

State Hygienic Laboratory

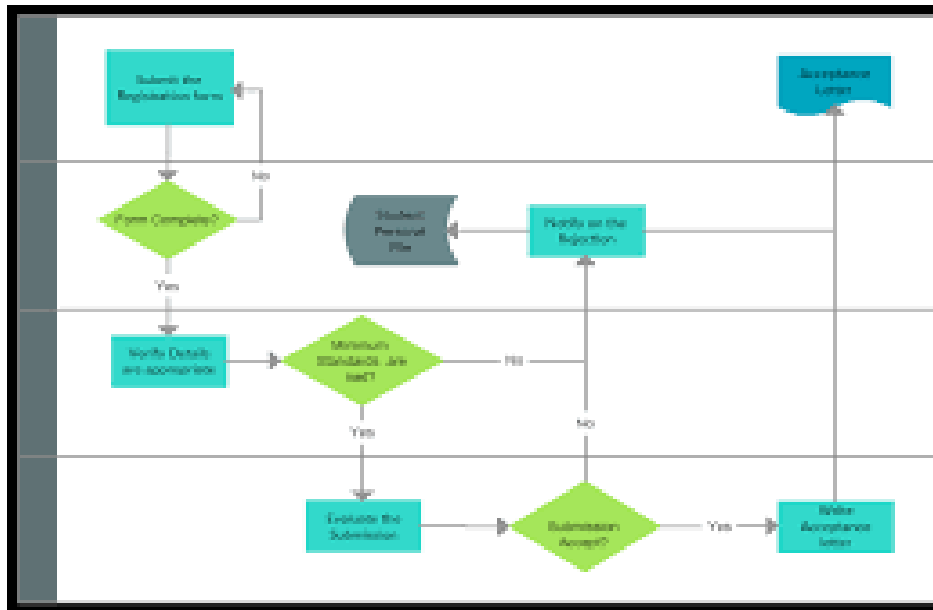
Process Map

Where do I start?

June 29, 2022

What is a Process Map?

- Visual representation of how things get done.
- Helps determine the Who, What, Where, When, and Why.



What is a Process Map?

- The sequence of steps are shown along with related decision points.
- Major components of a process map are:
 - Inputs (critical or not)
 - Steps in the process (consecutive steps for the current process)
 - Outputs (critical or not).



When is a Process Map helpful?

- Before a new process/work begins.
- When staff have workarounds.
- When there are changes (testing equipment, LIMs systems, new employees).
- When an organization is looking to make changes.



Who should be involved with putting a Process Map together?

- Group leader. Ideally would have experience with leading groups/putting maps together.
- Staff that do the work in the process.
 - They have the knowledge of what is currently being done.



Who should be involved with putting a Process Map together?

→ Staff that work before and after the process.

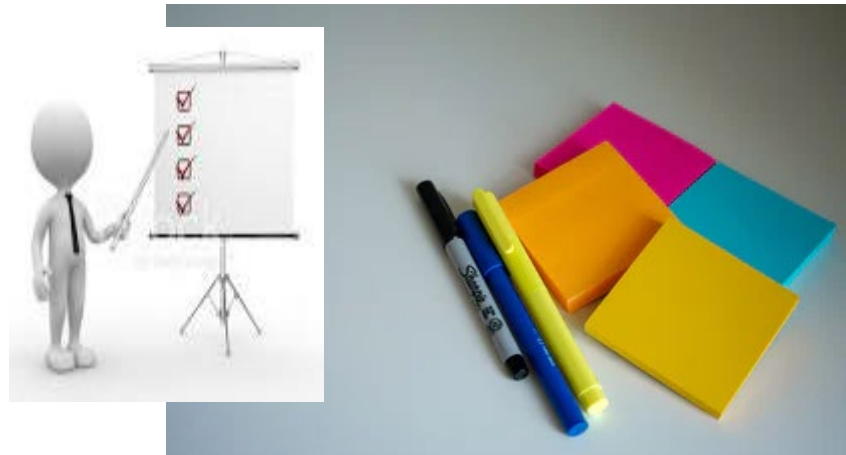
- They have the knowledge of what is going into and coming out of the process.
- Potentially could be affected by any process changes.
- Can & should ask 'Why is it done this way?' questions.



How to put a Process Map together

→ Supplies needed:

- Sticky notes – multicolored can be helpful.
- Colored pens/markers
- Flip chart paper/roll of paper
- Wall space



How to put a Process Map together

→ Identify the process

- Is something not going well? Adding/removing a service/test?

→ Define what the beginning of the process is.

→ Define what the end of the process is.

- By identifying the beginning and ending of a process boundaries are created that the team will work within.
- Helps prevent the team from adding in other steps that could cause the project to inadvertently increase in scope.

How to put a Process Map together

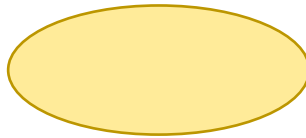
- Gather a team to walk through the process.
- Make it clear that the group is not going to judge each other for what is said while making the map.
 - This can be helpful for staff that may not be as comfortable sharing steps/workarounds.



Common Terminology

→ Basic symbols

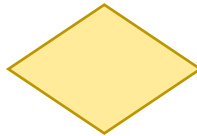
- Start/End – Oval



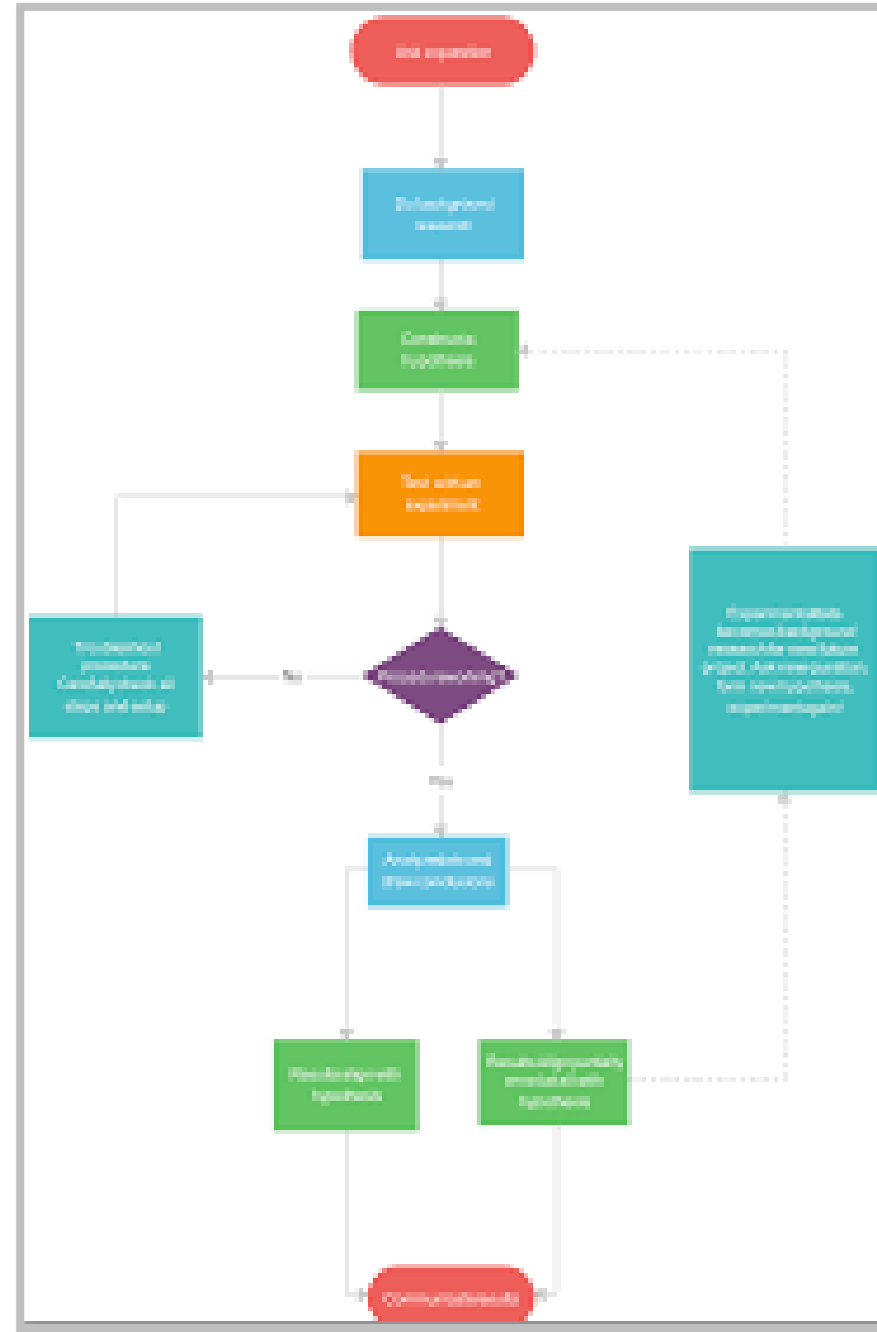
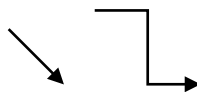
- Process step – Rectangle



- Decision – Diamond



- Directional arrows



Practice doing a Process Map

→ It can be helpful to practice a new technique before one needs to use it.

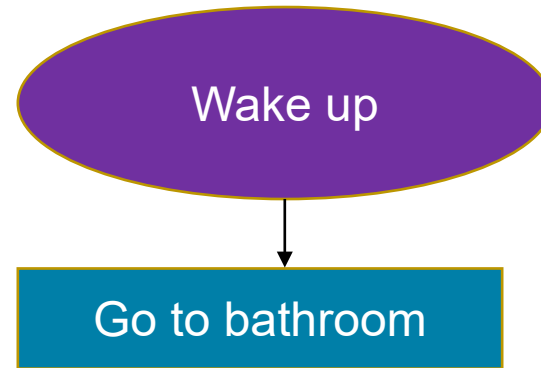
→ Go to Work Routine

- Typically, everyone has a routine to get to work.
- Can be done in small or large groups.

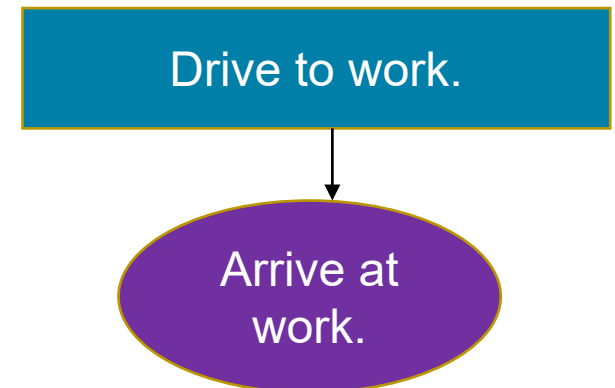


Practice doing a Process Map

→ Clear beginning step – Wake up.

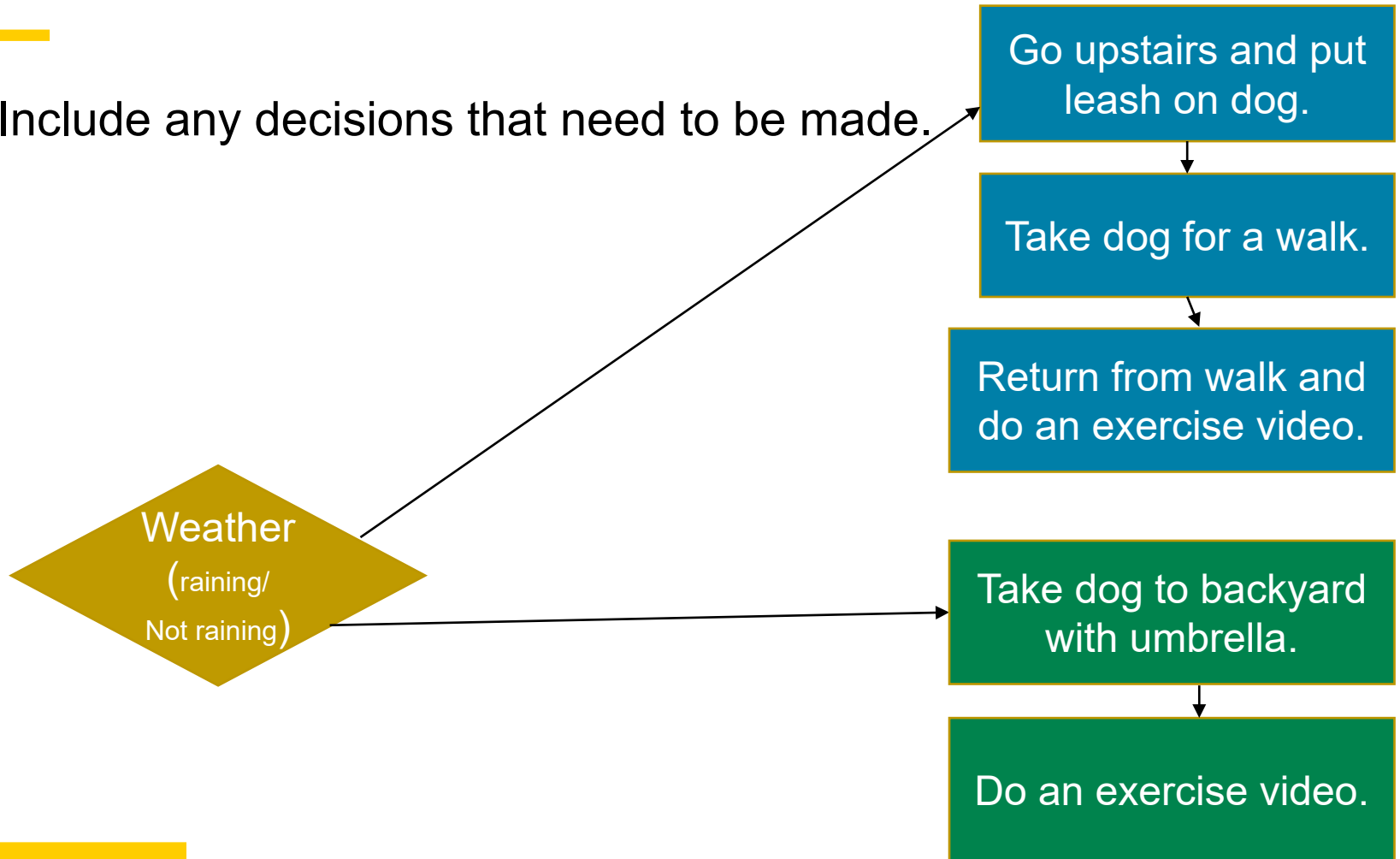


→ Clear ending step – arrive at work.

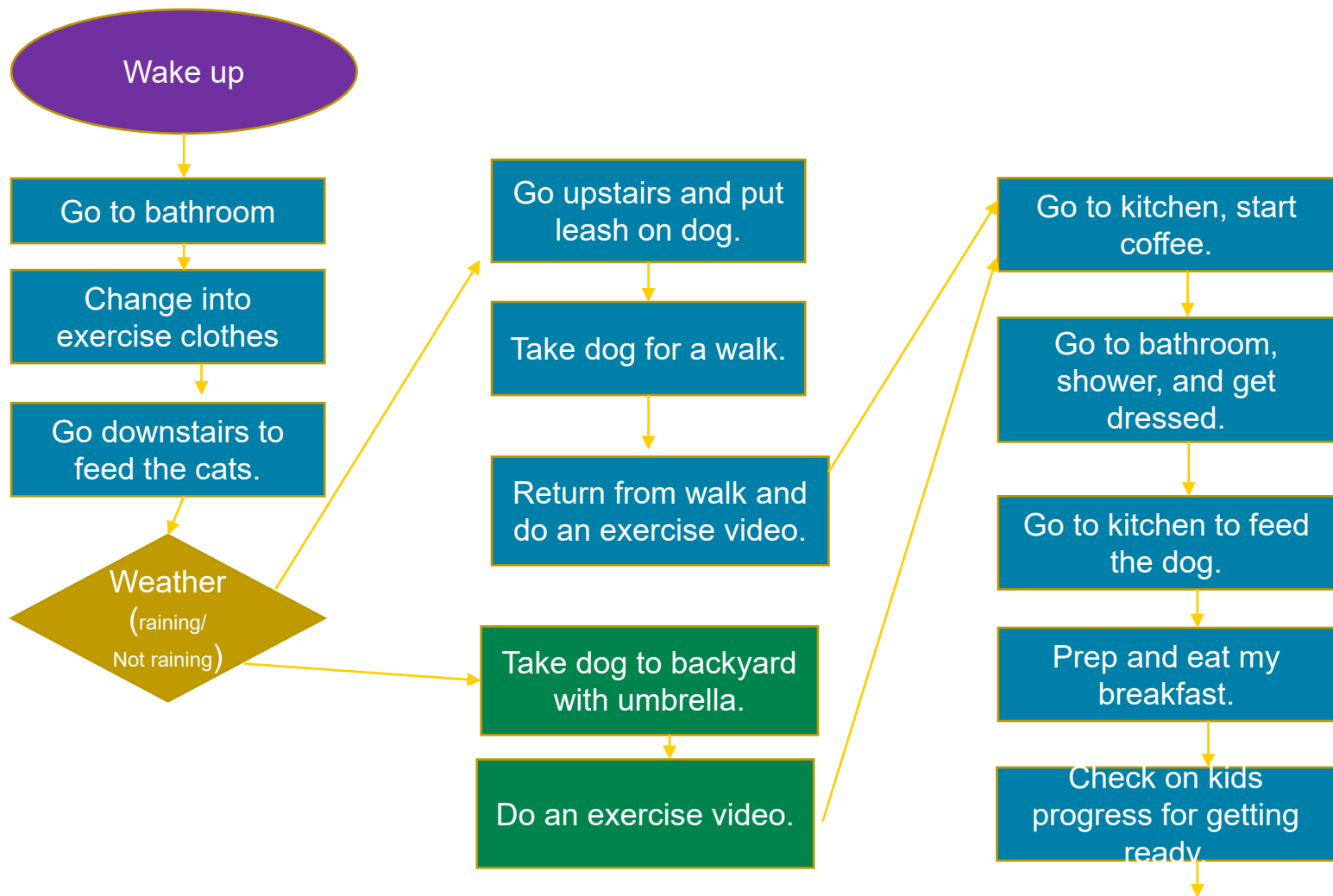


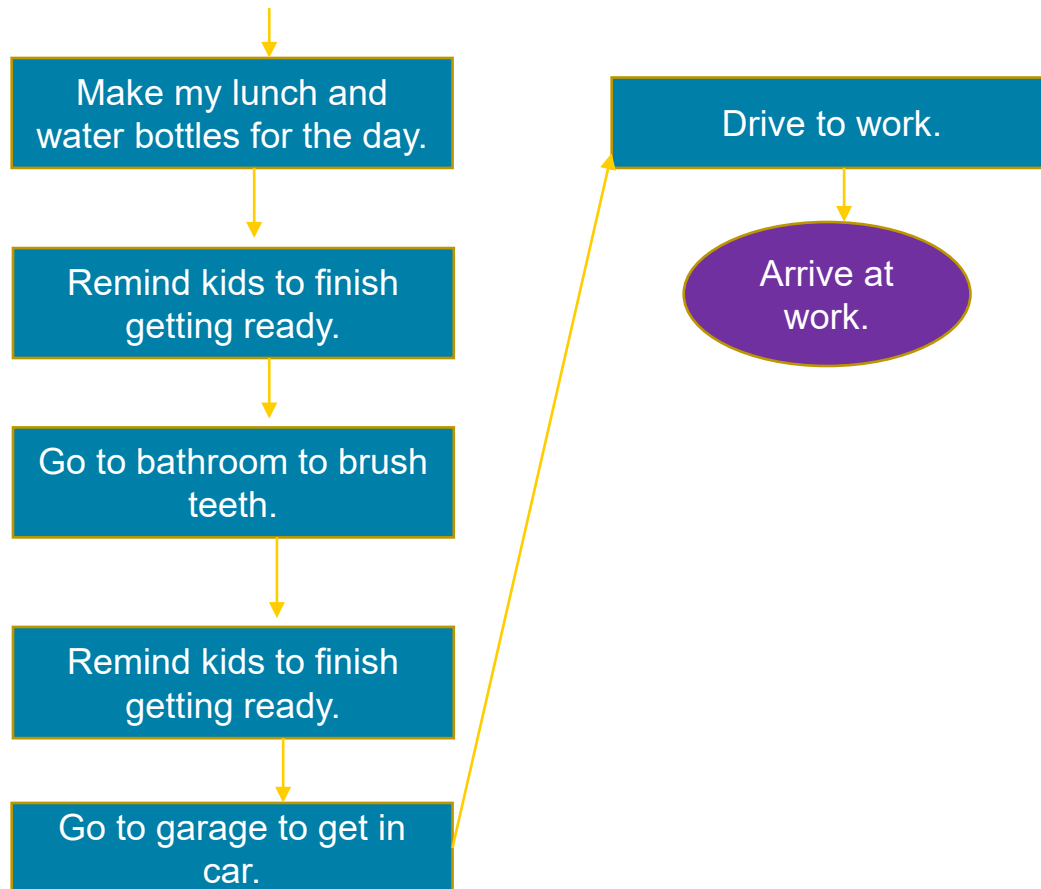
Practice doing a Process Map

→ Include any decisions that need to be made.



My morning routine





Now what?

- Now that the Process Map has been put together, what do we do?
- Now the team can see the whole process;
 - Areas for improvement are evident.



Now what?

→ Planning for making changes to the current process to show an ideal future process.

- Eliminate re-work
- Eliminate over-production
- Remove steps that are not needed
- Reduce unneeded movement of supplies
- Reduce movement of people
- Reduce waiting
- Limit inventory
- Better utilize people



IOWA

State Hygienic Laboratory

Laura Clark
laura-clark@uiowa.edu

One Process Walk and Process Mapping Experience

Daniel Gard and Mary Bonifas

Michigan Department of Health and Human Services

Bureau of Laboratories

Prevent Disease – Promote Wellness – Improve Quality of Life



Background

- New employee
 - Previous employee had been here for many years
 - Great time to examine processes
 - Good way to learn new role
- 5 newly certified Lean Six Sigma Green Belts
 - Required to complete a project within 1 year of certification
 - Excited to use DMAIC

Terminology Note

- Process improvement terms
 - Can be intimidating
 - It's OK not to know
 - Likely, already using the tenants
 - Most is common knowledge
 - Training provides framework/steps
 - Can still do mapping without any formal training
 - DMAIC = Process improvement process steps (Define, Measure, Analyze, Improve, Control)

Overview

- Media Unit makes in-house growth media and reagents for multiple departments
- Multiple users in Microbiology area order commercial media (which is under Media Unit purview)
- Quality Control (QC) Unit tests in-house media/reagents and commercial media prior to use
- 787 forms:
 - List Media Unit Procedure for that media
 - List QC procedures for that media
 - Used to document process as it is completed (used as final record)

Project Outline

- Problem Statement
 - Process for media orders is cumbersome with potential for error.
 - Once the media is produced, the status of the media and the path of the 787 form is not clear.
- Business Case
 - Save time and effort as well as minimize the occurrences for errors by streamlining the process.

Project Outline

- Goals
 - Central place to receive orders in the Infectious Disease Division
 - Process defined to communicate media status (QC status)
 - Process defined for media delivery to customer

Timeline

- Project took 9 months to complete
 - December 2016 – September 2017
 - Meeting availability time was an issue with both small and large group meetings
 - New Green Belts wanted to go through every step of DMAIC
 - ❖ It's OK to not cover each step
 - ❖ What does the project require?
 - ❖ What are your time constraints?

Process Walk

- Can be a physical walk
- Can be a group discussion
- Schedule enough time to complete the walk
 - If not possible, clearly define what should be covered in each meeting/walkthrough
 - Prevents frustration
 - Promotes feeling of accomplishment

Process Walk

- Everyone in the same room at the same time
 - If not possible, be sure to send detailed notes
 - Everyone on the same page
 - Promotes buy-in
 - Prevents feeling left out (leads to resistance)
 - Prevents feeling rushed or getting rushed results

Process Walk

- Set ground rules
 - Not here for solutions (difficult for laboratorians)
 - Everyone has an important role
 - Not everyone in the processes understands each role
 - ❖ This is normal
 - ❖ Great way for everyone to see what happens outside of their silos
- Method to keep participants on track

Our Process Walk

- 1 Facilitator
 - There to guide, not to add ideas
- 1+ individuals backed up the facilitator
 - Each step on a sticky note
 - Moved stickies around as the group discussed
 - Took notes on additional thoughts along the way
- Had fun with it
 - Kept it light so individuals didn't check-out
- Celebrate the completion

Polling Question

- If you have facilitated or participated in a process walk, what did you use to capture process steps?
 - Physical whiteboard at front of room
 - Sticky notes
 - Digital whiteboard
 - Easel Pad
 - Notebook as you took an actual walk-through
 - Something else

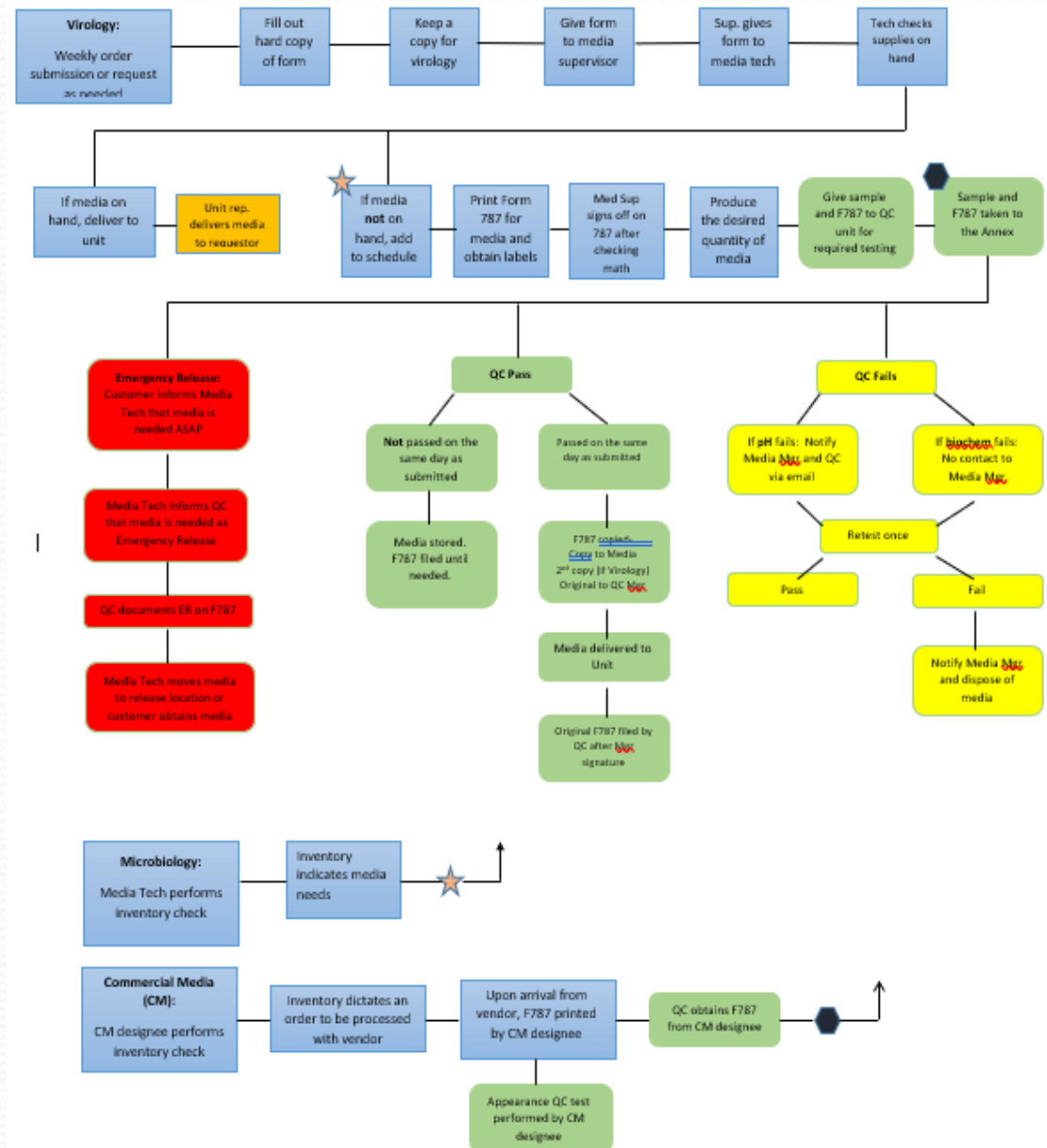
Process Walk

- We used lots of sticky notes!



Process Map

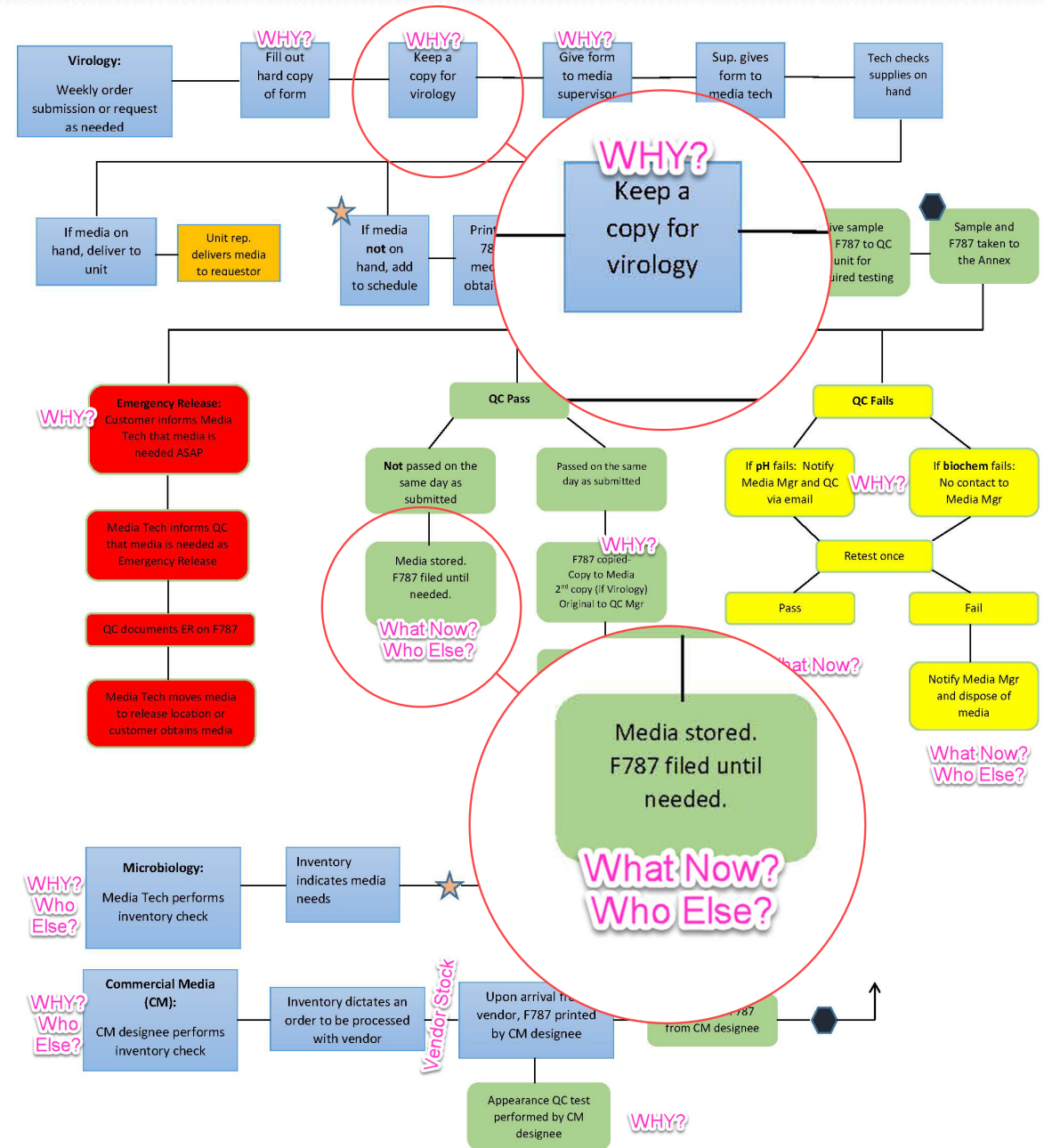
- Created process map
 - Used Microsoft Word
 - available to everyone
- Compress thoughts into one map
 - Wanted to have fit on screen at one time
 - Can be difficult to do



For Micro and Commercial Media, once the path leads you to a symbol, find that symbol up above and continue the path.

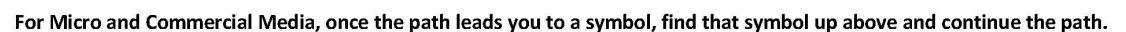
Process Map

- Analyzed for:
 - Questions
 - Who Else?
 - What Now?
 - When?
 - Where?
 - Why?



For Micro and Commercial Media, once the path leads you to a symbol, find that symbol up above and continue the path.

- Analyzed for
 - Rework loops
 - Redundancies
 - Bottlenecks
 - Inspections, Decisions, Approvals
 - Hand-offs



Polling Question

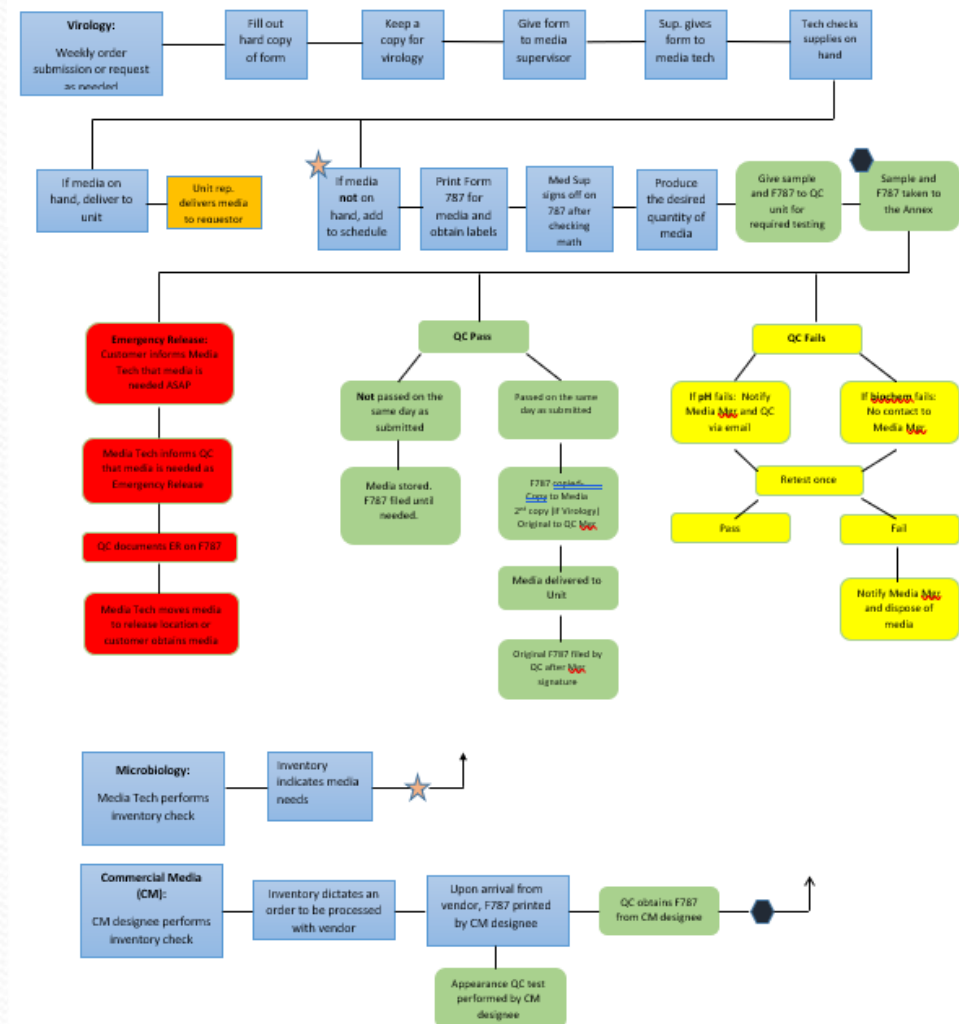
- If you haven't tried a process mapping, why not?
 - Time constraints
 - No roadmap – didn't know how
 - Can't narrow project scope
 - Not enough managerial support
 - I have already tried processes mapping

Next Steps

- Developed Project Measurables
 - Project did not align with traditional measurables
 - That's OK
 - Tailor to fit project
- Brainstormed for solutions
 - Where laboratorians shine
 - Still needed a facilitator to keep within the scope of the project

Tools Developed

- After solutions were accepted by everyone →
 - New, improved process flow detailed in updated process map



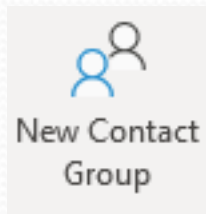
For Micro and Commercial Media, once the path leads you to a symbol, find that symbol up above and continue the path.

Tools Developed

- Excel order form that auto-populates data



- Group email address



- Visual cues along the way



Results

- Revisited 1 year later:
 - All changes had “stuck”
 - Were effective
- Today:
 - All are still current practice and still effective

Contact Information:

Daniel Gard GardD@michigan.gov

Mary Bonifas BonifasM@michigan.gov

