DC | HEALTH

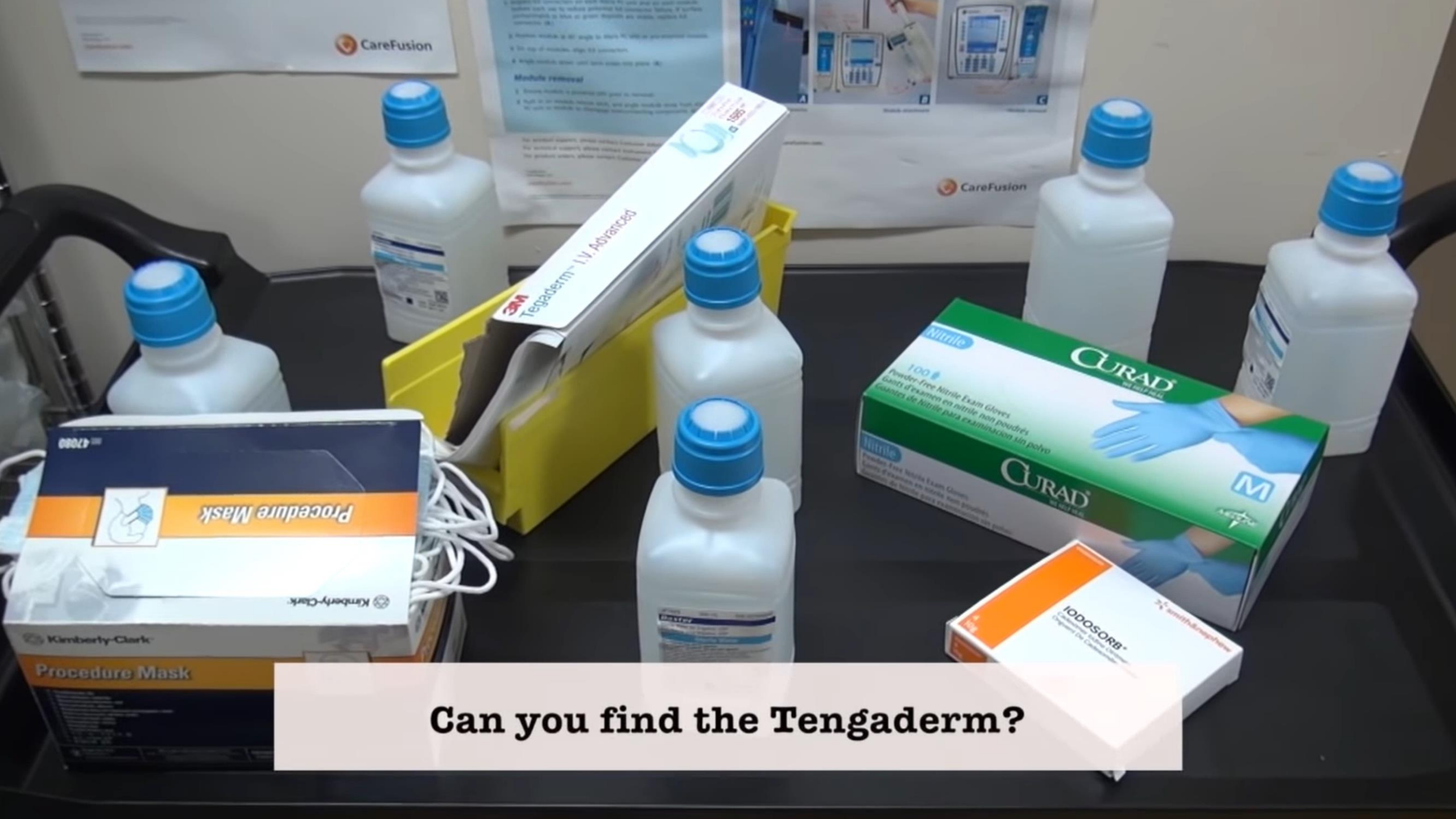
Making Lean Personal

Khalil Hassam
CQI Coach
HAHSTA

GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

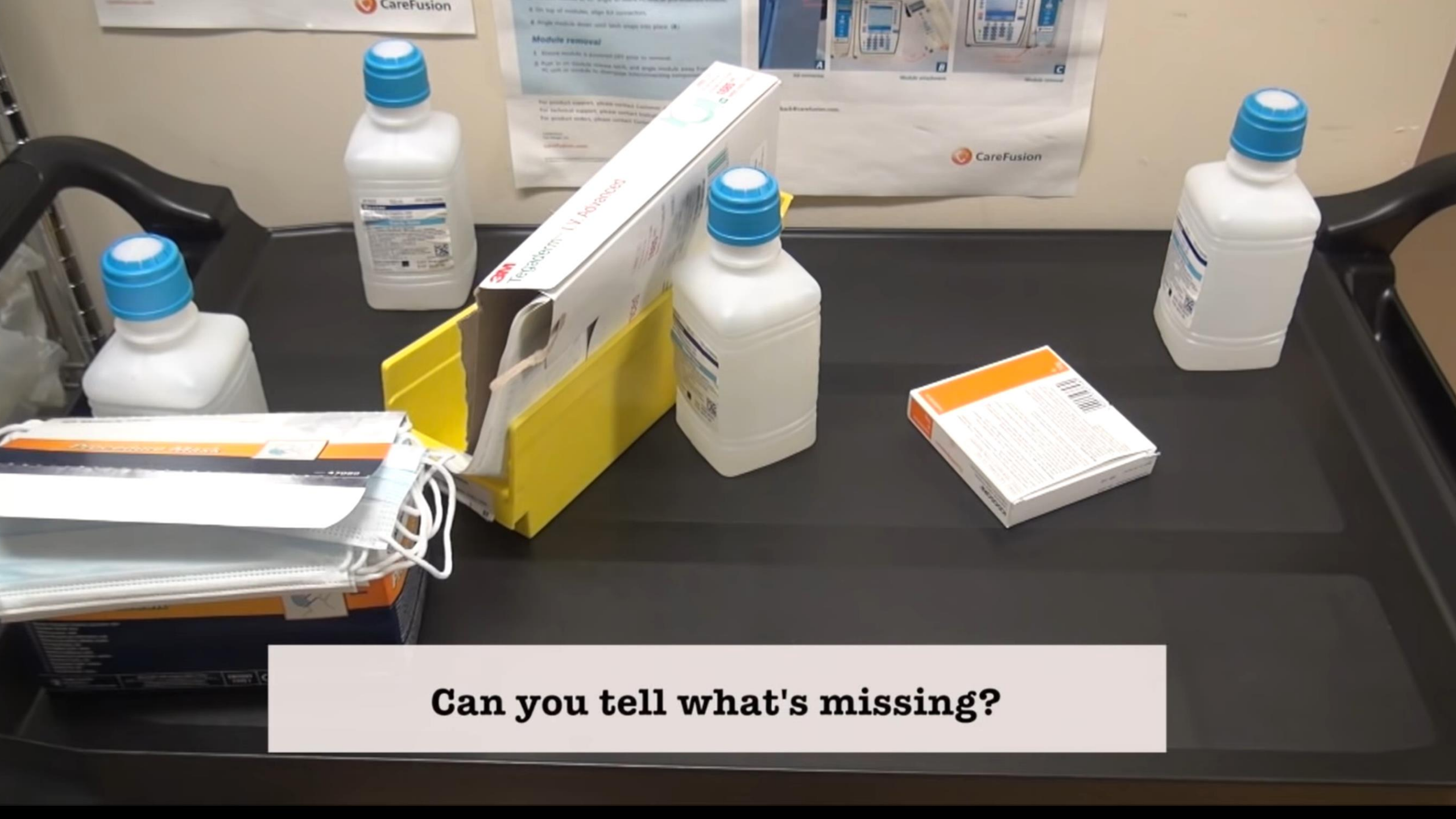
Panadol
Esselte
LOWELL
A4 Gloss
Laminating

Look familiar?



Can you find the Tengaderm?

How about now?



Can you tell what's missing?

University Health Network, Canada

QUICK POLL

RAISE YOUR HAND (AND KEEP RAISED) IF…

1. I have studied lean
2. I practice lean
3. I practice lean daily

DISCLAIMER

I AM NOT AN EXPERT

- Curious about Lean and sharing what little I know
- This is a *relaxed, close to the ground* take on lean
  - Not a lecture session
  - Lots of showing (nine lean projects)

MY STORY

- Spent 5 years studying QI
- Practiced and documented quarterly (sometimes)
- Studied 5 years *more*

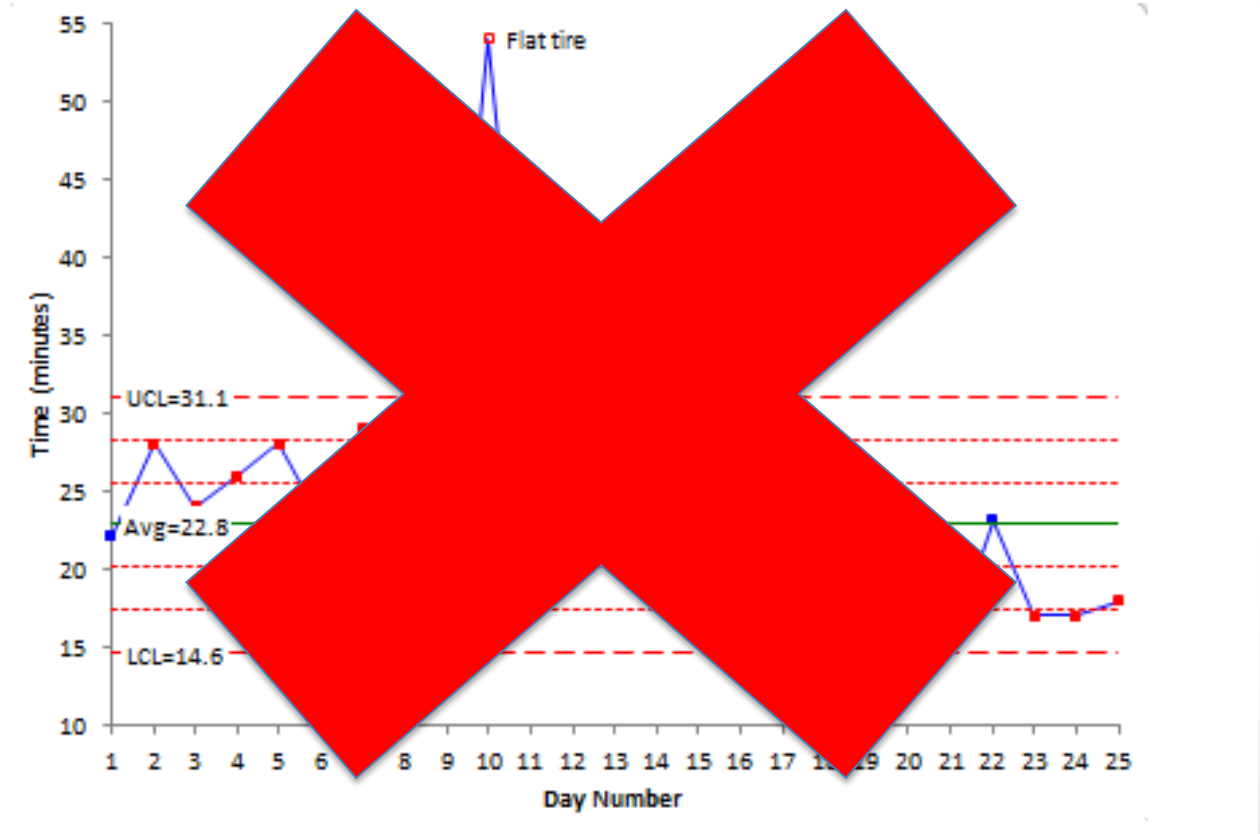
- QI Lead, Data, Admin, Ops, etc.

WHAT I SAW OVER 10 YEARS

BIG Gorgeous Goals

QI AS FUN?

YES! WITH LEAN!



GROUND RULES

1. Lean is simple!

2. You are my customer

MY GOAL

“I WILL SEE WASTE”

WHAT IS LEAN?

WASTE – SEE IT, ELIMINATE IT

GOAL:

Provide perfect value to the customer
with a perfect process

that has zero waste

HOW:

CONTINUOUSLY IMPROVE EVERYTHING

Your training in:

- PDSA/MFI
- Root Cause

Now can be flexed daily

IMPROVEMENTS VIA LEAN

Cleveland Clinic

- Outpatient Chemo – wait times reduced from 20 minutes to one minute
- Increase feelings of trust within team by 50+%
- Inpatient nurse response time – cut in about half

Virginia Mason

- Eliminated waiting rooms in a few clinics
    - Working to eliminate waiting rooms across all their sites

Pediatric Hospital

- Staff applied lean principles to value stream map their practice, saved $8 million during two years

N. VA Hospital Group

- 31% drop in average waiting time
- 4x reduction in customers that left without being served

https://legacy-uploads.ul.com/wp-content/uploads/sites/40/2015/02/UL_WP_Final_Applying-Lean-Principles-to-Improve-Healthcare-Quality-and-Safety_v11_HR.pdf

8 DEADLY SINS OF WASTE

FAST FOOD STYLE

1 Over-Production

Make too much food

2 Transportation

Transfer food from the kitchen

3 Excess Inventory

Extra food stits in inventory

4 Defects

Customer doesn't want pickles!

5 Over-Processing

Pickles have to be removed from food

6 Wasted Motion

Wasted motion from reworking finished food

7 Waiting Time

Customers are waiting for fixed order

8 Wasted Potential

Could be improving the kitchen

OVERPRODUCTION

EXTRA, OR BEFORE REQUEST

Unnecessary labs/tests

Over ordering medication the customer doesn't need

Peak staffing during non-peak times

Bad: I have 45, 600mg Ibuprofin

TRANSPORTATION

UNNECESSARY MOVEMENT OF SUPPLIES / PEOPLE

Clinic flow of customers – is it seamless, or are they moved around from room to room? Why are they moved?

Phlebotomy room is far from exam rooms

Provider moves from room to room

Good: I went to see my Doctor, the doctor came to get me, all services were in one room

Bad: old provider's office treated me like a shuttlecock

INVENTORY

SUPPLIES AND WORK IN PROGRESS

Equipment in the wrong place, or at wrong levels

Inventory > demand

Medications or specimen tubes that expire

Bad: MAs are hoarding butterfly needles because they're scarce. → team fights

DEFECTS

NOT DONE RIGHT THE FIRST TIME

Misdiagnosis
Wrong ICD code
Sent Rx to previous pharmacy
Missed collecting a lab specimen

Good: front desk confirms which pharmacy I want rx sent to, not sending to default
Better(?): provider sends when they tell me about rx

Bad: I have to go back to leave a throat specimen because it wasn't labeled

OVER PROCESSING

TOO MUCH EFFORT ON PRODUCT / SERVICE

Multiple forms, some with the same data fields

Office visit for lab results that could have been given by phone / web

Data in forms collected, but never used

Good: someone studied all the forms and eliminated duplicate fields between Medical and (off site) Food Bank intake packets

MOTION

UNNECESSARY MOTION

Supplies not stored where needed

Extra clicks in EMR

Clinic flow is inconsistent with clinic layout

Unnecessary twisting, moving, to complete tasks (e.g. lab processing, eye exam)

Wasted motion from reworking finished food

Good: we implemented a ‘supermarket’ of supplies and stocked each exam room with appropriate level of supplies, and developed a Kanban system to quickly supply low stock

WAITING

WAITING FOR PROCESS

Customers sitting in waiting room or exam room

Staff members with uneven workloads and waiting for customers

Waiting for lab results to be sent to online portal

Bad: clinic ran fifteen minutes behind after first customer, because the front, but not the back, knew they were coming for pre-op clearance

WASTED POTENTIAL

HUMAN POTENTIAL NOT MAXIMIZED

Working below the level of your licensure

Not listening to employees

Focused on rework, or other unimportant tasks

Bad: Between calling customers and fitting them in during my admin time, I spent 65 minutes working on collecting urine specimens again (that we missed on Tuesday after clinic)

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READY TO DIVE IN AND BE ACTIONABLE?

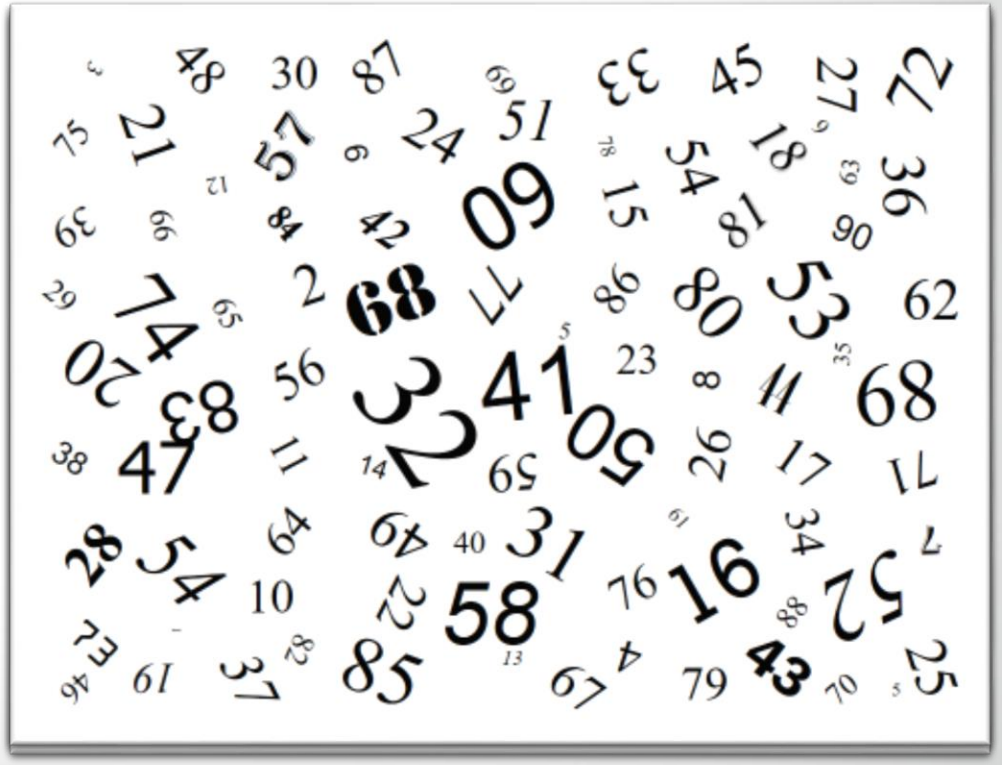
COMBATTING WASTE

- 5S
- Just in time
- Kanban
- Visual control

- Many, many, many more tools and principles to use

5s method

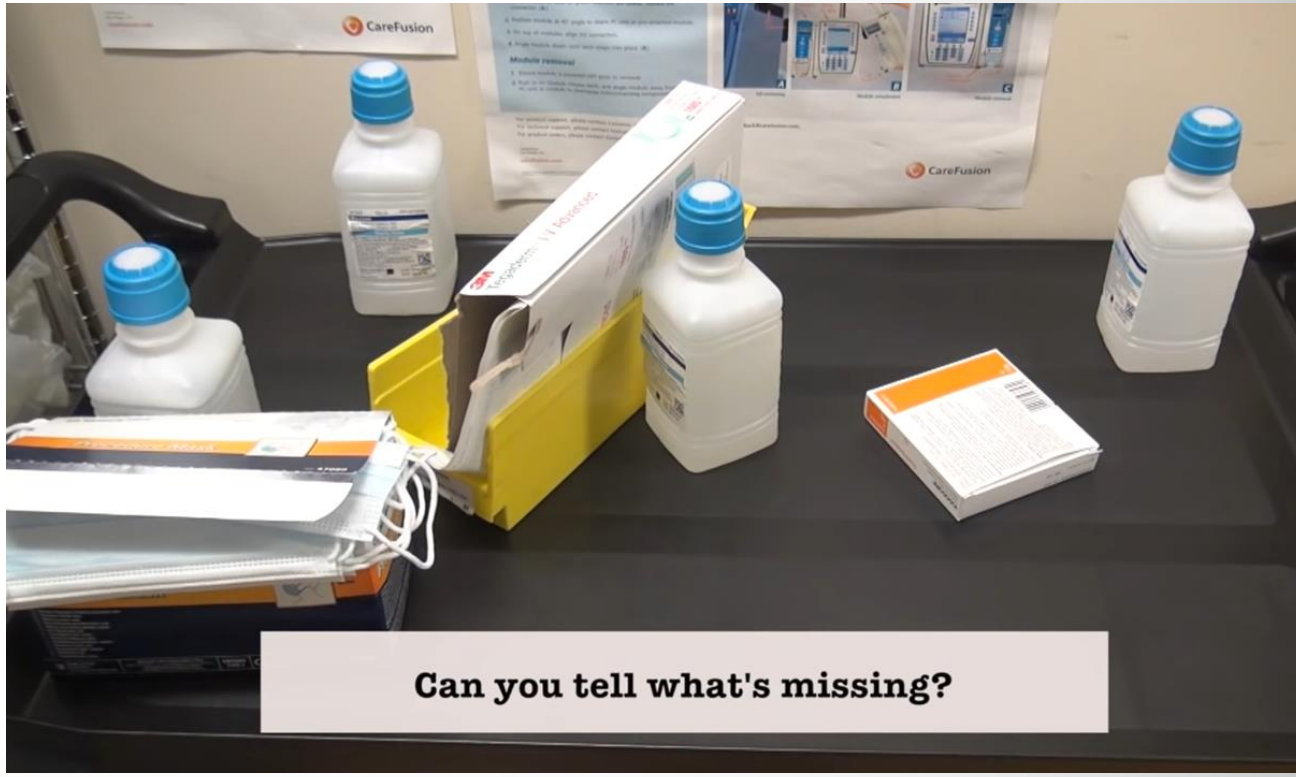
- **Sort:**
  - When in doubt, move it out
- **Set in Order:**
  - A place for everything, and everything in its place
- **Shine:**
  - A clean place, is a safe, healthy and more productive place
- **Standardize:**
  - Consistency is the key to success
- **Sustain:**
  - Excellence is not an act, it’s a habit

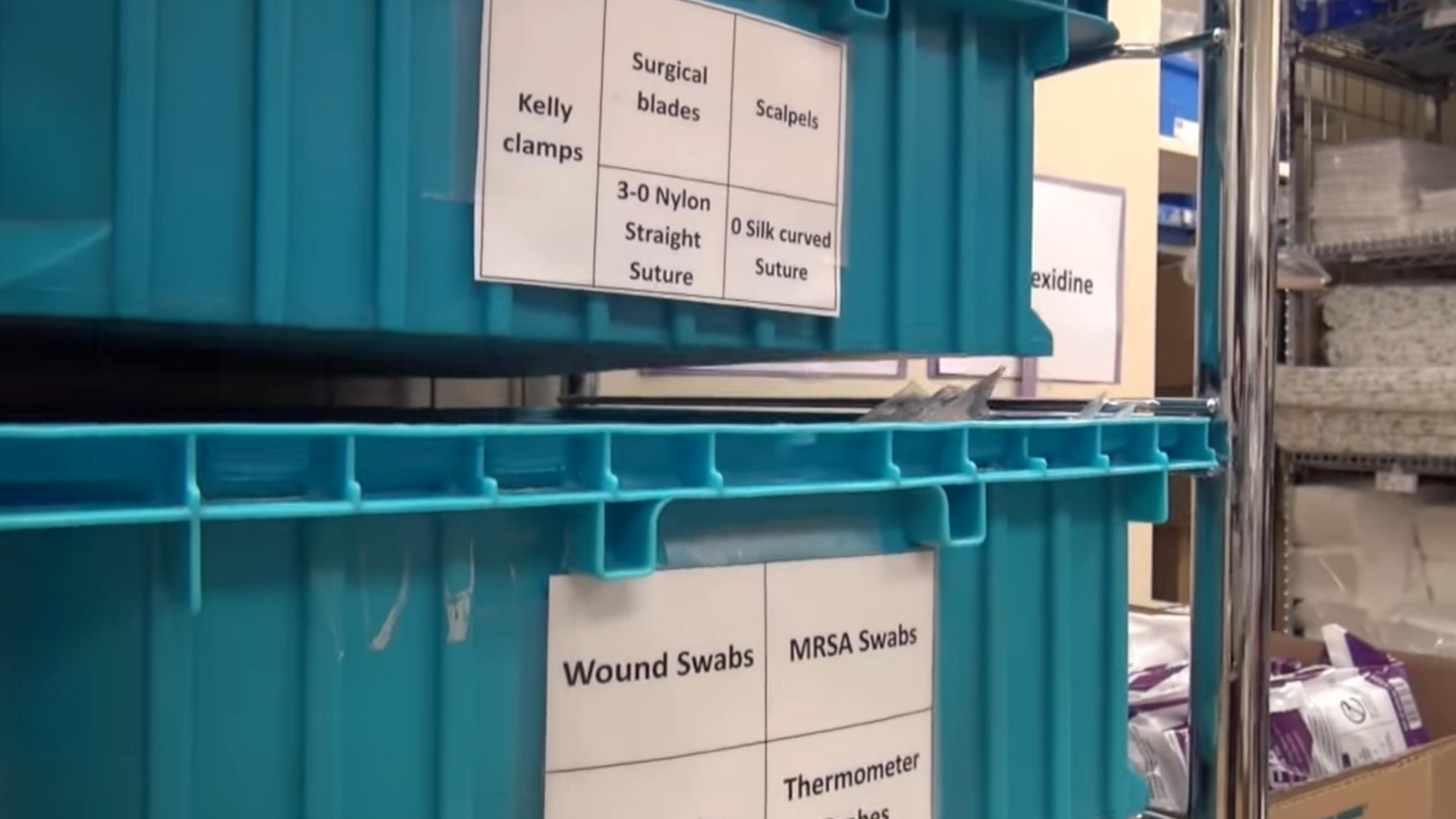


1. JUST BEING ORGANIZED?

WASTE AFTER WASTE

- Inspecting to see if I'm out of gloves
  - Over processing
- Hoarding of supplies because we're always out
  - Inventory
- Running to supply room to get gloves…
  - Motion
- …During a client visit
  - Waiting
- Clinic runs 90 seconds behind… times 10
  - Defect




Kelly clamps
Surgical blades
Scalpels
3-0 Nylon Straight Suture
0 Silk curved Suture
exidine
Wound Swabs
MRSA Swabs
Thermometer

IV
SOLUTIONS/ SUPPLIES

WASTE MULTIPLIED

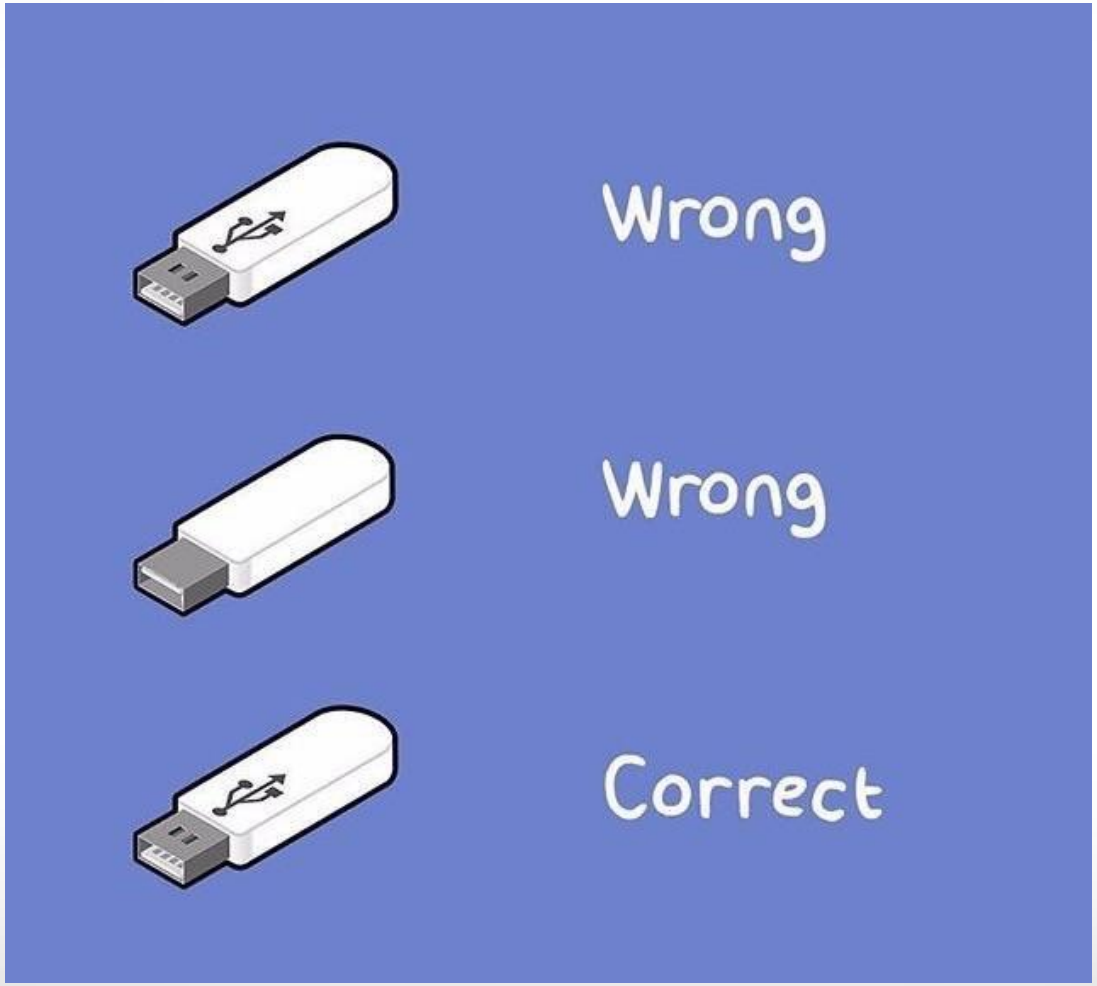
- Breakdown of non productive time per shift
  - Looking for things = 30min
  - Waiting for things = 6min
  - Other = 6min
- Total = 42min
- If we concentrate on Looking for things time (30min)
- Early shift has 8 nurses: 8x30 =240min
- Late shift has 7 nurses: 7x30 =210min
- Night shift has 4 nurses: 4x30 =120min
- Total over a 24 hour period =9.5 hours
- Total for one ward for the year =3,467.5 hours

=144 days a year

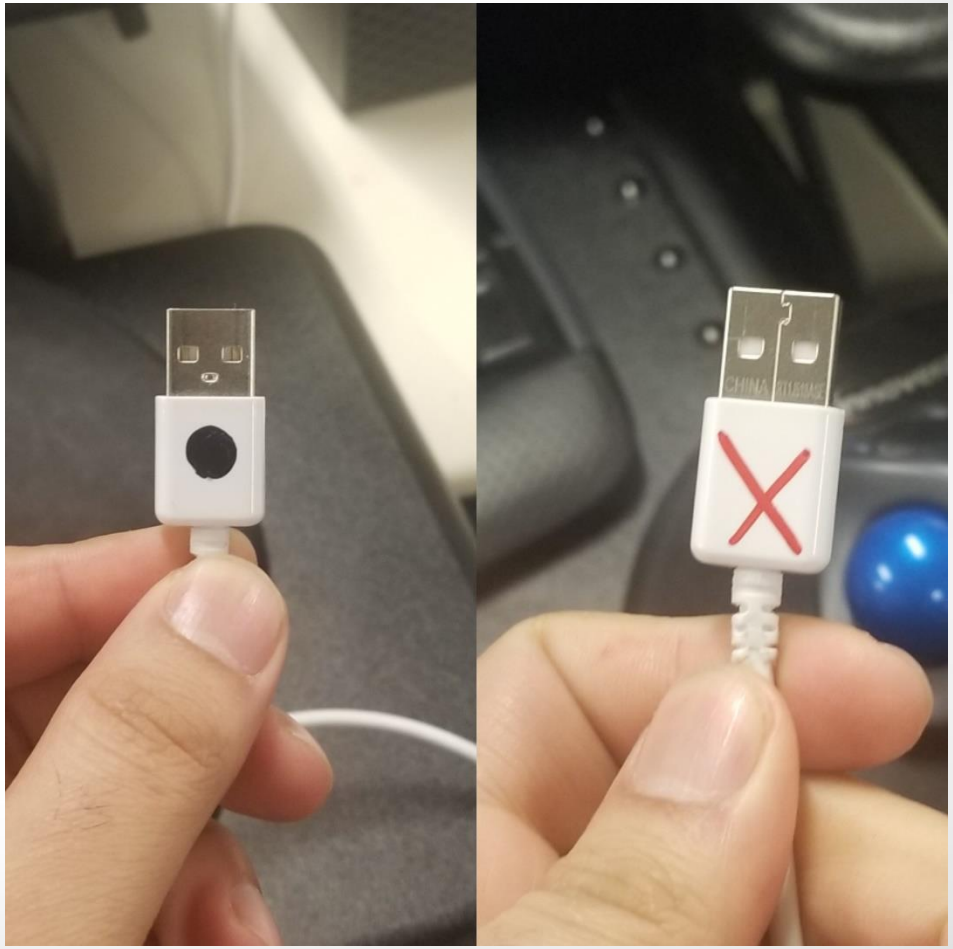
=433 shifts

REQUEST: VOLUNTEER

2. SCHRÖDINGER'S USB

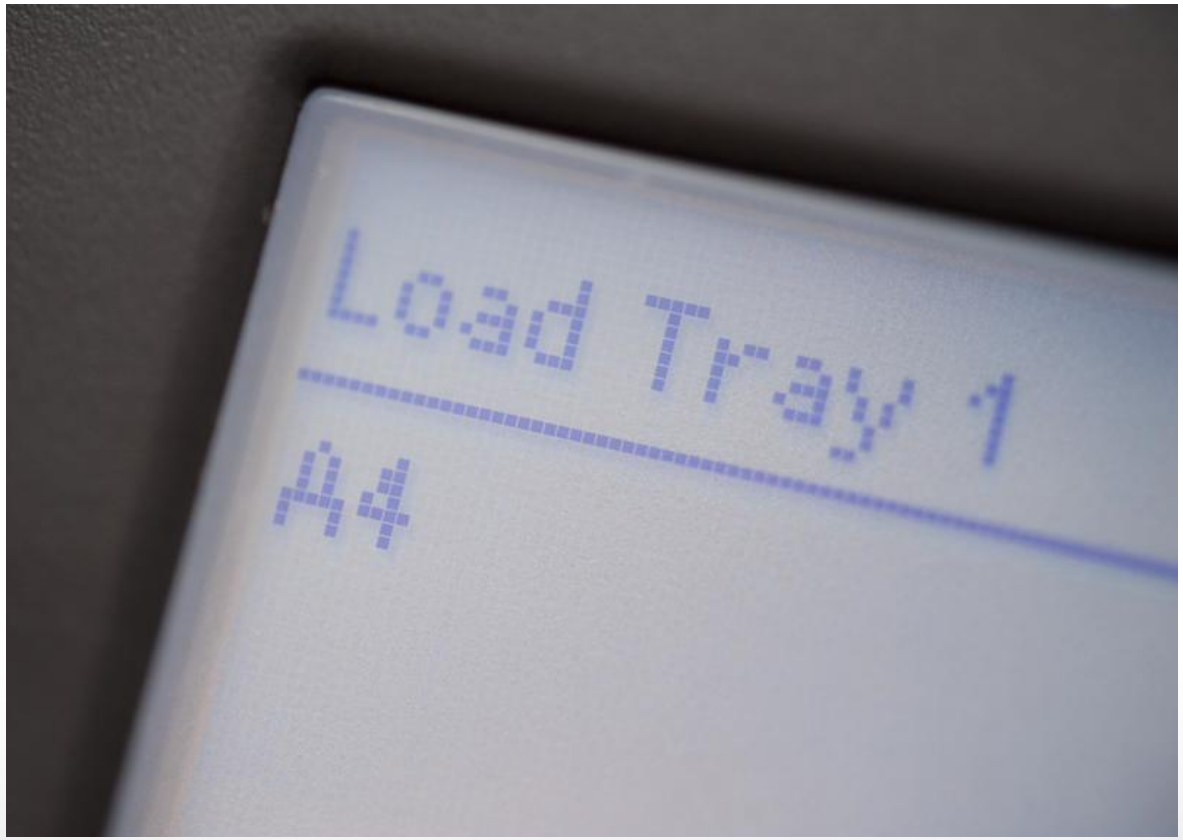


STILL IMPROVING



3. MONDAY MORNING

ONLY TWO FAXES?



BROKEN PROCESS

- Missing unknown number of faxes!
  - Defects
- Fax needs to get sent again
  - Over processing
- Customers and partner providers
  - Waiting

Root cause: process (check fax machine paper levels every day) was not followed, machine ran out of paper

ONE OF MY FAVORITE TOOLS

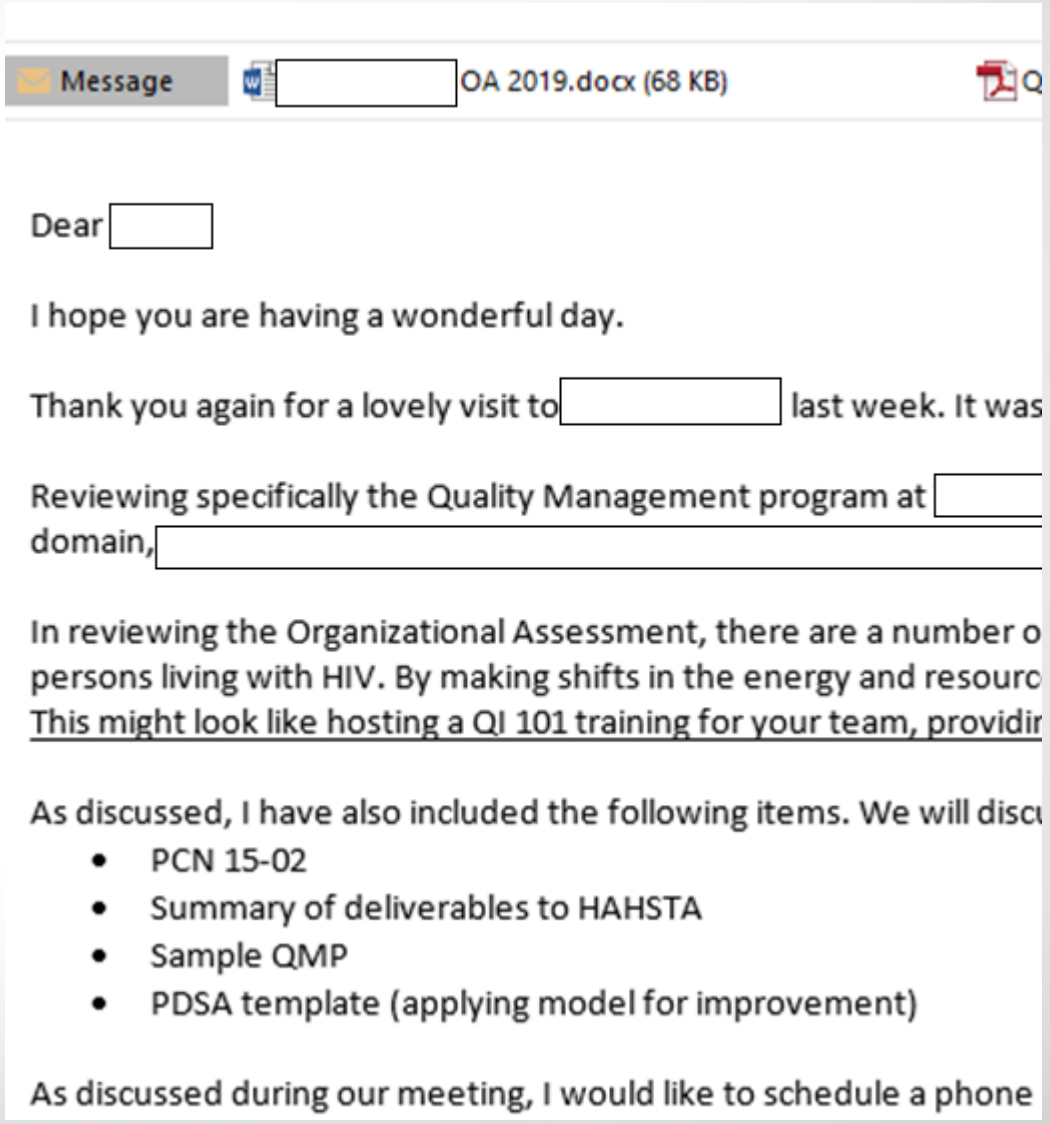
KANBAN CARD

- Know exactly when to add more paper
  - Just in time
- Easy
  - Visual control

FastCap

4. EMAIL WASTE

- Lots of time to write a careful, comprehensive email
  - Over processing
- I spend **five days a year** writing the same four emails
  - Human potential


Message [redacted] OA 2019.docx (68 KB)

Dear [redacted]

I hope you are having a wonderful day.

Thank you again for a lovely visit to [redacted] last week. It was

Reviewing specifically the Quality Management program at [redacted] domain, [redacted]

In reviewing the Organizational Assessment, there are a number o persons living with HIV. By making shifts in the energy and resourc This might look like hosting a QI 101 training for your team, providir

As discussed, I have also included the following items. We will discu

- PCN 15-02
- Summary of deliverables to HAHSTA
- Sample QMP
- PDSA template (applying model for improvement)

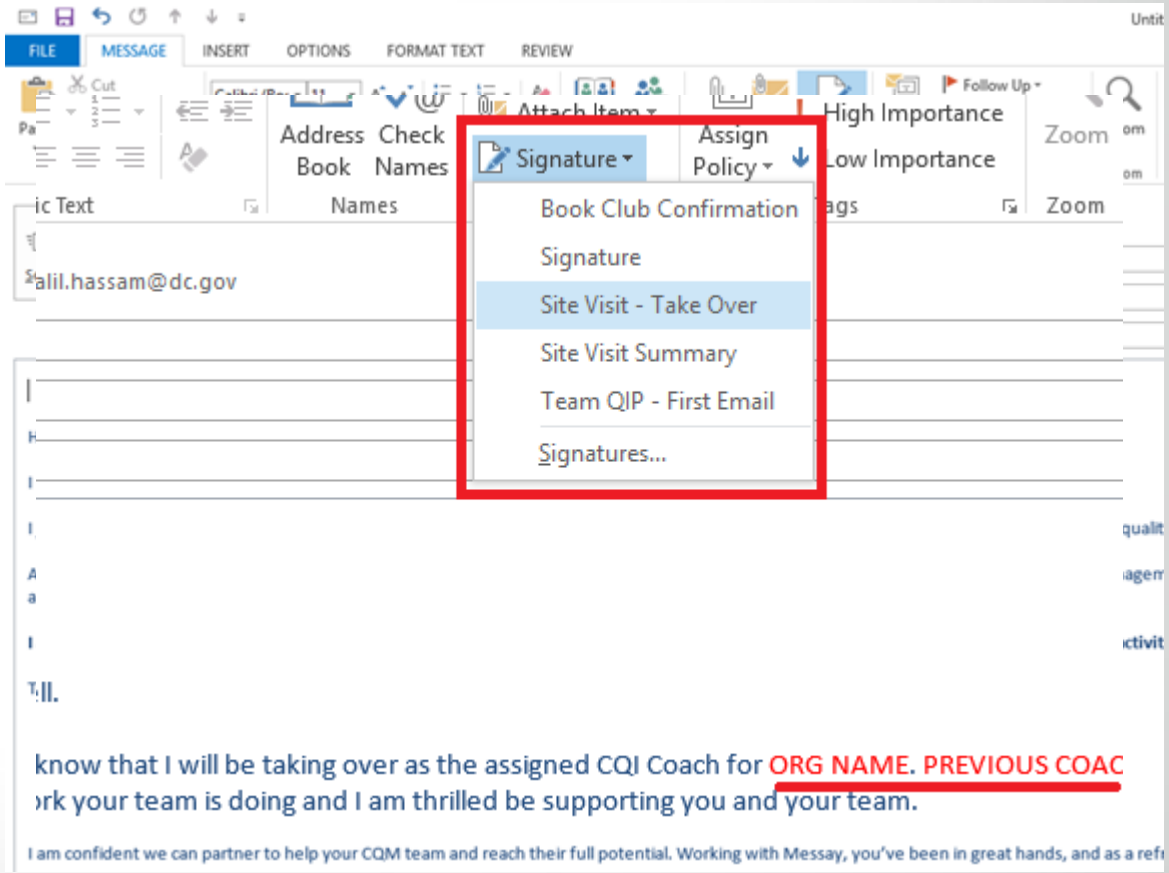
As discussed during our meeting, I would like to schedule a phone

EMAIL WASTE - IMPROVED

- Searching for previous emails to use as template, then copy paste
  - Motion, waiting, over processing
- Change the name, but miss organization / date
  - Defects
- I spend **2.5 days a year** writing the same four emails
  - Human potential

EMAIL WASTE – IMPROVED AGAIN

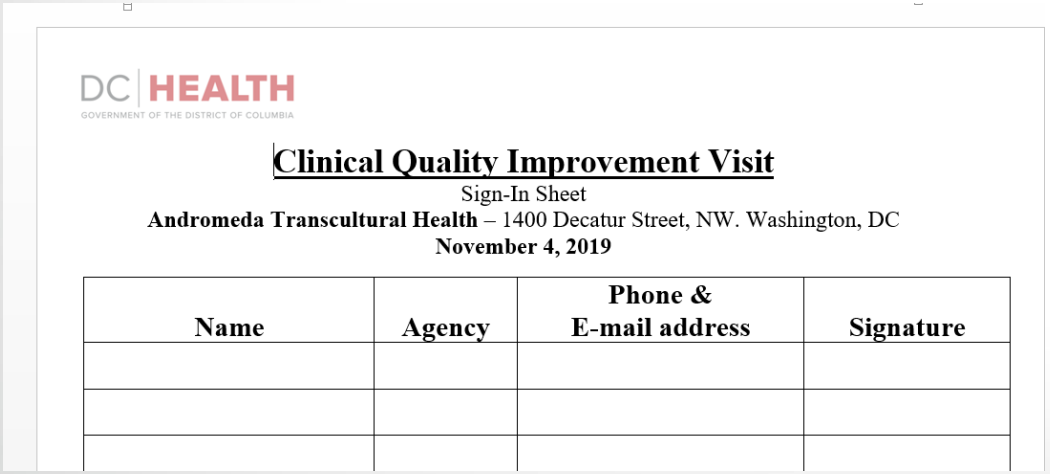
- Have the email draft only when I need it
  - Just in time
- Know exactly what to find/replace because of red text
  - Visual control



Lean practice: Set in order, visual control, mistake-proof

5. SITE VISIT HICCUP

- Making custom sign in sheet for each visit
  - Over processing
- Sometimes forget at the office
  - Defect



DC | HEALTH
GOVERNMENT OF THE DISTRICT OF COLUMBIA

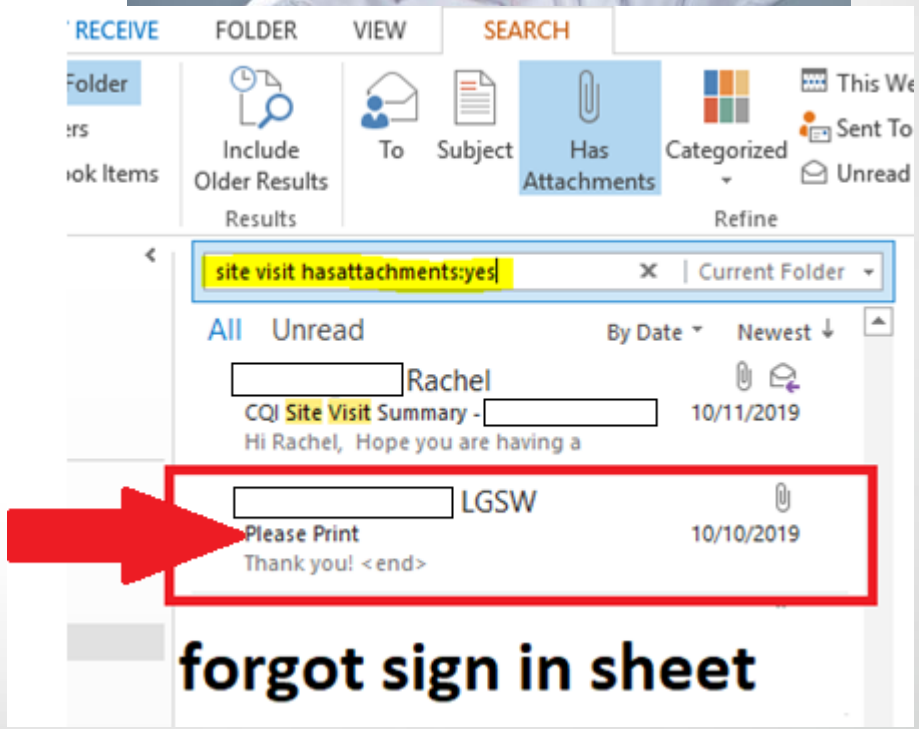
Clinical Quality Improvement Visit

Sign-In Sheet

Andromeda Transcultural Health – 1400 Decatur Street, NW. Washington, DC

November 4, 2019

Name	Agency	Phone & E-mail address	Signature



SITE VISIT GO BAG

DC | HEALTH
GOVERNMENT OF THE DISTRICT OF COLUMBIA

Clinical Quality Improvement Visit

Sign-In Sheet

Health and Wellness Center – 77 P St NE, Washington, DC

January 27, 2020

Name	Agency	Phone & E-mail address	Signature

SITE VISIT GO BAG

DC | HEALTH
GOVERNMENT OF THE DISTRICT OF COLUMBIA

Clinical Quality Improvement Visit

Sign-In Sheet

Site: _____

Date: _____

Name	Agency	Phone & E-mail address	Signature

SITE VISIT GO BAG

DC | HEALTH
GOVERNMENT OF THE DISTRICT OF COLUMBIA

Clinical Quality Improvement Visit

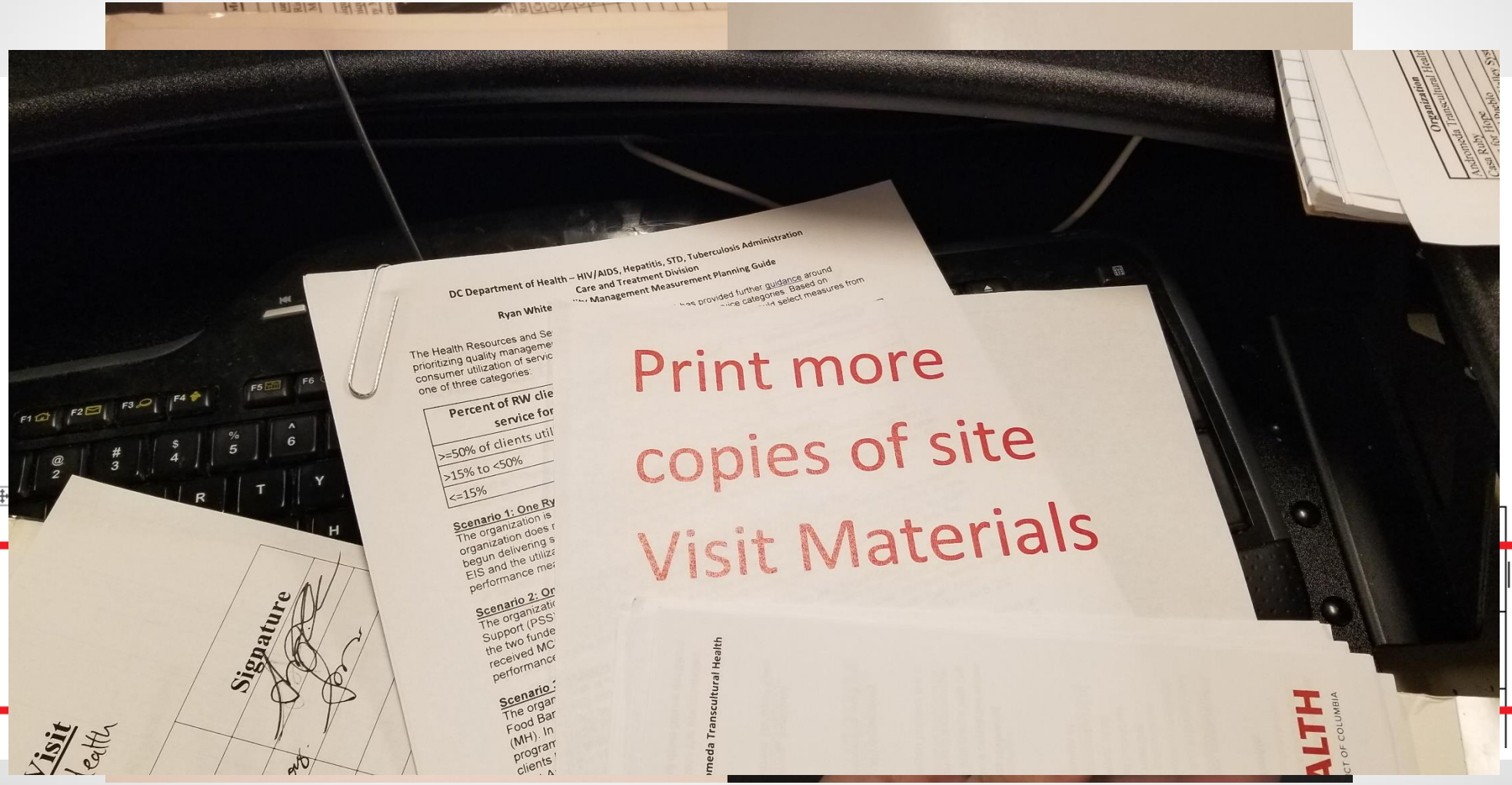
Sign-In Sheet

Site: _____

Date: _____

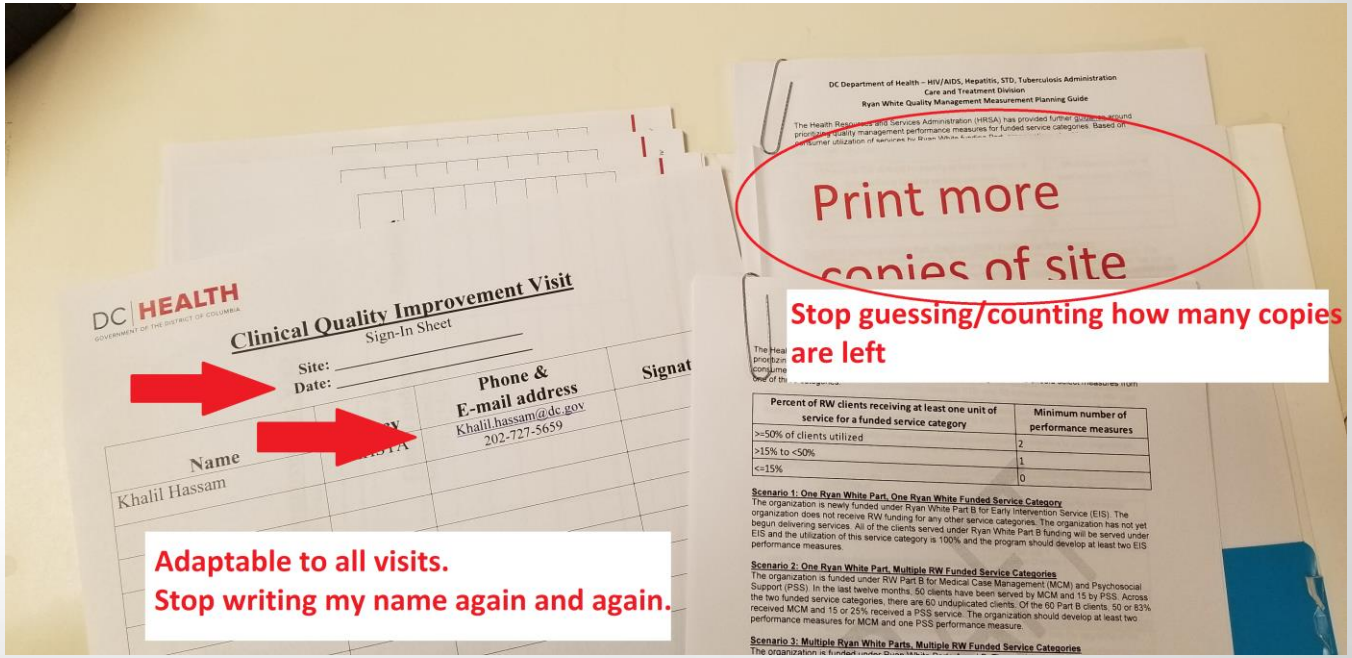
Name	Agency	Phone & E-mail address	Signature
Khalil Hassam	HAHSTA	Khalil.hassam@dc.gov 202-727-5659	

SITE VISIT GO BAG



SITE VISIT GO BAG

- Always have a stack in my work bag
  - Just in time
- Know when to make more copies
  - Kanban
  - Set in order

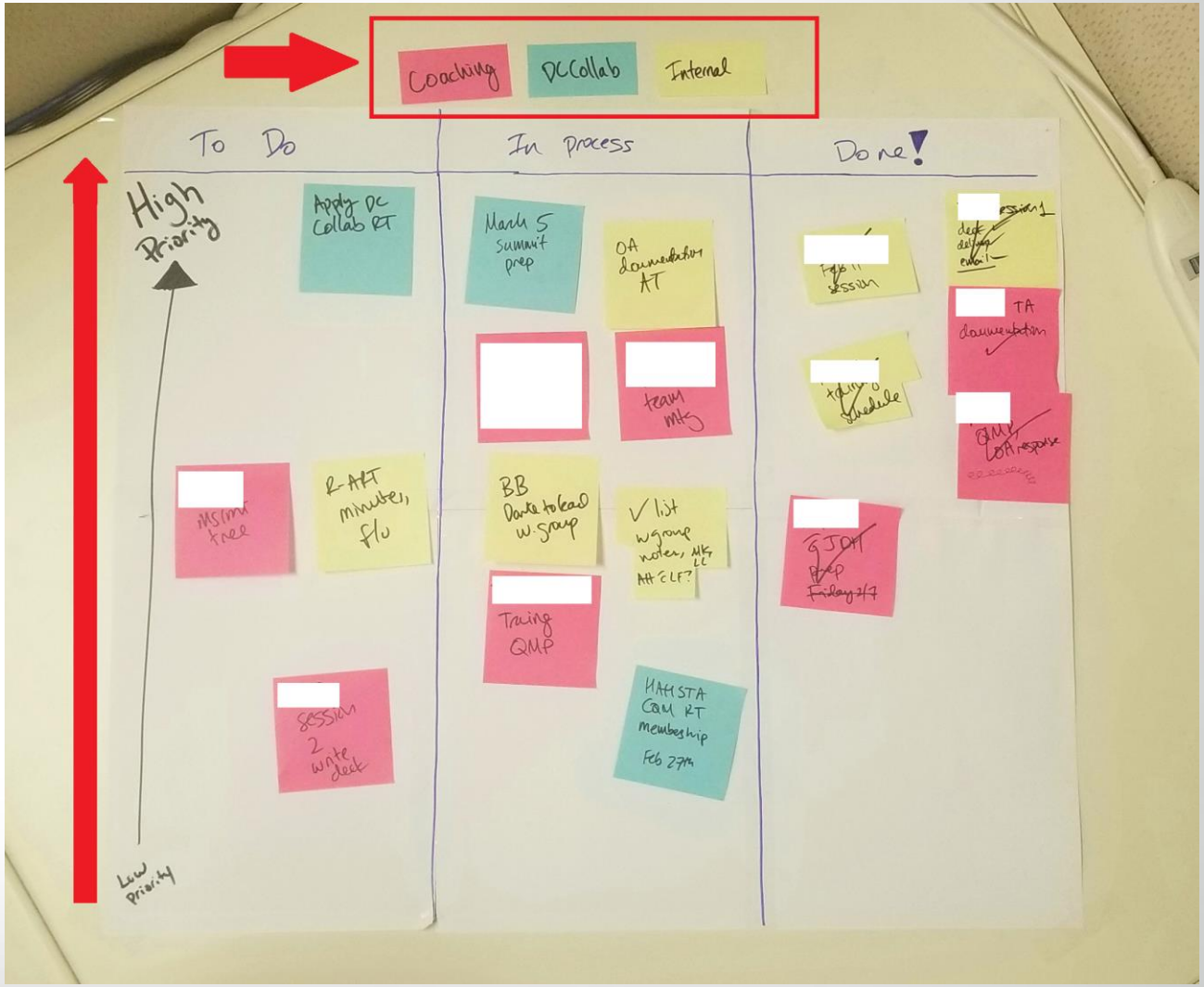


6. KANBAN MANAGEMENT

CYCLE ONE

- Visualizing my work
- Limit work in progress
- Prioritization
- Easy to assess work by priority, area, and status

WHAT'S IN CYCLE TWO?



7. WE PRACTICE EVEN AT HOME

- Outdated materials
  - Inventory
- Unclear what is where, looking for what I need
  - Motion, over processing

WE PRACTICE EVEN AT HOME

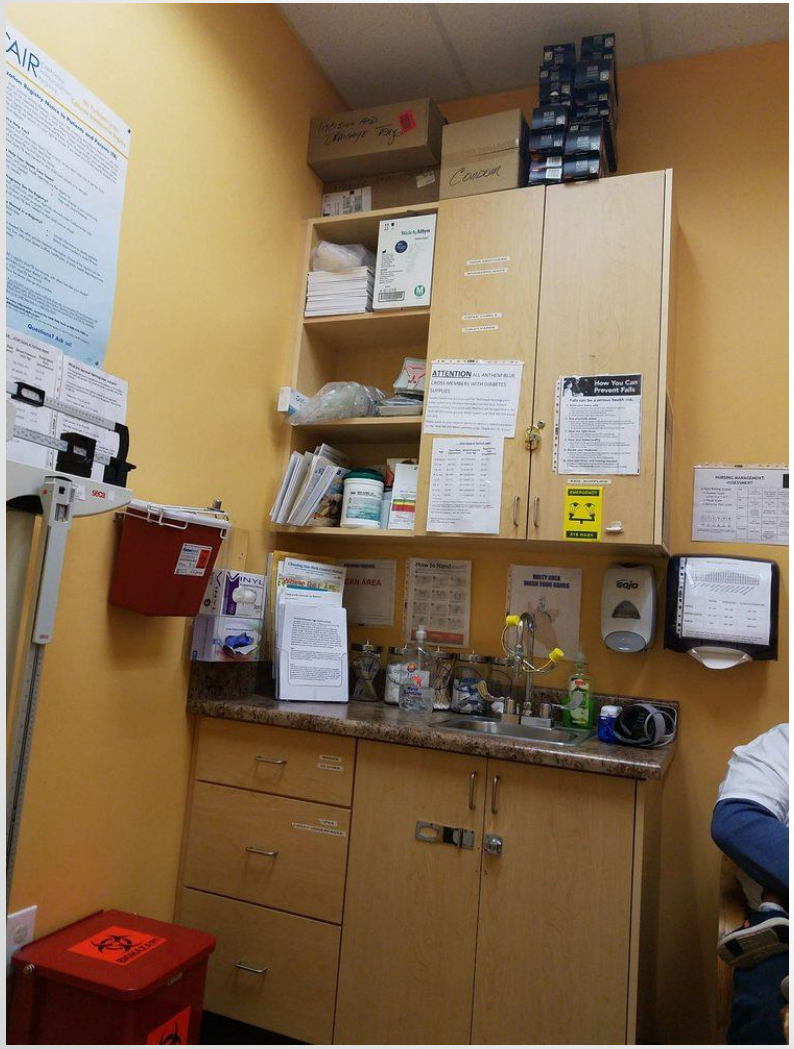
REMOVING THE STRUGGLE

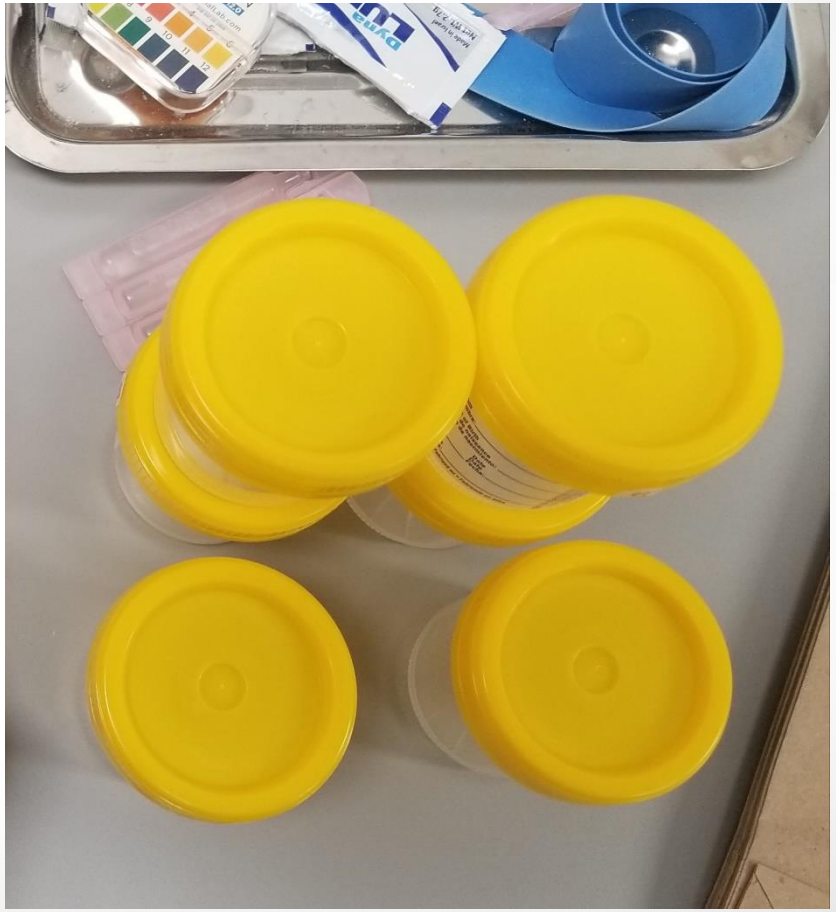
- Know if my wallet is missing or not
  - Visual control
- Everything has a place
  - Sort, set in order, shine

WHAT'S IN CYCLE TWO?

8. PLAYING DETECTIVE

THE SITUATION





UPSTREAM

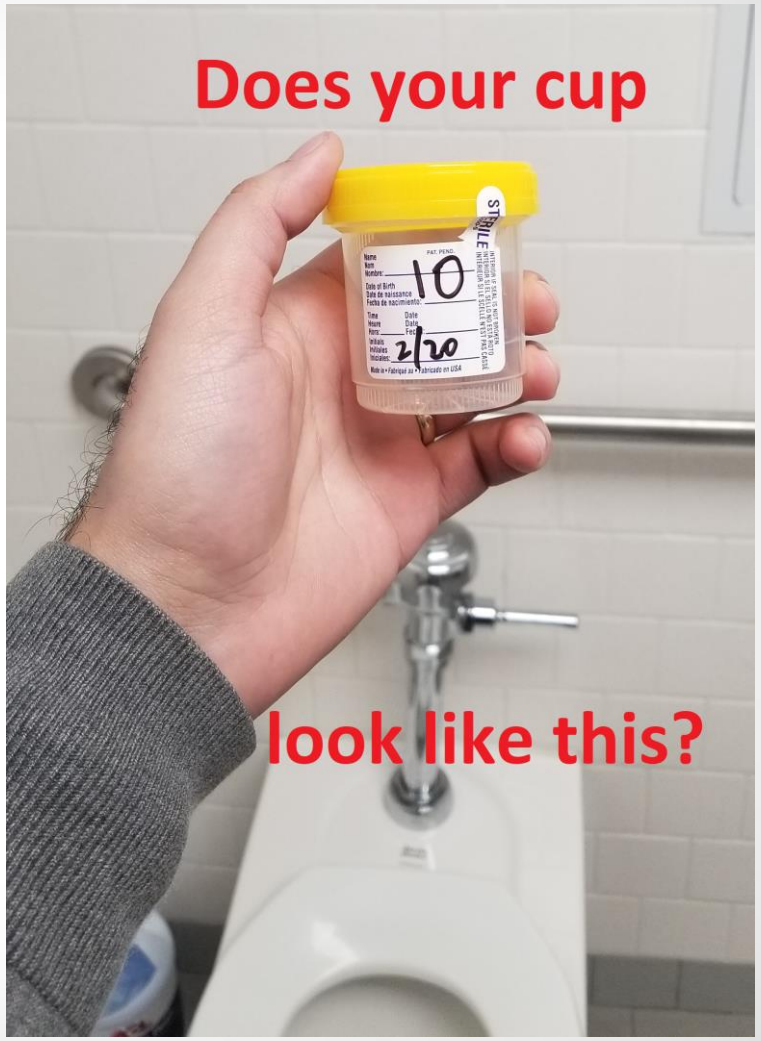
WHAT COULD WE APPLY?

- Visually busy exam room; put the information where it's useful
  - Just in time
- Put example picture with the tools needed
  - Visual control
  - Just in time

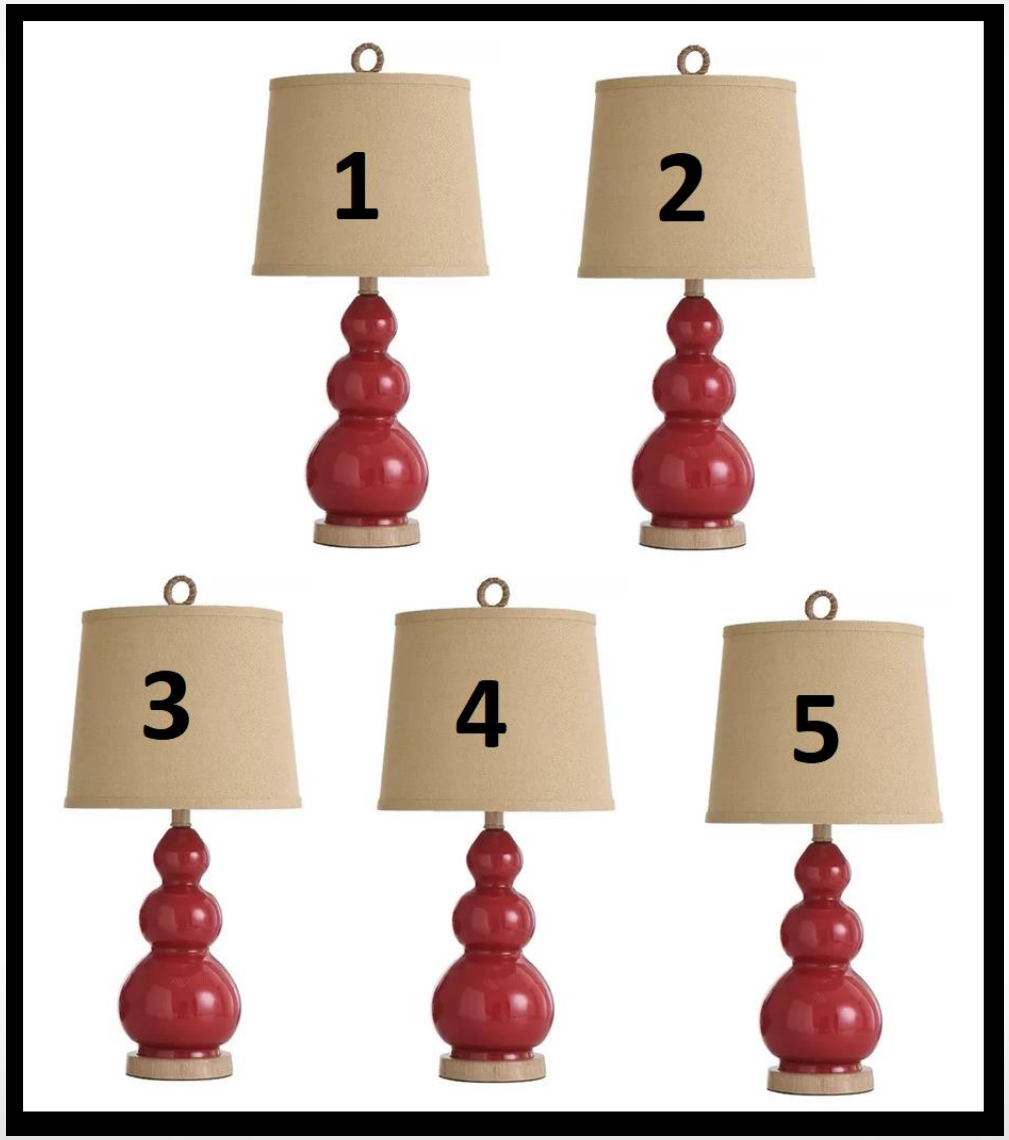
DOWNSTREAM

WHAT COULD WE APPLY?

- Customer has lots to focus on; remind them in the bathroom
  - Just in time
- Put example picture with the tools needed
  - Visual control
  - Just in time

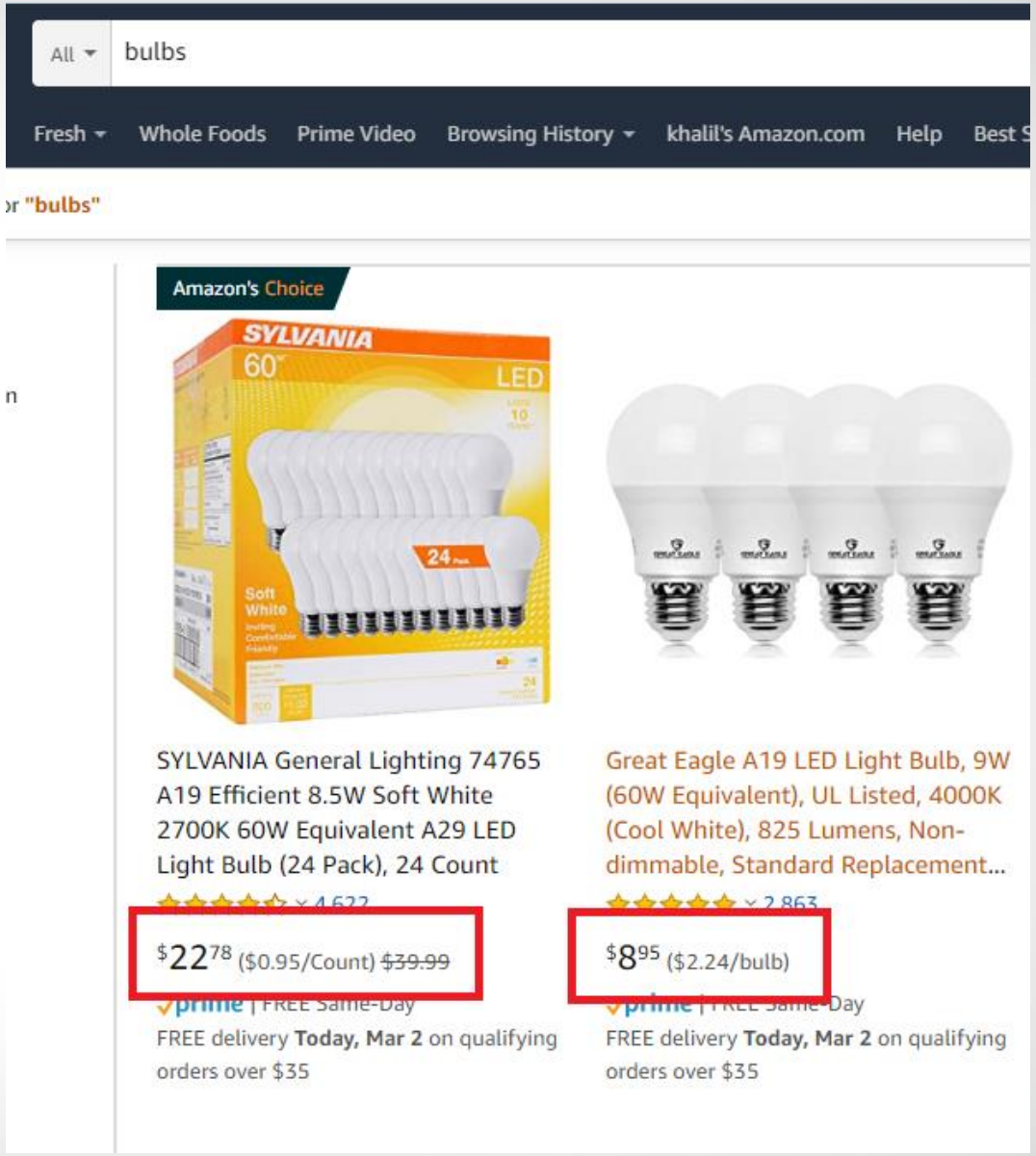


9. MY HOUSE



OLD VS. NEW ME

WHICH TO BUY?

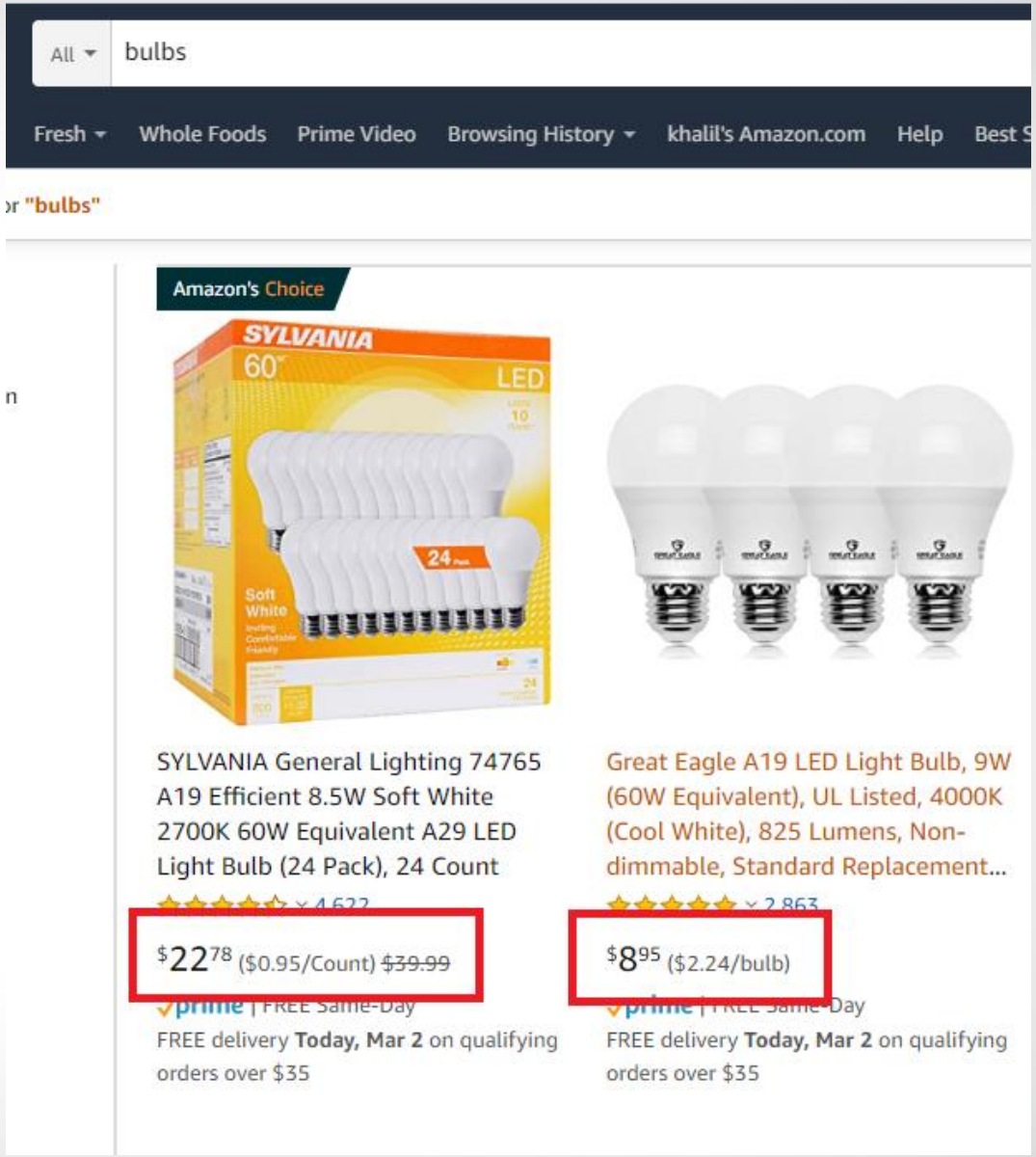


WASTE AFTER WASTE

- $19 of bulbs I don’t need for 10+ years
  - Inventory
- What if that 24 pack bulb is terrible?
  - Defects
- Moving the bulbs from apartment to apartment
  - Transportation
- 12 of 20 bulks breaking in transit
  - Defects

OLD VS. NEW ME

WHICH DO YOU THINK I BOUGHT?



CHALLENGE: PRACTICE LEAN BY TOMORROW

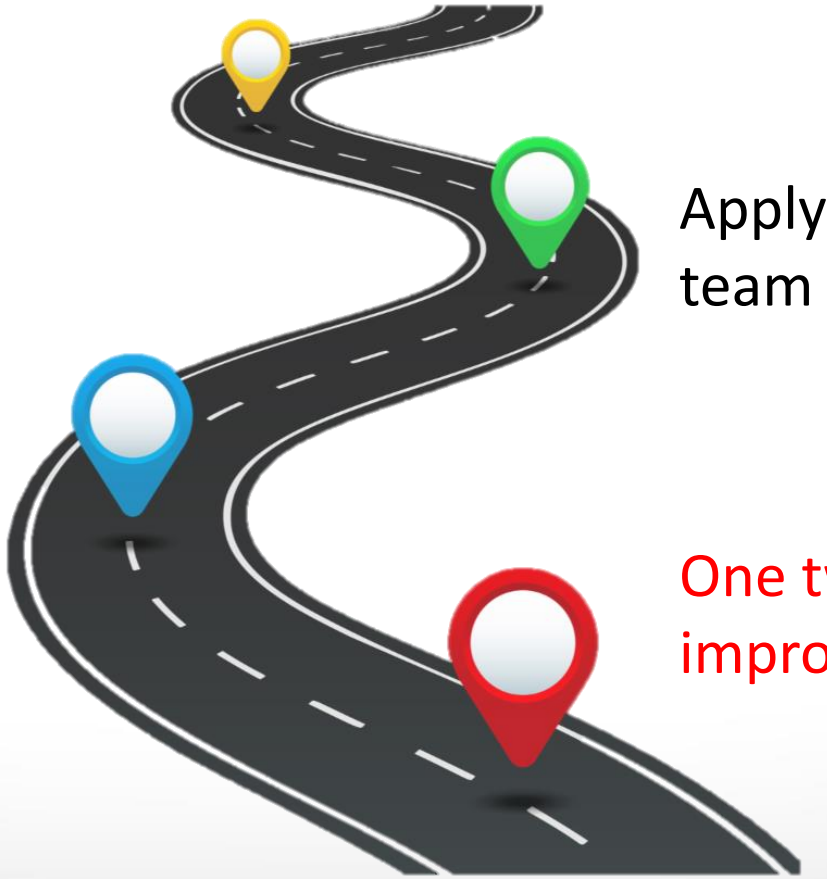
1. What waste(s) do you recognize?
2. What small change could I make that results in an improvement?
3. How am I measuring that change/impact?
4. Share!!

Flex your methodology skills (PDSA, RCA, etc.) in a new way!

Continually improve

LEAN BY TOMORROW?!?!

System level improvements



Applying it with the team

One two second improvement every day

One two second improvement

THINGS WE DID NOT COVER TODAY

1. **This was an incomplete discussion of lean**
2. Still need MFI / DMAIC methodology
3. Still need leadership support
4. DOCUMENTATION
5. Talk to your coach for more!

QUESTIONS?

THANK YOU FOR YOUR TIME AND COMMITMENT TO QUALITY!