TRAINING REGULATIONS

MEDICAL CODING AND CLAIMS PROCESSING NC III

ICT SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Superhighway, Taguig City, Metro Manila

TABLE OF CONTENTS

ICT SECTOR

MEDICAL CODING AND CLAIMS PROCESSING

NATIONAL LEVEL III

TRAINING REGULATIONS FOR MEDICAL CODING AND CLAIMS PROCESSING NC III

Section 1 MEDICAL CODING AND CLAIMS PROCESSING NC III QUALIFICATIONS

The **MEDICAL CODING AND CLAIMS PROCESSING NC III** Qualification consists of competencies that a person must achieve to demonstrate a proficiency in assigning internationally prescribed diagnostic and procedural codes associated with billing and reimbursement in compliance with clinical documentation requirements.

This Qualification is packaged from the competency map of the Information and Communication Technology Industry (Service sector) as shown in Annex A.

The units of competency comprising this qualification include the following:

Code	BASIC COMPETENCIES
5 00 311 1 09	Lead workplace communication
5 00 311 1 10	Lead small teams
5 00 311 1 11	Develop and practice negotiation skills
5 00 311 1 12	Solve problems related to work activities
5 00 311 1 13	Use mathematical concepts and techniques
5 00 311 1 14	Use relevant technologies

Code	COMMON COMPETENCIES
ICT315202	Apply quality standards
ICT311203	Perform computer operations

Code	CORE COMPETENCIES
ICT325301	Assign medical codes
ICT325302	Process medical claims/billing
ICT325303	Manage medical claims

A person who has achieved this Qualification is competent to be:

- Medical/Clinical Coding Specialist
- Medical/Clinical Claims Specialist

SECTION 2: COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common, and core units of competency required for **MEDICAL CODING AND CLAIMS PROCESSING NC III**.

BASIC COMPETENCIES

UNIT OF COMPETENCY : LEAD WORKPLACE COMMUNICATION

UNIT CODE : 500311109

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to lead in the dissemination and discussion of ideas, information and issues in the workplace.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Communicate information about workplace processes	1.1. Appropriate ***communication method*** is selected 1.2. Multiple operations involving several topics areas are communicated accordingly 1.3. Questions are used to gain extra information 1.4. Correct sources of information are identified 1.5. Information is selected and organized correctly 1.6. Verbal and written reporting is undertaken when required 1.7. Communication skills are maintained in all situations	1.1. Organization requirements for written and electronic communication methods 1.2. Effective verbal communication methods 1.3. Methods of Communication 1.4. Types of Question 1.5. Communication Tools 1.6. Questioning Techniques	1.1. Organizing information 1.2. Understanding and conveying intended meaning 1.3. Participating in variety of workplace discussions 1.4. Complying with organization requirements for the use of written and electronic communication methods 1.5. Reporting occupational hazards during safety meeting
2. Lead workplace discussions	2.1. Response to workplace issues are sought 2.2. Response to workplace issues are provided immediately 2.3. Constructive contributions are made to workplace discussions on such issues as production, quality and safety 2.4. Goals/objectives and action plan are undertaken in the workplace are communicated	2.1 Leading as a management function 2.2 Barriers of communication 2.3 Effective verbal communication methods 2.4 Method/techniques of discussion 2.5 How to lead discussion 2.6 How to solicit response 2.7 Goal setting and action planning	2.1 Communicating effectively 2.2 Consulting the crew on the prepared menu for the month

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Identify and communicate issues arising in the workplace	3.1 Issues and problems are identified as they arise 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication 3.3 Dialogue is initiated with appropriate personnel 3.4 Communication problems and issues are raised as they arise	3.1 Types of issues and problems in the workplace 3.2 Written and electronic communication methods 3.3 Communication barriers affecting workplace discussions	3.1 Identifying cause of problems 3.2 Communicating with the Master of the Ship on the possible shortage of the food supply due to change of ship's port 3.3 Identifying problems and issues 3.4 Organizing information on problems and issues 3.5 Relating problems and issues of call/ voyage

RANGE OF VARIABLES

VARIABLE	RANGE
1. Methods of communication	1.1. Non-verbal gestures 1.2. Verbal 1.3. Face to face 1.4. Two-way radio 1.5. Speaking to groups 1.6. Using telephone 1.7. Written 1.8. Internet

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1. Dealt with a range of communication/information at one time 1.2. Made constructive contributions in workplace issues 1.3. Sought workplace issues effectively 1.4. Responded to workplace issues promptly 1.5. Presented information clearly and effectively written form 1.6. Used appropriate sources of information 1.7. Asked appropriate questions 1.8. Provided accurate information
2. Resource Implications	The following resources **MUST** be provided: 2.1. Variety of Information 2.2. Communication tools 2.3. Simulated workplace
3. Methods of Assessment	Competency in this unit must be assessed through 3.1. Written Examination 3.2. Oral Questioning 3.3. Portfolio
4. Context for Assessment	4.1. Competency may be assessed in the workplace or in simulated workplace environment

UNIT OF COMPETENCY : LEAD SMALL TEAMS

UNIT CODE : 500311110

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes to lead small teams including setting and maintaining team and individual performance standards.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Provide team leadership	1.1. ***Work requirements*** are identified and presented to team members 1.2. Reasons for instructions and requirements are communicated to team members 1.3. ***Team members' queries and concerns*** are recognized, discussed and dealt with	1.1. Company policies and procedures 1.2 How performance expectations are set 1.3 Methods of Monitoring Performance 1.4 Client expectations 1.5 Team member's duties and responsibilities 1.6 Definition of Team 1.7 Skills and techniques in promoting team building 1.8 Up-to-date dissemination of instructions and requirements to members 1.9 Art of listening and treating individual team members concern	1.1. Communication skills required for leading teams 1.2. Team building skills 1.3. Negotiating skills 1.4. Evaluation skills
2. Assign responsibilities	2.1 Duties, and responsibilities are allocated having regard to the skills, knowledge and aptitude required to properly undertake the assigned task and according to company policy 2.2 Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible	2.1 Concept of delegation 2.2 How to delegate 2.3 Understanding individual differences 2.4 Methods of monitoring performance 2.5 Duties and responsibilities of each team member 2.6 Knowledge in identifying each team member duties and responsibilities	2.1 Delegating skills 2.2 Identifying individual skills, knowledge and attitude as basis for allocating responsibilities 2.3 Identifying each team member duties and responsibilities
3. Set performance expectations for team members	3.1 Performance expectations are established based on client needs and according to assignment requirements	3.1 Definition of performance indicators/ criteria 3.2 Definition of team goals and expectations	3.1 Identifying performance indicators 3.2 Evaluating performance

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	3.2 Performance expectations are based on individual team members duties and area of responsibility 3.3 Performance expectations are discussed and disseminated to individual team members	3.3 Methods of monitoring performance 3.4 Client expectations 3.5 Team members duties and responsibilities 3.6 Defining performance expectations criteria	3.3 Setting individual performance target/ expectation indicators
4. Supervised team performance	4.1 ***Monitoring of performance*** takes place against defined performance criteria and/or assignment instructions and corrective action taken if required 4.2 Team members are provided with ***feedback***, positive support and advice on strategies to overcome any deficiencies 4.3 ***Performance issues*** which cannot be rectified or addressed within the team are referenced to appropriate personnel according to employer policy 4.4 Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction 4.5 Team operations are monitored to ensure that employer/client needs and requirements are met 4.6 Follow-up communication is provided on all issues affecting the team 4.7 All relevant documentation is completed in accordance with company procedures	4.1 Understanding Monitoring of work 4.2 How to undertake corrective action 4.3 Understanding feedback and procedure 4.4 Feedback reporting procedure 4.5 Methods of monitoring performance 4.6 Team member's duties and responsibilities 4.7 Monitoring team operation to ensure client needs and satisfaction	4.1 Monitoring skills 4.2 Setting priorities 4.3 Evaluating performance 4.4 Informal/ formal counseling skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Work requirements	1.1. Client Profile 1.2. Assignment instructions
2. Team member's concerns	2.1. Roster/shift details
3. Monitor performance	3.1. Formal process 3.2. Informal process
4. Feedback	4.1. Formal process 4.2. Informal process
5. Performance issues	5.1. Work output 5.2. Work quality 5.3. Team participation 5.4. Compliance with workplace protocols 5.5. Safety 5.6. Customer service

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1. Maintained or improved individuals and/or team performance given a variety of possible scenario 1.2. Assessed and monitored team and individual performance against set criteria 1.3. Represented concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf 1.4. Allocated duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed 1.5. Set and communicated performance expectations for a range of tasks and duties within the team and provided feedback to team members
2. Resource Implications	The following resources **MUST** be provided: 2.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2. Materials relevant to the proposed activity or task
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Written Examination 3.2. Oral Questioning 3.3. Portfolio
4. Context for Assessment	4.1. Competency assessment may occur in workplace or any appropriately simulated environment 4.2. Assessment shall be observed while task are being undertaken whether individually or in-group

UNIT OF COMPETENCY: DEVELOP AND PRACTICE NEGOTIATION SKILLS

UNIT CODE : 500311111

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to collect information in order to negotiate to a desired outcome and participate in the negotiation.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Plan negotiations	1.1 Information on ***preparing for negotiation*** is identified and included in the plan 1.2 Information on creating ***nonverbal environments*** for positive negotiating is identified and included in the plan 1.3 Information on ***active listening*** is identified and included in the plan 1.4 Information on different ***questioning techniques*** is identified and included in the plan 1.5 Information is checked to ensure it is correct and up-to- date	1.1 Knowledge on Codes of practice and guidelines for the organization 1.2 Knowledge of organizations policy and procedures for negotiations 1.3 Decision making and conflict resolution strategies procedures 1.4 Concept of negotiation	1.1 Communication skills (verbal and listening) 1.2 Active listening 1.3 Setting conflict 1.4 Preparing conflict resolution 1.5 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation 1.6 Interpersonal skills to develop rapport with other parties
2. Participate in negotiations	2.1 Criteria for successful outcome are agreed upon by all parties 2.2 Desired outcome of all parties are considered 2.3 Appropriate language is used throughout the negotiation 2.4 A variety of questioning techniques are used 2.5 The issues and processes are documented and agreed upon by all parties 2.6 Possible solutions are discussed and their viability assessed 2.7 Areas for agreement are confirmed and recorded 2.8 Follow-up action is agreed upon by all parties	2.1 Outcome of negotiation 2.2 Knowledge on Language 2.3 Different Questioning techniques 2.4 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation	2.1 Negotiating skill 2.2 Communication skills (verbal and listening) 2.3 Observation skills 2.4 Interpersonal skills to develop rapport with other parties 2.5 Applying effective questioning techniques 2.6 Setting conflict

RANGE OF VARIABLES

VARIABLE	RANGE
1. Preparing for negotiation	1.1 Background information on other parties to the negotiation 1.2 Good understanding of topic to be negotiated 1.3 Clear understanding of desired outcome/s 1.4 Personal attributes 1.4.1 self-awareness 1.4.2 self esteem 1.4.3 objectivity 1.4.4 empathy 1.4.5 respect for others 1.5 Interpersonal skills 1.5.1 listening/reflecting 1.5.2 nonverbal communication 1.5.3 assertiveness 1.5.4 behavior labeling 1.5.5 testing understanding 1.5.6 seeking information 1.5.7 self-disclosing 1.6 Analytic skills 1.6.1 observing differences between content and process 1.6.2 identifying bargaining information 1.6.3 applying strategies to manage process 1.6.4 applying steps in negotiating process 1.6.5 strategies to manage conflict 1.6.6 steps in negotiating process 1.6.7 options within organization and externally for resolving conflict
2. Nonverbal environments	2.1 Friendly reception 2.2 Warm and welcoming room 2.3 Refreshments offered 2.4 Lead in conversation before negotiation begins
3. Active listening	3.1 Attentive 3.2 Don't interrupt 3.3 Good posture 3.4 Maintain eye contact 3.5 Reflective listening
4. Questioning techniques	4.1 Direct 4.2 Indirect 4.3 Open-ended

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1 Demonstrated sufficient knowledge of the factors influencing negotiation to achieve agreed outcome 1.2 Participated in negotiation with at least one person to achieve an agreed outcome
2. Resource Implications	The following resources **MUST** be provided: 2.1 Room with facilities necessary for the negotiation process 2.2 Human resources (negotiators)
3. Methods of Assessment	Competency may be assessed through: 3.1 Written Examination 3.2 Oral questioning 3.3 Portfolio
4. Context for Assessment	4.1 Competency to be assessed in real work environment or in a simulated workplace setting.

UNIT OF COMPETENCY : SOLVE PROBLEMS RELATED TO WORK ACTIVITIES

UNIT CODE : 500311112

UNIT DESCRIPTOR : This unit of covers the knowledge, skills and attitudes required to solve problems in the workplace including the application of problem solving techniques and to determine and resolve the root cause of problems.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify the problem	1.1. Variances are identified from normal operating parameters; and product quality 1.2. Extent, cause and nature of the problem are defined through observation, investigation and ***analytical techniques*** 1.3. ***Problems*** are clearly stated and specified	1.1. Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognize non-standard situations 1.2. Competence to include the ability to apply and explain, sufficient for the identification of fundamental cause, determining the corrective action and provision of recommendations 1.2.1. Relevant equipment and operational processes 1.2.2. Enterprise goals, targets and measures 1.2.3. Enterprise quality, OHS and environmental requirement 1.2.4. Enterprise information systems and data collation 1.2.5. Industry codes and standards 1.3. Normal operating parameters and product quality 1.4. Identifying and clarifying the nature of problem	1.1 Using range of formal problem solving techniques 1.2 Identifying and clarifying the nature of the problem 1.3 Evaluating the effectiveness of a present process in the galley 1.4 Applying analytical techniques

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
2. Determine fundamental causes of the problem	2.1 Possible causes are identified based on experience and the use of problem solving tools / analytical techniques. 2.2 Possible cause statements are developed based on findings 2.3 Fundamental causes are identified per results of investigation conducted	2.1 Relevant equipment and operational processes 2.2 Enterprise goals, targets and measures 2.3 Enterprise quality, OHS and environmental requirements 2.4 Enterprise information systems and data collation 2.5 Industry codes and standards	2.1 Analysis of root causes
3. Determine corrective action	3.1 All possible options are considered for resolution of the problem 3.2 Strengths and weaknesses of possible options are considered 3.3 Corrective actions are determined to resolve the problem and possible future causes 3.4 **Action *plans*** are developed identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures	3.1 Understanding the procedure in undertaking corrective action 3.2 Principles of decision making strategies and techniques 3.3 Enterprise information systems and data collation 3.4 Action planning	3.1 Identifying and clarifying the nature of the problem 3.2 Devising the best solution 3.3 Evaluating the solution 3.4 Implementing developed plan to rectify the problem 3.5 Implementing corrective and preventive actions based on root cause analysis
4. Provide recommendation/s to manager	4.1 Reports on recommendations are prepared according to procedures. 4.2 Recommendations are presented to appropriate personnel. 4.3 Recommendations are followed-up, if required	4.1 How to make a report and recommendation	4.1 Writing report and recommendations

RANGE OF VARIABLES

VARIABLE	RANGE
1. Analytical techniques	1.1. Brainstorming 1.2. Cause and effect diagrams 1.3. Pareto analysis 1.4. SWOT analysis 1.5. Gant chart, Pert CPM and graphs 1.6. Scattergrams
2. Problem	2.1. Non – routine process and quality problems 2.2. Equipment selection, availability and failure 2.3. Teamwork and work allocation problem 2.4. Safety and emergency situations and incidents
3. Action plans	3.1. Priority requirements 3.2. Measurable objectives 3.3. Resource requirements 3.4. Timelines 3.5. Co-ordination and feedback requirements 3.6. Safety requirements 3.7. Risk assessment 3.8. Environmental requirements

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1. Identified the problem 1.2. Determined the fundamental causes of the problem 1.3. Determined the correct / preventive action 1.4. Provided recommendation to manager These aspects may be best assessed using a range of scenarios / case studies / what ifs as a stimulus with a walk through forming part of the response. These assessment activities should include a range of problems, including new, unusual and improbable situations that may have happened.
2. Resource Implications	2.1. Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios / case studies / what ifs will be required as well as bank of questions which will be used to probe the reason behind the observable action.
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Written Examination 3.2. Oral Questioning 3.3. Portfolio
4. Context for Assessment	4.1. In all workplace, it may be appropriate to assess this unit concurrently with relevant teamwork or operation units.

UNIT OF COMPETENCY: USE MATHEMATICAL CONCEPTS AND TECHNIQUES

UNIT CODE : 500311113

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required in the application of mathematical concepts and techniques.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Identify mathematical tools and techniques to solve problem	1.1 Problem areas are identified based on given condition 1.2 ***Mathematical techniques*** are selected based on the given problem	1.1 Fundamental operation (addition, subtraction, division, multiplication) 1.2 Units of measurement and its conversion 1.3 Fundamental of units 1.4 Standard formulas 1.5 Basic measuring tools/devices 1.6 Measurement system 1.7 Basic measuring tools/devices 1.8 Steps in solving problem	1.1 Identifying and selecting different measuring tools 1.2 Applying different formulas in solving problems 1.3 Describing the units of measurement and fundamental units 1.4 Stating arithmetic calculations involving the following; addition, subtraction, division, multiplication 1.5 Stating arithmetic calculations involving the following: addition, subtraction, division, multiplication 1.6 Applying theory into actual application on shipboard catering processes
2. Apply mathematical procedure/ solution	2.1 Mathematical techniques are applied based on the problem identified 2.2 Mathematical computations are performed to the level of accuracy required for the problem 2.3 Results of mathematical computation is determined and verified based on job requirements	2.1 Problem-based questions 2.2 Estimation 2.3 Use of mathematical tools and standard formulas 2.4 Mathematical techniques	2.1 Solving mathematical computations 2.2 Converting Metric to English 2.3 Selecting and using appropriate and efficient techniques and strategies to solve problems

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
3. Analyze results	3.1 Result of application is reviewed based on expected and required specifications and outcome 3.2 ***Appropriate action*** is applied in case of error	3.1 Techniques in analyzing the results 3.2 Process in reviewing the results 3.3 Precision and accuracy 3.4 Four fundamental operations 3.5 Steps in solving problem 3.6 Standard formulas 3.7 Conversion measurement	3.1 Analyzing the result based on the specified requirements 3.2 Interpreting and communicating the results of the analysis

RANGE OF VARIABLES

VARIABLE	RANGE
1. Mathematical techniques	May include but are not limited to: 1.1 Four fundamental operations 1.2 Measurements 1.3 Use/Conversion of units of measurements 1.4 Use of standard formulas
2. Appropriate action	2.1 Review in the use of mathematical techniques (e.g. recalculation, re-modeling) 2.2 Report error to immediate superior for proper action

EVIDENCE GUIDE

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Identified, applied and reviewed the use of mathematical concepts and techniques to workplace problems
2. Resource Implications	The following resources **MUST** be provided: 2.1 Calculator 2.2 Basic measuring tools 2.3 Case Problems
3. Methods of Assessment	Competency may be assessed through: 3.1 Authenticated portfolio 3.2 Written Test 3.3 Interview/Oral Questioning 3.4 Demonstration
4. Context for Assessment	4.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY: USE RELEVANT TECHNOLOGIES

UNIT CODE : 500311114

UNIT DESCRIPTOR : This unit of competency covers the knowledge, skills, and attitude required in selecting, sourcing and applying appropriate and affordable technologies in the workplace.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Study/select appropriate technology	1.1 Usage of different ***technologies*** is determined based on job requirements 1.2 Appropriate technology is selected as per work specification	1.1 Awareness on technology and its function 1.2 Communication techniques 1.3 Health and safety procedure 1.4 Company policy in relation to relevant technology 1.5 Machineries/ equipment and their application 1.6 Software programs	1.1 Identifying relevant technology on job
2. Apply relevant technology	2.1 Relevant technology is effectively used in carrying out function 2.2 Applicable software and hardware are used as per task requirement 2.3 ***Management concepts*** are observed and practiced as per established industry practices	2.1 Knowledge on operating instructions 2.2 Understanding software and hardware system 2.3 Communication techniques 2.4 Health and safety procedure 2.5 Company policy in relation to relevant technology 2.6 Different management concepts 2.7 Technology adaptability	2.1 Applying relevant technology 2.2 Communicating skills 2.3 Using software applications skills 2.4 Conducting risk assessment
3. Maintain/	3.1 Maintenance of	3.1 Awareness on	3.1 Performing basic

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
enhance relevant technology	technology is applied in accordance with the ***industry standard operating procedure***, ***manufacturer's operating guidelines*** and ***occupational health and safety procedure*** to ensure its operative ability 3.2 Updating of technology is maintained through continuing education or training in accordance with job requirement 3.3 Technology failure/ defect is immediately reported to the concern/responsible person or section for ***appropriate action***	technology and its function 3.2 Repair and maintenance procedure 3.3 Health and safety procedure 3.4 Company policy in relation to relevant technology 3.6 Upgrading of technology 3.7 Organizational set-up/work flow	troubleshooting skills 3.2 Identifying failures or defects 3.3 Communication skills 3.4 Applying corrective and preventive maintenance

RANGE OF VARIABLES

VARIABLE	RANGE
1. Technology	May include but are not limited to: 1.1 Office technology 1.2 Industrial technology 1.3 System technology 1.4 Information technology 1.5 Training technology
2. Management concepts	May include but not limited to: 2.1 Real Time Management 2.2 KAIZEN or continuous improvement 2.3 5s 2.1 Total Quality Management 2.2 Other management/productivity tools
3. Industry standard operating procedure	3.1 Written guidelines relative to the usage of office technology/equipment 3.2 Verbal advise/instruction from the co-worker
4. Manufacturer's operating guidelines/ instructions	4.1 Written instruction/manuals of specific technology/ equipment 4.2 General instruction manual 4.3 Verbal advise from manufacturer relative to the operation of equipment
5. Occupational health and safety procedure	5.1 Relevant statutes on OHS 5.2 Company guidelines in using technology/equipment
6. Appropriate action	6.1 Implementing preventive maintenance schedule 6.2 Coordinating with manufacturer's technician

EVIDENCE GUIDE

1. Critical aspects of Competency	Assessment requires evidence that the candidate: 1.1 Studied and selected appropriate technology consistent with work requirements 1.2 Applied relevant technology 1.3 Maintained and enhanced operative ability of relevant technology
2. Resource Implications	The following resources **MUST** be provided: 2.1 Relevant technology 2.2 Interview and demonstration questionnaires 2.3 Assessment packages
3. Methods of Assessment	Competency must be assessed through: 3.1 Interview 3.2 Actual demonstration 3.3 Authenticated portfolio (related certificates of training/seminar)
4. Context for Assessment	4.1 Competency may be assessed in actual workplace or simulated environment

COMMON COMPETENCIES

UNIT TITLE : APPLY QUALITY STANDARDS
UNIT CODE : ELC315202
UNIT DESCRIPTOR : This unit covers the knowledge, skills, (and) attitudes and values needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements

ELEMENT	PERFORMANCE CRITERIA ***Italicized Bold*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Assess quality of received materials or components	1.1. Work instructions are obtained and work is carried out in accordance with standard operating procedures 1.2. Received ***materials or component parts*** are checked against workplace standards and specifications 1.3. Faulty material or components related to work are identified and isolated 1.4. ***Faults*** and any identified causes are recorded and/or reported to the supervisor concerned in accordance with workplace procedures 1.5. Faulty materials or components are replaced in accordance with workplace procedures	1.1 Relevant production processes, materials and products 1.2 Characteristics of materials, software and hardware used in production processes 1.3 Quality checking procedures 1.4 Quality Workplace procedures 1.5 Identification of faulty materials related to work	1.1. Reading skills required to interpret work instruction 1.2. Critical thinking 1.3. Interpreting work instructions
2. Assess own work	2.1. ***Documentation*** relative to quality within the company is identified and used 2.2. Completed work is checked against workplace standards relevant to the task undertaken 2.3. ***Errors*** are identified and isolated 2.4. Information on the quality and other indicators of production performance is recorded in accordance with workplace procedures	2.1 Safety and environmental aspects of production processes 2.2 Fault identification and reporting 2.3 Workplace procedure in documenting completed work 2.4 Workplace Quality Indicators	2.1 Carry out work in accordance with OHS policies and procedures

ELEMENT	PERFORMANCE CRITERIA ***Italicized Bold*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	2.5. Deviations from specified ***quality standards***, causes are documented and reported in accordance with the workplace' standards operating procedures		
3. Engage in quality improvement	3.1. Process improvement procedures are participated in relation to workplace assignment 3.2. Work is carried out in accordance with process improvement procedures 3.3. Performance of operation or quality of product or service to ensure ***customer*** satisfaction is monitored	3.1 Quality improvement processes 3.2 Company customers defined	3.1 Solution providing and decision-making 3.2 Practice company process improvement procedure

RANGE OF VARIABLES

VARIABLE	RANGE
1. Materials/components	1.1. Materials may include but not limited to: 1.1.1. wires 1.1.2. cables, soldering lead 1.1.3. electrical tape 1.2. Components may include but not limited to: 1.2.1. ICs 1.2.2. Diodes
2. Faults	Faults may include but not limited to: 2.1. Components/materials not according to specification 2.2. Components/materials contain manufacturing defects 2.3. Components/materials do not conform with government regulation i.e., PEC, environmental code 2.4. Components/materials have safety defect
3. Documentation	3.1. Organization work procedures 3.2. Manufacturer's instruction manual 3.3. Customer requirements 3.4. Forms
4. Errors	4.1. Errors may be related but not limited to the following: 4.1.1. Deviation from the requirements of the Client 4.1.2. Deviation from the requirement of the organization
5. Quality standards	5.1. Quality standards may relate but not limited to the following: 5.1.1. materials 5.1.2. component parts 5.1.3. final product 5.1.4. production processes 5.1.5. customer service
6. Customer	6.1. Co-worker 6.2. Supplier 6.3. Client 6.4. Organization receiving the product or service

EVIDENCE GUIDE

1. Critical aspect of competency	Assessment requires evidence that the candidate: 1.1. Carried out work in accordance with the company's standard operating procedures 1.2. Performed task according to specifications 1.3. Reported defects detected in accordance with standard operating procedures 1.4. Carried out work in accordance with the process improvement procedures
2. Method of assessment	2.1. The assessor may select two (2) of the following assessment methods to objectively assess the candidate: 2.1.1. Observation 2.1.2. Questioning 2.1.3. Practical demonstration
3. Resource implication	3.1. Materials and component parts and equipment to be used in a real or simulated electronic production situation
4. Context of Assessment	4.1. Assessment may be conducted in the workplace or in a simulated work environment.

UNIT TITLE : PERFORM COMPUTER OPERATIONS
UNIT CODE : ELC311203
UNIT DESCRIPTOR : This unit covers the knowledge, skills, (and) attitudes and values needed to perform computer operations which include inputting, accessing, producing and transferring data using the appropriate hardware and software

ELEMENT	PERFORMANCE CRITERIA ***Italicized Bold*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Plan and prepare for task to be undertaken	1.1. Requirements of task are determined according to job specifications 1.2. Appropriate ***hardware*** and ***software*** are selected according to task assigned and required outcome 1.3. Task is planned to ensure ***OH & S guidelines*** and procedures are followed 1.4. Client -specific guidelines and procedures are followed. 1.5. Required data security guidelines are applied in accordance with existing procedures.	1.1 Main types of computers and basic features of different operating systems 1.2 Main parts of a computer 1.3 Information on hardware and software 1.4 Data security guidelines	1.1. Reading and comprehension skills required to interpret work instruction and to interpret basic user manuals. 1.2. Communication skills to identify lines of communication, request advice, follow instructions and receive feedback. 1.3 Interpreting user manuals and security guidelines
2. Input data into computer	2.1. Data are entered into the computer using appropriate program/application in accordance with company procedures 2.2. Accuracy of information is checked and information is saved in accordance with standard operating procedures 2.3. Inputted data are stored in ***storage media*** according to requirements 2.4. Work is performed within ***ergonomic guidelines***	2.1 Basic ergonomics of keyboard and computer user 2.2 Storage devices and basic categories of memory 2.3 Relevant types of software	2.1 Technology skills to use equipment safely including keyboard skills. 2.2 Entering data
3. Access information using computer	3.1. Correct program/ application is selected based on job requirements 3.2. Program/application containing the information required is accessed according to company procedures 3.3. ***Desktop icons*** are correctly selected, opened and closed for navigation purposes	3.1 General security, privacy legislation and copyright 3.2 Productivity Application 3.3 Business Application	3.1 Accessing information 3.2 Searching and browsing files and data

ELEMENT	PERFORMANCE CRITERIA ***Italicized Bold*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	3.4. Keyboard techniques are carried out in line with OH & S requirements for safe use of keyboards		
4. Produce/ output data using computer system	4.1. Entered data are processed using appropriate software commands 4.2. Data printed out as required using computer hardware/peripheral devices in accordance with standard operating procedures 4.3. Files, data are transferred between compatible systems using computer software, hardware/ peripheral devices in accordance with standard operating procedures	4.1 Computer application in printing, scanning and sending facsimile 4.2 Types and function of computer peripheral devices	4.1 Computer data processing 4.2 Printing of data 4.3 Transferring files and data
5. Maintain computer equipment and systems	5.1. Systems for cleaning, minor ***maintenance*** and replacement of consumables are implemented 5.2. Procedures for ensuring security of data, including regular back-ups and virus checks are implemented in accordance with standard operating procedures 5.3. Basic file maintenance procedures are implemented in line with the standard operating procedures	5.1 Computer equipment/system basic maintenance procedures 5.2 Viruses 5. 3 OH & S principles and responsibilities 5.4 Calculating computer capacity 5.5 System Software 5.6 Basic file maintenance procedures	5.1 Removing computer viruses from infected machines 5.2 Making backup files

RANGE OF VARIABLES

VARIABLE	RANGE
1. Hardware and peripheral devices	1.1. Personal computers 1.2. Networked systems 1.3. Communication equipment 1.4. Printers 1.5. Scanners 1.6. Keyboard 1.7. Mouse
2. Software	Software includes the following but not limited to: 2.1. Word processing packages 2.2. Data base packages 2.3. Internet 2.4. Spreadsheets
3. OH & S guidelines	3.1. OHS guidelines 3.2. Enterprise procedures
4. Storage media	Storage media include the following but not limited to: 4.1. diskettes 4.2. CDs 4.3. zip disks 4.4. hard disk drives, local and remote
5. Ergonomic guidelines	5.1. Types of equipment used 5.2. Appropriate furniture 5.3. Seating posture 5.4. Lifting posture 5.5. Visual display unit screen brightness
6. Desktop icons	Icons include the following but not limited to: 6.1. directories/folders 6.2. files 6.3. network devices 6.4. recycle bin
7. Maintenance	7.1. Creating more space in the hard disk 7.2. Reviewing programs 7.3. Deleting unwanted files 7.4. Backing up files 7.5. Checking hard drive for errors 7.6. Using up to date anti-virus programs 7.7. Cleaning dust from internal and external surfaces

EVIDENCE GUIDE

1. Critical aspect of competency	Assessment requires evidence that the candidate: 1.1. Selected and used hardware components correctly and according to the task requirement 1.2. Identified and explained the functions of both hardware and software used, their general features and capabilities 1.3. Produced accurate and complete data in accordance with the requirements 1.4. Used appropriate devices and procedures to transfer files/data accurately 1.5. Maintained computer system
2. Method of assessment	2.1. The assessor may select two of the following assessment methods to objectively assess the candidate: 2.1.1. Observation 2.1.2. Questioning 2.1.3. Practical demonstration
3. Resource implication	3.1. Computer hardware with peripherals 3.2. Appropriate software
4. Context of Assessment	4.1. Assessment may be conducted in the workplace or in a simulated environment

CORE COMPETENCIES

UNIT TITLE : ASSIGN MEDICAL CODES
UNIT CODE : ICT325301
UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitude necessary to assign codes for medical diagnoses, procedures, services, supplies, equipment, and other services.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Prepare requirements for medical coding	1.1. Patient's medical records/charts are retrieved from client's system 1.2. ***Coding tools/system*** to be used for medical coding are prepared based on client's specification/coding guidelines	1.1. Medical Documentation 1.2. Healthcare Laws and Ethics 1.3. Medical Coding Systems • Diagnosis Code Set • Procedure Code Set • Supplies code Set 1.4. 5S and 3Rs 1.5. I.T. Process	• Computer skills • Analytical skills • Reading and comprehension skills • Research skills • Communication skills
2. Evaluate medical reports	2.1. ***Medical information*** necessary for coding are analyzed for **completeness** based on client's specification/coding guidelines 2.2. Medical Report is reviewed to determine the appropriate diagnoses, procedures equipment & supplies based on client's specification/coding guidelines. 2.3. When necessary, specific requirements of insurance/ payor are considered 2.4. Lacking data based on the initial screening result are requested from the client	2.1. Medical Terminology • Systems of the body (e.g., skeletal, respiratory, cardiovascular) • Human anatomy • Human physiology • Fundamental nature of a disease process, signs, symptoms and methods of treatment • Common medical conditions • Medical investigations and procedures • Injuries • Common abbreviations for medical and pharmacological terms (e.g., BCG, HRT) • Common medications • Commonly used medical equipment	• Analytical skills • Reading and comprehension skills • Research skills • Communication skills • Computer skills

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		and instruments • Laboratory testing methods • Diagnostic and surgical procedures • Laboratory values and significance • Medico-legal terminology 2.2. Client's specific guidelines/ coding standards 2.3. Medical Documentation 2.4. Healthcare Laws and Ethics 2.5. Essential of healthcare insurance 2.6. Medical Coding Systems	
3. Assign codes	3.1 Medical terms to be reported are searched or located in the Alphabetic index of the appropriate ***coding reference/s*** 3.2 Code numbers are verified using the tabular list of the coding manual 3.3 Verified ***medical code or* codes** are assigned to the highest level of details in line with coding standards and guidelines 3.4 Unclear/Questionable cases are clarified with appropriate resource person/s in line with enterprise procedures 3.5 Coding information/ requirements are verified for completeness of data based on the required fields prior to submission	3.2 Medical Terminologies 3.3 Medical Documentation 3.4 Healthcare Laws and Ethics 3.5 Essential of healthcare insurance • Diagnosis code set • Procedure code set • supplies code set 3.6 Client's specific guidelines/coding standards 3.7 5S and 3Rs	• Analytical skills • Reading and comprehension skills • Research skills • Communication skills • Computer skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Coding tools	May include but not limited to: • electronic copy • hard copy
2. Medical coding system	Medical coding systems include but not limited to: • International Classification of Diseases • Current Procedural Terminology • Healthcare Common Procedure Coding System
3. Completeness	May include but not limited to: • quantitative (completeness of data), and • qualitative (consistency of data) analysis
4. Medical information	May include but not limited to: • Patient • Provider • Payor

5. coding references	May include but not limited to:
	• Electronic reference
	  ○ ICD codes
	  ○ CPT codes
	  ○ HCPCS
	• Hard copy
	  ○ ICD codes
	  ○ CPT codes
	  ○ HCPCS

6. medical codes	May include but not limited to:
	• diagnoses codes
	• codes for procedures and services
	  ○ ICD procedure codes
	  ○ CPT Procedure codes
	• codes for supplies, equipment and others services

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment may show that the candidate: 1.1. Prepared requirements for medical coding 1.2. Evaluated medical reports 1.3. Assigned codes
2. Methods of assessment	The following may be used to objectively assess the candidate: 2.1. Demonstration with Oral Questioning (chart coding) 2.2. Written test 2.3. Portfolio assessment (international/DOH and DOH-accredited training institution) with interview
3. Resource implication	The following resources MUST be provided: 3.1. Diagnosis Coding manuals 3.2. Procedure/services and supplies coding manuals or their equivalent 3.3. Mockup/Sample Medical documentation 3.4.
4. Context of Assessment	4.1. Assessment may be conducted in the workplace or in a simulated environment.

UNIT TITLE : PROCESS MEDICAL CLAIMS/BILLING

UNIT CODE : ICT325302

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitude necessary to process medical claims/billing. It covers preparation of requirements for screening and processing of claims/billing.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Prepare requirements for claims processing	1.1. ***Data*** are gathered from patient's record as provided by the client. 1.2. Patient's medical record are created or updated based on ***claims processing requirements*** 1.3. Medical provider's demographics are checked and updated based on claims processing requirements	1.1. Medical Terminology • Systems of the body (e.g., skeletal, respiratory, cardiovascular) • Human anatomy • Human physiology • Fundamental nature of a disease process, signs, symptoms and methods of treatment • Common medical conditions • Medical investigations and procedures • Injuries • Common abbreviations for medical and pharmacological terms (e.g., BCG, HRT) • Common medications • Commonly used medical equipment and instruments • Laboratory testing methods • Diagnostic and surgical procedures • Laboratory values and significance • Medico-legal terminology 1.2. Medical Documentation 1.3. Medical claim process 1.4. Healthcare Laws and Ethics 1.5. Essential of healthcare insurance 1.6. Medical Coding Systems • Diagnosis code set • Procedure Code Set • Supplies Code Set	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills • Communication skills • Computer skills

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		1.7. Client's specific guidelines/ coding and claims processing standards 1.8. 5S and 3Rs	
2. Screen claims	2.1. Claims are checked for authorization, eligibility based on provider and/or subscriber contract with the payer 2.2. Completeness of ***claims documentation*** are checked in accordance with payer requirements 2.3. Lacking data based on the initial screening result are requested from medical provider	2.1. Medical Terminologies 2.2. Medical Documentation 2.3. Medical claim process 2.4. Healthcare Laws and Ethics 2.5. Essential of healthcare insurance 2.6. Medical Coding Systems • International Classification of Diseases • Current Procedural Terminology • Healthcare Common Procedure Coding System 2.7. Client's specific guidelines/ coding and claims processing standards	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills • Communication skills • Computer skills
3. Process claims/billing	3.1. Encode patient, provider and/or ***billing information*** 3.2. Determine reimbursable procedures and/or services based on existing insurance contract or provider contract or any existing reimbursement guidelines 3.3. Billing information is verified for completeness of data based on the required fields. 3.4. Determine billing address and facility based on insurance contract	3.1 Medical Terminologies 3.2 Medical Documentation 3.3 Medical claim process 3.4 Healthcare Laws and Ethics 3.5 Essential of healthcare insurance 3.6 Medical Coding Systems include but not limited to: 3.6.1 Diagnosis Code Set 3.6.2 Procedure Code Set 3.6.3 Supplies Code set 3.7 Client's specific guidelines/ coding and claims processing standards	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills • Communication skills • Computer skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Data	May include but not limited to: • Patient information • Patient medical records • Record of medical provider
2. Claims processing requirements	May include but not limited to: • General guidelines • Client-specific guidelines
3. Claims documentation	May include: 1. medical report 2. supply documentation
4. Billing information	May include but not limited to: • Diagnosis Code • Date of injury • Date of service • Place of service • Procedure and other service codes • Number of units • Charges

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment must show that the candidate: 1.1. Prepared requirements for claims processing 1.2. Screened medical claims 1.3. Processed medical claims
2. Methods of assessment	The following may be used to objectively assess the candidate: 2.1. Demonstration with Oral Questioning 2.2. Written test -OR- 2.3. Portfolio (years of experience) with interview 2.4. Third-party report (COE)
3. Resource implication	The following resources may be provided: 3.1. Diagnosis coding manuals 3.2. Procedures/Services and supplies coding Manuals and/or their equivalent 3.3. Mockup/Sample Medical documentation
4. Context of Assessment	4.1. Assessment may be conducted in the workplace or in a simulated environment.

UNIT TITLE : MANAGE MEDICAL CLAIMS
UNIT CODE : ICT325303
UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitude necessary to manage medical claims. It covers managing account receivable, denials/ rejections and underpaid medical claims.

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Manage account receivable	1.1. Processed and submitted claims are tracked and monitored based on enterprise or client requirements 1.2. Pending claims are followed-up from payer and/or patient in accordance with enterprise policy 1.3. ***Supporting documents*** are Identified and requested from the medical provider based on payer requirements (when necessary) 1.4. ***Posting of payments*** are performed in accordance with enterprise/client's policy	1.1. Medical Terminology • Systems of the body (e.g., skeletal, respiratory, cardiovascular) • Human anatomy • Human physiology • Fundamental nature of a disease process, signs, symptoms and methods of treatment • Common medical conditions • Medical investigations and procedures • Injuries • Common abbreviations for medical and pharmacological terms (e.g., BCG, HRT) • Common medications • Commonly used medical equipment and instruments • Laboratory testing methods • Diagnostic and surgical procedures • Laboratory values and significance • Medico-legal terminology 1.2. Medical Documentation 1.3. Medical claim process 1.4. Healthcare Laws and Ethics	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills • Communication skills • Computer skills

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
		1.5. Essential of healthcare insurance 1.6. Medical Coding Systems include but not limited to: • Diagnosis code set • Procedure code set • Supplies Code set 1.7. Client-specific guidelines and coding and claims processing standards 1.8. 5S and 3Rs	
2. Manage denied/ rejected claims	2.1. ***Denied/ Rejected claims*** are reviewed based on the explanation of benefits from the insurance company. 2.2. Reasons for denial/rejections are verified with payer's adjusters in line with enterprise policy. 2.3. Necessary adjustments are made based on the explanation of benefits from the insurance company. 2.4. Supporting documents are Identified and requested from the medical provider based on the payer requirements. 2.5. Adjusted claims are re-submitted in compliance with payer's requirements	2.1. Medical Terminologies 2.2. Medical Documentation 2.3. Medical claim process 2.4. Healthcare Laws and Ethics 2.5. Essential of healthcare insurance 2.6. Medical Coding Systems • Diagnosis Code set • Procedure Code set • Supplies Code set 2.7. Client's specific guidelines / Coding and claims standards 2.8. 5S and 3Rs	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills • Communication skills • Computer skills
3. Manage underpaid claims	3.1 Underpaid claims are reviewed based on the explanation of benefits from the insurance company. 3.2 ***Reasons for underpayment*** are verified with payer's adjusters in line with enterprise policy.	3.1 Medical Terminologies 3.2 Medical Documentation 3.3 Medical claim process 3.4 Healthcare Laws and Ethics 3.5 Essential of healthcare insurance	• Analytical skills • Reading and comprehension skills • Researching skills • Basic mathematical skills

ELEMENT	PERFORMANCE CRITERIA ***Italicized*** terms are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
	3.3 Supporting documents are prepared based on payer requirements. 3.4 Underpaid claims are re-submitted together with appeal request in line with enterprise/client's policy.	3.6 Medical Coding Systems • Diagnosis Code set • Procedure Code Set • Supplies Code set 3.7 Client's specific guidelines / Coding and Claims Standards 3.8 5S and 3Rs	• Communication skills • Computer skills

RANGE OF VARIABLES

VARIABLE	RANGE
1. Supporting documents	May include but not limited to: • Patient's record (diagnostic examination result) • Medical provider's notes • Diagnoses code set, procedure code set and supplies code set • Billing record
2. Posting of payments	May be classified as: • fully paid • under paid • rejected or denied
3. Rejected claims	May be caused by but not limited to: • Incomplete/incorrect patient information • Illegible/unreadable documents • Incorrect medical codes • Incomplete/incorrect providers information
4. Reasons for underpayment	May include but not limited to: • Medically unnecessary procedure, supplies and/or equipment • Not covered by benefit plan • Exceeded coverage plan • Unauthorized procedure, supplies and/or equipment • Duplicate billing • Bundled medical procedure codes

EVIDENCE GUIDE

1. Critical aspects of competency	Assessment must show that the candidate: 1.1. Managed account receivable 1.2. Managed rejection/denials 1.3. Managed underpayment
2. Methods of assessment	The following may be used to objectively assess the candidate: 2.1. Demonstration with oral Questioning 2.2. Written test 2.3. Portfolio with interview
3. Resource implication	The following resources May be provided: 5.1 diagnosis coding manuals 5.2 Procedures/Services and supplies coding Manuals and/or their equivalent 5.3 Mockup/Sample Medical documentation
4. Context of Assessment	Assessment may be conducted in the workplace or in a simulated environment.

SECTION 3 TRAINING ARRANGEMENTS

This set of standards provides Technical and Vocational Education and Training (TVET) providers with information and other important requirements to consider when designing training programs for Medical Coding and Claims Processing NC III.

This includes information on curriculum design; training delivery; trainee entry requirements; tools and equipment; training facilities; and trainer's qualification and institutional assessment.

3.1 CURRICULUM DESIGN

TESDA shall provide the training on the development of competency-based curricula to enable training providers develop their own curricula with the components mentioned below.

Delivery of knowledge requirements for the basic, common and core units of competency specifically in the areas of mathematics, science/technology, communication/language and other academic subjects shall be contextualized. To this end, TVET providers shall develop a Contextual Learning Matrix (CLM) to accompany their curricula.

Course Title**:** **MEDICAL CODING AND CLAIMS PROCESSING** NC Lev**el: NC III**

Nominal Training Hours**:**

32 Hours	**(Basic)**
+ 18 Hours	**(Common)**
160 Hours	**(Core)**
210 Hours - TOTAL	

Course Description:

This course is designed to develop knowledge, desirable attitudes, and skills in assigning medical codes to medical conditions and procedures and services from medical reports made by physicians and other health care professional for reporting and billing/claims purposes. It covers specialized competencies such as assigning medical codes, processing and managing of medical claims.

To obtain this, all units prescribed for this qualification must be achieved:

BASIC COMPETENCIES

32 hrs

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
1. Lead workplace communication	1.1 Communicate information about workplace processes. .	• Method of communication • Communication skills • Communication tools • Questioning techniques	• Expressing One self • Practice on Public speaking • Written activities on workplace process	• Group discussion • Role Play • Brainstorming • Demonstration	• Written Test • Interview • Observation	2 hours
	1.2 Lead workplace discussions	• Method/technique of discussion • How to lead discussion • How to solicit response	• Written and Electronic communication activities • Debate Exercises	• Self-paced handout/ module • Discussion • Role Play	• Written Test • Demonstration	2 hours
	1.3 Identify and communicate issues arising in the workplace	• Identify problems and issues • Organizing information on problem and issues • Relating problems and issues • Communication barriers affecting workplace discussions	• Resolving conflict in the workplace • Making a report about problem and issues • Practice communication model	• Brainstorming • Self-paced handout/ module • Role Play • Self-paced handout/ module	• Interviews • Written exam • Demonstration	2 hours

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
2. Lead small teams	2.1 Provide team leadership.	• Communication skills required for leading small team • Skills and techniques in promoting team building • Negotiating skills • Up to date dissemination of instruction and requirements to members • Art of listening and treating individual team members concern	• Evaluate the success factors in the contribution of the personnel in the implementation of the safety, quality and environmental objectives of the company • Practice leadership activities • Teambuilding activities • Write simple negotiation strategy on workplace issues • Role play on communication model and the art of listening	• Self-paced handout/ module • Role Play • Case Study	• Written • Oral Questioning • Demonstration	2 hours
	2.2 Assign responsibilities among members	• Duties and responsibilities of each team member • Skills in identifying individual skills, knowledge and attitude as basis for allocating responsibilities • Knowledge in identifying each team member duties and responsibilities	• Planning session regarding duties and responsibilities of each team member • Writeshop of interpersonal abilities, attitude and knowledge • Identification of team members responsibilities thru simulation	• Role Play • Workshop • Demonstration	• Case studies • Interview • Demonstration	2 hours
	2.3 Set performance expectation for team members.	• Knowledge and skills in setting individual performance target/expectation • Team members duties and responsibilities • Employee policies and procedures • Defining performance expectations criteria	• Develop /implement an appraisal document for the worker • Workshop on setting individual performance target • Writeshop on team members duties and responsibilities • Video presentation regarding employees performance role and expectation towards work	• Group discussion • Writeshop • Multimedia presentation	• Written exam • Demonstration • Written Exam	1 hour

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	2.4 Supervise team performance	• Knowledge and skills in monitoring team member performance • Monitoring team operation to ensure client needs and satisfaction • Methods of monitoring performance • Informal/formal counseling skills	• Practice monitoring skills • Design monitoring scheme for team operation as well as client satisfaction and needs • Evaluate performance of worker	• Role Play • Writeshop • Discussions • Self-paced handout/ module • Group Dynamics	• Written Test • Demonstration • Written Test • Demonstration	1 hour
3. Develop and practice negotiation skills	3.1 Identify relevant information in planning negotiations	• Background information on other parties to the negotiation • Observing differences between content and process • Identifying bargaining information • Applying strategies to manage process	• Perform Data gathering regarding relevant information related to negotiation • Designing a negotiation process • Practice negotiation strategies and manage the process	• Direct observation • Self-paced handout/ module • Discussion • Workshop	• Interview • Written exam • Demonstration	2 hours
	3.2 Participate in negotiations	• Applying steps in negotiating process • Strategies to manage conflict • Steps in negotiating process	• Writeshop on identifying negotiation process • Perform background information gathering	• Simulation/ role playing • Writeshop • Discussion	• Written exam • Practical/ performance test	2 hours
	3.3 Document areas for agreement	• Procedure in documenting negotiations • Managing information • Filing documents	• Practice documentation techniques/minutes of meeting • Practice recording of agreement • Keeping of records	• Case studies • Role play	• Written exam • Practical/ performance test	1 hour

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
4. Solve workplace problem related to work activities	4.1 Explain the analytical techniques	• Observation, investigation & analytical techniques • Brainstorming • Cause and effect diagrams	• Conduct investigation and root cause analyses and implement corrective actions • Perform analytical skills in solving problem related to work	• Direct observation • Simulation	• Written test • Demonstration	2 hours
	4.2 Identify the problem	• Normal operating parameters & product quality • Identifying & clarifying the nature of problem • Application of analytical techniques	• Evaluate the present status of the performance against the established safety, quality and environmental policies of the workplace • Discussion in identifying and clarifying the nature of problem	• Simulation/ role playing • Discussion • Simulation	• Written exam • Practical/ performance test • Demonstration	1 hour
	4.3 Determine the possible cause/s of the problem	• Non-routine process and quality problems • Teamwork and work allocation problem • Safety and emergency situations and incidents	• Implement corrective or preventive actions based on root cause analyses • View video presentation on possible cause of problem in the workplace • Writeshop on the determining problems in the workplace	• Case studies • Multimedia presentation • Writeshop	• Written exam • Interviews • Written Test	1 hour
5. Use mathematical concepts and techniques	5.1 Identify mathematical tools and techniques to solve problem	• Measurement system • Basic measuring tools/devices	• Practice mathematical concepts to solve problem in the workplace	• Direct observation • Demonstration	• Written exam • Practical/ performance test	1 hour
	5.2 Apply mathematical procedures/ solution	• Fundamental operation (addition, subtraction, division, multiplication)	• Practice linear measurements and conversion • Practice mathematical calculation on workplace situation	• Simulation/ role playing • Demonstration	• Written exam • Practical/ performance test	2 hours

Unit of Competency	Learning Outcomes	Learning Content (Required Knowledge)	Practical Activities (Required Skills)	Methodology	Assessment Approach	Nominal Duration
	5.3 Analyze results	• Precision and accuracy	• Compare the results against the new requirements and identify gaps • Analysis of result	• Case studies • Demonstration	• Written exam • Interviews	2 hours
6. Use relevant technologies	6.1 Identify appropriate technology	• Awareness on technology and its function • Communication techniques	• Film Viewing regarding technology and its benefits • Identify different technology applicable to workplace	• Direct observation • Multimedia presentation	• Written exam • Demonstration	2 hours
	6.2 Apply relevant technology	• Study different relevant technology in the workplace • Relate 5s to technology	• Conduct risk assessment for a routine or non-routine task in the workplace using the established systems • Application of relevant technology to the workplace	• Direct observation • Simulation/ role playing	• Written exam • Demonstration	2 hours
	6.3 Maintain/ enhance relevant technology	• Corrective and preventive maintenance • Upgrading of technology • Communication Skills • Organizational set–up / work flow	• Identify monthly maintenance tasks based on the Planned Maintenance System • Application of corrective and preventive maintenance to workplace	• Case studies • Simulation/ role playing	• Interviews • Demonstration	2 hours
						32 hours

Note: Basic competencies may be embedded in the core competencies.

COMMON COMPETENCIES
18 hrs

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
1. Apply Quality Standards	1.1 Assess quality of received materials	1.1 Relevant production processes, materials and products 1.2 Characteristics of materials, software and hardware used in production processes 1.3 Quality checking procedures 1.4 Quality Workplace procedures 1.5 Identification of faulty materials	▪ Checking quality of materials or component parts as per manufacturer's standards ▪ Interpreting specifications or symbols	▪ Field trip ▪ Symposium ▪ Video clips ▪ Simulation/ Role playing ▪ On the job training	▪ Written test ▪ Demonstration & questioning ▪ Observation & questioning	3 hours
	1.2 Assess own work	2.1 Safety and environmental aspects of production processes 2.2 Fault identification and reporting 2.3 Workplace procedure in documenting completed work 2.4 Workplace Quality Indicators	▪ Observing safety and environmental aspects of production processes ▪ Preparing technical reports ▪ Performing procedures in the workplace	▪ Field trip ▪ Symposium ▪ Film showing ▪ Simulation ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report	3 hours
	1.3 Engage in quality improvement	3.1 Quality improvement processes a. IEC/ISO standards b. Environmental and safety standards	▪ Implementing continuous improvement	▪ Field trip ▪ Symposium ▪ Film showing ▪ Simulation ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report	2 hours

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
2. Perform Computer Operations	2.1 Plan and prepare for task to be undertaken	2.1 Main types of computers and basic features of different operating systems 2.2 Main parts of a computer 2.3 Information on hardware and software 2.4 Data security guidelines 2.5 Different Computer specifications	▪ Planning and preparing computer operation activity	▪ Modular ▪ Film showing ▪ Computer based training (e-learning) ▪ Project method ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report ▪ Assessment of output product ▪ Portfolio ▪ Computer- based assessment	3 hours
	2.2 Input data into computer	2.1 keyboard and computer user 2.2 Storage devices and basic categories of memory 2.3 Relevant types of software	▪ Encoding of data ▪ Saving encoded data	▪ Modular ▪ Film showing ▪ Computer based training (e-learning) ▪ Project method ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report ▪ Assessment of output product ▪ Portfolio ▪ Computer- based assessment	1 hour
	2.3 Access information using computer	3.1 General security, privacy legislation and copyright 3.2 Productivity Application ▪ Microsoft office applications 3.3 Business Application ▪ Introduction to Basic Programming software	▪ Accessing computer data/files ▪ Performing data encoding ▪ Creating presentation materials ▪ Drafting office communication and documents	▪ Modular ▪ Film showing ▪ Computer based training (e-learning) ▪ Project method ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report ▪ Assessment of output product ▪ Portfolio ▪ Computer- based assessment	2 hours

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
	2.4 Produce/ output data using computer system	4.1 Computer application in printing, scanning and sending facsimile 4.2 Types and function of computer peripheral devices	▪ Printing and scanning of office documents and materials ▪ Sending of office/business documents ▪ Saving of documents in storage devices a. CD/DVD b. USB drives c. Hard disk drives	▪ Modular ▪ Film showing ▪ Computer based training (e-learning) ▪ Project method ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report ▪ Assessment of output product ▪ Portfolio ▪ Computer- based assessment	2 hours
	2.5 Maintain computer equipment and systems	5.1 Computer equipment/system basic maintenance procedures 5.2 Different types of computer viruses 5.3 Basic file maintenance procedures	▪ Performing cleaning of PC parts/hardware components ▪ Scanning/Debugging of computer software and applications ▪ Performing cleaning and defragmentation of computer files ▪ Performing backup of computer files	▪ Modular ▪ Film showing ▪ Computer based training (e-learning) ▪ Project method ▪ On the job training	▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report ▪ Assessment of output product ▪ Portfolio ▪ Computer- based assessment	2 hours

CORE COMPETENCIES

160 hrs

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
1. Assign Medical Codes	1.1 Prepare requirements for medical coding	• Types and contents of medical record • Different type and uses of Medical Codes • Identification of types and uses Coding Tools • Format and Organization of Coding Tools • Healthcare Data Security and Privacy • Medical terminology • Anatomy and Physiology	• Analyzing the completeness of a medical record • Identifying different types of medical codes and its uses • Identifying types of Coding Tools • Familiarizing on the format and organization of different coding tools • Understanding HIPAA and its importance in Healthcare Coding and Claims Processing	▪ Lecture ▪ Discussion ▪ Demonstration	▪ Written exam ▪ Demonstration ▪ Interview	16
	1.2 Evaluate medical reports	• Information/Data set necessary in Coding • Data management • Coding Guidelines and Conventions • Current Coding practices	• Identifying and gathering necessary information or Data sets in Coding • Identifying and understanding all the appropriate Coding conventions and guidelines. • Identifying standard coding practices	▪ Lecture ▪ Discussion ▪ Demonstration	▪ Written exam ▪ Demonstration ▪ Interview	**24**
	1.3 Assign codes	• Basic Coding steps • Classification of Diagnoses Codes • Classification of Procedure and Supply codes • Best Practices in Coding	• Knowing the basic coding steps. • Assigning appropriate diagnoses codes • Assigning appropriate procedure and supply codes • Applying best practices in coding activities	▪ Lecture ▪ Discussion ▪ Demonstration	▪ Written exam ▪ Demonstration ▪ Interview	**80**

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
2. Process Medical Claims/ Billing	2.1 Prepare requirements for claims processing	• Medical terminology • Medical documentation and billing forms • Claims processing requirements • Medical provider requirements • Third-party payers • Patient Information	• Perform data gathering of requirements for claims processing • Identify the appropriate claims processing requirement by medical providers • Evaluate completeness of claims documents for processing	▪ Discussion ▪ Demonstration ▪ Case study	▪ Written exam ▪ Demonstration ▪ Interview	4
	2.2 Screen claims	• Healthcare Laws and Ethics • Healthcare Insurance and Plans • Government Insurance • Clearinghouse • Medical billing software • Basic mathematical tools • Precision and accuracy • Communication skills	• Checking claim eligibility and authorization • Performing research activities to screen claims • Practicing mathematical concept to process claims • Identifying and analyzing variances and discrepancies in claims • Creating report log to communicate with client	▪ Discussion ▪ Demonstration ▪ Project type	▪ Written exam ▪ Demonstration ▪ Direct observation	**12**
	2.3 Process claims/billing	• Healthcare Laws and Ethics • Medical Coding Systems • Client-specific guidelines and claims processing standards	• Identify correct billing information • Maintain data confidentiality and security • Demonstrate research capability • Apply appropriate guidelines when processing claims	▪ Brain storming ▪ Discussion ▪ Demonstration	▪ Written exam ▪ Demonstration ▪ Interview / questioning	**12**
3. Manage medical claims	3.1 Manage account receivable	• Basic mathematical tools/accounting process • Communication skills • Research skills	• Record the appropriate payments and balances • Create report log to communicate action items for payers and providers re	▪ Lecture ▪ Discussion ▪ Demonstration ▪ Project type	▪ Written exam ▪ Demonstration ▪ Interview	4

Unit of Competency	Learning Outcomes	Learning Contents	Practical Activities	Methodologies	Assessment Methods	Nominal Duration
		• Medical documentation • Computer operation	documentation • Checks various payer portals for payment status and reasons for non-payment • Performs data entry to post payment			
	3.2 Manage denied/ rejected claims	• Explanation of Benefits • Insurance Policies • Common Reason for Claim denials • Measure to Prevent Denied Claims • Communication Skills • Common Reason for Claim Rejection • Rebilling Process for Rejected Claims	• Identifying the components of an Explanation of Benefits • Interpreting Explanation of Benefits of a denied claim • Interpreting an Explanation of Benefits of a rejected claims • Identifying common reason for claim rejection • Identifying solution for identified reason for rejection	▪ Lecture ▪ Demonstration ▪ Case study	▪ Written exam ▪ Demonstration ▪ Interview/ questioning	**4**
	3.3 Manage underpaid claims	• Common Reason for Underpaid claims • Measure to Prevent underpaid Claims • Rebilling process for underpaid claims • Review and Appeal process	• Identifying common reason for claims underpayment • Identifying measures to prevent underpayment of claims • Providing possible solution for identified reason for underpayment • Performing Rebilling of underpaid Claims • Performing Review and Appeal for underpaid Claims	▪ Brain storming ▪ Discussion ▪ Demonstration ▪ Case study	▪ Written exam ▪ Demonstration ▪ Interview	**4**
						160 hours

3.2 TRAINING DELIVERY

1. The delivery of training shall adhere to the design of the curriculum. Delivery shall be guided by the principles of competency-based TVET.

    a. Course design is based on competency standards set by the industry or recognized industry sector; **(Learning system is driven by competencies written to industry standards)**

    b. Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies;

    c. Training can be done on an actual workplace setting, simulation of a workplace and/or through adoption of modern technology.

    d. Assessment is based in the collection of evidence of the performance of work to the industry required standards;

    e. Assessment of competency takes the trainee's knowledge and attitude into account but requires evidence of actual performance of the competency as the primary source of evidence.

    f. Training program allows for recognition of prior learning (RPL) or current competencies;

    g. Training completion is based on satisfactory performance of all specified competencies.

2. The competency-based TVET system recognizes various types of delivery modes, both on-and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities and their variations/components may be adopted singly or in combination with other modalities when designing and delivering training programs:

    2.1. Institution- Based:

    - **Dual Training System (DTS)/Dualized Training Program (DTP**) which contain both in-school and in-industry training or fieldwork components. Details can be referred to the Implementing Rules and Regulations of the DTS Law and the TESDA Guidelines on the DTP;

    - **Distance learning** is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may employ correspondence study, audio, video, computer technologies or other modern technology that can be used to facilitate learning and formal and non-formal training. Specific guidelines on this mode shall be issued by the TESDA Secretariat.

- The **traditional classroom-based or in-center instruction** may be enhanced through use of learner-centered methods as well as laboratory or field-work components.

2.2 Enterprise-Based:

- **Formal Apprenticeship** – Training within employment involving a contract between an apprentice and an enterprise on an approved apprenticeable occupation.

- **Enterprise-based Training-** where training is implemented within the company in accordance with the requirements of the specific company. Specific guidelines on this mode shall be issued by the TESDA Secretariat.

3.3 TRAINEE ENTRY REQUIREMENTS

The trainees who wish to enter the course should possess the following requirements:

- Graduate of 12-years Basic education;
- Can communicate in English, both oral and written;
- Have pass the trainability/aptitude test of the institution*

Note: * *Optional*

This list does not include specific institutional requirements such as educational attainment, appropriate work experience, and others that may be required of the trainees by the school or training center delivering the TVET program.

3.4 LIST OF TOOLS, EQUIPMENT AND MATERIALS

Recommended list of equipment and materials for the training in Medical Coding and Claims Processing NC III

	MATERIALS
At least 5 sets	Coding Manuals (*latest edition or at least 2-years of publication*) • Coding Resources Diagnosis code set • Procedures/Services and Supplies code set Claims Processing Manuals / Handouts
1:1	Training/Student manual (optional)
At least 2 pcs	Latest Medical Dictionary
At least 2 sets	Computers with internet (optional)

3.5 TRAINING FACILITIES

The building must be in compliance with occupational health and safety guidelines. The space requirements for the teaching/learning and circulation areas are as follows:

TEACHING/LEARNING AREAS	**SIZE IN METERS**	**AREA IN SQ. METERS**	**QTY.**	**TOTAL AREA IN SQ. METERS**
Lecture /Laboratory Room*	8 x 5	40	1	40
Learning Resource Area / Repository of references/ manuals, etc. *(may be located inside the lecture / laboratory room)*	4 X 5	20	1	20
Wash ,Toilet & Locker Room	1 x 2	2	2	4
Total				64
Facilities / Equipment / Circulation**				19
Total Area				**83**

Note: *Maximum required ratio of trainer to students* = 1: 25

** The above specification for the lecture room space requirement assumes a maximum of 25 students. The area size may vary depending on the number of students at a given class.*

*** Area requirement is equivalent to 30% of the total teaching/learning areas*

3.6 TRAINERS QUALIFICATIONS

MEDICAL CODING AND CLAIMS PROCESSING – NC III
Trainer's Qualification I (TQ I)

- Must be a holder of National TVET Trainer's Certificate (NTTC) I
  - Must be a holder of Medical Coding and Claims Processing NC III
  - Must have completed training and passed the assessment for Trainer's Methodology course
- With at least two (2) years of relevant industry experience as medical coding and claims specialist or with international certification in medical coding, billing and/or claims

3.7 INSTITUTIONAL ASSESSMENT

Institutional assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for each unit of competency.

The result of the institutional assessment may be considered as evidence for the assessment for national certification.

SECTION 4. ASSESSMENT AND CERTIFICATION ARRANGEMENTS

Competency Assessment is the process of collecting evidence and making judgments whether competency has been achieved. The purpose of assessment is to confirm that an individual can perform to the standards expected at the workplace as expressed in relevant competency standards.

The assessment process is based on evidence or information gathered to prove achievement of competencies. The process may be applied to an employable unit(s) of competency in partial fulfillment of the requirements of the national qualification.

4.1 NATIONAL ASSESSMENT AND CERTIFICATION ARRANGEMENTS

4.1.1 To attain the National Qualification of **Medical Coding and Claims Processing NC III**, the candidate must demonstrate competence in all units listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the TESDA Director General.

4.1.2 The qualification of **Medical Coding and Claims Processing NC III** may be attained through:

4.1.2.1 Accumulation of Certificates of Competency (COCs) in the following competencies:

4.1.2.1.1 Assign medical codes
4.1.2.1.2 Perform medical claims/billing work

- Process medical claims/billing
- Manage medical claims

Successful candidates shall be awarded a **Certificate of Competency (COC)** in each of the core units.

4.1.2.2 Demonstration of competence through project-type assessment covering all the units required in the qualification.

4.1.3 Accumulation and submission of all COCs acquired for the relevant units of competency comprising a qualification, an individual shall be issued the corresponding National Certificate.

4.1.4 Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.

4.1.5 The following are qualified to apply for assessment and certification:

4.1.5.1 Graduate of formal, non-formal, and informal including enterprise-based training programs and e-learning/online/distance learning programs;

4.1.5.2 Experienced workers (wage employed or self-employed).

4.1.5.3 Those who are included in the national ICD10 Training Registry of DOH/WHO

4.1.5.4 Those with international medical coding training certification

4.1.6 The conduct of assessment and issuance of certificates shall follow the procedures manual and implementing guidelines developed for the purpose.

4.2 COMPETENCY ASSESSMENT REQUISITE

4.2.1 Self-Assessment Guide. The self-assessment guide (SAG) is accomplished by the candidate prior to actual competency assessment. SAG is a pre-assessment tool to help the candidate and the assessor determine what evidence is available, where gaps exist, including readiness for assessment.
This document can:

a. Identify the candidate's skills and knowledge
b. Highlight gaps in candidate's skills and knowledge
c. Provide critical guidance to the assessor and candidate on the evidence that need to be presented
d. Assist the candidate to identify key areas in which practice is needed or additional information or skills that should be gained prior `

4.2.2 Accredited Assessment Center. Only Assessment Center accredited by TESDA is authorized to conduct competency assessment. Assessment centers undergo a quality assured procedure for accreditation before they are authorized by TESDA to manage the assessment for National Certification.

4.2.3 Accredited Competency Assessor. Only accredited competency assessor is authorized to conduct assessment of competence. Competency assessors undergo a quality assured system of accreditation procedure before they are authorized by TESDA to assess the competencies of candidates for National Certification.

ANNEX A - COMPETENCY MAP

Medical Coding and Claims Processing NC III

BASIC COMPETENCIES

Receive and Respond to Workplace Communication	Work with Others	Demonstrate work values	Practice basic housekeeping procedures	Participate in Workplace Communication
Work in a Team Environment	Practice career professionalism	Practice occupational health and safety procedures	**Lead Workplace Communication**	**Lead Small Team**
Develop and practice negotiation skills	**Solve Problems Related to Work Activities**	**Use mathematical concepts and techniques**	**Use relevant technologies**	Utilize Specialist Communication Skills
Develop Team and Individuals	Apply Problem Solving Techniques in the Workplace	Collect, analyze and organize information	Plan and Organize Work	Promote environmental protection

COMMON COMPETENCIES

Use Hand Tools	Perform Mensuration and Calculation	Prepare and Interpret Technical Drawing	**Apply Quality Standards**	**Perform Computer Operations**

CORE COMPETENCIES

Communicate effectively in a customer contact center	Render quality customer service	Utilize enterprise/ company technology	Conduct contact center campaign	Provide specialized support and assistance to customers
Manage the activities of a contact center work team	Lead a contact center work team	Use business technology	Use medical technology to carry out task	Produce text from audio transcription
Review/edit documents	Manage the activities of a work team	Lead a team in delivering quality service	Produce cleaned-up and in-between drawings	Create 2D models and images
Produce 2D colored animation	Produce key drawings for animation	Produce over-all designs for animation	Produce background designs	Composite and edit animation sequence
Create 3D models and images	Produce storyboard for animation	Coordinate the production of animation		
Assign medical codes	**Process medical claims/billings**	**Manage medical claims**		

DEFINITION OF TERMS

GENERAL

1) **Certification -** is the process of verifying and validating the competencies of a person through assessment

2) **Certificate of Competency (COC)** – is a certification issued to individuals who pass the assessment for a single unit or cluster of units of competency

3) **Common Competencies** - are the skills and knowledge needed by all people working in a particular industry

4) **Competency** - is the possession and application of knowledge, skills and attitudes to perform work activities to the standard expected in the workplace

5) **Competency Assessment -** is the process of collecting evidence and making judgments on whether competency has been achieved

6) **Competency Standard (CS)** - is the industry-determined specification of competencies required for effective work performance

7) **Context of Assessment** - refers to the place where assessment is to be conducted or carried out

8) **Core Competencies -** are the specific skills and knowledge needed in a particular area of work - industry sector/occupation/job role

9) **Critical aspects of competency -** refers to the evidence that is essential for successful performance of the unit of competency

10) **Elective Competencies -** are the additional skills and knowledge required by the individual or enterprise for work

11) **Elements** - are the building blocks of a unit of competency. They describe in outcome terms the functions that a person performs in the workplace.

12) **Evidence Guide** - is a component of the unit of competency that defines or identifies the evidences required to determine the competence of the individual. It provides information on critical aspects of competency, underpinning knowledge, underpinning skills, resource implications, assessment method and context of assessment

13) **Level -** refers to the category of skills and knowledge required to do a job

14) **Method of Assessment** - refers to the ways of collecting evidence and when, evidence should be collected

15) **National Certificate (NC)** – is a certification issued to individuals who achieve all the required units of competency for a national qualification defined under the Training Regulations. NCs are aligned to specific levels within the PTQF

16) **Performance Criteria** - are evaluative statements that specify what is to be assessed and the required level of performance

17) **Qualification** - is a cluster of units of competencies that meets job roles and is significant in the workplace. It is also a certification awarded to a person on successful completion of a course in recognition of having demonstrated competencies in an industry sector

18) **Range of Variables** - describes the circumstances or context in which the work is to be performed

19) **Recognition of Prior Learning (RPL)** – is the acknowledgement of an individual's skills, knowledge and attitudes gained from life and work experiences outside registered training programs

19) **Resource Implication -** refer to the resources needed for the successful performance of the work activity described in the unit of competency. It includes work environment and conditions, materials, tools and equipment

20) **Basic Competencies -** are the skills and knowledge that everyone needs for work

21) **Training Regulations (TR)** – refers to the document promulgated and issued by TESDA consisting of competency standards, national qualifications and training guidelines for specific sectors/occupations. The TR serves as basis for establishment of qualification and certification under the PTQF. It also serves as guide for development of competency-based curricula and instructional materials including registration of TVET programs offered by TVET providers

22) **Underpinning Knowledge -** refers to the competency that involves in applying knowledge to perform work activities. It includes specific knowledge that is essential to the performance of the competency

23) **Underpinning Skills** - refers to the list of the skills needed to achieve the elements and performance criteria in the unit of competency. It includes generic and industry specific skills

24) **Unit of Competency** – is a component of the competency standards stating a specific key function or role in a particular job or occupation; it is the smallest component of achievement that can be assessed and certified under the PTQF

SECTOR SPECIFIC

1. **Anatomy** – the branch of morphology concerned with the structure of animals or plants.
2. **Browser** – a software package that provides the user interface for accessing Internet, intranet and extranet Web sites.
3. **Claims processing -** is the fulfillment by an insurer of its obligation to receive, investigate and act on a claim filed by an insured. It involves multiple administrative and customer service layers that includes review, investigation, adjustment (if necessary), remittance or denial of the claim.
4. **Computer** – a device that has the ability to accept data; internally store and execute a program of instructions; perform mathematical, logical, and manipulative operations on data; and report the results.
5. **Computer Terminal** – any input/output device connected by telecommunications links to a computer.
6. **Data** - objective measurements of the attributes (characteristics) of entities such as people, places, things, and events.
7. **Documentation** – a collection of documents or information.
8. **Edit** – to modify the form or format of data
9. **Encryption** – to scramble data or convert it, prior to transmission, to a secret code that masks the meaning of he data to unauthorized recipients.
10. **End user –** anyone who uses an information system or the information it produces.
11. **Ergonomics** - the science and technology emphasizing the safety, comfort, and ease of use of human-operated machines. The goal of ergonomics is to produce systems that are user-friendly: safe, comfortable and easy to use.
12. **Information** – data placed in a meaningful and useful context for an end user.
13. **Information and Communication Technology (ICT) -** refers to technologies associated with the transmission and exchange of data in the form of sound, text, visual images, signals or any combination of those forms through the use of digital technology. It encompasses such services as telecommunications, posts, multimedia, electronic commerce, broadcasting, and information technology.
14. **Keyboarding –** using the keyboard of a microcomputer or terminal.
15. **Knowledge workers –** people whose primary work activities include creating, using, and distributing information.
16. **Local Area Network (LAN) –** a communications network that typically connects computers, terminals, and other computerized devices within a limited physical area such as an office, building, manufacturing plant and other work sites.
17. **Medical billing** - is the process of submitting and following up on claims with health insurance companies in order to receive payment for services rendered by a healthcare provider. It is an interaction between a health care provider and the insurance company (payer).The same process is used for most insurance companies, whether they are private companies or government sponsored programs.
18. **Medical claims processor** - manages and processes insurance claims. When healthcare providers treat patients, they file a medical claim to receive payment

from the patient's insurance company. The medical claims processor then reviews and assesses the claim, remitting payment to the doctor if a claim is covered by the patient's insurance policy. Due to the nature of the work, it is vital that the processor be knowledgeable about the health insurance industry.

19. **Outsourcing –** turning over all or part of an organization's information systems operation to outside contractors, known as systems integrators or facilities management companies.
20. **Physiology –** the branch of biology concerned with the functions of living things.
21. **Protocol –** a set of rules and procedures for the control of communication in a communications network.
22. **Quality Assurance –** methods for ensuring that information systems are free from errors and fraud and provide information products of high quality.
23. **Software –** computer programs and procedures concerned with the operation of an information system.
24. **Standards –** measures of performance developed to evaluate the progress of a system toward its objectives
25. **System –** an assembly of methods, procedures, or techniques unified by regulated interaction to form an organized whole
26. **User- friendly** – a characteristic of human-operated equipment and systems that makes

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