

Health Academy



الأكاديمية الصحية



# CLINICAL CODING PROGRAM





## Introduction

### VISION

To build a competent and sustainable clinical coding workforce for the Kingdom of Saudi Arabia to meet coding requirements in all healthcare settings by 2020.

### MISSION

To promote clinical coding as a profession by establishing a unified National Training Framework, Guidelines and minimum requirements in order to have highly qualified Saudis in alignment with KSA Vision 2030.

### Overview

Clinical Coding ranks as one of the most promising careers around the world. In fact, it is now considered a high-demand profession and the role of coders has become more important than ever.

Clinical Coding involves reviewing, analyzing, and translating medical information from a patient's health record into alphanumeric/numeric codes, using a complex health classification system. The resulting data provides comprehensive quality information that is used for direct patient care, physician and hospital reimbursement, research, decision making and health system planning.

The future clinical coders will have twice the opportunity to make a difference and shoulder twice the responsibility that they do today. The plan is to fill the gap by candidates who are not only talented and skilled, but also ethical.



## PROGRAM DESCRIPTION

Clinical coding program starts by establishing a strong foundation in medical sciences to build a solid clinical knowledge for the students.

Then, students will start to learn classification guidelines, coding conventions and coding from medical record.

Graduates of this program will be able to work as an inpatient coder and code simple to moderate cases as well as same-day cases.

The duration of this program is 12 months.

## PROGRAM OBJECTIVES:

By the end of this program, the student will be able to:

1. Identify the structure and organization of the five volumes of ICD-10-AM, ACHI and ACS.
2. Interpret the conventions and instructions used in ICD-10-AM, ACHI and ACS.
3. Apply the Australian Coding Standards.
4. Examine health record structure, principles, language of clinical practice and diseases/conditions/diagnoses and medical treatments in simple to moderate cases.
5. Extract relevant clinical information from medical records.
6. Identify principal diagnosis and principal procedure for an admission as well as additional diagnoses and additional procedures.
7. Select accurate codes from ICD-10-AM, ACHI and ACS for diseases, conditions, injuries and procedures.



## CODER COMPETENCIES

After finishing the clinical coding program, coders must be capable to achieve the following:

### 1. Work effectively in the healthcare system

- 1.1 Identify the roles and responsibilities of medical, nursing, allied health and other health workers as they interact with and support the patient during their health care experience.
- 1.2 Describe the differences between the encounter types of the patient; e.g. inpatient, day case, emergency, and outpatient.
- 1.3 Differentiate between acute and subacute care types.
- 1.4 Explain the scope, structure, roles and responsibilities of a health information service.
- 1.5 Explain the health information statutory and legislative reporting requirements of a health service.
- 1.6 Describe the functions of the data collected within a health information system.

### 2. Extract clinical information to support coding

- 2.1 Interpret clinical data and documentation including:
  - Common disease conditions and symptoms.
  - Patient related data and documentation.
  - Common surgical and medical procedures.
  - Explain treatment associated with an episode of care and relate to the documentation in a patient's medical record.
- 2.2 Utilize clinical information in order to prepare to assign clinical codes.
- 2.3 Use medical terminology.
- 2.4 Contribute to the completeness and accuracy of the medical record by:
  - Searching for all relevant information in the medical record;
  - Accessing other sources of patient information, e.g. pathology, imaging, operative report or ICU systems.
  - Identifying missing or incomplete documentation.
  - Locating missing or incomplete information, and where available file/ append to the medical record;
  - Validating information in the medical record with other databases.





### 3. Prepare to work as clinical coder

- 3.1 Access common systems used by hospitals to capture patient demographic data and patient clinical coding data.
- 3.2 Explain the interactions between the patient and the health service as captured and documented in the medical record, and the implications on the work of the Clinical Coder.
- 3.3 Describe the roles and responsibilities of a Clinical Coder
- 3.4 Identify key health classifications used by clinical coders i.e. ICD10AM, ACHI, ARDRG.
- 3.5 Identify the Australian Coding Standards (ACS).
- 3.6 Explain the diverse uses of clinical coded data i.e. health service planning, quality and safety, epidemiology and research funding.

### 4. Assign codes to an episode of care

- 4.1 Apply the Australian Coding Standards (ACS) appropriately.
- 4.2 Access and reference coding conventions embedded in the classifications.
- 4.3 Assign codes to an episode of care using the following:
  - (1) ICD-10-AM Diseases Index.
  - (2) ICD-10-AM Diseases Tabular.
  - (3) ACHI Interventions Index.
  - (4) ACHI Interventions Tabular.
- 4.4 Sequence codes according to ACS.
- 4.5 Enter clinical codes into hospital systems.

### 5. Ensure quality of coded data

- 5.1 Communicate with clinical coders, HIMs, clinicians, educators and managers by:
  - Formulating and writing coding queries;
  - Responding to questions as they arise;
  - Using appropriate language (verbal/written) for the intended audience.
  - Managing email communication precisely, appropriately & on time.
  - Participating in meetings (formal & informal);
- 5.2 Comprehending written English;
- 5.3 Correctly interpreting handwriting;
- 5.4 Seeking and responding to constructive feedback.
- 5.5 Using medical terminology correctly.





## 6. Manage time, resources and professional development (Internship)

- 6.1 Identify and log into relevant databases.
- 6.2 Abstract data from a database.
- 6.3 Validate primary and trusted location of information.
- 6.4 Cross reference with other databases.
- 6.5 Enter relevant data into appropriate databases.
- 6.6 Check data entry is accurate & complete.
- 6.7 Recognise data discrepancies.
- 6.8 Report and follow up data discrepancies to appropriate staff member.
- 6.9 Manage time and resources including:
  - Comply with coding throughput expectations.
  - Seek appropriate assistance when required.
  - Identify own limitations and recognize own work style.
  - Organize and prioritize own workload.
- 6.10 Practice team building skills.
- 6.11 Seek and incorporate advice and constructive feedback;
  - Access mentors.
  - Consult educational resources appropriately.
  - Determine knowledge gaps and rectify.
  - Participate in coding professional networks, communities etc.

## 6. Comply with workplace policies, procedures, and professional requirements (Internship)

- 7.1 Access and comply with workplace policies & procedures.
- 7.2 Comply with workplace guidelines regarding privacy and confidentiality
- 7.3 including;
  - Managing working environment to maintain privacy of information, including password integrity.
  - Disposing of unwanted patient related documents in an authorized manner.
  - Managing conflict of interest in coding a relative, friend or known acquaintance's medical record.





## ADMISSION CRITERIA:

### Admission Criteria for applicants

Bachelor's degree in one of the following:

- 1- English
- 2- Science

o **Essential Requirements:**

English proficiency IELTS Bands must be as the following:

- a) Reading band 5.5
- b) Writing band 5.5
- c) Total IELTS Band is 5.5 minimum.

OR TOEFL iBT:

- a) Reading score 8-12.
- b) Writing score 18-20
- c) Total score 46-59

## TRAINING DELIVERY MODE

- **Face-to-face:** to obtain an understanding of basic concepts that are required to undertake further study (Elaborated lectures/ discussion and activities for each module will be prepared by each training site based on the curriculum/ syllabus objectives, competencies and blueprint provided).
- **Self-learning (e.g. prescribed sections of textbooks and online materials):** to reinforce/strengthen students understanding of the coding conventions, standards and practices.
- **Internship:** by reviewing records and practicing coding in the sponsor hospital under direct supervision (Mentor).
- **Blended Model:** Combine classroom learning with online learning.



## EVALUATION AND ASSESSMENT

The evaluation should be done as following:

### 1. Assessments:

- After finishing each module, students should undertake assessment. The educator should monitor the student's progress through these assessments. Educator provide the student with feedback where appropriate.
- Assessments should include: Case Studies, Discharge Summaries, and Medical Records. True/False questions and multiple choices should be limited in the Coding Assessments.

### 2. Internship: Internship is for practice coding a medical record in a sponsored hospital. Student will be evaluated for:

- The number of episodes per specialty see **Appendix A.**
- 80% Correct assignment for the following:
  - Principle diagnosis.
  - Additional diagnoses.
  - Interventions.
  - Sequence of codes.

### 3. Accreditation Exam:

The final exam will be conduct at Health Academy\SCFHS by the end of the progra

## COURSE PASSING REQUIREMENTS & GRADING SYSTEM:

- Attendance and attitude 10%
- Frequent quizzes 10%
- Module assessments 50% (each assessment can be taken in two attempts.
- Internship 30%
- Total passing score for the course is 80%

Marking mechanism for medical science modules:

- Assessment for medical science will be defined by the instructor.
- Students must pass the medical science modules to be eligible for taking the coding modules.
- Passing score for the medical science modules is 80%

**Note:** upon completing course requirement, students will receive certificate of program completion and be eligible to sit the final exam in the SCFHS. Upon passing the final exam, students will receive graduating certificate.





## SYLLABUS

### COURSE TEXT BOOKS/ READING MATERIALS AND RESOURCES:

#### Required reading materials:

##### *Clinical Coding:*

1. National Centre for Classification in Health. 2008, 6th edition, The International Statistical Classification of Diseases and Related Health Problems " Australian Coding Standards".
2. ICD-10 commandments (coding matters).

##### *Medical Science:*

1. Mastering Medical Terminology Australia and New Zealand (2nd edition) by Sue Walker, Maryann Wood and Jenny Nicol.
2. Essentials of Human Anatomy & Physiology, 12th edition by Elaine N Marieeb & Suzanne M Keller.
3. Mosby's Dictionary of Medicine, Nursing & Health Professions'

#### Recommended references:

1. Pharmacology Essentials for Allied Health by Jennifer Danielson; Jill Marquis; and Randall LeuVoy.
2. Essential Emergency Trauma Kaushal H. Shah & Daniel Egan.

### STUDENT ROLES AND RESPONSIBILITIES:

#### *Attendance*

1. Students are expected to attend the classes regularly.
2. A failing grade in the program for an absence of 25% of the class hours.
3. Student will be dismissed immediately without any notification if remains absent for 30 consecutive days (without information) after the commencement of the program.

For further details, Please Refer to health academy training programs' attendance policy.





### *Assessment and Assignments*

1. Completing and evidencing all mandatory pre-course eLearning or reading prior to the classroom
2. Completing all self-learning, exercises and quizzes during the course to the timeframes instructed by the course trainer.
3. Completing all assessments to the required criteria.
4. All assignments must be submitted to the educator on time.

### *Student Behavior*

1. Ensuring punctuality at all time.
2. Respecting the course trainer and fellow students.
3. Students are expected to maintain the highest standards with regard to honesty, effort and performance.





## DISTRIBUTION OF HOURS/WEEKS PER MODULE

Module No.	Module Name	Self-Learning	Classroom Training 5 Days/week	Hands-on Practice	Online interaction	Total Credit Hours	Duration
1	Introduction to Healthcare setting/communication /work ethics	6	17	-	1	24	1 week
2	Introduction to Medical Science	12	34	-	1	47	2 weeks
3	Medical Science/Blood, Lymphatic and Immune Systems	6	17	-	1	24	1 week
4	Medical Science/ Nervous System, Special Senses	6	17	-	1	24	1 week
5	Medical Science/ Endocrine and Metabolic Systems and Mental Health	6	17	-	1	24	1 week
6	Medical Science/Cardiovascular and Respiratory Systems	6	17	-	1	24	1 week
7	Medical Science/ Digestive, Dental & Urinary Systems	6	17	-	1	24	1 week
8	Medical Science/ Musculoskeletal	6	17	-	1	24	1 week
9	Medical Science/ Reproductive System	6	17	-	1	24	1 week
10	Medical Science/Traumatology	6	17	-	1	24	1 week
11	<b>Revision/Final Exam</b>	-	-	-	-	-	1 week
12	Introduction to Health Information Management/Clinical Coding	6	17	-	1	24	1 week
13	Australian Coding Standards and abstraction from Medical Record	12	34	-	1	47	2 weeks
14	Coding symptoms, factors influencing health status and infectious diseases	6	17	-	1	24	1 week
15	Coding neoplasms	18	51	-	1	70	3 weeks
16	Coding Blood, endocrine and mental health	12	34	-	1	47	2 weeks
17	Coding Respiratory, Digestive, Dental and Skin diseases	6	17	-	1	24	1 week
18	Coding circulatory diseases	18	51	-	1	70	3 weeks
19	Coding pregnancy, childbirth and the puerperium diseases	18	51	-	1	70	3 weeks
20	Coding Perinatal and Congenital Conditions	6	17	-	1	24	1 weeks
21	Coding nervous system, eye and ear diseases	6	17	-	1	24	1 week
22	Coding musculoskeletal and genitourinary diseases	6	17	-	1	24	1 weeks
23	Coding Injuries and External cause of injuries	12	34	-	1	47	2 weeks
24	Coding Poisoning and External Cause of Poisoning	12	34	-	1	47	2 weeks
25	<b>Revision</b>	-	-	-	-	-	1 week
26	Internship	-	-	360	-	360	12 weeks



Total

1165  
Hours

48  
Weeks



