report – Astrocytoma Grade II Patient completed RT on 18 July 2015 |
| Diagnostic test | Routine follow up test CT Scan - No evidence of disease – 1 Sept 2015 |
| Follow-up | Request follow-up after three months |

Question 1: Does this case belong to Mansa PBCR?

This case is not from the Mansa PBCR because the patient address is from the Bhatinda district. Address and residence confirmation is an important factor for case registration.

Question 2: What is the most valid basis of diagnosis?

Histopathology report.

Question 3: What is the primary site of this case?

Primary site- Brain cancer

Histopathology- Astrocytoma

Case Study 2

Staff of a rural cancer registry—Barshi PBCR —is collecting the cancer cases information of Barshi area. He comes across the following record in XXX Hospital, Barshi.

| | |
|------------------------|--|
| Name of the patient | Mrs. SSS |
| Address | At Post – Khandvi – Tal Barshi |
| Age and sex | 35 y/o female |
| Hospital record Number | AC-1954 |
| Referred by | Dr. ABC |
| History | PAP Smear Report - 1 Feb 2014 Sq Cell Carcinoma , Early stage - Ia Patient returned to clinic after six month with Stage IIIb, underwent biopsy on 12 August 2014 Biopsy report - Sq Cell Carcinoma Grade II |
| Treatment | RT Completed 30 Fra on 15 Sept 2015 |
| Diagnostic test | Routine follow up test |
| Follow-up | Request follow-up after three months |

Question 1: Does this case belong to Barshi PBCR?

Case is from Barshi area, so we should take this case as residence of Barshi.

Question 2: What is the date of diagnosis?

Date of diagnosis is 1 Feb 2014 based on PAP smear report.

Question 3: What is the clinical stage of the disease?

Clinical stage is Ia (first seen at hospital).

Case Study 3

Staff of Chandigarh PBCR is collecting the cancer cases information of Chandigarh residence. He comes across the following record in XXX Hospital, Chandigarh.

| | |
|------------------------|---|
| Name of the patient | Mrs. SSS |
| Address | 12, Arju Society – Sector 12 Chandigarh |
| Age and sex | 35 y/o female |
| Hospital record Number | CM-12233 |
| Referred by | Dr. ABC |
| History | H/O Lumpectomy |

| | |
|-----------|--|
| | Lumpectomy 28 Feb 2010 Infl ductal cancer |
| Treatment | Patient underwent MRM 7 Mar 2010 MRM report – Inf. Lobular carcinoma, 1 out of 9 nodes show mets |
| Follow up | Follow up on 15 April 2010, 15 Aug 2010, 12 Dec 2010 Request follow up after three months No follow up information after 12 Dec 2010 |

Question 1: Does this case belong to Chandigarh PBCR?

Yes, the patient's address is from Chandigarh.

Question 2: What is date of diagnosis?

Date of first diagnosis is 28 Feb 2010, based on the lumpectomy.

Question 3: There is no follow up information after 12 Dec 2010. What will be the last date of contact for survival analysis?

Patient's last visit to the hospital was 12 Dec 2010, so this the last date of contact.

Case Study 4

Staff of Gadchiroli PBCR is collecting the cancer cases information of Gadchiroli residence. He comes across the following record in XXX Hospital, Nagpur.

| | |
|------------------------|---|
| Name of the patient | Mr. MMM |
| Address | Village – ABC, Gadchiroli |
| Age and sex | 50 y/o male |
| Hospital record Number | Y-12314 |
| Referred by | Dr. ABC |
| History | No information |
| Radiology report | CHEST X-ray 1 June 2015 Chest X ray showed scatter small nodular densities on both lung fields, more on the bases Heart, diaphragm and sinuses unremarkable Pulmonary mets |
| Follow-up | No further information |

Question 1: Does this case belong to Gadchiroli PBCR?

Yes, address is from Gadchiroli.

Question 2: What is date of diagnosis? What is the primary site of this case?

Date of diagnosis is 1 June 2015. Primary site is unknown. X-ray is the basis of diagnosis. No other information is available.

Case Study 5

Staff of PBCR Sangrur interacted with medical officer XYZ and he came to know about death of a cancer case in village XXX. He went and met relatives of diseased. A relative burned all the medical records and they were not willing to share any information. One educated person from family told that he was having food pipe cancer and was diagnosed six month ago. He was diagnosed at Medical College XXX. We do not have hospital record number.

Question 1: Should this case be included as a cancer death?

Yes, this case should be included in the cancer deaths.

Question 2: What is the most valid basis of diagnosis of this case?

The case is diagnosed on the relative remarks after the death of the patient (Verbal autopsy narration /Death certificate only).

Case Study 6

Staff of Mansa District PBCR is collecting the cancer cases information of Mansa residence. He comes across following record in XXX Hospital, Bhatinda.

| | |
|------------------------|--|
| Name of the patient | Mr. YYY |
| Address | A- 4, Shivlik Society - Mansa |
| Age and sex | 55 y/o male |
| Hospital record Number | AM-12324 |
| Referred by | Dr. ABC |
| History | Patient attend opd with neck node on 1 Jan 2015 Patient underwent FNAC: FNAC report – Sq cell Carcinoma |
| Treatment | Patient completed RT on 9 Feb 2015 Patient took 6 cycles of CT Patient completed CT |
| Follow up | 30 Aug 2015 – Patient underwent CT – No evidence of disease - advices follow up after three month |

Question 1: What is the primary site of disease?

Neck node- primary unknown.

Question 2: What is the most valid basis of diagnosis?

Cytology- FNAC

Case Study 7

Staff of Mansa District PBCR is collecting the cancer cases information of Mansa residence. He comes across the following record in XXX Hospital, Bhatinda.

| | |
|------------------------|--|
| Name of the patient | Mrs. BBB |
| Address | A- 6- Shivam Society –Buldhala - Mansa |
| Age and sex | 55 y/o female |
| Hospital record Number | AM-12324 |
| Referred by | Dr. ABC |
| History | Patient with neck node – FNAC Report Adenocarcinoma Grade II – Date 3 July 2015 Slides were sent to PGI, Chandigarh for second opinion PGI Report - Adenocarcinoma in situ – Dated 10 July 2015 |
| Treatment | RT + CT Completed |
| Follow-up | Routine follow up test Patient was called on 15 Sept 2015 for further follow-up |

Question 1: What is the primary site of disease?

Neck node- primary unknown.

Questions 2: Would you will include this case in the cancer registry?

The case is reported as adenocarcinoma in situ. We will not include this case as per the rule of the registry. We only register invasive cancer cases.

Case Study 8

Staff of XXX District PBCR is collecting the cancer cases information of XXX residence. He comes across the following record in XXX Hospital.

| | |
|------------------------|---|
| Name of the patient | Ms. YYY |
| Address | Flat No 26, Shivner Plaza, Paud Road Pune |
| Age and sex | 20 y/o female |
| Hospital record Number | AX-12121 |
| Referred by | Dr. ABC |
| History | K/C/O Of Hodgkin Lymphoma – Post Chemo evaluation – diagnosed in 2014 CT cycle completed PET CT Report - December 2014 No evidence of any significant metabolically active lymphadenopathy noted. No evidence of any metabolically active disease noted |

Question 1: What is the primary site of disease and date of diagnosis?

Primary site: Lymph Node (Based on Hodgkin Lymphoma report). Standard practice is that you have to interact with the treating physician as well you have visit the pathology department to see the details of the pathology report based on file number of the patient.

Question 2: How will you collect the other variables information required for the registry?

Since there is no other information available, we need to visit the patient at her house and collect all the necessary information.