Curriculum Development Centers Program

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

HEALTH IT WORKFORCE CURRICULUM
COMPONENT BLUEPRINT
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Component Number: 2
Component Title: The Culture of Healthcare

Component Description: For individuals not familiar with healthcare, this component addresses job expectations in healthcare settings. It discusses how care is organized within a practice setting, privacy laws, and professional and ethical issues encountered in the workplace.

Assigned Institution: Oregon Health & Science University
Principal Investigator: William Hersh, MD, OHSU
Team Lead(s): Vishnu Mohan, MD, OHSU
Team Members:
Tim Hickman, MD, University of Missouri, Kansas City (Curriculum Developer)
Vishnu Mohan, MD, OHSU (Curriculum Developer)
William Hersh, MD, OHSU(Curriculum Developer)

Workforce Roles:
- Implementation Managers
- Implementation Support Specialists
- Practice Workflow and Information Management Redesign Specialist
- Technical/Software Support
- Trainer

Component Objectives:
At the completion of this component, the student will be able to:
1. Describe the major types of clinical personnel involved in healthcare, including their education and training, certification and licensure, and typical roles in healthcare.
2. Describe the major types of settings in which healthcare occurs including ambulatory care, acute and emergency care, hospital based and critical care, and community health and public health settings.
3. Describe the major processes of information gathering, analysis, and documentation used by clinicians to detect, understand, and prevent or treat diseases.

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4. Give examples and explain the differences between common forms of care delivery including episodic one-on-one care, multidisciplinary care, interdisciplinary care, care of chronic conditions, population based care, disease management, long-term care, and end of life care.
5. Describe the role of community health and public health in managing illness outbreaks, epidemics, and pandemics.
6. Understand the basic principles of evidence-based practice, including the application of the best evidence in clinical decision-making.
7. Describe common forms of quality measurement, performance improvement, and incentive payment schemes meant to influence care delivery.
8. Discuss the role of medical ethics and professional values in care delivery including such issues as ethical conflicts, and health disparities.
9. Understand the concepts underlying the application of privacy, confidentiality, and security to health care practice and information technology, being able to help individuals and organizations adhere to the HIPAA Privacy and Security Rules.

Component Units with Objectives and Topics

Unit 1: An Overview of the Culture of Healthcare

Description:
This introductory unit discusses some of the underlying concepts of health, culture, and how health informatics applications can be used to study culture.

Objectives:
1. Distinguish between disease and illness. (Lecture a)
2. Discuss the relationship between health and the healthcare system. (Lecture a, b)
3. Define 'culture' in the classic sense, as well as in the modern sense of the term, and what it means for culture to be partial, plural, and relative. (Lecture a, b)
4. Explain the concept of 'cultural competence'. (Lecture a)
5. Explain the concepts and distinguish between 'culture', 'cultural safety', and 'safety culture', as applied to organizations. (Lecture a)
6. Be aware of the multiple cultures that interact in healthcare delivery. (Lecture a, b)
7. Define 'acculturation' and how it relates to working in healthcare settings. (Lecture a)
8. Be able to give examples of health informatics applications of the study of culture. (Lecture a, b)

Topics/Lectures:
1. What is meant by "the culture of healthcare"
2. Learning more about the culture of healthcare

Unit 2: Health Professionals – the People in Healthcare

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Description:
This unit discusses the health professionals who deliver healthcare and the training needed to work in these professions. The following professionals are described in this unit: physicians, nurses, advanced practice nurses, physician assistants, pharmacists, therapists, allied health professionals, paramedics, EMTs, dental professionals, mental health professionals, and social workers.

Objectives:
1. Define terms used in healthcare including clinician, patient, disease, and syndrome and in health professionals' education and training. (Lecture a)
2. Describe the education, training, certification, licensure and roles of physicians including those in primary care and other specialties. (Lecture a)
3. Describe the education, training, certification, licensure and roles of nurses, advanced practice nurses, LPNs, MA's and Medication Aids. . (Lecture b)
4. Describe the education, training, certification, licensure and roles of physician assistants, pharmacists, therapists, allied health professionals. (Lecture c)
5. Describe the education, training, certification, licensure and roles of paramedics, EMTs, dental professionals, mental health professionals, and social workers. (Lecture c)

Topics/Lectures:
1. Introduction and Physicians
2. Nursing Professionals
3. Physician assistants, Pharmacists, Therapists, Technicians, Paramedics, Dental Professionals, Mental Health Professionals, Care Coordinators

Unit 3: Healthcare Settings – The Places Where Care is Delivered

Description:
This unit describes healthcare delivery sites including outpatient care, hospitals, tertiary care centers, academic medical centers, the VA healthcare system, the military health system, the Indian health service, and non-traditional delivery sites such as school-based, community-based, and employer-based sites. It also specifically examines the structure, function and interrelationship between healthcare settings.

Objectives:
1. Differentiate the range of care delivery organizations, including primary care, specialty care, tertiary care, inpatient and outpatient facilities, long-term care hospitals, and long-term care facilities. (Lecture a)
2. Analyze the organization of healthcare delivery from the perspective of a "continuum of care", such as ambulatory services, in-patient care, long term care, and end of life care. (Lecture a)

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3. Evaluate the similarities and differences of community hospitals, teaching hospitals, and community health clinics. (Lecture a)
4. Describe the various departments and services offered by an outpatient clinic, community hospital, academic medical center, and long-term care facility. (Lecture b)
5. Explain the ways in which these departments interact and the services relate. (Lecture b)
6. Speculate on the data and information that are created and used by people in these departments. (Lecture b)
7. Describe ways in which medical and/or information technology has improved interdepartmental communication and how that has improved the patient experience. (Lecture b)

Topics/Lectures:
1. Range of care
2. Continuum of care
3. Departments and services
4. Interrelationships
5. Medical data use and impact

Unit 4: Healthcare Processes and Decision Making

Description:
This unit describes the process used by a clinician to make a diagnosis and determine a care plan. This includes gathering information from the patient as well as other objective and subjective sources, managing and organizing the information, comparing the information to known states of disease, and developing a care plan for the patient.

Objectives:
1. Describe the elements of the 'classic paradigm' of the clinical process. (Lecture a)
2. List the types of information used by clinicians when they care for patients. (Lecture a)
3. Describe the steps required to manage information during the patient-clinician interaction. (Lecture a, b, c)
4. List the different information structures or formats used to organize clinical information. (Lecture b)
5. Explain what is meant by the 'hypothetico-deductive' reasoning process. (Lecture a, b)
6. Explain the difference between observations, findings, syndromes, and diseases. (Lecture a, b, c)
7. Describe techniques or approaches used by clinicians to reach a diagnosis. (Lecture a, b, c, d, e)

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8. List the major types of factors that clinicians consider when devising a management plan for a patient's condition, in addition to the diagnosis and recommended treatment. (Lecture e)

Topics/Lectures:
1. The clinical process - overview of the classic paradigm
2. Gathering data and analyzing findings
3. Making a diagnosis
4. Choosing therapy
5. Communicating the plan

Unit 5: Evidence-Based Practice

Description:
This unit describes the application of evidence-based medicine (EBM). The discussion begins with the framing of clinical questions that can be answered by appropriate evidence. It then demonstrates how to find and apply the best evidence for answering four major types of clinical questions: interventions, diagnosis, harm, and prognosis. The unit also introduces summarizing of evidence (systematic reviews) as well as clinical practice guidelines and concludes with a discussion of the limitations of EBM.

Objectives:
1. Define the key tenets of evidence-based medicine (EBM) and its role in the culture of healthcare (Lecture a, b)
2. Construct answerable clinical questions and critically appraise evidence answering them (Lecture b)
3. Apply EBM for intervention studies, including the phrasing of answerable questions, finding evidence to answer them, and applying them to given clinical situations (Lecture c)
4. Understand EBM applied to the other key clinical questions of diagnosis, harm, and prognosis (Lecture d, e)
5. Discuss the benefits and limitations to summarizing evidence (Lecture f)
6. Describe how to implement EBM in clinical settings through clinical practice guidelines and decision analysis (Lecture g)

Topics/Lectures:
1. Definitions and application of (EBM)
2. Interventions
3. Diagnosis
4. Harm and prognosis
5. Summarizing evidence
6. Putting evidence into practice

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Unit 6: Nursing Care Processes

Description:
This unit describes the processes used by a nurse in making clinical decisions and assessing patients. It also describes how nurses are trained, where they work and the procedures that they perform.

Objectives:
1. Learn what nurses do and how they are trained (Lecture a)
2. Learn how nurses make clinical decisions and assess patients (Lecture b)
3. Learn about the settings where nurses work (Lecture a, c)
4. Learn about the procedures that nurses perform (Lecture c)

Topics/Lectures:
1. Nursing roles, responsibilities and work settings
2. Nursing process including clinical judgement and patient assessment; legal and societal expectations; roles in improving patient care
3. Nursing routines and procedures including invasive procedures, administering medication, documenting procedures and technology

Unit 7: Quality Measurement and Performance

Description:
This unit describes the concepts of quality measurement and performance improvement. The unit begins by setting the context of known quality problems in healthcare and then describes how quality is measured and efforts to improve it. The unit also discusses the role of information technology, incentives for quality improvement, and quality measurement under meaningful use.

Objectives:
1. Define healthcare quality and the major types of quality measures: structural, process, and outcome measures (Lecture a)
2. Describe the current state of healthcare quality in the United States (Lecture a)
3. Discuss the current healthcare quality measures used in various healthcare settings in the US, including those required for the HITECH meaningful use program (Lecture b)
4. Describe the role of information technology in measuring and improving healthcare quality (Lecture c)
5. Describe the results of current healthcare quality efforts in the US (Lecture c)

Topics/Lectures:
1. Definitions and framework for assessing quality

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2. What is known about healthcare quality
3. Current quality measures in use
4. Role of IT and informatics
5. Results of current approaches to quality assessment

Unit 8: Ethics & Professionalism

Description:
This unit describes the traditions and values that guide physicians, nurses, and allied health professionals. It explores medical ethics, professionalism and legal duties and applies ethics and professionalism to specific topics, including health informatics.

Objectives:
1. Provide an orientation to ideas about medical ethics and professionalism (Lecture a)
2. Explore the relationships among ethical ideals, professionalism, and legal duties (Lecture a, b)
3. Apply the general principles of ethics and professionalism to specific topics (Lecture c, d)
4. Examine ethical issues in health informatics (Lecture d)

Topics/Lectures:
1. Ethics and professionalism
2. Ethical and legislative standards and how they interact
3. Contemporary topics in medical ethics
4. Ethical issues in health informatics

Unit 9: Privacy & Security

Description:
This unit defines privacy, confidentiality, and security of health information, including the HIPPA Privacy and Security Rules.

Objectives:
1. Define and discern the differences between privacy, confidentiality, and security (Lecture a)
2. Discuss the major methods for protecting privacy and confidentiality, including through the use of information technology (Lecture b)
3. Describe and apply privacy, confidentiality, and security under the tenets of HIPAA Privacy Rule (Lecture c)
4. Describe and apply privacy, confidentiality, and security under the tenets of the HIPAA Security Rule (Lecture d)

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Topics/Lectures:
1. Definitions of privacy, confidentiality, and security
2. Tools for protecting privacy and confidentiality
3. HIPAA Privacy Rule
4. HIPAA Security Rule

Unit 10: Sociotechnical Aspects: Clinicians and Technology

Description:
This unit looks at the challenges of adapting work processes to new technology, and the resulting impact on quality, efficiency, and safety. This unit also examines the phenomena of social and technical resistance to change, especially among clinicians.

Objectives:
1. Describe the concepts of medical error and patient safety (Lecture a, b)
2. Discuss error as an individual and as a system problem (Lecture a)
3. Compare and contrast the interaction and interdependence of social and technical "resistance to change" (Lecture c)
4. Discuss the challenges inherent with adapting work processes to new technology (Lecture c)
5. Discuss the downside of adapting technology to work practices and why this is not desirable (Lecture c)
6. Discuss the impact of changing sociotechnical processes on quality, efficiency, and safety (Lecture a, b)

Topics/Lectures:
1. Medical errors
2. Patient safety
3. Sociotechnical aspects of healthcare

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