Benefits

- What’s in it for me? (WIIFM)
  - Reduce frustration from inconsistencies
  - Improve morale and satisfaction
  - Eliminate repeated steps
  - Streamline work environment and processes
  - Simplify training
  - Standardize forms, reports, other tools
  - Capture existing best practices
  - MORE TIME!
Value Stream

- **Value Stream**: All ESSENTIAL actions or steps to bring a service/product through the main process steps from beginning to end.
  - Includes people, info, materials, supplies
  - Includes time to complete each action/step and the Wait Time between the steps

- **Value Stream Map**: A diagram that shows all process steps of the Value Stream.
  - Includes Value-Added (VA) and Non-Value Added (NVA)
The Meaning of "Value-Added"

Everything that we do should be questioned for Value.
When considering an activity or process, ask yourselves:

- IS THIS VALUE-ADDED AS PERCEIVED BY OUR CUSTOMER (anyone downstream in a process)?

- WOULD THE CUSTOMER BE WILLING TO PAY FOR IT AND WOULD IT MEET THEIR EXPECTATIONS?

ASK THEM!

Downstream users include those internal, within our organization, and external, including system partners and customers.
Non-Value: The 8 Forms of Waste

1. Mistakes/Reworks
2. Excess Inventory (material, time, info)
3. Transporting (Unnecessary Transport of Materials)
4. Motion (Unnecessary Movement of People)
5. Waiting
6. Processing (Excess Process Steps)
7. Overproducing (Services/Goods do not meet the Needs of the Customer)
8. Failure to Utilize the Time and/or Staff Talents Effectively
When and Where

- **Visual Learning: Ah-ha moments**
  - Captures all steps and inputs/outputs
  - Makes the Invisible- Visible

- **Improve and/or redesign**
  - Identify Value Added activities (VA)
  - Identify/eliminate Non-Value Added activities (NVA)
    - e.g. The 8 Forms of Waste
  - Identify variances and create Standard Work
  - Simplify

- **Forms the backbone of the Kaizen Event**

- **Can be done anytime & anywhere**

Typical to see 70-80% of time in a process as NVA
Uses

- Both internal and external processes
- Include system partners
- Examples:
  - Ordering lab supplies and reagents
  - Preparing/shipping kits
  - Kit requests
  - Central accession & delivery
  - Forms (collection forms)
  - Internal/external training programs, including materials, brochures
  - On-boarding/off-boarding employees
  - Data entry
Creating a Value Stream Map

Materials

- White easel paper-adhesive backing
- Tape
- Colored markers
- Pen
- Calculator
- Colored self-sticking notes
- Camera

People

- Facilitator - your Lean Champion
  Teaches/Coaches/Mentors
  Removes Roadblocks
- Process Owners - those directly involved in the process. For a process that involves multiple groups or sections, use 1-2 reps per group.

A TEAM EXERCISE
Creating a Value Stream Map
Creating a Value Stream Map

- Write the names of each Process Owner (individual or groups/sections) along the left hand side. Include all those involved in the process.

- Determine your units of time. Keep consistent... min vs. hours

TIP
If looking at process for data entry or completing forms—use minutes or seconds.
Creating a Value Stream Map

- Process sequence moves Left to Right. Begin with the first step and map each step sequentially.

- Using individual self-sticking notes, write a description for each step in the process. Include the amount of time it takes to perform that step. Use one note per step.

- Place each note on the easel paper, next to the individual/group responsible for that process step.

TIP
Use color coding to represent specific inputs (materials/information) used in the process.

- **Pink** = electronic (email, scheduling, electronic forms)
- **Blue** = paper/hardcopy, materials/supplies (forms, checklists)
- **Green** = personal exchange (in-person, on the phone)
Creating The value stream map

- Draw a line between each step and add the amount of Wait Time.

- Is there Standard Work? (Does everyone do each step exactly the same way?) If not, then capture the variances.

**TIP**
Use relative spacing between process steps to depict time intervals.
Creating a Value Stream Map

- Identify **VA** and **NVA**
- Calculate Total Cycle Time
  - Sum all VA
  - Sum all NVA

\[ \text{VA + NVA} = \text{Total Cycle Time} \]
\[ \text{(Total Lead Time)} \]

The Value Stream Map depicts your Current State.

**TIP**
Use color-coding to identify VA/NVA
Examples

TIP
Take a Photo of Current State.
Avoid use of mapping software.
VSM Process Re/Design

- Eliminate **NVA** steps
- Identify Other Opportunities:
  - Can a step be eliminated?
  - Can a step be automated?
  - Can steps be done in parallel rather than sequentially?
  - Where are there bottlenecks? Where is the process slowed or stalled? Does batching occur?
  - Does the process need to be completely redesigned?
- Apply Lean Tools:
  - Standard Work
  - Visual Workplace
  - Kanban
VSM Process Re/Design

- Make List of Opportunities for Improvement (OFIs)
- Create your new FUTURE STATE process (VSM)
- Calculate new Total Cycle Time

Current State

Future State

Current
VA=496 min
NVA=1680 min
Total= 2176 min

Future
Total= 509 min

77% Reduction
Moving to the Future State

- Use OFIs to Create an Action Plan (WWW)
  - Who is going to do What and When
    - Include regular follow-ups/status on progress
    - Incorporate Visual Workplace & Kanban
      - Templates, Checklists, Signs, Policies, Charts
      - In/Out boxes, electronic signals
    - Ensure Standard Work
      - SOP
      - Training for All
- Present to Management
- Celebrate Success
  - Internally:
    - wallboard in common areas
    - staff meetings
  - Externally:
    - social media
    - newsletters, articles, conferences
Other Mapping Tools

Source: http://en.wikipedia.org/wiki/Value_stream_mapping

TIP
Focus on the process, NOT symbols. AGREE upon visual cues that are easy to remember and understand FOR ALL.
Creating & Supporting Change

Common Areas, Meeting Room, Break Areas:
Stock VSM Supplies
Post VS Mapping Quickguide
Make Available - Resources/Books

Leadership Support/Expectations
Visibility
Open-door Policy
Early Wins

Lean Training & Champions
On-Boarding New Staff
Workgroups
System Partners