Component Number:  1
Component Title:  Introduction to Healthcare and Public Health in the US

Component Description:  This component is a survey of how healthcare and public health are organized and services delivered in the US. It covers public policy, relevant organizations and their interrelationships, professional roles, legal and regulatory issues, and payment systems. It also addresses health reform initiatives in the US.

Assigned Institution:  Oregon Health & Science University
Principal Investigator:  William Hersh, MD, OHSU
Team Lead(s):  Vishnu Mohan, MD, OHSU
Team Members:
Thomas Blehl, MD, Valencia Community College, FL (Curriculum Developer)
Karen Eden, PhD OHSU(Curriculum Developer)
Bill Hersh, MD, OHSU(Curriculum Developer)
JA Magnuson, PhD, OHSU(Curriculum Developer)
Vishnu Mohan, MD, OHSU(Curriculum Developer)
Joanne Valerius, MPH, RHIA, OHSU (Curriculum Developer)

Workforce Roles:
• Implementation Managers
• Implementation Support Specialist
• 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. Define healthcare terms.
2. Describe paradigm shifts in healthcare.
3. Describe the medical model of healthcare in the US.
4. Describe the administrative and functional organization of entities that deliver healthcare in the US, both in the inpatient as well as the outpatient settings.
5. Discuss the role of various healthcare professionals, their education, and certification/licensure requirements.
6. Distinguish between public and private funding for healthcare.
7. Describe healthcare financing structures, including insurance plans, third-party payers, Medicare, and Medicaid.
8. Describe the organization and structures of Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), and Independent Practice Associations (IPAs).
10. Describe elements of coding and charge capture in healthcare.
11. Compare and contrast the function of the Joint Commission, Food and Drug Administration (FDA), Centers for Disease Control (CDC), and National Institutes of Health (NIH), with an emphasis on Electronic Health Records (EHRs).
12. Discuss legal issues in medicine including the Health Insurance Portability and Accountability Act (HIPAA), confidentiality, medical malpractice, and tort reform.
13. Describe the organization of public health in the US at the federal, state, and local levels, and discuss the role of public health in averting epidemics and bioterrorism.
15. Discuss the key issues driving healthcare reform in the US.
16. Describe the implementation of meaningful use of health information technology in the context of the Health Information Technology for Economic and Clinical Health (HITECH) Act.

Component Units with Objectives and Topics

Unit 1: Introduction and History of Modern Healthcare in the US

Description:
This introductory unit covers definitions of terms used in the component, with an emphasis on paradigm shifts in healthcare, including the transition from physician-centric to patient-centric care, the transition from individual care to interdisciplinary team-based care, and the central role of technology in healthcare delivery. This unit also emphasizes the core values in US healthcare.

Objectives:
1. Delineate key definitions in the healthcare domain (Lectures a, b, c, d)
2. Explore components of healthcare delivery and healthcare systems (Lecture a)
3. Define public health and review examples of improvements in public health (Lecture b)
4. Discuss core values and paradigm shifts in US healthcare (Lecture c)
5. Describe in overview terms, the technology used in the delivery and administration of healthcare (Lecture d)

**Topics:**
1. Description of terms commonly used in healthcare including:
   a) Health  
   b) Healthcare  
   c) Healthcare Delivery  
   d) Healthcare Industry  
   e) Healthcare Systems  
   f) Public Health
2. Core values in US healthcare
3. Discussion of critical paradigm shifts in medicine including
   a) Physician-centric to patient-centric care  
   b) Individual to team-based care  
   c) Physician-kept records to personal health records  
   d) Dominance of technology in healthcare delivery
4. The dominant role of technology in healthcare delivery - technology used in the delivery and administration of healthcare, with emphasis on technology used in:
   a) Clinical medicine  
   b) Telemedicine  
   c) Pharmacy  
   d) Radiology  
   e) Rehabilitation  
   f) Dentistry  
   g) Healthcare education

**Unit 2: Delivering Healthcare (Part 1)**

**Description:**
This unit depicts the medical model of healthcare in the US, with an overview of the organization of healthcare and the physical structure of healthcare delivery in the outpatient, inpatient and long-term care settings, including an overview of the organization of the Veterans Affairs (VA) system. This unit is intended primarily for the student who does not have a background in healthcare, though the topics of this unit will be described at a relatively advanced level.

**Objectives:**
1. Describe the organization of healthcare at the federal, state and local levels (Lecture a)  
2. Describe the organization of the VA system and Military Health System (Lecture b)  
3. Describe the structure and function of hospital clinical and administrative units (Lecture c)
4. Describe different types of long term care facilities, with an emphasis on their function (Lecture d)

**Topics/Lectures:**
1. The organization of healthcare at the federal, state and local levels
2. The organization of the VA system and Military Health System
3. Outpatient clinics and hospitals
   a) Individual and group practices
   b) Managed care
   c) Urgent care
   d) Community health centers
   e) Types of hospitals (community, teaching/research, critical access)
4. Post-acute care, long-term care, non-traditional settings
   a) School-based healthcare
   b) Health issues for older adults
   c) Types of long-term care facilities and services for older adults
   d) Other long-term healthcare settings
   e) Other hospitals (Specialty, Rehabilitation Care, Psychiatric, Day)
   f) Community Mental Health Centers, Substance Abuse Treatment Centers

**Unit 3: Delivering Healthcare (Part 2)**

**Description:**
This unit depicts the medical model of healthcare in the US, with an overview of the organization of healthcare and the physical structure of healthcare delivery in the outpatient setting, including an overview of the people involved in the delivery of healthcare, their education and licensing. This unit is intended primarily for the student who does not have a background in healthcare, though the topics of this unit will be described at a relatively advanced level.

**Objectives:**
1. Describe the organization of clinical healthcare delivery in the outpatient setting, and the organization of outpatient healthcare (Lectures a, b, c)
2. Describe the organization of ancillary healthcare delivery in the outpatient setting (Lecture d)
3. Discuss the role of different healthcare providers, with an emphasis on the delivery of care in an interdisciplinary setting (Lecture e)

**Topics/Lectures:**
1. Outpatient care
   a) Types of outpatient clinics
   b) Primary care
   c) Primary Care Specialties
d) Specialty Care  
e) Urgent care clinics and walk-in clinics  
f) Emergency Room visits  

2. Outpatient laboratories, radiological services, and ancillary services (e.g. home health, hospice, physical therapy, occupational therapy)  

3. Organization of Primary Care – the Clinical Team  

**Unit 4: Financing Healthcare (Part 1)**  

**Description:**  
This unit provides an overview of the role of healthcare in the economy and a description of various models of healthcare financing. The unit provides a history of the current US system and laws that have influenced its development. It also includes discussion of healthcare financing at the governmental, enterprise, and consumer levels.  

**Objectives:**  
1. Understand the importance of the healthcare industry in the US economy and the role of financial management in healthcare. (Lecture b)  
2. Describe models of health care financing in the US and in selected other countries. (Lecture c)  
3. Describe the history and role of the health insurance industry in financing healthcare in the United States, and Federal laws that have influenced the development of the industry. (Lecture a)  
4. Understand the differences among various types of private health insurance and describe the organization and structure of network-based managed care health insurance programs. (Lecture d)  
5. Understand the various roles played by government as policy maker, payer, provider, and regulator of healthcare. (Lecture d)  
6. Describe the organization and function of Medicare and Medicaid. (Lecture e)  

**Topics/Lectures:**  
1. Overview: healthcare, the economy, and finance  
   a) Role of healthcare in the economy -- statistics  
   b) Distinction between publically-funded and privatized healthcare  
   c) Need for sound financial management of the healthcare system  
2. Single payer systems versus multiple payer systems  
3. Development of the US health insurance industry  
4. Insurance and third party payers  
   a) Commercial health insurance  
   b) Organization and structure of network-based managed care health insurance programs including  
      o health maintenance organizations (HMOs)
5. Government roles and payment programs
   a) Government roles in healthcare
   b) Government financing of healthcare
      o Medicare
      o Medicaid

Unit 5: Financing Healthcare (Part 2)

Description:
This unit continues the discussion of healthcare financing at the governmental, organizational, and consumer levels. It describes the revenue cycle for healthcare organizations, identifies the different reimbursement methodologies and standards developed for the billing (reimbursement) process. Finally, this unit reviews some of the factors responsible for the escalating healthcare expenditures in the US and discusses some methods for controlling rising medical costs.

Objectives:
1. Describe the revenue cycle and the billing process undertaken by different healthcare enterprises. (Lecture a)
2. Understand the billing and coding processes, and standard code sets used in the claims process. (Lecture a)
3. Identify different fee-for-service and episode-of-care reimbursement methodologies used by insurers and healthcare organizations in the claims process. (Lecture a)
4. Review factors responsible for escalating healthcare expenditures in the United States. (Lecture b)
5. Discuss methods of controlling rising medical costs. (Lecture c)

Topics/Lectures:
1. Private healthcare plans, the revenue cycle, and medical billing and coding
   a) Revenue cycle
   b) Billing and reimbursement in medicine
   c) Overview of coding concepts - DRGs, ICD-9, CPT
2. Reimbursement methodologies and managed care
   a) Reimbursement methodologies
   b) Capitation and managed care techniques
3. Medical expenditures: costs gone wild?
   a) Factors escalating healthcare expenditures
   b) The Emergency Medical Treatment and Active Labor (EMTALA) Act and its effect on medicine
   c) The cost of uninsured care
d) The trend of inappropriate use of the Emergency Department (ED) for the delivery of primary care

4. Controlling medical costs
   a) Controlling costs in medicine
      o Reducing excessive expenses in diagnosis
      o Reducing excessive expenses in management
   b) The medical home
      o Concierge medicine

Unit 6 Regulating Healthcare

Description:
This unit provides an overview of the regulation of healthcare, including regulatory and professional organizations, the regulation of safety in medicine, and key legal aspects of medicine. This unit also covers compliance issues including privacy violations, reimbursement and fraud and abuse.

Objectives:
1. Describe the role of accreditation, regulatory bodies, and professional associations in healthcare in the US. (Lecture a)
2. Describe the basic concepts of law in the United States: the legal system, sources of law, classification of laws, the court system, and the trial process. (Lecture b)
3. Describe legal aspects of medicine involving the Affordable Care Act, professional standards in healthcare, medical malpractice, Tort reform, and Medicare and Medicaid Fraud and Abuse (Lecture c)
4. Describe key components of the Health Insurance Portability and Accountability Act (HIPAA) and current issues of privacy and patient safety in the US (Lecture d)
5. Discuss the need for quality clinical documentation for the use of the health record as a legal document, communication tool and a key to prove compliance for healthcare organizations. (Lecture e)

Topics/Lectures:
1. The role of accreditation, regulatory bodies, and professional organizations in health care promoting standardized care and safety for patients.
2. The basic concepts of law in the US including branches of law, sources of law, the court system, classification of laws, and the trial process
3. Review of the Affordable Care Act, medical malpractice and professional standards of care, tort reform and fraud and abuse
4. The role of HIPAA Privacy Rule, the Joint Commission’s Safety Initiatives and the Agency for Healthcare Research and Quality (AHRQ)
5. The use of health record as the legal and communication document, quality clinical documentation, compliance with privacy and reimbursement laws and regulations.
Unit 7: Public Health (Part 1)

Description:
This unit provides a discussion of public health origins and history, the differentiation from private health, and the significant value provided by public health. It also reviews important terminology and includes an examination of the general organization of public health agencies and the flow of data within public health.

Objectives:
1. Discern the main differences and similarities between public and private health (Lecture a)
2. Delineate the historic timeline and achievements of public health in the US (Lecture a)
3. Define and discuss key terminology of public health (Lecture b)
4. Illustrate the general organization of public health agencies and public health data flow (Lecture b)
5. Evaluate and explain the impact and value of public health (Lecture c)

Topics / Lectures:
1. History of public health
2. Public health terminology and organization
3. Value and impact of public health

Unit 8: Public Health (Part 2)

Description:
This unit provides an overview of public health topics including: important communicable diseases and public health responses; terrorism, including biological, agricultural, and chemical terrorism; and chronic diseases and environmental health.

Objectives:
1. Give examples of and explain the general program categories of public health, including communicable disease, chronic disease, terrorism response, and environmental public health (Lecture a)
2. Discuss the activities and achievements of public health in the realm of communicable disease (Lecture a)
3. Compare and contrast the different types of terrorism and the different public health responses (Lecture b)
4. Describe chronic disease activities and achievements of public health, and the work of public health in the realm of environmental health hazards (Lecture c)
Unit 9: Healthcare Reform

Description:
This unit provides an overview of healthcare trends including evidence based medicine, quality and practice-care recommendations, comparative effectiveness research, and an overview of healthcare reform initiatives in the US.

Objectives:
1. Describe evidence-based medicine, clinical practice guidelines, and quality indicators in medicine (Lecture a, b, c)
2. Describe the patient-centered medical home model (Lecture d)
3. Discuss the key issues driving healthcare reform in the US (Lecture e)

Topics /Lectures:
1. Evidence based practice
2. Clinical practice guidelines
3. Quality indicators and comparative effectiveness
4. The patient-centered medical home
5. Healthcare reform in the US

Unit 10: Meaningful Use

Description:
The Health Information Technology for Economic and Clinical Health (HITECH) Act of the American Recovery and Reinvestment Act (ARRA) legislated incentives for the meaningful use of health information technology. This unit describes the meaningful use program of HITECH, eligibility for incentive payments, and the criteria for achieving those payments in Stage 1 of the program. It also describes the standards specified for Stage 1 of meaningful use, including those devoted to privacy and security.

Objectives:
1. Define meaningful use of health information technology in the context of the Health Information Technology for Economic and Clinical Health (HITECH) Act (Lecture a)
2. Describe the major goals of meaningful use (Lecture a)
3. Define the criteria for Stage 1 of meaningful use for eligible professionals and eligible hospitals (Lecture b)
4. Describe the standards specified for Stage 1 of meaningful use, including those devoted to privacy and security (Lecture b)
5. Discuss the likely criteria for Stages 2-3 of meaningful use (Lecture b)

Topics/Lectures:
1. Requirements for meaningful use
2. Implementation of meaningful use
3. Core and menu criteria for Stage 1 of meaningful use for eligible professionals and eligible hospitals
4. Standards for Stage 1 of meaningful use, including those devoted to privacy and security
5. Likely criteria for Stages 2-3 of meaningful use