Clinical Workflow
Learning Objectives

1. Describe the purpose for process analysis and redesign in the clinical setting (Lectures a, b)
2. Describe the role of a practice workflow and information management redesign specialist and contrast it with other roles such as technical support and implementation management (Lecture a)
3. Explain how health care process analysis and redesign and meaningful use are related (Lecture a)
4. Analyze a health care scenario and identify the components of clinical workflow (Lectures a, b)
5. Given a scenario of a health care analysis and redesign, analyze the responsibilities of each participant in the process and how the roles complement or overlap with one another (Lecture b)
6. Describe how the workflow processes used by a health care facility might differ depending on the type of facility (Lecture b)
Role of Practice Workflow and Information Management Redesign Specialist

• Assist in reorganizing the work of a provider
• Take full advantage of health IT
• Help practices achieve meaningful use
• Ultimately improve health and care

The overarching goal of the role is to assure that the clinical workflow supports the IOM’s requirements of safe, effective, efficient and timely health care that is patient-centered and equitable.
Types of Roles

Roles requiring six month / short-term training

• Mobile adoption support positions
• Permanent staff of health care delivery and public health sites

Roles requiring university-based training that culminates in a degree (BS, MS, PhD, etc.)
Related Roles

Mobile Adoption Support Positions
• Practice Workflow and Information Management Redesign Specialist
• Clinician/Practitioner Consultant
• Implementation Support Specialist
• Implementation Manager

Permanent Staff of Health Care Delivery and Public Health Sites
• Technical/Software Support Staff
• Trainer
Workflow is a Process

Workflow includes:

• How tasks are accomplished
  - By whom
  - Task order
  - Task priority
  - Task timing

• Choices and decisions

• Location

• Information needs
Clinical Care Activities

- Interaction with patients
- Physical assessment
- Ordering and conducting diagnostic tests
- Decision making and diagnosis
- Developing a treatment plan
- Assessing compliance with treatment regimen
- Patient education
- Follow-up on test results
- Records creation and management
- Determination of confidentiality / privacy requirements
Administrative Activities

• Scheduling a patient visit
• Registering a patient
• Transporting and tracking a patient within a facility
• Submitting a claim for reimbursement
• Making a referral to a specialist
• Sending / receiving health information to / from another provider
• Food and laundry service
Grouped Activities (Tasks)

- Admission
- Surgery
- Specimen collection
- Reimbursement
- Discharge
- Handling of inpatient emergencies
Examples of Roles in Health Care Settings

- Providers
- Medical Assistants
- Phlebotomists
- Receptionists
- Billing Coordinators
Location, Location, Location

• Where tasks are performed can be important
• Physical layout of a clinic impacts workflow
  – Patient transportation
  – Hallway traffic
  – Distance clinic staff must travel to accomplish tasks
  – Patient privacy
Information Needs

• What information is used and generated in the course of a patient encounter?
• Do providers and clinic staff have ready-access to information they need when they need it?
• Do patients have access to information about their health before, after and between visits?
Unique Aspects of Health Care

• System of “experts”
  – Physicians and physician extenders are ultimately ethically, morally and legally responsible for *everything* that happens to a patient
  – Physicians have taken an oath to “above all, do no harm”

• Health care usually involves personal contact

• Decisions impact patient’s health and well being

• Patient care involves teams of people working in information-intense situations

• Patterns of fundamental clinical routines are the product of years and decades of evolution
Complexities of Health Care

- Each situation is unique
- Involve multiple people and organizations
  - Many opportunities for delays and variability
- Must take patient preference into account
- Continually changing priorities
- Many interruptions, options and exceptions
- Have overlapping roles and responsibilities
- Involves Humans and organizations
- Vary from practice to practice
- Subject to time and resource pressures
Complexities of Health Care

Pause the slides and view the videos below about health care complexity

http://www.youtube.com/watch?v=4kW4bIrYqPY

Pulling it all Together

Clinical Workflow Impacts Patients

• Problems, errors and delays are not just aggravating, inefficient or even infuriating

• In medicine, more than in other fields, problems, errors and delays can cause serious harm
Common Processes in Physician Practices

- Appointment scheduling
- New patient intake
- Existing patient intake
- Exam and patient assessment
- Ordering labs/receiving & communicating results
- Prescriptions
- Referrals out/in
- Diagnostic testing
- Billing
Common Health Care Processes

Electronic Medical Record (EMR/EHR) Videos, Parts 1-3:

http://www.youtube.com/watch?v=hqYXOM0bMRM&feature=related

http://www.youtube.com/watch?v=jl2b_z71zBY&feature=related

http://www.youtube.com/watch?v=jz91yUBUbbU&feature=related
Video Part I Processes

• Referral
• Following up on lab tests
• Billing
• Obtaining insurance pre-approval
• Monitoring patient outcomes
• Reporting performance measures
Video Part II Processes Include

• Prescription refills
• Billing
• Following-up appointment no-shows
• Scheduling same-day appointments
• Tracking accounts receivable and resubmission of unpaid claims
• Scanning old charts, i.e., getting old data into the new EHR system
• Referrals
Video Part III Clinical Processes

• Receiving and reviewing electronically acquired data
• Patient exam
• Posting payments
• Viewing practice financials
• Answering call
Lab Process Example

Locate the *Ordering Lab Results - Using an EMR* scenario in your course materials (Appendix of the Instructor’s Manual).
Activities

1. Patient arrives
2. Patient checks in
3. Patient pays co-pay
4. Patient called back to exam room
5. Nurse asks reason for visit
6. Nurse takes vital signs
7. Nurse locates electronic chart
8. Nurse confirms medications
9. Patient removes shoe and sock
10. Doctor examines patient
11. Doctor makes working diagnosis
Activities cont.

12. Doctor describes treatment options and requirements
13. Patient chooses course of action
14. Doctor orders lab tests
15. Nurse obtains lab supplies
16. Nurse completes lab requisition form
17. Nurse labels tubes
18. Nurse draws blood
19. Nurse immediately centrifuges and refrigerates samples
20. Nurse provides patient education
21. Courier picks tubes up and takes to lab
Locations & Roles

Locations
• Reception area
• Exam room
• Phlebotomy room

Roles
• Patient
• Receptionist
• Nurse
• Doctor
• Courier
Choices and Decisions

1. Working diagnosis (Doctor)
2. Patient preparation for Doctor (Nurse decides based on chief complaint)
3. Which treatment option (Patient decision)
4. Required tests (determined for each treatment option by clinical guidelines)
5. What tests or treatments to order and when (Doctor based on clinical guidelines)
Information Needs

• Co-pay amount
• Existing medications for medication reconciliation
• Treatment options for working diagnosis
• Required tests / follow-up for treatment options
• Patient and provider identifiers for lab test requisition
Confusion about Workflow

• Most people are not accustomed to thinking of what they do everyday in terms of workflow
• Terms used in health care that may be confused with workflow or process analysis:
  – Regimented care
  – Clinical pathways, clinical guidelines
  – Accreditation and audit
Workflow Changes

• Must first, do no harm
• Must improve processes
  – Increase efficiency
  – Decrease delays and cost
  – Increase quality and safety
  – Improve the work environment
  – Improve ability to care for patients
  – Create a better overall patient experience
Fundamentals of Health Workflow Process Analysis & Redesign
Summary

What a Practice Workflow and Information Management Redesign Specialist Does

• Document context and process so that it can be analyzed
• Analyze process
• Recommend redesign options
• Implement redesign
• Evaluate, adjust and maintain changes
References