

Component 10 – Fundamentals of Health Workflow Process Analysis and Redesign

Unit 1-2 – Clinical Workflow

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Topics – Unit 10.1-2

- The Clinical Setting
- Common Health Care Processes
- Clinical Workflow
- Summary: What a Process Analysis and Redesign Specialist Does

Role of Health Care Workflow Analysis and Redesign Specialist

Workers in this role assist in reorganizing the work of a provider to take full advantage of the features of health IT in pursuit of meaningful use of health IT to improve health and care.

Mission

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.

Workflow is a Process

Workflow includes:

- How tasks are accomplished
 - By whom
 - Task order
 - Task priority
- Choices and decisions
- Location
- Information needs

Clinical Care Activities

- Interaction with patients
- Verbal and physical assessment
- Prescribing and conducting diagnostic tests
- Decision making and diagnosis
- Developing a treatment plan
- Assessing compliance with treatment regimen
- Patient education
- Records creation and management
- Determination of confidentiality / privacy requirements

Administrative Activities

- Patient flow and efficient intake
 - Scheduling
- Patient tracking internally and externally
 - Transportation
- Coordination of billing for services
- Making consultations and referrals
- Facilities and supplies services and maintenance

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Grouped Activities (Tasks)

- Admission
- Surgery
- Specimen collection
- Reimbursement
- Discharge
- Handling of inpatient emergencies

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Roles

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

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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

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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?

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Unique Healthcare Requirements

1. 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"
2. Patient care involves teams of people
3. Patterns of fundamental clinical routines are the product of years and decades of evolution

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Complexities of Healthcare

- 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

Pause the slides and view the videos below about healthcare complexity

<http://www.youtube.com/watch?v=4kW4blrYgPY>

<http://www.youtube.com/profile?user=Saferhealthcare#p/u/4/imh4FWapa80>

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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 kill people

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Common Health Care Processes

Electronic Medical Record (EMR/EHR) MedComSoft 02, 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>

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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

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Lab Process Example

Locate the *Lab Tests Ordering* scenario in your course materials.

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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

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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

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Locations & Roles

Locations

- Reception area
- Exam room
- Phlebotomy room

Roles

- Patient
- Receptionist
- Nurse
- Doctor
- Courier

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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)

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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

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Confusion about Workflow

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

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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

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What a Workflow Analysis and Process 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

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References

1. *Crossing the Quality Chasm: A New Health System for the 21st Century 2001* available from the National Academy Press (NAP), Available from: <http://www.nap.edu/books/0309072808/html/>

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