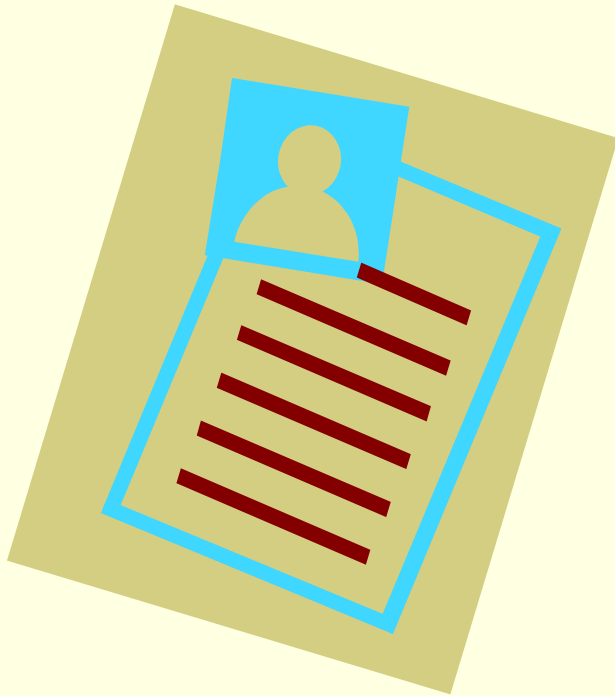


Using an Electronic Medical Record to Enhance Case Studies in an Undergraduate Student Curriculum



Barbara A. Mays, RN, BSEd
Diane J. Sheets MS, RN
The Ohio State University
College of Nursing

Case Studies



- “Story problems”
(Dewey, 1929)
- Walking rounds
- Standardized case studies
(Barrow, 1960’s)

Case Studies in Nursing

Benner

- Proficient / expert nurses develop “paradigm cases”
- Powerful
- Changed the nurse’s perception



Case Studies in Nursing

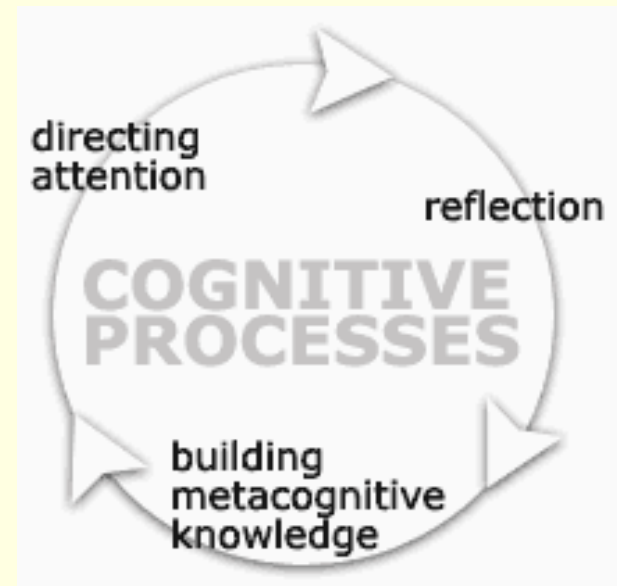
Fowler

- “Prototypical case reasoning” used by home health nurses to compare current patient illness to past case references



Case Studies in Nursing

- Schmidt et al.
- “Illness scripts”
 - Cognitive processes that nurses develop
 - to describe a disease
 - its consequences
 - the context in which it develops



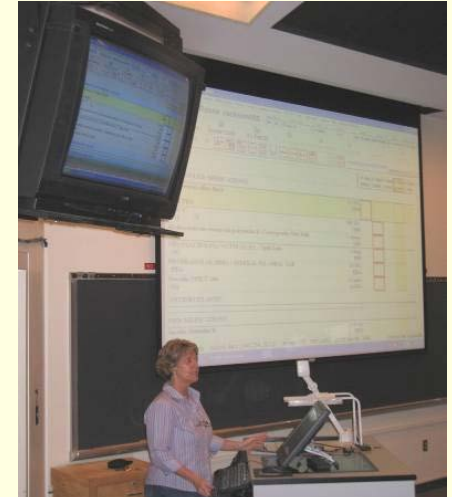
Creating the Electronic Health Record

- Determine what is needed
 - Teaching concept
 - Case specific demographic data
 - Setting where care is delivered



Creating the Electronic Health Record

- How will it be used
 - Lecture
 - Out of class assignment
 - Simulation lab



Creating the Electronic Health Record

- Data Resources
 - Actual patients
 - Newsworthy stories
 - Class / lecture concepts and objectives
 - Difficult patients
 - Legal issues
 - Medical errors
 - Ethical dilemmas
 - Internet

Maintaining HIPAA Standards



- Real patients are stripped of identifiable information
- Fictitious identifiable information is created for each pt (e.g., zip codes and area codes)

Components of the Electronic Health Record

- Demographic data
- ED record
- Daily flowsheet
- Results
 - Lab, radiology, cardiology, and other procedures
- Notes
 - H&P, admission database, consultations,
- Orders
- Medication administration
- Special forms
 - From course texts
 - National guidelines
 - Clinical sites

Building Case Studies

- Create standard documents
- Time intensive to validate data and follow guidelines and standards of care
- Collaborative effort with multiple disciplines



Benefits of Using an Electronic Health Record

- Standardizes organization
- Fills gaps in student experiences
- Increases visibility of student thinking
- Enhances students' confidence

Thomas et al.

- Creates standard presentation of information
- Provides richer data
- Mimics nursing practice
- Easily modified
- Exposes students to various forms of technology

Challenges of Electronic Health Record

- One – dimensional
- Exponential amount of data to process
- Portability
- Single purpose of the assignment – RIGHT ANSWER!

How it was Integrated

- Fundamentals
- Medical Surgical
- Critical Care
- OB
- Leadership

Outcomes for Students

- Becomes familiar with patients
- Has similar or same experience
- Builds complexity over time
- Helps correlate diagnosis, treatment and outcomes
- Encourages correct documentation

Lessons Learned

- Getting buy in
- Plan in stages
- Setting limits
- Access
- Maintenance

Example

Simulation: Filing an Event Report

Example

Health History

Questions



Acknowledgement

This project is supported by funds from the Division of Nursing (DN), Bureau of Health Professions (BHP), Health Resources Services Administration (HRSA), Department of Health and Human Services (DHHS) under grant number D11HP03121, Christine R. Curran, PhD, RN, Project Director, and title "Using Clinical Information Systems at the Point of Care (CIS@POC)" for \$904,563. The information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should be any endorsements be inferred by the DN, BHP, DHHS or the U.S. Government.