Workflow Redesign for EHRs

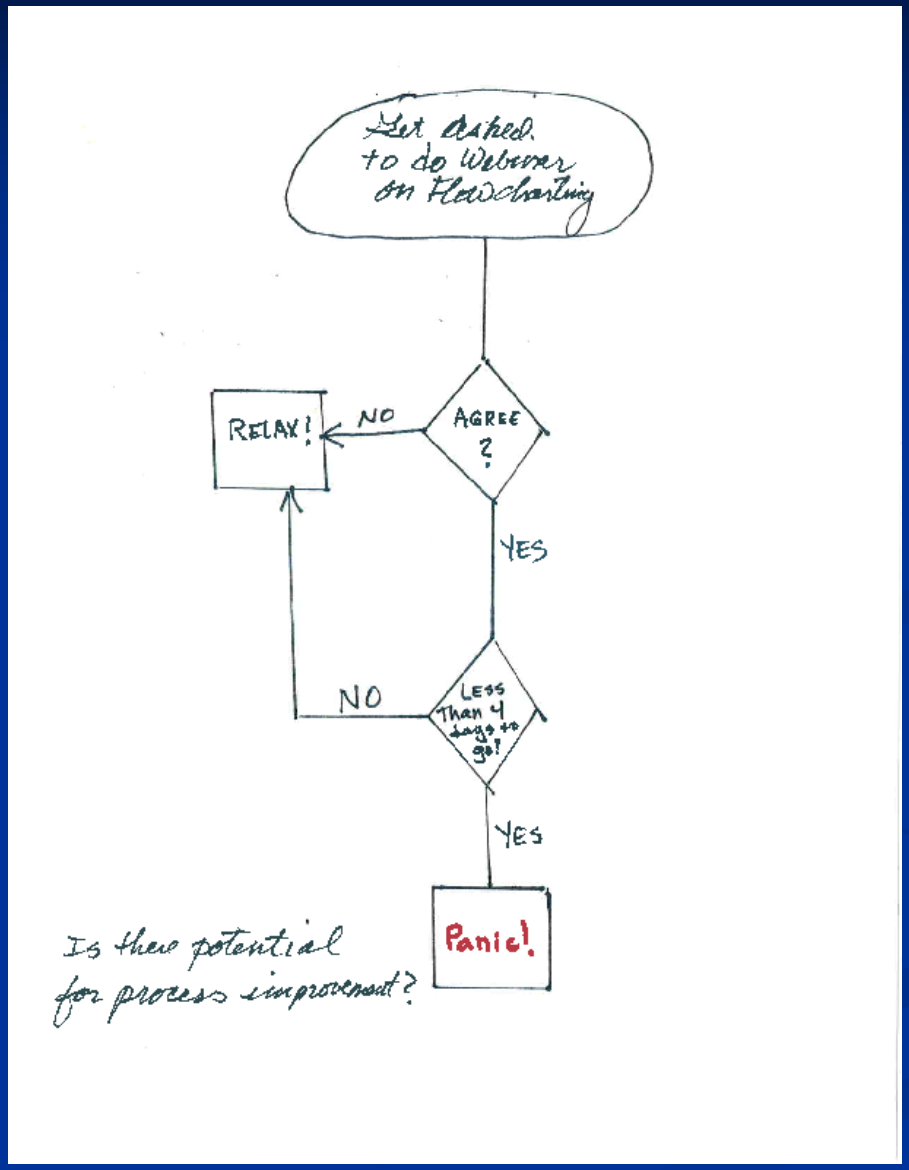
Phil Deering
Regional Coordinator
REACH

Pam Oachs, MA, RHIA
Assistant Professor
College of St. Scholastica

Objectives

- Learn the value of understanding current clinical workflows
- Understand how workflow documentation can improve the success of an EHR implementation
- Increase awareness of practical workflow analysis tools
- Receive suggestions on ways to involve clinical staff

What's so Great About Flow Charts?



Why Map Processes?

- Excellent early step to engage the organization in the idea of change
  - EHR will force standardization
  - EHR implementation requires a review of workflow
  - Process mapping engages structured thinking
- Potential for process improvement
  - Almost always "aha moments"
- Captures key controls, processes, important ways you are unique
- EHR success is the about the People and the Process, NOT the technology.

Process Maps & the EHR

- Process maps illustrate nature of the activities and the sequence & flow of the work
- Process maps are a visual representation of complex activities
- Process mapping begins the change management process by engaging users
- Process maps help identify problems and workarounds in the current system
- Process maps can form the basis for identifying functional requirements in the EHR

Key Concepts & Definitions

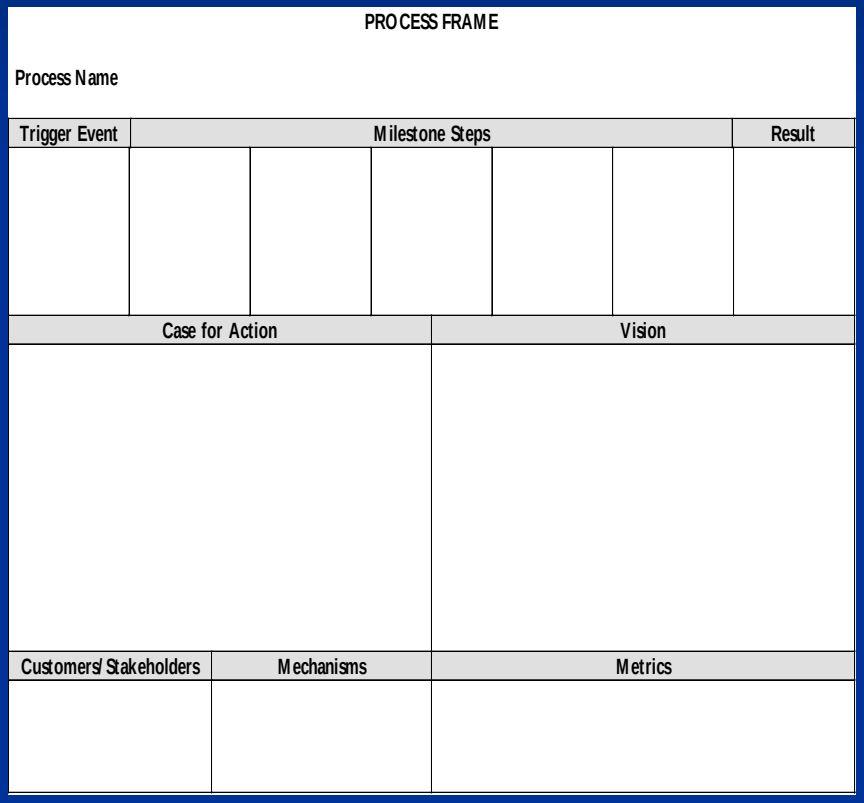
- **Workflow**
  - The study of "Who Does What When"
- **Process**
  - A complete set of activities that crosses functional boundaries to accomplish a task.

EVENT ⟹ **TASKS** ⟹ **RESULTS**

Workflow Analysis

- Frame the Process
- Understand the current (as-is) process
- Design the new (to-be) process

Process Frame Example



PROCESS FRAME

Process Name

Trigger Event	Milestone Steps					Result

Case for Action	Vision

Customers/ Stakeholders	Mechanisms	Metrics

- Boundaries
  - Major steps in the process from the trigger event to the end result
  - Stakeholders / Customers
  - Mechanisms
- Case For Action / Assessment
- Vision
- Metrics / Measures

Process Frame

Establishing Expectations for Use of EHR in Key Clinical Processes

Current Processes	EHR Impact Function	Benefits	Metrics	Expectations/Goals
Visit Specific Processes				
Pre-Visit Appointment scheduling Diagnostic studies scheduling Insurance verification Chart preparation	- Patient portal for scheduling visit - Automated self history & symptom assessment - ASC X12N 270/271 - Paperless	- Context-specific scheduling of diagnostics studies prior to visit - Check eligibility - Reduce/eliminate filing	# FTE scheduling # FTE pulling/filing charts and loose sheets $ in collections # days in A/R # FTE prepping charts Patient satisfaction	- Reduce clerical staff 75% through attrition - Check eligibility on 95% of patients, reducing A/R days by 5 and cutting bad debt by 50% - Increase patient satisfaction survey scores by 3%
Check in	- Workflow - Wait times calculated	- Reduce wait time - See more patients - Increase revenue	# minutes wait time # patient visits/hour/ physician $ average revenue/ patient	
Patient intake Documentation of vitals, HPI, etc. Check on health maintenance Patient preparation	- Context-specific template-based charting - Health maintenance reminders	- Compliance with health maintenance	# records identifying flu shot status # DM foot exams	- Obtain flu shot information from 100% of patients and provide flu shots to 98% of pts
Review chart Review results (incl. images) Review past encounter data Review other provider & patient-supplied data	- Integrated provider EHR and patient PHR - Inter-disciplinary, multi-media, and remote access - Continuum of care			
Clinical documentation Validate history data Record physical exam Document encounter notes				
Care planning Develop care plan consistent with guidelines				
Medication management Order medications Manage refills: local pharmacy, mail order Manage samples Reconcile medications				

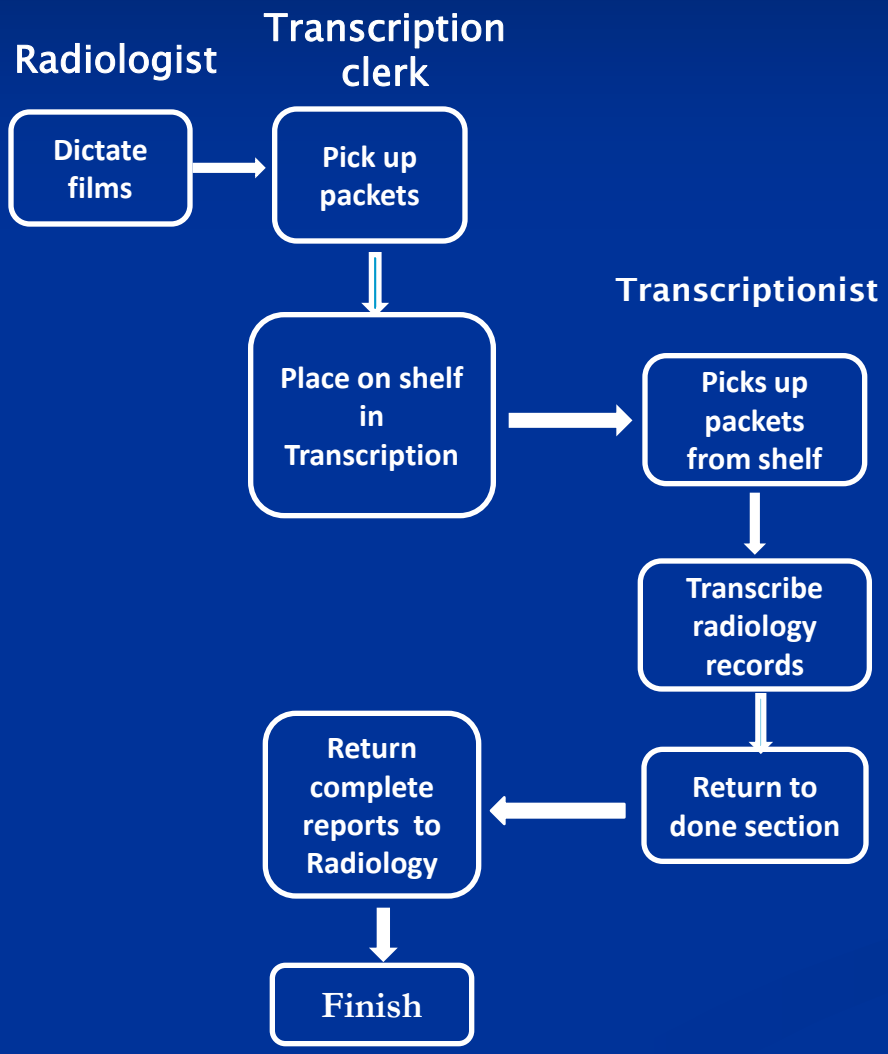
The Current (As-Is) Process

- Map the current process using progressive levels of detail until the process is understood
- Use an 80/20 Rule at a sufficient detail to inform the software configuration process
- Capture low hanging fruit or ah hahs
- Remember to include the staff involved in the process

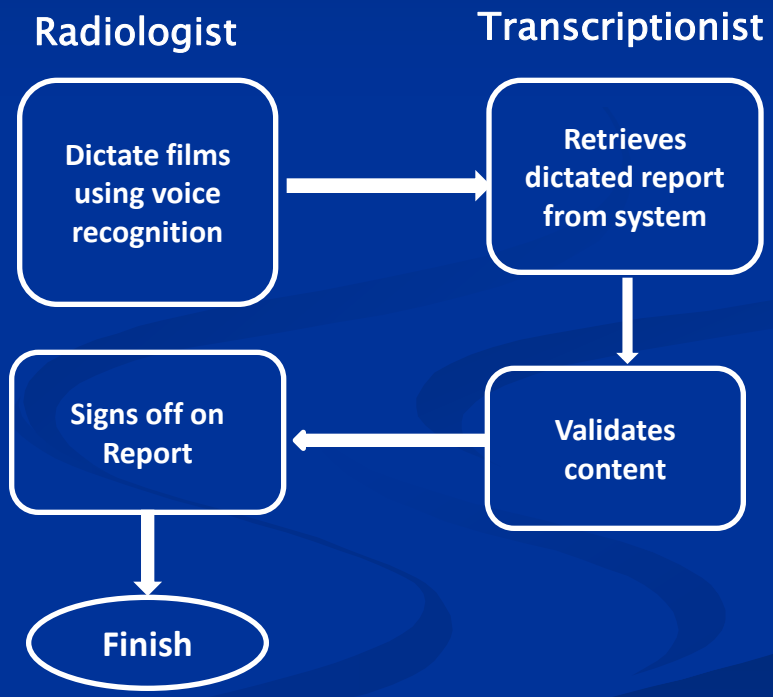
The New (To-Be) Process

- Combination of the as is and the design of the technology
  - Functional benefits
  - Functional constraints
- Forms the basis for change management and training
- Distributed widely and discussed

Current As-Is Process



Future To-Be Process

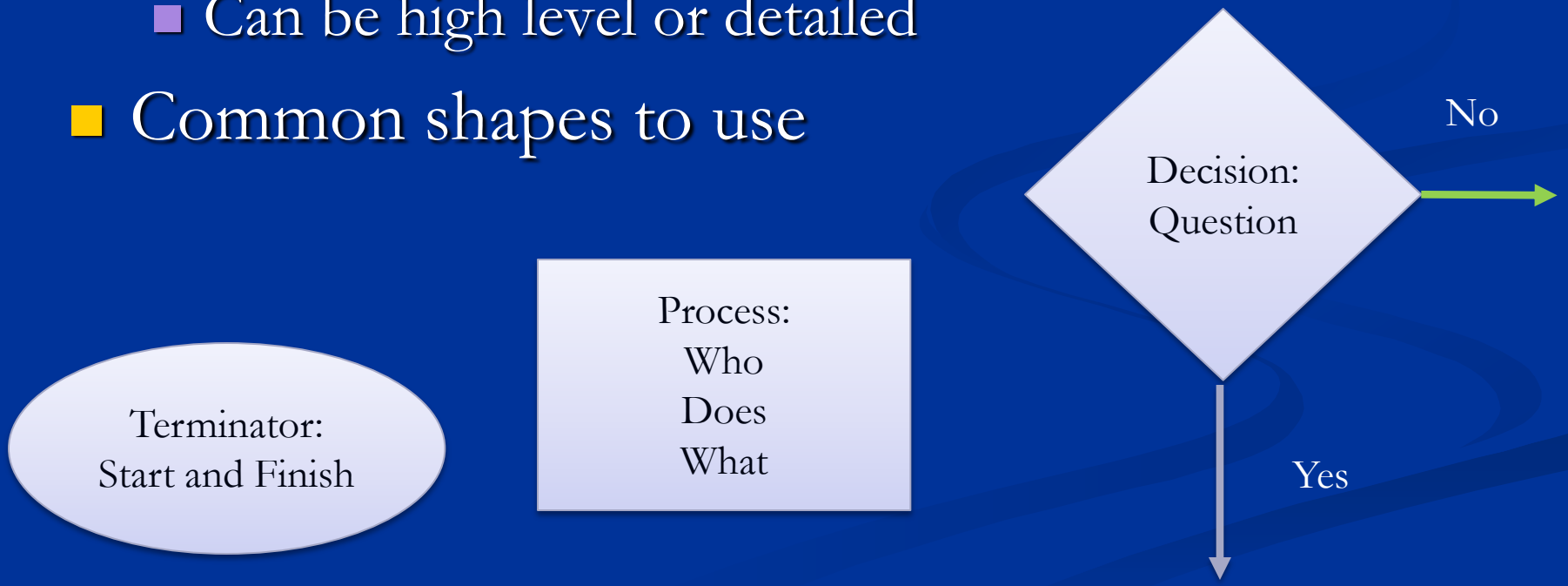


Process Mapping Tools

- Tools may be used at varying levels of detail
- Tool selection may depend on the nature of the process being mapped
- Tools may be paper-based, automated, or web-based
- There are a variety of process mapping tools; the key is to choose the one that works best for your organization
- The tool is not as important as understanding the process

Process Mapping Tools

- Flowcharts
  - Graphical, pictorial mapping tool
  - Easy to understand
  - Can be high level or detailed
- Common shapes to use

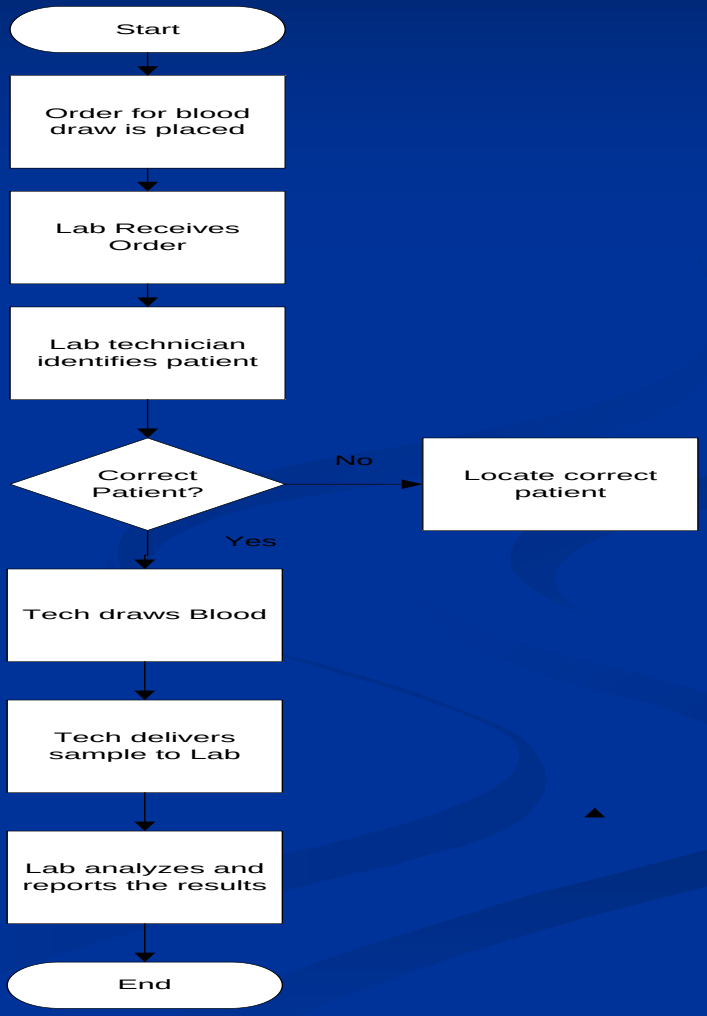


How to Map Processes

- With a team of experts – the people who do the work
- Written down
- Dynamically – in a way that can be updated
- With or without flow charting tools
- With a sense of engagement or excitement

Getting Started
Discuss Drawing Blood

- What event needs to be in place to start?
- What info needs to be delivered to the next step?
- What is a process step for this process?
- What is a work instruction?

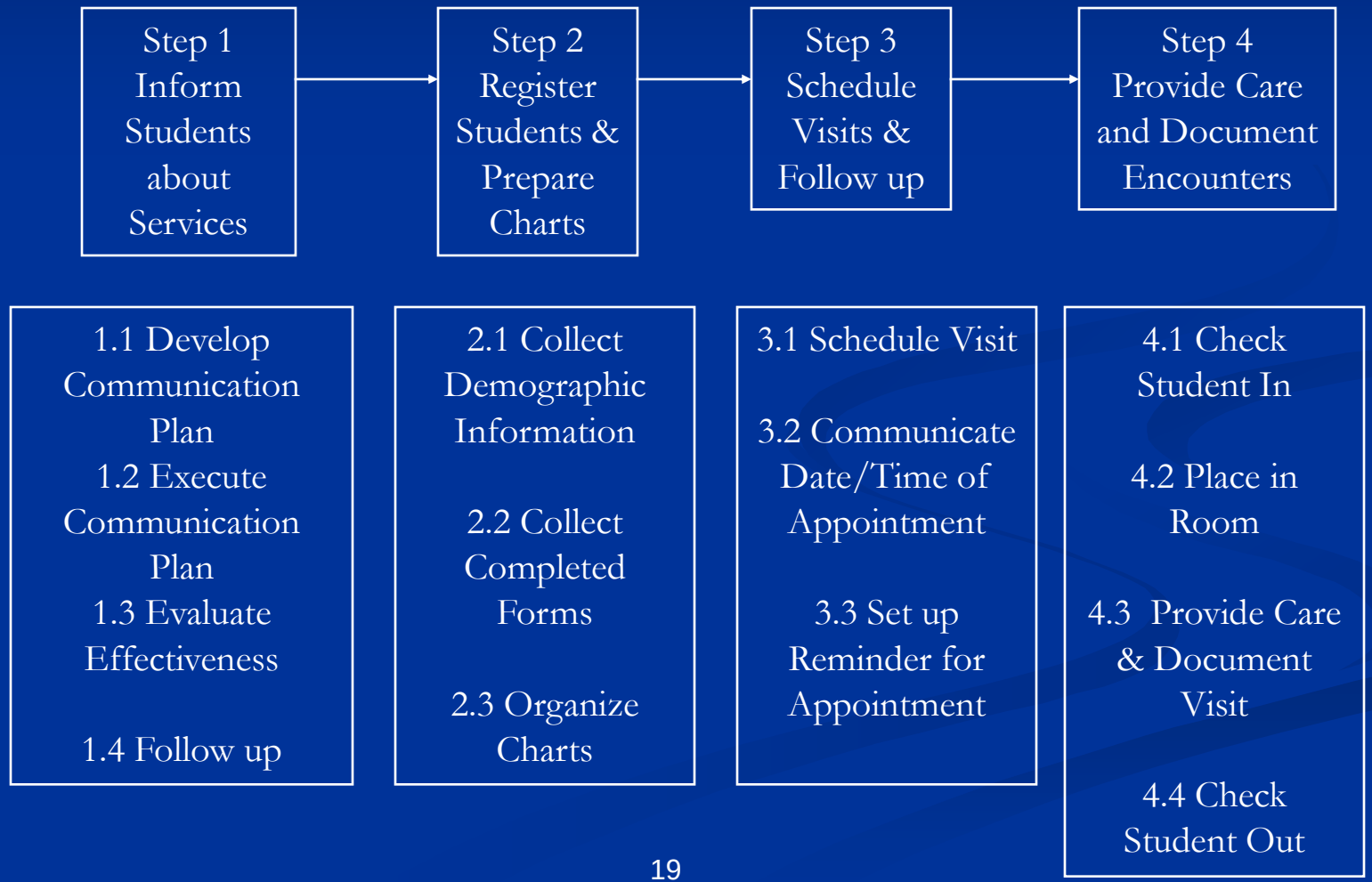


Process Mapping Tools

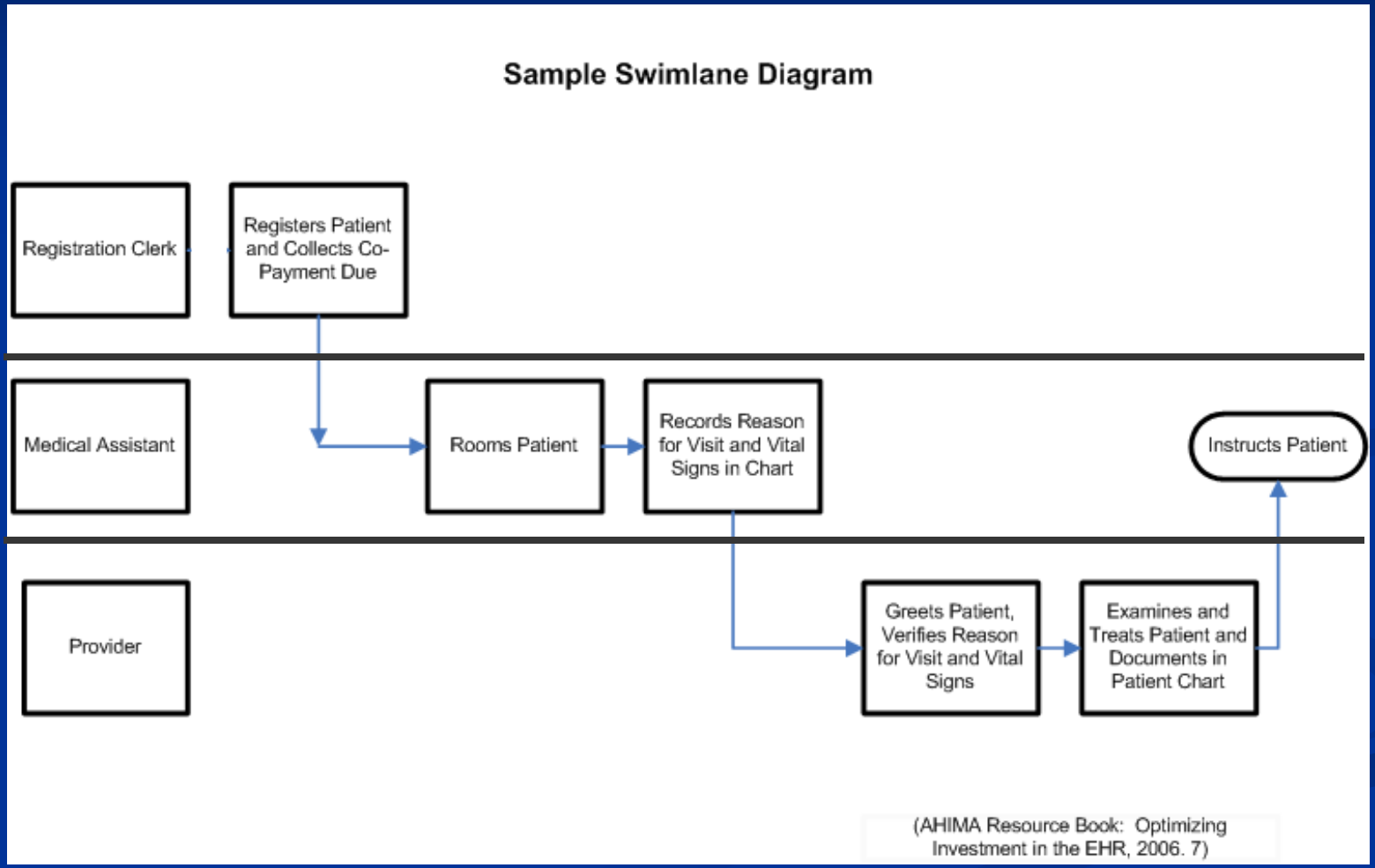
- **Top Down Process Map**
  - Can refer to another pre-defined process
  - Use the least number of steps necessary, usually 7 or 8 steps
  - Stay at a high level; more detail can be added later if necessary

Top Down Process Map (High Level)

Top Down Process Map (More Detailed)



Swimlane Diagram



What We're Looking For

- The right way
  - Not:
    - My way
    - Your way
    - The way we've always done it
- Focus on the right way is often a cultural change

What to Map

- Use 80-20 Rule: 80% is good enough
- Common process list:

1. Pre-Visit
   - Appointment scheduling
   - Diagnostic studies scheduling
   - Insurance verification
   - Chart preparation
3. Patient intake
   - Documentation of vitals, HPI, etc.
   - Check on health maintenance
   - Patient preparation
4. Review chart
   - Review results (incl. images)
   - Review past encounter data
   - Review other provider & patient-supplied data
5. Clinical documentation
   - Validate history data
   - Record physical exam
   - Document encounter notes
6. Care planning
   - Develop care plan consistent with guidelines
7. Medication management
   - Order medications
   - Manage refills: local pharmacy, mail order
   - Manage samples
   - Reconcile medications across continuum of care
8. Ordering
   - Diagnostic studies
   - Surgery
   - Referrals
   - Admissions
   - Nursing services
9. E&M coding
10. Charge capture
11. Patient instruction
    - Education
    - Summary of visit
12. Check out

Process Improvements

- Look for
  - Duplication
  - Variation
  - Inefficiencies
  - Inconsistencies
- Ah Ha's, low hanging fruit
- Correct some things you find
- Communicate and celebrate

Conclusion

- The power of process mapping lies in the visual representation of complicated concepts
- Process mapping is a vital step in preparing for EHR implementation
- Process mapping has inherent benefits beyond the EHR
- There is no one right tool
- Engaging people who do the work is essential to success