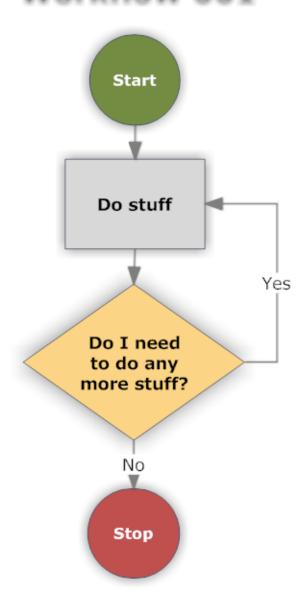
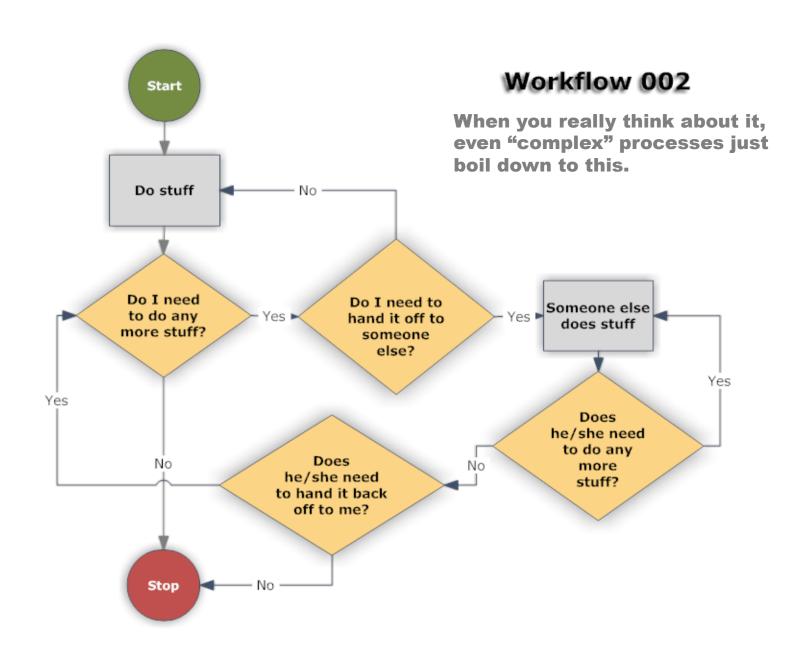
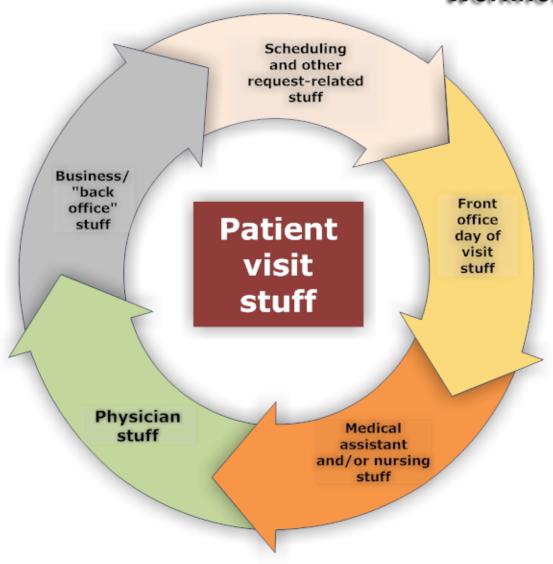
"Workflow" demystified

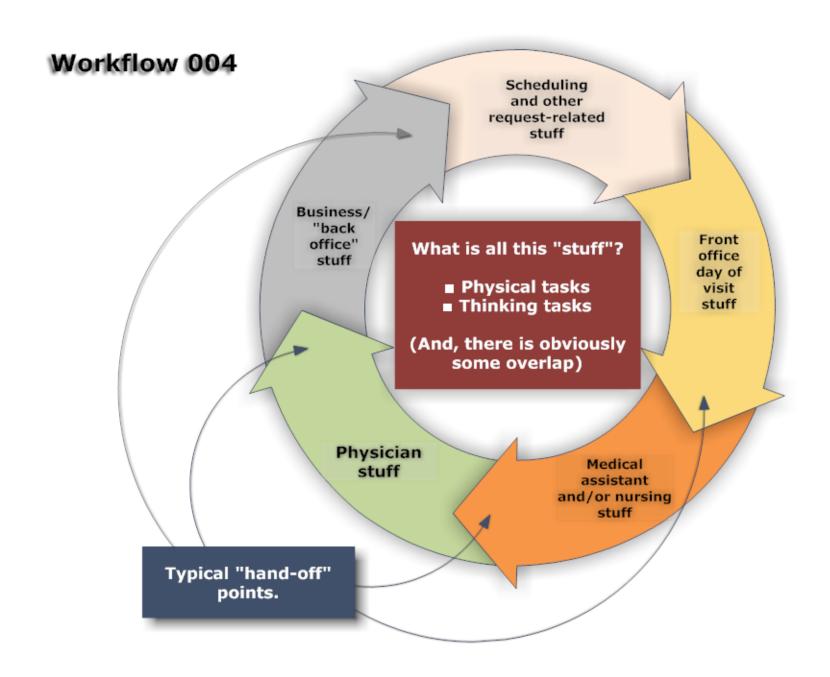
Workflow 001





Workflow 003



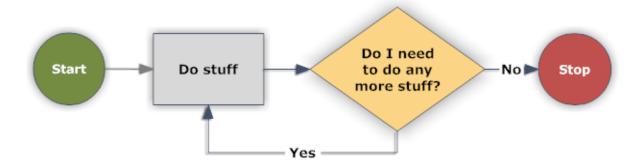


"Workflow analysis" is really just about fully recognizing and documenting all of the task steps ("stuff") you and your fellow staff must take to complete your work (and to see how well it actually "flows"). Between the "begin" and "end" points, there are really only two types of process steps:

[1] straight input/output tasks (typically depicted by a square or rectangle), and

[2] decision point tasks (the "diamond" box) where the output path is the result of having made some decision from a set of alternatives.

Workflow 001

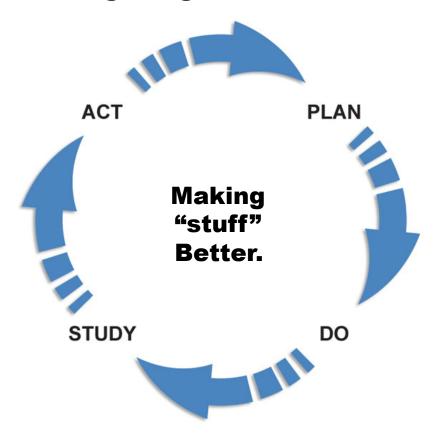


Individual process tasks are sequential, one after the other, often with "hand-offs" between people. Unless you work alone, work tasks typically run in parallel, i.e., different staffers performing different tasks at the same time (and where hand-off misalignments result in "bottlenecks").

We are simply interested in a small number of basic things related to process tasks:

- The total number of steps/tasks in a process;
- People and tools involved in each step;
- Time to completion for each step (min/average/max if possible, to capture variability);
- Number and type(s) of errors encountered in each step.

We first seek to understand and depict our "current state" processes. Only after doing so can we begin to understand where things might systematically be changed for the better (e.g., fewer steps, faster task completion, fewer errors) using The "PDSA" cycle (Plan-Do-Study-Act) in order to verify that we are in fact making things better.



People

(Patients and all staff, as well as vendor, payer, and regulatory roles where appropriate.)

Workflow elements for analysis and re-design

Processes

(The sum of all sequential and parallel tasks comprising the operation.)

Tools

(e.g., files, forms, supplies, phones, computers, fax, manuals, medical devices, etc.)

Clinical workflow

(Ideally, consistently efficient coordination of people, processes, tools, and information, aimed at achieving the highest quality results in the shortest time at the lowest cost.)

Results

(Patient care dx and effective treatment plans, prompt claims reimbursement, profitable operation.)

What are some typical processes (recognizing that many things overlap)?

- Phone calls (inbound and outbound)
 - Rx refills
 - Patient scheduling
 - □ Patient visit, check-in
 - □ Insurance verification
 - □ Patient visit, exam (e.g., CC, PMH, HPI, ROS, SOAP, etc)
 - □ Orders (e.g., px, Rx, labs/imaging, referrals)
 - □ Patient visit, check-out
 - Coding/billing/claims submission
 - □ General business administration

How would we go about improving them? What exactly is "workflow analysis"?

Information

(Input, assessment, transformation, decisions, and output.)

People

(Patients and all staff, as well as vendor, payer, and regulatory roles where appropriate.)

What is workflow analysis?

Processes

(The sum of all sequential and parallel tasks comprising the operation.)

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(e.g., files, forms, supplies, phones, computers, fax, manuals, medical devices, etc.)

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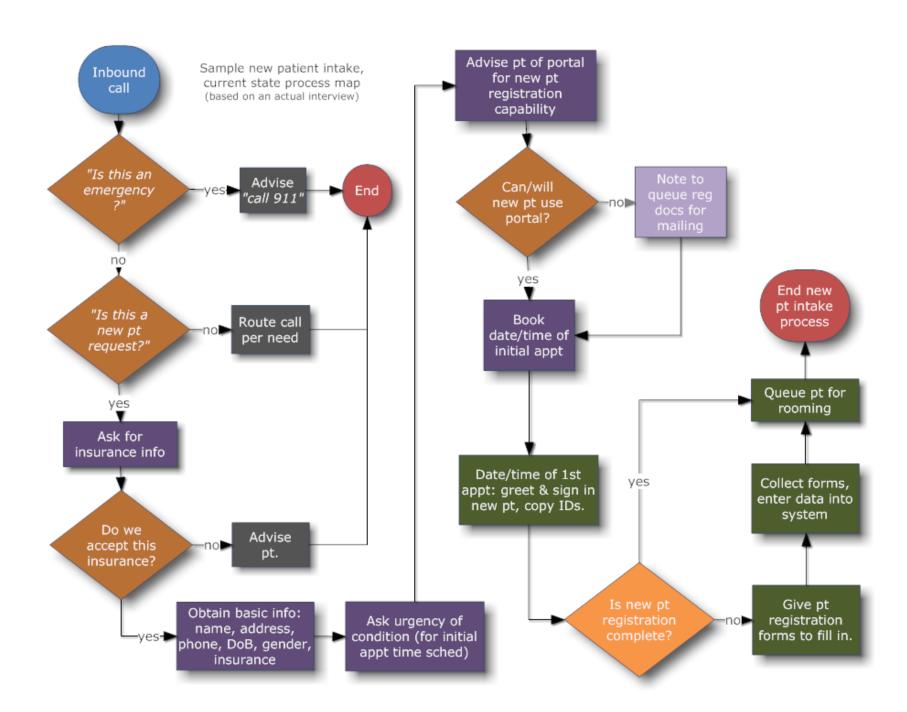
So ,what exactly is "workflow analysis"? Start to think of it this way, at its most detailed:

- Pick a single process, note the people, tools, and information involved;
- Identify and write down every individual task step;
- Calculate and record how long it takes to complete the task step;
- Make note of the type and frequency of any errors that occur;
- Then ask yourself some questions, such as:
- > Does the time to completion of each task vary a lot? If so, what are the causes?
- > Is the error rate correlated with the speed of task completion?
- > Could I speed up or eliminate some steps without an increase in the error rate?
- > Then, thinking more broadly, if I re-do some steps and improve this process, could it adversely affect another of my processes?
- Move to another process. You're on your way.

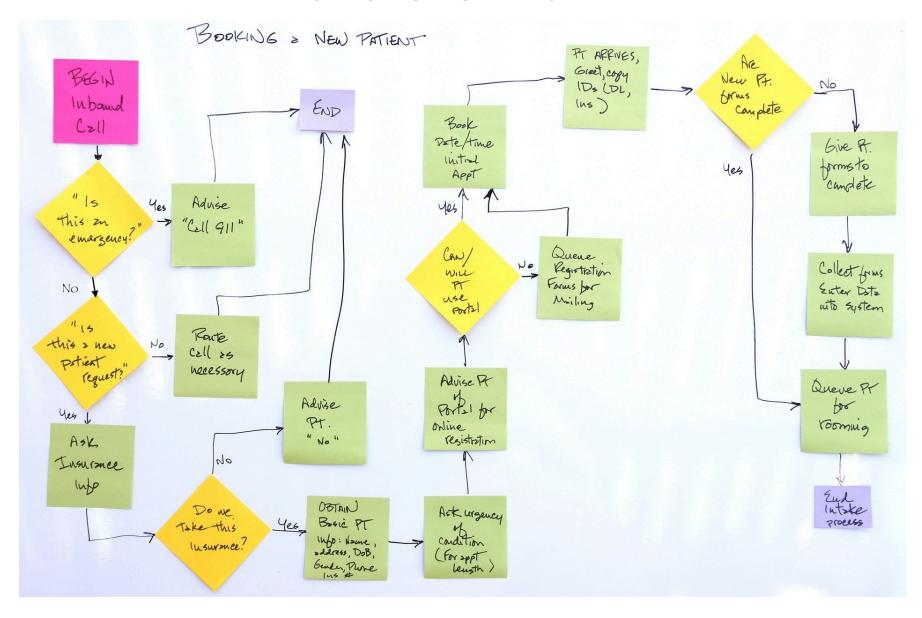
A quick real world example from a clinic staffer phone interview

Step#	Process step (including decision point steps)	Staff role (e.g., front ofc, MA, physician, back ofc etc)	Tool(s) used	Avg time (minutes) to completion
1	If inbound call, ask [1] is this a 911 situation? or [2] non new-pt related, and [3] insurance carrier. Else, if new pt request inbound via email, call pt outbound to gather this info (start w/ step 3).	Front desk staff	Phone, email	2.00
2	If 911, so advise ("call 911"). If insuror not taken, so advise. Sorry. End of call.	Front desk staff	Phone	0.25
3	Else: Take down/enter name, address, phone#, DoB, gender.	Front desk staff	Phone, computer	2.00
4	Ask about urgency of condition relating to 1st visit (for intial visit time allotment).	Front desk staff	Phone	0.25
5	Advise pt to use portal to fill out pt info docs if possible, otherwise we will mail them to be filled out. If the latter, queue for forms mailout.	Front desk staff	Phone, computer	0.50
6	Ask for prior provider(s) info for MedRecs request(s).	Front desk staff	Phone, computer	2.00
7	Book 1st appointment with estimated appropriate time allotment, end call.	Front desk staff	Phone, computer	1.00
8	Day of appt: greet and sign in pt.	Front desk staff	sign-in sheet, computer	0.50
9	If setup info was completed via portal, queue for rooming.	Front desk staff	computer	0.10
10	If setup info not done online, ask for /provide paperwork and have pt sign releases (e.g, HIPAA docs), then queue for rooming and enter pt info into system.	Front desk staff	computer, paper forms	5.00

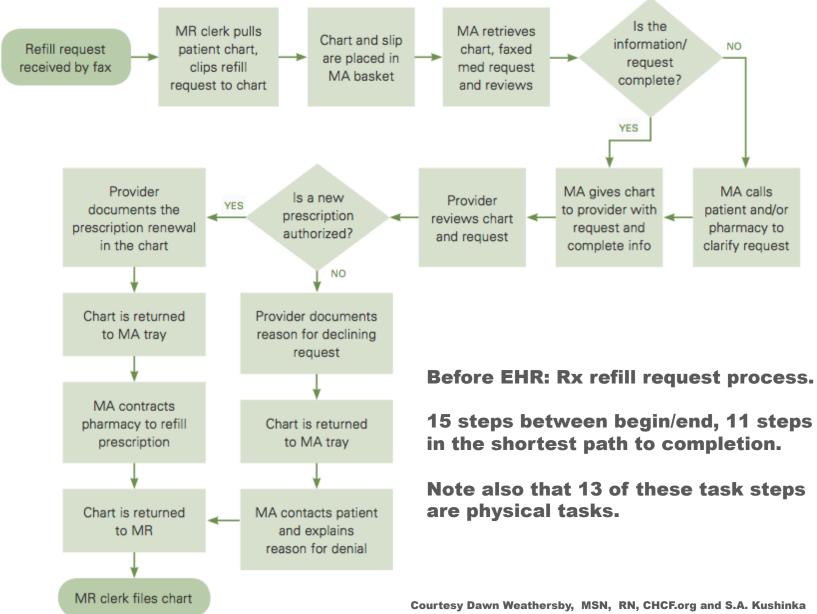
(Depiction in a flowchart graphic on the next page.)



It doesn't have to be fancy to get going. Sticky notes on a whiteboard will do.



Another real world example: Rx refill process



After EHR: Rx refill request process.

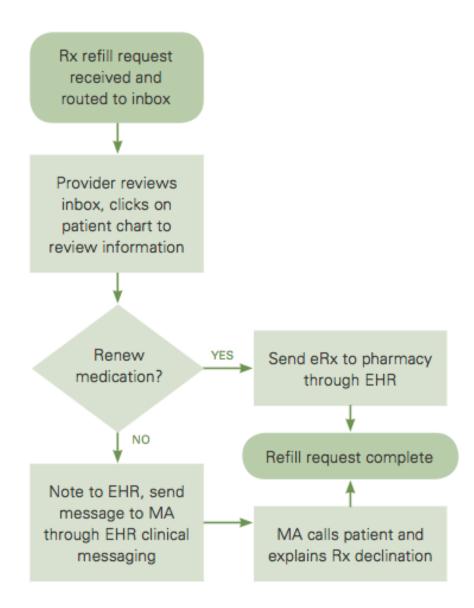
Now only 5 steps between begin/end, only 3 steps in the shortest path to completion.

Fewer steps means quicker task completion in general, and fewer opportunities for error.

Think about it; unless every step in a process works perfectly every time, each additional step increases the likelihood of a mistake.

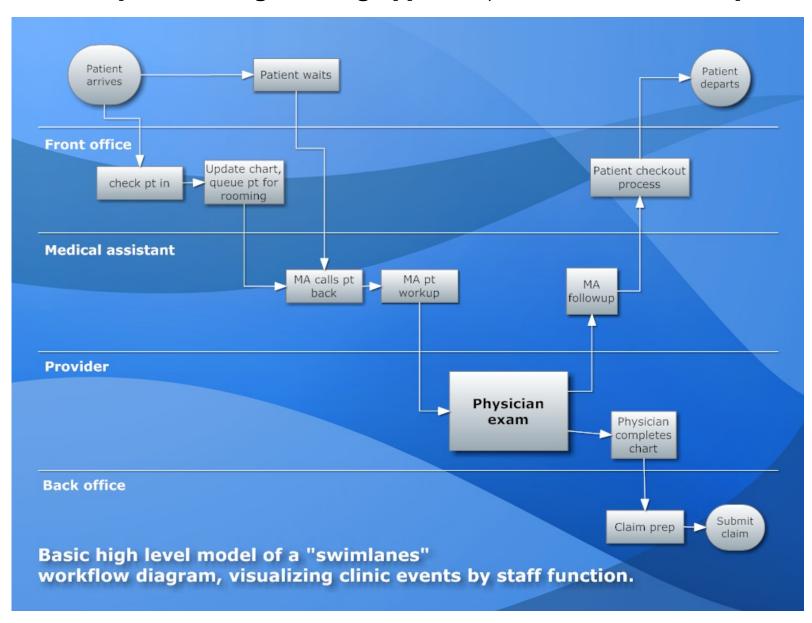
Note also that while some of the tasks are still "physical," they are less so, involving the use of the computer rather than moving paper around the clinic.

One caution: moving from a paper chart process to an EHR can result in "information flow misalignment" if we're not careful to analyze our processes and reorganize tasks where warranted.



Courtesy Dawn Weathersby, MSN, RN, CHCF.org and S.A. Kushinka

Another process diagramming approach, the "swimlanes" map.



Clinic	Process	
Date		
Ву		

Step#	Process step (including decision point steps)	Staff role (e.g., front ofc, MA, physician, back ofc etc)	Avg time (minutes) to completion	Tool(s) used	Notes

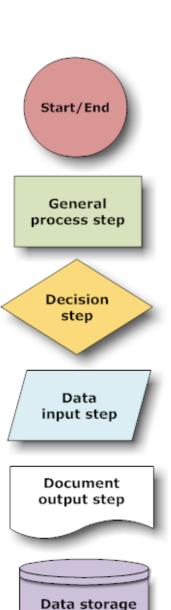
(Photocopy and use additional pages as needed.)

Basic workflow diagram symbols

While there are dozens of "formal" workflow mapping symbols, we advise that you

Keep It Simple.

Also, pay attention to task completion times and types and rates of errors. The standard workflow diagram is really a "process logic map," which, while important, doesn't capture time and error information, but those too are critical for true process improvement.



A few thoughts about "Lean" methods for workflow re-design.

Advocates of "lean" process re-design classify tasks as

- 1. Value adding,
- 2. Non-value adding but necessary, and
- 3. Unnecessary (i.e., "waste")

We want to maximize time spent on #1, minimize time spent on #2, and eliminate tasks in category #3.

In the context of your clinic, "point of view" must be considered. For example, only the provider "adds value" in terms of being the one person who whom services can be billed. All other tasks are either necessary support or waste.

From the point of view of the *patient*, that which eases or cures her medical problem is the source of "value." Time spent waiting or filling out the same forms repeatedly is waste.

Barriers to a Lean operation: The Eight Wastes



We wait for defects to be corrected. We wait while tasks involving excess motion and transportation get completed. We wait while multiple forms get filled in -- all asking for much of the same information (overprocessing). We wait while piled-up chart review goes unfinished 'til after hours (overproduction and inventory). Finally, we wait owing to unrealized/underutilized talent and skills. We need to ID and remove waste.

Workflow 001



Ask yourself:

"How much of the 'stuff' I do every day is really 'wasted' effort that keeps me from being more productive and less frustrated?"

The answer lies in first documenting and then analyzing your processes as necessary first steps to systematically improving them.

We all typically come to work every day and do our jobs with the best of intentions, but we usually don't give much thought to <u>how</u> we "do stuff" once we've been trained and we're mired in the onslaught of daily work.

But, a relatively small amount of time spent figuring out better ways to "do stuff" can have a huge and durable payoff, both in terms of productivity and job satisfaction.

"Experts" really can't come in and do this from the outside, because, really, YOU are the experts. But, we can certainly help.

Some useful links:

www.ama-cmeonline.com/health_it_workflow

www.lean.org

www.asq.org/health

en.wikipedia.org/wiki/Workflow

en.wikipedia.org/wiki/Lean_services

tinyurl.com/4y557ah (AHRQ workflow resource for Health IT)