HIM-2530: ONCOLOGY TREATMENT AND CODING

Cuyahoga Community College

Viewing: HIM-2530 : Oncology Treatment and Coding

Board of Trustees:

March 2021

Academic Term:

Fall 2021

Subject Code

HIM - Health Information Management

Course Number:

2530

Title:

Oncology Treatment and Coding

Catalog Description:

This course covers treatment and management of cancerous diseases. Includes identification and coding of surgical treatments, radiation treatments, chemotherapy treatments, immunotherapy treatments, hormonal treatments, alternative, palliative and experimental treatments, and other treatment coding. Clinical Trials with coding and monitoring also discussed.

Credit Hour(s):

3

Lecture Hour(s):

3

Requisites

Prerequisite and Corequisite

BIO-2600 Pathophysiology, and departmental approval: admission to Cancer Registrar Post-Degree Certificate program.

Outcomes

Course Outcome(s):

Differentiate between curative and palliative cancer treatments.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Define and compare curative and palliative cancer treatment
2. Give examples and explain technique used for different curative treatments for cancer diagnoses.
3. Differentiate which treatments are curative and which treatments are palliative.
4. Given a clinical scenario, explain why a treatment would be considered palliative or curative
5. Given a clinical scenario, predict which patients are likely to receive a curative treatment and which are likely to receive a palliative treatment
6. Give examples and explain techniques used for different palliative treatments for cancer diagnoses.
7. List examples of curative cancer treatments.
8. Construct a list of treatments by disease site which have a curative intent.
9. Record examples of palliative cancer treatments.
10. Construct a list of treatments by disease site which have a palliative intent.
11. Utilize communications skills to gather information about cancer treatment resources.
12. Identify quality internet resources that provide guidance on specific cancer treatments.
13. Verbalize what strategies to use to gather further information about a specific cancer treatment.
14. Discuss what strategies to use to gather further information about a specific cancer treatment.

Course Outcome(s):

Identify surgical techniques used in the treatment of cancerous diseases.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Cite examples of surgical techniques used in the treatment of cancerous diseases.
2. Formulate a list of cancer sites where endoscopic surgery may be used in cancer treatments
3. Compose a list of cancer treatment surgical procedures that can be performed using robotics.
4. Compare the differences between laparoscopy procedures and open surgical procedures used in cancer treatments by cancer site
5. Compose a list of primary cancer sites where RFA or laser ablation are options for treatments
6. Identify the primary sites cryosurgical procedures may be used as cancer treatments.
7. Describe Natural Orifice Transluminal Endoscopic Surgery and explain its uses in cancer treatments
8. Describe Robotic Surgical procedures and explain its use in cancer treatments
9. Describe and differentiate between radiofrequency ablation (RFA) procedures and laser ablation and explain its use in cancer treatments
10. Describe cryosurgery procedures and explain its use in cancer treatments

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Course Outcome(s):

Identify and describe different methodologies in radiation therapy

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Describe image-guided radiation therapy and explain its uses in cancer treatments
2. Describe stereotactic and linac radiosurgery radiation therapy and explain its use in specific cancer treatments
3. Differentiate between GammaKnife and CyberKnife radiation therapy and explain the uses in cancer treatments
4. Describe external-beam, proton-beam, orthovoltage, hyperthermia, 3-D radiation therapy, conformal radiation therapy, brachytherapy and total-body radiation therapies and give examples of the different cancers that would be treated with each therapy
5. Explain the different radioisotopes used in radiation therapy and provide examples of neoplasms or cancerous conditions in which each would be applied.
6. Describe how radiation therapy is used in cancer treatments.
7. Cite primary sites in which stereotactic radiosurgery may be used for cancer treatment.
8. Describe stereotactic radiosurgery.
9. Create a list of radioisotopes and identify the primary site that is the target of the cancer treatment
10. Differentiate between intracavitary and interstitial brachytherapy.
11. Define hyperthermia and how it is used in radiation cancer treatments
12. Name and describe radiation therapy procedures and explain the different modalities for delivery in cancer treatments.
13. Compare intensity-modulated radiation therapy to conventional radiation therapy used in cancer treatments.

Course Outcome(s):

Identify and differentiate between the multitude of systemic therapies for cancer treatment

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Describe chemotherapy and identify the different types of chemotherapy agents used to treat neoplasms and explain the various routes of administration of these agents in attacking the neoplasms.
2. Explain biologic therapy, also known as immunotherapy or biologic response modifiers (BRMs) and identify the different types used in treating cancers
3. Explain the use and frequency of "targeted therapy" as a systemic therapy.
4. Identify the different hormones used in hormone therapy and the types of cancers treated with this modality.
5. Describe bone marrow transplantation therapy and explain its use in specific cancer treatments
6. Describe Complementary and Alternative Medicine practices use in the treatment of cancer
7. Describe support services, multimodality treatment, neoadjuvant therapy, and adjuvant therapy practices use in the treatment of cancer patients
8. Explain the use of Clinical Trials in the research related to cancer treatment and the involvement of patients in these trials.
9. Select different primary sites and list different types of chemotherapy agents used to treat cancer of these sites.

10. Specify the routes by which chemotherapy agents may be given.
11. Explain the differences between hormonal therapy, chemotherapy and immunotherapy for cancer treatment.
12. Explain the mechanism of action of biologic therapy, also known as immunotherapy or biologic response modifiers (BRMs).
13. Formulate a list of immunotherapy agents / biologic agents and identify the different primary site cancers they are used to treat.
14. Explain what is meant by targeted therapy and how it is classified.
15. Name five targeted therapies and the primary cancer that they are used to treat.
16. Compose a list of system therapies in categories of hormonal therapy, chemotherapy, and immunotherapy, and more.
17. Identify the different hormones used in hormone therapy and the types of cancers treated with each modality.

Course Outcome(s):

Identify and describe different modalities of radiation therapy.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Course Outcome(s):

Effectively utilize multiple manuals and resources for identification and coding of chemotherapy, immunotherapy, surgical procedures and hormone drug identification and for treatments of cancer and the disease itself.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Efficiently utilize the Surveillance, Epidemiology, and End Results (SEERs) manual.
2. Efficiently utilize the **ST**andards for **O**ncology **R**egistry **E**ntry (STORE) manual to correctly code drugs used in chemotherapy, radiation therapy, immunotherapy, hormone therapy and surgical procedures used in the treatment of neoplasms.
3. Effectively utilize the most recent editions of the **ST**andards for **O**ncology **R**egistry **E**ntry (STORE) manual and the Surveillance, Epidemiology, and End Results-Interactive Antineoplastic Drugs Database (SEER-Rx) to correctly code chemotherapy, radiation therapy, immunotherapy, and hormone therapy.
4. Identify and properly assign coding for multiple oncology therapies.
5. Effectively utilize the Standards for Oncology Registry Entry (STORE) manual and the SEER Program Coding and Staging manual, and the Hematopoietic and Lymphoid Neoplasm Coding Manual to correctly code surgical procedures for cancer
6. Discuss source documents for coding based on various reporting entities such as state central registries, the National Cancer Database (NCDB) system, or the Surveillance, Epidemiology, and End Results (SEERs)
7. Articulate communication resources and use to clarify documented chemotherapy, immunotherapy, hormonal therapy and radiation therapy treatment information.

Methods of Evaluation:

1. Discussion assignments in person or online
2. Glossary assignments
3. Cancer and diagnostic activities utilizing the internet
4. Quizzes, writing assignments, and a final examination.

Course Content Outline:

1. Identification and description of multiple oncology treatments
   a. Chemotherapy
   b. Immunotherapy
   c. Hormonal Therapy
   d. Radiation Therapy
      i. External beam
         1. Orthovoltage
         2. Cobalt-60
         3. Cesium-137
         4. Protons
      ii. Electrons
      iii. Neutrons

      iv. IMRT
      v. 3-d/Conformal
      vi. Stereotactic radiosurgery
         1. Linac radiosurgery
         2. Gamma knife
      vii. Brachytherapy
         1. LDR
         2. HDR
         3. Interstitial
         4. Intracavitary
      viii. Radium
      ix. Radioisotopes
         1. Iodine-131
         2. Phosphorus-32
      x. Strontium-89
      xi. Other
    e. Targeted Therapy
    f. Other Treatment
    g. Hematologic transplant and endocrine procedures
2. Coding of oncology treatment using most recent edition of Facility Oncology Registry Data Standards (FORDS) and Surveillance, Epidemiology, and End Results-Interactive Antineoplastic Drugs Database (SEER-Rx).
    a. Coding Instructions
      i. Chemotherapy
      ii. Immunotherapy
      iii. Hormonal Therapy
      iv. Radiation Therapy
      v. Other treatment
      vi. Palliative care
3. Utilization of SEER Rx for chemotherapy, immunotherapy, and hormone drug identification
4. Discuss importance of clinical trials, follow up and monitoring of cancer patients.
    a. Clinical Trials
    b. Follow-up/Monitoring
      i. Cancer Status
      ii. Recurrence
      iii. Vital Status
      iv. Follow-up source
      v. Date of last contact

Resources

Menck, Gress, Griffin, Mulvihill, Hofferkamp, Johnson, Pearson. (2021) *Cancer Registry Management: Principles and Practices*, Dubuque:Kendal Hunt Publishing.

National Cancer Institute. (2021) *Surveillance, Epidemiology, and End Results (SEERs) manual.*, https://seer.cancer.gov/tools/codingmanuals/2021manual.html

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National Cancer Institute. *Surveillance, Epidemiology, and End Results-Interactive Antineoplastic Drugs Database (SEER-Rx) manual.* {ts '2014-12-30 00:00:00'}.

Resources Other

Various internet websites for conducting research

National Cancer Staging website: https://cancerstaging.org/Pages/default.aspx

American College of Surgeons website: https://www.facs.org/

National Cancer website: http://www.cancer.gov

CTR Guide to Coding Radiation Therapy Treatment in the Standards for Oncology Registry Entry (STORE) manual

National Cancer Institute. SEER Program Coding and Staging manual.https://seer.cancer.gov/tools/codingmanuals/2021manual.html

National Cancer Institute. Surveillance, Epidemiology, and End Results-Interactive Antineoplastic Drugs Database (SEER-Rx). https://seer.cancer.gov/tools/codingmanuals/2021manual.html

North American Association of Central Cancer Registries Site Specific Data Items Manual - https://apps.naaccr.org/ssdi/list/2.0

Grade Coding Instructions and Tables https://www.naaccr.org/wp-content/uploads/2020/08/Grade-Manual_v-2.0.pdf?v=1601681042

Site-Specific Data Items Manual https://www.naaccr.org/wp-content/uploads/2020/08/SSDI-Manual_v-2.0.pdf?v=1606594157

Resources Other Various internet websites for conducting research National Cancer Institute

Hematopoietic and Lymphoid Neoplasm Database -https://seer.cancer.gov/seertools/hemelymph/

Hematopoietic and Lymphoid Neoplasm Coding Manual –

https://seer.cancer.gov/tools/heme/Hematopoietic_Instructions_and_Rules.pdf

SEER Rx - https://seer.cancer.gov/seertools/seerrx/

American College of Surgeons website

AJCC Staging - American College of Surgeons website - https://cancerstaging.org/references-tools/deskreferences/Pages/Cancer-Staging-Forms.aspx

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