

## Component 2: The Culture of Health Care

### Unit 4: Health care processes and decision making Lecture 1

This material was developed by Oregon Health & Science University, funded by the Department of Health and Human  
Services, Office of the National Coordinator for Health Information Technology under Award Number H260CC000115.

---

---

---

---

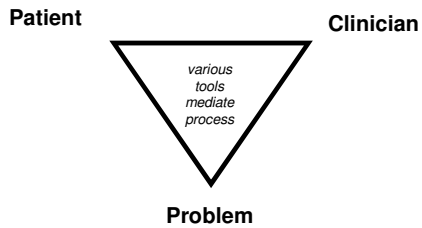
---

---

---

---

## The Classic Paradigm



Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

2

---

---

---

---

---

---

---

---

## Classic Paradigm

### Evolution of tools that support the task

- "Central Theorem of Health Informatics"
  - human + computer > human alone
- Classic Paradigm in Health Informatics
  - one patient
  - one problem
  - one clinician
  - one visit
- Technologies support 1:1:1:1

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

3

---

---

---

---

---

---

---

---

## Attributes of Clinician

- possesses specialized knowledge
- received experiential training
- has direct relationship with patient
- makes decisions about patient care
- acts in patient's best interest
- integrates diverse types of information
- functions within time & resource constraints

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

4

---

---

---

---

---

---

---

---

## Types of information

Patient Data	refers to one person	patient, family, records, observation
Population Statistics	aggregated patient data	colleagues, public health dept, EHR
Medical Knowledge	generalizable to many persons	textbooks, reviews articles, MEDLINE
Logistic Information	How to get things done	people (RN, HUC), policy and procedure
Social Influence	How others get the job done	observe and discuss w/ colleagues

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

5

---

---

---

---

---

---

---

---

## Organization

How clinicians organize information?

- Narrative structure
  - Hunter *Doctor's Stories: The Narrative Structure of Medical Knowledge*
- History and Physical format
- Evans & Gadd hierarchy
- S O A P note
- Textbook structure
- Ad hoc structures
- Computable structure

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

6

---

---

---

---

---

---

---

---

"Disease hides its secrets in a casual parenthesis"

Component 2/Unit 4-1 Health IT Workforce Curriculum Version 2.0/Spring 2011 7

---

---

---

---

---

---

---

---

How stories fit into health system

- Between Patient and Clinician
  - Facts embedded in story (meaning to clinician)
  - Meaning of the illness to the patient
  - Communication and relationship building
  - Therapeutic value
  - Important aspect of quality received/perceived by patient

Component 2/Unit 4-1 Health IT Workforce Curriculum Version 2.0/Spring 2011 8

---

---

---

---

---

---

---

---

How stories fit in ... part 2

- Among Clinicians
  - Efficient communication among experts
  - Values and ethics are communicated through stories
- How do health systems (and HIT) deal with stories?
  - eliminate or alter them
  - reduce opportunities for them
  - extract (incomplete) information from them

Component 2/Unit 4-1 Health IT Workforce Curriculum Version 2.0/Spring 2011 9

---

---

---

---

---

---

---

---

## Interpretation

How clinicians understand clinical data

- Disciplinary differences
  - Psychiatry vs. Neurology
- Diagnostic process
  - Differing approaches to interpreting clinical data
- Social construction
  - Meaning arising from discourse and consensus
- Context
  - Meaning depending on patient context, clinician context, setting, other constraints

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

10

---

---

---

---

---

---

---

---

## Beyond the Classic Paradigm Collaboration in Surgery

	patients	problems	clinicians	visits
classic paradigm	1	1	1	1
operating room	1	1	many	1

- ▶ single condition or disease
- ▶ multiple disciplines
- ▶ multiple roles and tasks
- ▶ short time horizon
- ▶ advance planning, resource rich

▶ technologies support collaboration and individual action

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

11

---

---

---

---

---

---

---

---

## Beyond the Classic Paradigm Uncertain, complex, high stakes

	patients	problems	clinicians	visits
classic paradigm	1	1	1	1
operating room	1	1	many	1
acute complex illness	1	many	many	1 or more

- ▶ acute complex illness
- ▶ multiple disciplines, roles, tasks
- ▶ short time horizon
- ▶ unplanned events
- ▶ uncertain data
- ▶ focus on immediate goals
- ▶ need for flexibility - dynamic replanning

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

12

---

---

---

---

---

---

---

---

## Beyond the Classic Paradigm Many to many relationships

	patients	problems	clinicians	visits
classic paradigm	1	1	1	1
operating room	1	1	many	1
acute complex illness	1	many	many	1 or more
emergency dept.	many	many	many	1

- ▶ simultaneous care of multiple acute and non-acute
- ▶ very short time horizon - "treat 'em and street 'em"
- ▶ planning for the unexpected
- ▶ resources constrained
- ▶ coordination, cooperation, collaboration

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

13

---

---

---

---

---

---

---

---

## Steps in Classic Process

- What is the matter?
  - diagnosis
- What can be done?
  - treatment
- What will happen?
  - prognosis
- Gathering data
- Analyzing findings
- Making a diagnosis
- Choosing treatment
- Communicating the plan

Component 2/Unit 4-1

Health IT Workforce Curriculum  
Version 2.0/Spring 2011

14

---

---

---

---

---

---

---

---