Curriculum Development Centers Program

Awardee of The Office of the National Coordinator for Health Information Technology

HEALTH IT WORKFORCE CURRICULUM
COMPONENT BLUEPRINT
Version 3.0/Spring 2012

Component Number: 3
Component Title: Terminology in Health Care and Public Health Settings

Component Description: This component explains specific terminology used by workers in health care and public health. This is NOT a course in data representation or standards.

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Workforce Roles:
- Clinician/Practitioner Consultant
- Implementation Managers
- Implementation Support Specialist
- Practice Workflow and Information Management Technology Specialist
- Technical/Software Support
- Trainer

Component Objectives:
At the completion of this component, the student will be able to:
1. Define, understand and correctly pronounce medical terms related to each of the major body systems.
2. Define commonly used terms in public health, nursing, health information technology, and clinical vocabularies & terminologies related to the implementation of electronic health records.

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3. Identify the purpose and uses of pertinent health care terminologies in the electronic health record.
4. Demonstrate the ability to integrate and use health care terminology in the various health information technology roles.

Component Units with Objectives and Topics

Unit 1: Understanding Medical Words

Description:
This unit describes the meanings of medical words.

Objectives:
1. Discuss the four parts of medical terms.
2. Recognize word roots and combining forms.
3. Identify the most common prefixes and suffixes.
4. Describe the anatomical positions.
5. Define the body planes.
6. Identify regions of the body.
7. Define directional and positional terms.
8. Build, divide, spell and pronounce common medical words.

Topics:
1a.1 Understanding medical words
1a.2 Parts of a medical term
1a.3 Word and combining forms
1b.1 Common prefixes and suffixes
1b.2 Singular and plural endings
1b.3 Abbreviations
1c.1 Body structure
1c.2 Anatomical positions
1c.3 Body planes
1c.4 Regions of the body
1c.5 Directional and positional terms

Unit 2: Integumentary System

Description:
This unit describes the integumentary system.

Objectives:

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1. Define, understand and correctly pronounce medical terms related to the Integumentary System.
2. Describe common diseases and conditions with an overview of various treatments related to the Integumentary System.

Topics:
2.1 Integumentary System Overview
2.2 Organs of the Integumentary System
2.3 Function
2.4 Skin
2.5 Accessory Organs
2.6 Integumentary Combining Forms
2.7 Integumentary System Disorders/Diseases
2.8 Burns
2.9 Skin Cancer
2.10 Wounds
2.11 Common Hair problems
2.12 Nail Problems

Unit 3: Musculoskeletal System

Description:
This unit describes the musculoskeletal system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Musculoskeletal System.
2. Describe common diseases and conditions, with an overview of various treatments related to the Musculoskeletal System.

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Topics:
3.1 Musculoskeletal system overview
3.2 Muscular components
3.3 Skeletal components
3.4 Functions
3.5 Bones
3.6 Joint
3.7 Muscles
3.8 Muscle disorders
3.9 Myopathy
3.10 Myositis
3.11 Muscular dystrophy
3.12 Muscular system combining forms

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3.13 Skeletal system
3.14 Spinal column
3.15 Upper extremity
3.16 Lower extremity
3.17 Skeletal disorders
3.18 Fractures
3.19 Arthritis
3.20 Osteoporosis
3.21 Skeletal system combining forms

Unit 4: Blood, Lymphatic and Immune System

Description:
This unit describes the blood, lymphatic and immune systems.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Blood, Lymphatic and Immune Systems.
2. Describe common diseases and conditions with an overview of various treatments related to the Blood, Lymphatic and Immune Systems.

Topics:
4.1 Blood Overview
4.2 Function
4.3 Blood Components
4.4 Blood cells
4.5 Plasma
4.6 Common Blood disorders/conditions
4.7 Iron deficiency Anemia
4.8 Sickle Cell Anemia
4.9 Blood Combining Forms
4.10 The Lymphatic and Immune Systems
4.11 Primary organs
4.12 Lymph nodes
4.13 Lymphatic vessels
4.14 Thymus gland
4.15 Tonsils
4.16 Functions
4.17 Immunity
4.18 Types
4.19 Natural Immunity
4.20 Passive Acquired immunity
4.21 Active Acquired immunity
4.22 Common Lymphatic and Immune disorders/conditions

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4.23 Lymphedema
4.24 Tonsillitis
4.25 AIDS
4.26 Lymphatic & Immune Combining Forms

Unit 5: Cardiovascular System

Description:
This unit describes the cardiovascular system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Cardiovascular System.
2. Describe common diseases and conditions with an overview of various treatments related to the Cardiovascular System.

Topics:
5.1 Cardiovascular System Overview
5.2 Function
5.3 Primary Organs
5.4 Heart
5.5 Atria
5.6 Ventricle
5.7 Septum
5.8 Blood Vessels
5.9 Common diseases/conditions
5.10 Atherosclerosis
5.11 Stroke
5.12 Hypertension
5.13 Myocardial Infarction
5.14 Cardiovascular Combining Forms

Unit 6: Digestive System

Description:
This unit describes the digestive system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Digestive System.
2. Describe common diseases and conditions with an overview of various treatments related to the Digestive System.

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Topics:
6.1 Digestive system overview
6.2 Function
6.3 Primary organs
6.4 Accessory organs
6.5 Primary organs
6.6 Oral cavity
6.7 Pharynx
6.8 Esophagus
6.9 Stomach
6.10 Small intestine
6.11 Colon
6.12 Rectum and anus
6.13 Accessory organs
6.14 Salivary glands
6.15 Liver
6.16 Gallbladder
6.17 Pancreas
6.18 Common diseases/conditions
6.19 Peptic ulcer
6.20 Cholelithiasis
6.21 Crohn's disease
6.22 Digestive system combining forms

Unit 7: Endocrine System

Description:
This unit describes the endocrine system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Endocrine System.
2. Describe common diseases and conditions with an overview of various treatments related to the Endocrine System.

Topics:
7a.1 Overview of the Endocrine System
7a.2 Hormones
7a.3 Disorders
7a.4 Identification of the location of the endocrine glands
7a.5 Adrenal Glands
7a.6 Pancreas
7b.1 Pituitary Gland
7b.2 Pineal Gland

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7b.3 Thyroid Gland
7b.4 Reproductive Organs
7b.5 Thymus Gland

Unit 8: Ears, Nose, Throat, Eye and Vision

Description:
This unit describes the ears, nose, throat, eyes and vision.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Ears, Nose and Throat and Eyes and Vision.
2. Describe common diseases and conditions with an overview of various treatments related to the Ears, Nose and Throat and Eyes and Vision.

Topics:
8a.1 Overview of the Ear Anatomy
8a.2 Hearing Loss and Deafness
8a.3 Ear Disorders and Diseases
8a.4 Overview of the Nose and Throat Anatomy
8a.5 Nasal Cavity Disorders
8a.6 Allergies
8a.7 Common Cold
8a.8 Hay Fever
8a.9 Deviated Septum
8a.10 Nasal Polyps
8a.11 Nosebleed
8a.12 Rhinitis
8a.13 Sinusitis
8a.14 Nasal Cancer
8a.15 Paranasal Sinuses
8a.16 Throat Disorders
8a.17 Cough
8a.18 Diphtheria
8a.19 Streptococcal Infections
8a.20 Head and Neck Cancers
8b.1 Overview of the Eye Anatomy
8b.2 Eye Disorders and Diseases
8b.3 Cataract
8b.4 Color Blindness
8b.5 Diabetic Retinopathy
8b.6 Glaucoma
8b.7 Eye Infections

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8b.8 Conjunctivitis
8b.9 Stye
8b.10 Macular Degeneration
8b.11 Refractive Errors
8b.12 Myopia
8b.13 Hyperopia
8b.14 Presbyopia
8b.15 Astigmatism
8b.16 Eye Cancers
8b.17 Melanoma
8b.18 Lymphoma

Unit 9: Nervous System

Description:
This unit describes the nervous system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Nervous System.
2. Describe common diseases and conditions with an overview of various treatments related to the Nervous System.

Topics:
9.1 Overview of the Anatomy of the Nervous System
9.2 Central Nervous System
9.3 Brain
9.4 Spinal Cord
9.5 Cerebrospinal fluid
9.6 Cerebrum
9.7 Hypothalamus
9.8 Cerebellum
9.9 Peripheral Nervous System
9.10 Cranial Nerves
9.11 Spinal Nerves
9.12 Brain Disorders and Diseases
9.13 Alzheimer's Disease
9.14 Brain Aneurysm
9.15 Brain Cancer
9.16 Epilepsy
9.17 Parkinson's Disease
9.18 Stroke
9.19 Ischemic
9.20 Hemorrhagic

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9.21 Spinal Cord Disorders and Disease
9.22 Arteriovenous Malformation
9.23 Meningitis
9.24 Multiple Sclerosis
9.25 Nerve Disorders and Diseases
9.26 Bell's Palsy
9.27 Carpal Tunnel Syndrome
9.28 Peripheral Nerve Disorders
9.29 Neurofibromatosis

Unit 10: Reproductive System

Description:
This unit describes the reproductive systems.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Female Reproductive System and Male Reproductive System.
2. Describe common diseases and conditions with an overview of various treatments related to the Female Reproductive System and Male Reproductive System.

Topics:
10a.1 Overview of the female reproductive system anatomy
10a.2 Breast
10a.3 Ovary
10a.4 Fallopian tube
10a.5 Uterus
10a.6 Cervix
10a.7 Vagina
10a.8 Breast disorders and diseases
10a.9 Fibrocystic breast
10a.10 Cysts
10a.11 Fibroadenomas
10a.12 Intraductal papillomas
10a.13 Breast Cancer
10a.14 Cervical disorders and disease
10a.15 Cervicitis
10a.16 Cervical incompetence
10a.17 Cervical polyps and cysts
10a.18 Human papillomavirus (HPV)
10a.19 Gonorrhea
10a.20 Trichomoniasis
10a.21 Ovarian disorders and diseases
10a.22 Pelvic inflammatory disease

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10a.23 Uterine disorders and diseases
10a.24 Dysfunctional uterine bleeding
10a.25 Endometriosis
10a.26 Uterine fibroids
10a.27 Adenomyosis
10a.28 Vaginal disorders and diseases
10a.29 Vaginal cancer
10b.1 Overview of the male reproductive system anatomy
10b.2 Testes
10b.3 Scrotum
10b.4 Excretory ducts
10b.5 Seminal vesicles
10b.6 Prostate gland
10b.7 Penis
10b.8 Disorders and diseases of the penis
10b.9 Balanitis
10b.10 Erectile dysfunction
10b.11 Infections
10b.12 Chlamydia
10b.13 Genital warts
10b.14 Gonorrhea
10b.15 Disorders and diseases of the prostate
10b.16 Prostatitis
10b.17 Benign prostatic hypertrophy (BPH)
10b.18 Prostate cancer
10b.19 Disorders and diseases of the testicles
10b.20 Testicular disorders
10b.21 Testicular cancer

Unit 11: Respiratory System

Description:
This unit describes the respiratory system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Respiratory System.
2. Describe common diseases and conditions with an overview of various treatments related to the Respiratory System.

Topics:
11.1 Overview of the Anatomy of the Respiratory System
11.2 Upper Respiratory Tract
11.3 Lower Respiratory Tract

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11.4 Diseases and Disorders of the Bronchus
11.5 Asthma
11.6 Bronchitis
11.7 Diseases and Disorders of the Pharynx
11.8 Tonsillitis
11.9 Pharyngitis
11.10 Head and Neck Cancer
11.11 Diseases and Disorders of the Lung
11.12 Cystic Fibrosis
11.13 Lung Transplantation
11.14 Pneumonia
11.15 Pulmonary Embolism
11.16 Pulmonary Hypertension

Unit 12: Urinary System

Description:
This unit describes the urinary system.

Objectives:
1. Define, understand and correctly pronounce medical terms related to the Urinary System.
2. Describe common diseases and conditions with an overview of various treatments related to the Urinary System.

Topics:
12.1 Overview of the Anatomy of the Urinary System
12.2 Kidneys
12.3 Ureters
12.4 Urinary Bladder
12.5 Urethra
12.6 Diseases and Disorders of the Urinary System
12.7 Bladder Diseases
12.8 Cystitis
12.9 Urinary Tract Infection
12.10 Interstitial Cystitis
12.11 Diagnostic Tests
12.12 Urine Tests
12.13 X-rays
12.14 Cystoscopy
12.15 Bladder Cancer
12.16 Diseases and Disorders of the Kidney
12.17 Nephrolithiasis
12.18 Diabetic Nephropathy

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12.19 Kidney Failure Treatments
12.20 Hemodialysis
12.21 Peritoneal Dialysis
12.22 Kidney Transplantation
12.23 Wilms' Tumor
12.24 Renal Cancer

Unit 13: Public Health and Healthcare System Terminology

Description:
This unit describes public health.

Objectives:
Define frequently used public health terms.
Identify distinguishing features of public health.
Identify categories and factors that influence health.
Identify terms commonly used as measures of health status.
Define frequently used healthcare systems terms.
Identify and define types of patients in various healthcare settings.
Identify and define the healthcare professions.

Topics:
13a.1 What is Public Health?
13a.2 Public Health Definitions
13a.3 Public Health Terms
13a.4 Features of Public Health
13a.5 Defining Health
13a.6 Factors that influence Health
13a.7 Measurement of Health Status
13b.1 Healthcare System Terms
13b.2 Healthcare Services
13b.3 Healthcare Professionals
13b.4 Healthcare Services Terms

Unit 14: What is Health Information Management and Technology?

Description:
This unit describes health information management and technology.

Objectives:
1. Define and explain the terms and concepts used in the field of Health Information Management and Technology.
2. Understand the terms that frame Health Information Management (HIM) and Health Information Technology (HIT) practice.

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3. Describe health IT hardware and software.
4. Define acronyms and abbreviations.

Topics:
14.1 Electronic Health Information Management
14.2 Health Information Technology: Hardware and Software
14.3 Types of Networks
14.4 Data Entry Devices and Locations
14.5 Commonly Used Health Information Technology (HIT) Acronyms
14.6 Professional Organizations Supporting HIT
14.7 National Agencies Supporting HIT
14.8 US Governmental Oversight for HITECH
14.9 Organizations Supporting HIT Standards
14.10 Commonly Used Health Information Technology Acronyms
14.11 Commonly Used HIT Acronyms
14.12 Commonly Used HIPAA Acronyms

Unit 15: Electronic Health Records

Description:
This unit describes the electronic health record (EHR).

Objectives:
1. Identify the function of the health record.
2. Describe the American Recovery and Reinvestment Act of 2009 (ARRA) including the portion of the bill called the Health Information Technology for Economic and Clinical Health Act (HITECH) Act of 2009.
3. Define meaningful use.
4. Discuss the difference between an EHR, EMR, and PHR.
5. Define functional requirements of an electronic health record (EHR).
6. Identify the purposes of EHR components.
7. Describe methods to ensure data security and confidentiality.

Topics:
15a.1 Functions of the Health Record
15a.2 Electronic Health Record
15a.3 Past and Future
15a.4 Data Rich and Information Poor
15a.5 Rights of Information
15a.6 Health Information Technology Regulations
15a.7 American Recovery and Reinvestment Act (ARRA)
15a.8 Health Information Technology for Economic and Clinical Health Act (HITECH)
15a.9 Meaningful Use
15a.10 Regional Extension Centers (RECs)

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15a.11 Data Capture and Data Sharing
15a.12 Improve Quality
15a.13 Engage Patients and Families
15a.14 Improve Care Coordination
15a.15 Improve Population and Public Health
15a.16 Meaningful Use Rule
15b.1The Electronic Health Record
15b.2 Users of the Electronic Health Record
15b.3 Components of an Electronic Medical Record
15b.4 Clinical Systems
15b.5 Personal Health Records
15b.6 Functions of Personal Health Records
15b.7 Personal Health Record Models
15b.8 Attributes of the EHR
15b.9 Key EHR-Related Terms
15b.10 Data Security and Confidentiality
15b.11 Legal Protections
15b.12 Maintaining Confidentiality

Unit 16: Standards to Promote Health Information Exchange

Description:
This unit describes standards to promote health information exchange.

Objectives:
1. Define terms related to standardized terminologies.
2. Identify and define HIPAA standard code sets.
3. Identify and define terminologies and vocabularies that represent nursing care.
4. Define and give examples of data interchange standards.

Topics:
16.1 Terms Related to Health Information Standards
16.2 EHR Messaging Standards
16.3 Digital Imaging Communications in Medicine (DICOM)
16.4 Health Level 7 (HL7)
16.5 Classifications, Terminologies and Vocabularies
16.6 Clinical Terminologies
16.7 Health Information Standards
16.8 HIPAA Standard Code Sets
16.9 International Classification of Diseases, 9th Revision, Clinical Modification
16.10 National Drug Codes (NDC)
16.11 Healthcare Common Procedure Coding System (HCPCS)
16.12 American Nursing Association's Recommended Standardized Nursing Terminologies

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16.13 North American Nursing Diagnosis Association (NAND)
16.14 Nursing Intervention Classification (NIC)
16.15 Nursing Outcomes Classification (NOC)
16.16 Perioperative Nursing Data Set (PNDS)
16.17 National Committee on Vital and Health Statistics Recommended Data Interchange Standards
16.18 Health Level 7
16.19 SNOMED CT
16.20 Logical Observation Identifiers, Names, and Codes (LOINC)
16.21 Consolidated Health Informatics (CHI) Initiative

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