

## PEDIATRIC CANCER REGISTRATION CURRICULUM

*To provide a scalable solution for initial and continuing education, we developed a customized pediatric cancer registry curriculum for personnel in these settings to support the launch of the hospital-based, SJCARES Pediatric Cancer Registry. The curriculum has four broad learning objectives: a) explain what a cancer registry is and its purpose; b) state the importance of cancer registration and follow-up in fighting cancer; c) describe cancer registration operations; d) apply coding and staging standards for cancer registration.*

### **Structure:**

- Hosted via Cure4Kids as virtual classroom.
- **Five module Data Abstraction and Introductory Course to Pediatric Oncology and Medical Terminology** developed for data entry specialists with limited medical background.
  - For more information on the data abstraction and introductory course, use this link: <https://www.cure4kids.org/ums/home/portal/>

**Curriculum:** **Pediatric cancer registry course** consists of seven modules, 20 lessons, and 59 learning objectives:

### □ **Module 1: Introduction to Cancer Registration**

#### **(1) Lesson 1: Purpose, Design, Types of, and Uses for Cancer Registries**

##### **Objectives:**

- Describe what a cancer registry is designed to do (purpose)
- List the different types of cancer registries
- Compare the purposes of different types of cancer registries
- Outline the uses of cancer registry data in research and cancer control
- Explain the importance of each type of cancer registry and how they can integrate to improve public health

### □ **Module 2: Cancer Registry Basics**

#### **(1) Lesson 1: Cancer Classification**

##### **Objectives:**

- Explain why cancers are classified
- List the different systems of cancer classifications
- Describe the relationships between different classification systems for coding and presentation purposes
- State how the interpretation of the data would vary based on the type of classification used

**(2) Lesson 2: Data Elements**

**Objective:** List the essential data elements that are collected by cancer registries

**(3) Lesson 3: Data Sources**

**Objectives:**

- Identify the multiple sources of information to correctly register a childhood cancer case
- State different scenarios where the integration of multiple sources of information are necessary to obtain the most accurate information

**(4) Lesson 4: Determining Class of Case**

**Objectives:**

- Define the concepts of analytic and non-analytic cases
- Critique the implications of miscategorization when class of case is incorrectly assigned

**(5) Lesson 5: Quality in Data Collection**

**Objectives:**

- Identify determinants of data quality
- Define the difference between quality assurance and quality control
- Identify the three types of errors
- Apply strategies to improve data quality

**Module 3: Coding Rules for Cancer Registration**

**(1) Lesson 1: Rules for Topography**

**Objectives:**

- Locate the topography coding rules for ICD-O
- Apply the rules for topography coding using ICD-O
- State common mistakes when coding cancers related to topography using ICD-O

**(2) Lesson 2: Rules for Morphology**

**Objectives:**

- Locate the morphology coding rules for ICD-O
- Apply the rules for morphology coding using ICD-O
- State common mistakes when coding cancers related to morphology using ICD-O

□ **Module 4: Staging**

**(1) Lesson 1: The Importance of Pediatric Cancer Staging**

**Objectives:**

- Explain why cancer staging is important to understanding cancer outcomes
- State the reasons why multiple childhood cancer staging systems exist
- Identify what types of information are used to stage a case
- Describe how accurate cancer staging can affect decisions for cancer treatment

**(2) Lesson 2: The Toronto Guidelines**

**Objectives:**

- Explain why the Toronto Guidelines for childhood cancer staging were developed
- Locate resources to help implement the Toronto Guidelines
- Apply the Toronto Guidelines to appropriately stage common childhood cancers

**(3) Lesson 3: Staging for Pediatric Cancer**

**Objectives:**

- Explain how the TNM cancer staging system works
- State the common pediatric cancer-specific staging systems
- Identify resources to help with childhood cancer staging assignment

□ **Module 5: Treatment**

**(1) Lesson 1: Types of Treatment Modalities**

**Objectives:**

- Explain the principles of cancer therapy
- State the three major modalities to treat childhood cancer
- Explain considerations that go into determining how to treat cancer

**(2) Lesson 2: Chemotherapy in Cancer Treatment**

**Objectives:**

- Describe basic principles of how chemotherapy treats cancer
- Explain the difference between chemotherapy and supportive care medication
- Identify resources for determining why a medication is being used

**(3) Lesson 3: Radiation and Surgical Therapy**

**Objectives:**

- Explain the principles of radiation treatment
- State different types of common surgical sub-specialties involved in a childhood cancer treatment

#### (4) Lesson 4: Determining Palliative Intent

##### Objectives:

- Explain the difference between palliative and curative intent of cancer treatment
- Identify whether a patient is receiving therapy for palliation or curative intent

#### □ **Module 6: Follow-Up**

##### (1) Lesson 1: Types and Methods of Follow-Up (Common Scenarios)

##### Objectives:

- State the reason follow-up is important for cancer registration
- Explain the difference between active and passive follow-up
- Discuss the advantages and disadvantages of both types of follow-up
- Identify the different sources of information used for each method of follow-up

##### (2) Lesson 2: Understanding Lost-to-Follow-Up and Abandonment

##### Objectives:

- Explain the definition of childhood cancer treatment abandonment
- Explain the definition of lost-to-follow-up
- Identify the implications of misclassification between lost-to-follow-up and abandonment

##### (3) Lesson 3: Cause of Death

##### Objectives:

- State the reason cause of death is an important variable to capture
- Apply basic principles for cause of death reporting

#### □ **Module 7: Measuring Health Events in Cancer Epidemiology**

##### (1) Lesson 1: Common Health Outcomes in Cancer Epidemiology

##### Objectives:

- List the common events measured in cancer epidemiology
- Explain how the occurrence of health events in cancer epidemiology are measured
- Differentiate between overall cancer survival and event-free survival

##### (2) Lesson 2: Implications of Registry Data on Health Policy and Cancer Control Planning

##### Objectives:

- Describe the roles of hospital and population-based cancer registries for cancer surveillance
- Explain the application and relevance of population-based cancer registry data for population-based health services planning
- Explain the application and relevance of hospital-based cancer registry data for assessing the quality and provision of cancer care delivery

**Additional SJCARES Registry Specific Training:**

- **8<sup>th</sup> module on TrialMaster** platform functionality and usage available.
- **Thirteen practice cases based on dummy patient charts** created to ensure practical application of knowledge for all hospital site registry team members.

**Use Case Scenarios:**

- For Registries:
  - Three (3) educational training tracks by Registry Role (MD Monitor, Data Entry Specialist) and team member professional background

<b>MD Monitor</b> (must be a physician)	<b>Data Entry Specialist</b> with medical (MD/RN) professional background	<b>Data Entry Specialist</b> without medical background
Data Abstraction Course, Intro to Pediatric Oncology Module: Optional	Data Abstraction Course, Intro to Pediatric Oncology Module: Optional	<b>Data Abstraction Course, Intro to Pediatric Oncology Module: Required</b>
Data Abstraction Course, Intro to Clinical Data Abstraction Module: Optional	<b>Data Abstraction Course, Intro to Clinical Data Abstraction Module: Required</b>	<b>Data Abstraction Course, Intro to Clinical Data Abstraction Module: Required</b>
<b>Cancer Registration Course: Required</b>	<b>Cancer Registration Course: Required</b>	<b>Cancer Registration Course: Required</b>
<b>TM Training Tutorial: Required</b>	<b>TM Training Tutorial: Required</b>	<b>TM Training Tutorial: Required</b>

- For Short Courses/Group Training:
  - Opportunity to set up training room for antecedent training opportunities before in-person workshops or training sessions.