



Awardee of The Office of the National Coordinator for Health Information Technology

Component 10 – Fundamentals of Workflow Process Analysis and Redesign

Unit 10.5-2 -Process Analysis

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Topics – Unit 10.5

- Objectives of Process Analysis
- Process Analysis skills and knowledge
- Steps for Process Analysis
- Clinical Practice Processes
- Process Variations and Exceptions
- Identifying EHR functionality from Process Analysis

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Process Variations and Exceptions

Variations: Processes used by the clinic

Exceptions: Errors or common odd things that com up during the process.

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Common Process Variations & Exceptions: Patient Check-In

Patient check-in variations

- New patient
- Existing patient
- Walk-in

Patient check-in exceptions

- No insurance / non-covered service
- Change in insurance information

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Common Process Variations & Exceptions: Patient Visit

Patient visit variations

- Referral out needed
- Procedure needed
- Diagnostic test needed

Patient visit exceptions

- Emergent reason to stop visit
- Non-covered service needing separate visit
- Need to be seen by different provider

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Common Process Variations & Exceptions: Prescription

Prescription variations

- Paper
- Electronic
- Refill call-in needed
- Other call-in needed

Prescription exceptions

- No insurance / non-covered service
- Samples provided
- Prescriptions to multiple pharmacies
- Prescription can't be filled at pharmacy

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Common Process Variations & Exceptions: Received Documentation

Received documentation variations

- Paper
- Electronic
- Triggers patient contact

Received documentation exceptions

- Inadequate patient identification
- Inadequate source identification
- Unintelligible or ambiguous information

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Common Process Variations & Exceptions: Labs

Lab variations

- Sample taken in clinic, test done in clinic
- Sample taken in clinic, test done externally
- Sample and test done at central lab

Lab exceptions

- Bad sample – need another
- Results not received
- Lab results not physiologically possible

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Common Process Variations & Exceptions: Diagnostic Tests

Diagnostic test variations

- Test done in clinic
- Test done externally
- Report expected
- Image or test result data expected

Diagnostic test exceptions

- No insurance / non-covered service
- Test error / unintelligible results
- Results from external test not received

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Common Process Variations & Exceptions: Referral

Referral variations

- Paper via patient
- Paper provider to provider
- Electronic
- Multiple referrals

Referral exceptions

- Referee does not accept the referral

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Common Process Variations & Exceptions: Consult

Consult variations

- Paper / phone request
- Electronic

Consult exceptions

- No insurance / non-covered service
- Consult no-show

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Common Process Variations & Exceptions: Disease Management

Disease management variations

- Paper
- Electronic

Disease management exceptions

- Insufficient data
- Data errors
- Care fragmentation
- Contraindications

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Common Process Variations & Exceptions: Billing

Billing variations

- Paper (superbill as source)
- Electronic
- Where coding is done
- Billing & collections done externally

Billing exceptions

- No insurance / non-covered service
- Claim denied
- Coding errors
- Data errors

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Steps for Process Analysis

- Start with process Inventory & diagrams
 - Context diagram showing clinic functions
 - Flowchart for each process
- For each process, list
 - Variations applicable to the clinic
 - Exceptions
- Report findings
 - Major observations
 - EHR functionality necessary to support clinic functions
 - Opportunities for improvement

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Process Analysis Example

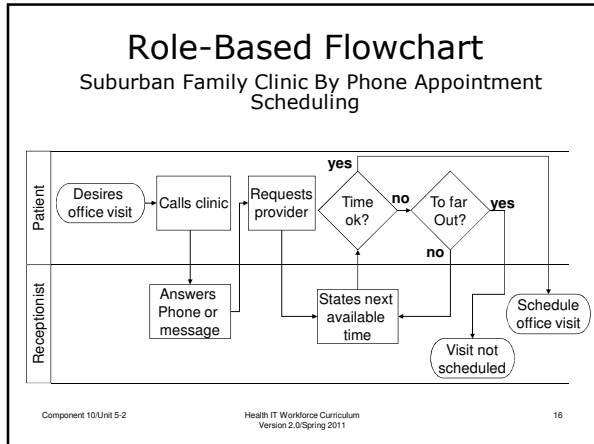
As a process analyst working with Suburban Family Clinic, you have listed appointment scheduling on the process inventory. Read the "By Phone Appointment Scheduling Scenario" in the course materials.

1. Draw a role-based flow chart of the process
2. Indicate the process variations used by Suburban Family Clinic
3. Make a list of exceptions likely to occur with this process

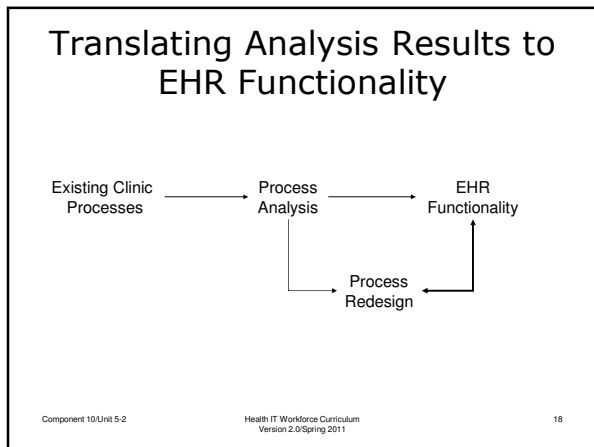
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- ## Process Variations & Exceptions
- ### Suburban Family Clinic By Phone Appointment Scheduling:
- Appointment scheduling variations
 - By phone
 - Appointment scheduling possible exceptions
 - Receptionist doesn't answer, patient leaves message
 - Someone other than patient calls
 - Requested provider not available
 - Available appointment time slots not acceptable
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From Process Analysis to EHR Functionality Requirements

1. Process variations → needed functionality
2. Common process exceptions → needed functionality

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Example: Process Analysis Results

Read the following Scenarios:

1. By phone appointment scheduling
2. New patient intake and registration using paper chart
3. Existing patient intake and registration using paper chart
4. Receiving and communicating lab results using paper chart

Create a Process and Exception List

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Example: Phone Scheduling

Process: By phone scheduling

Exceptions:

- Receptionist doesn't answer, patient leaves message
- Someone other than patient calls
- Requested provider not available
- Available appointment time slots not acceptable

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Example: Patient Intake

- Processes:
 - New patient intake
 - Existing patient intake
- Exceptions:
 - No insurance / non-covered service
 - Patient has to leave during intake process

Example: Lab Scenario

Processes:

- Lab sample processing at external lab
- Lab sample acquisition – unknown from the scenario
- Receiving lab results
- Communicating lab results

Exceptions:

- No results received
- Results not matchable to a patient
- Results not matchable to a provider
- Results abnormal and require action
- Patient not contactable / not responsive to contact attempts

After the Process Analysis

- The list of processes and exceptions are compiled together in one document and provided to the clinic
- This list corresponds to needed EHR functionality
 - Included in process analysis report
 - Ultimately included in a request for proposal intended for EHR software vendors
- Where process diagrams are created as part of the process analysis, they are included in the report

Process Analysis Report Should Include

- Information about the analysis
- Process inventory
- Process variations and exceptions
- Process diagrams
- List of EHR functionality needed for the practice

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