

Joint Project in Lean Thinking



Health Information Services and
Outpatients Department
Royal Melbourne Hospital

Elva Redenbach HIM/ Leonie Carberry NUM



HIS-OPD LEAN THINKING

Process Improvement

- Achieved reduction in process steps involving handling of over 600 histories per day
- Eliminated 5 steps involving manual handling
- Eliminated duplication
- Achieved a vast improvement which was a “win/win” for both departments



We have a problem...HIS

- Manual handling
 - Bending
 - Lifting
 - Pushing trolleys
- Double handling
 - Multiple transfers
 - Re-sorting
- Accessibility
- Loss of records
 - Wrong labelling
 - Wrong bundles
 - Wrong delivery point
- Lack of accountability
 - Who did what



"Our process"

- 600-700 records daily, 6 HIS OPD prep clerks
- Preparation process included
 - Retrieve from file
 - Transport to desk
 - Bundle & label records
 - Stack on trolleys
 - Unbundled to prepare for OP – print labels, add progress sheets, binding in loose filing.....
 - To be continued

Bundles





Our process (cont)

- Unload and stack on metal shelves
- Find missing records (detective work!)
- Prepare them
- Create further bundles & label
- Place on shelves
- Delivery – to several clinic locations
 - Load 50-80 bundles on delivery trolley
 - Push to clinic area
 - Unload onto benches or trolleys in clinic

Shelving

The way we were





The problem & solution...HIS

- Cut down multiple handling & solve OHS risks
- Keep records in clinic sequence
- Put records onto trolleys by appointment day

We had a solution.....

New trolleys.....one or two should do

- Suppliers sought
- Designed and built a wonderful new double sided trolley! Motorised!!!



What about OP?

Call a meeting.....TELL them
And then came.....LISTENING



The OP story

- Morning began with chaos
 - Undo the bundles
 - Sort into clinics - locations
 - Load into clinic trolleys
 - Check off the records
 - Phone HIS to follow-up the missing ones
 - Who to speak to? Phones not answered



A new set of problems – OPD's problems!

- Sorting and checking-in required - work already done in HIS
- Pressured time at the beginning of the day when multiple other tasks to be done
- Problems - lost labels, mis-labelling
Bundles left in wrong locations
- If no record - what was the story?



HIS solution was no solution

- Mobile shelving – not the answer
- Did not help the morning set-up
- Did not address mis-deliveries
- Did not address communication problems
- Didn't help OP one iota



Enter Lean Thinking!

- Work as a team – with another department – working party
- Map the whole process, end to end
- Meet the requirements of our customers
- Eliminate waste of effort
- Standardise procedures
- Error-proof – colour code



Our joint needs

■ HIS

- Minimize manual handling risks
- Able to locate—accessible (e.g. ED)
- Easy to manoeuvre trolleys
- Knowledge - how the clinics functioned

■ OPD

- Records sorted in clinic & doctor order
- Arrive ready for clinic
- Be informed about missing records
- Know who to contact



Information exchange

- Which clinics happened where?
- Which staff supported which clinic?
- Sharing contact details
- What did colour coding mean?
- What was the best order for records?
- What trolleys worked best

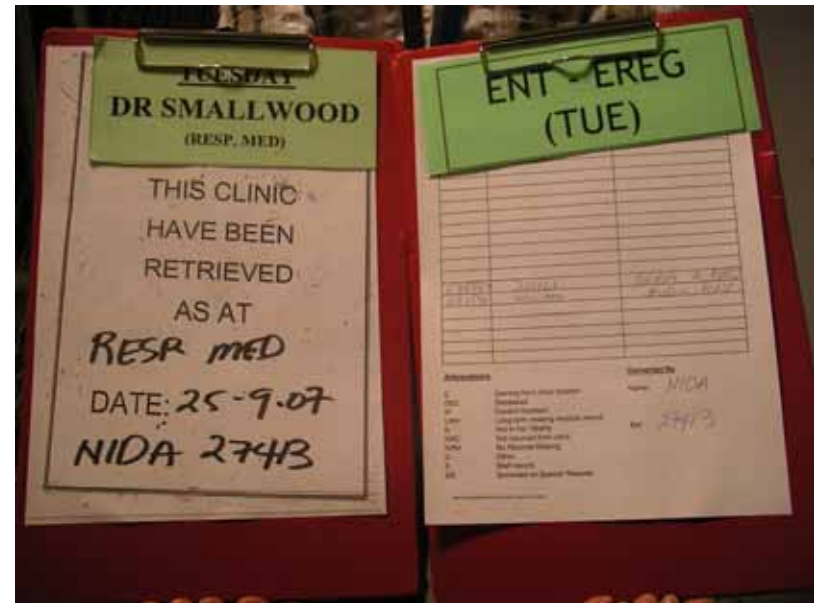
The joint solution

- Use only 1 type of trolley in the whole process
 - Pulling
 - Preparing
 - “Standing”
 - Delivery
 - In the clinic



Labelling & colour coding

- Clipboards
 - Clinic & doctor
 - Appointment list
 - Missing list
 - Name of MR clerk and extension
- Clinic & doctor labels
 - 5 colours for weekday

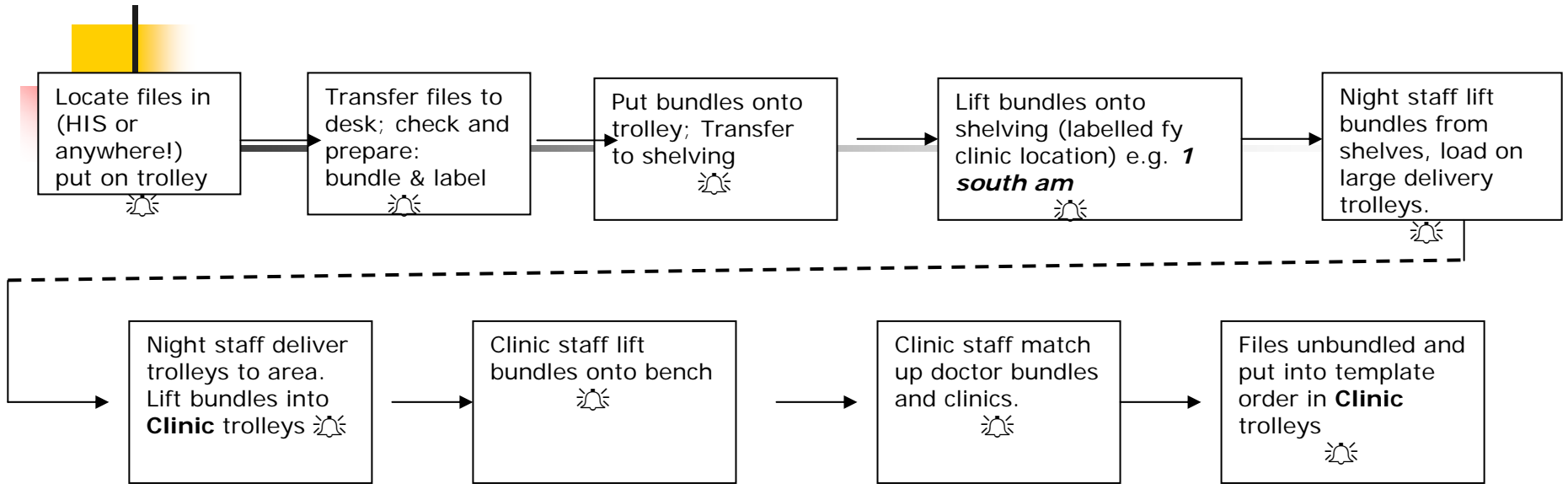




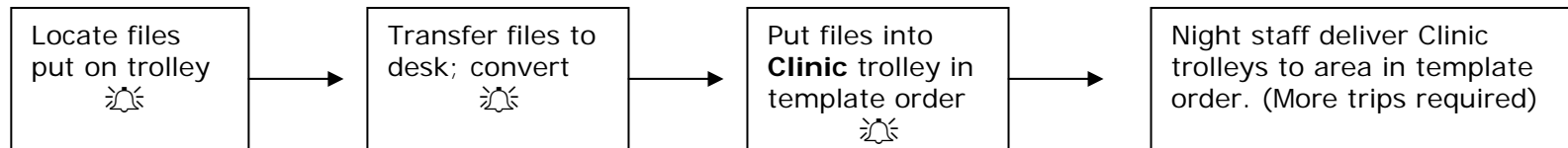
The new process

- 2 days prior
 - Records located
 - Records prepared
 - Placed in trolley in colour order
 - Records added as found
 - Clipboards labelled
- 1 day prior
 - Lists checked
 - Missing records location explained
 - Trolleys moved to cage
- Night before
 - Trolley wheeled to clinic area - READY

OLD PROCESS



NEW PROCESS



From this...



To This





Operationalizing the agreement

- \$\$\$ for purchase of trolleys
- Space around desks for bigger trolleys
- Space to park laden trolleys pre-delivery
- More delivery runs needed – who to do?



Solutions found

- Capital funds released
- HIS desk layout – thanks to HIS clerk
- “Cage” in our basement corridor
- Bought in the consumables
- Sharing the delivery runs between shifts
(time saved in loading and unloading)



What we achieved

- From 15 to 9 manual handling tasks
- One trolley type used in whole process
- Eliminated lifting high, bending low
- Pushing heavy trolleys eliminated
- Mis-deliveries eliminated (almost!)
- Colour coding / labelling = easy to find
- Calm mornings in OP: 4-5 hrs clerical effort saved daily – staff saving or redirected



Reflection

- Huge process and culture change
- Dramatically reduced manual handling
- Eliminated duplication of effort
- Increased communication between departments
- A model to copy for other areas



Thank you for listening

Lean thinking gets results