



# Singapore Healthcare Management 2017

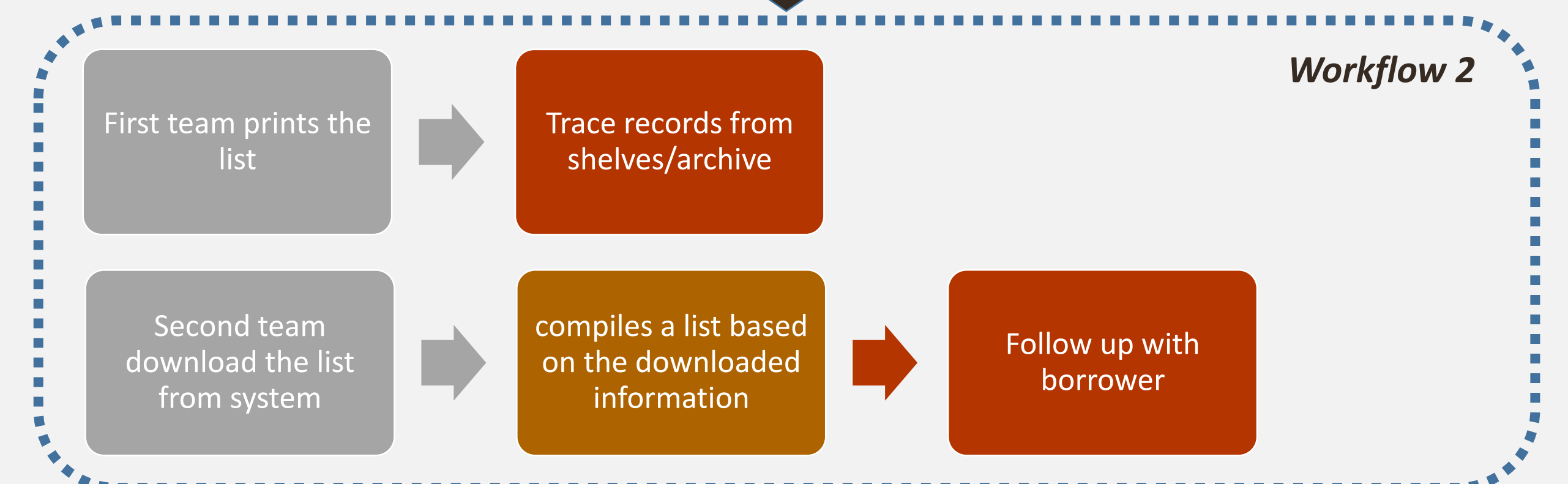
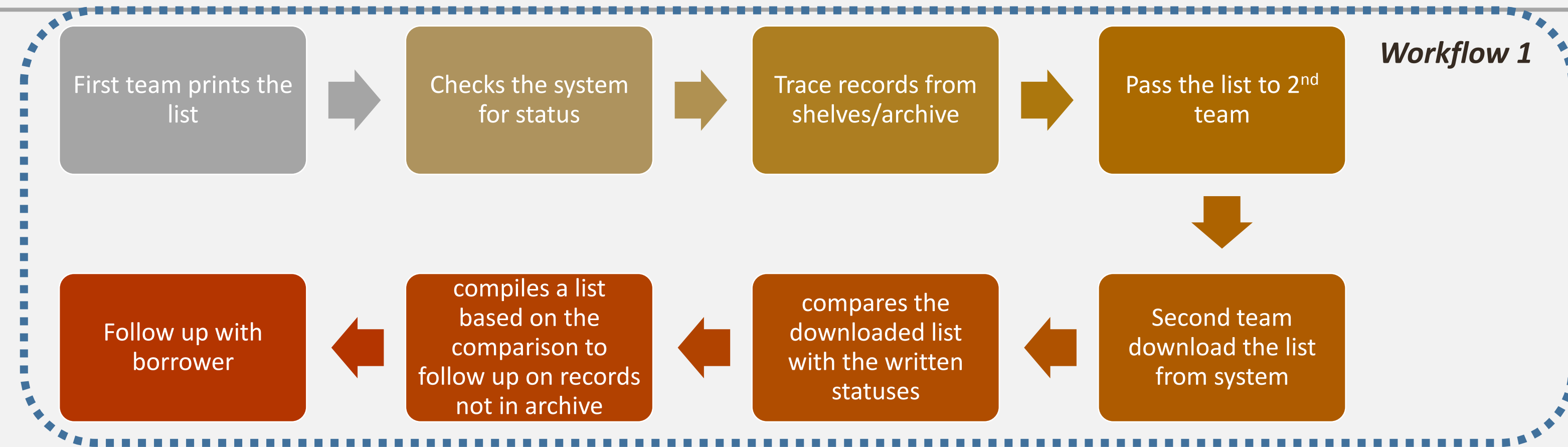
# One Sequential Process Turns Two Concurrent and Finally Made Whole

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## INTRODUCTION | BACKGROUND

A major role of Health Information Management Services (HIMS) is to retrieve medical records for patients' appointment at Specialist Outpatient Clinic. The retrieval lists are printed in advance of the appointment to allow ample time for follow up with the various borrowers (clinics/wards/department) of the records. For each list, the retrieval from the HIMS archive is done by first team and then any remaining ones that are not in archive are handled by second team. As the processes are sequential, this dependency between the two teams poses several issues

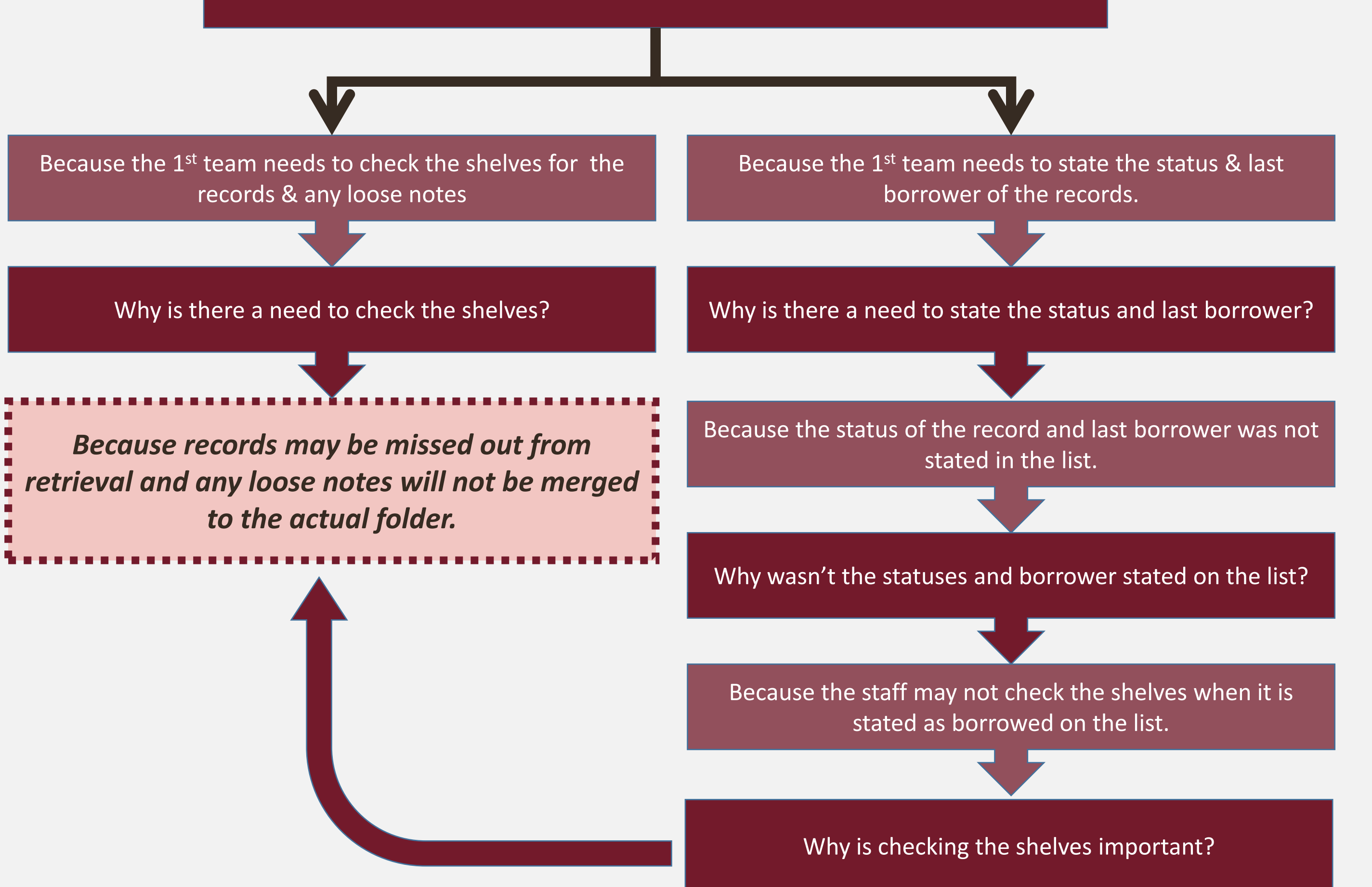
- delays in submission by first team causes delay in follow up actions by the second team. The borrowers were given even shorter time to follow-up.
- scheduling of printing has impact to both teams' timeline and some times consensus cannot be agreed upon by both team.



## AIM

The principal aim of this project is find a win-win solution that allows the two teams to work concurrently on the same list instead of sequential and yet not compromising the end-result. From workflow 1 to workflow 2.

### Why was there a need to do so sequentially?



## METHODOLOGY

Root cause analysis was done using the WHY methodology. One of the example as shown on the left. Essentially, the root cause were

- concerns that the records or loose notes may be on the shelves and staff may overlook the retrieval and merging of records.
- The second team also played a role in highlighting issues of status not updated or erroneous updates in the system as they are the ones who will download the list after the first team have done their updating. Without which who will be the gatekeeper?

## SOLUTIONS

Brainstorming and discussions were held to find ways to address the concerns:

- The first team will print the list with the latest statuses and borrower*
  - The tracers have to ensure that the shelves are checked for every case.
  - Once the tracer has completed the retrieval and updating the system, the team leaders have to re-generate the list again. This is to check for any mistakes i.e. act as gatekeeper.

- The second team will concurrently download the same list as the first team*
  - They compile the list based on statuses from the system and not information from first team.

Two weeks (14/11/2016 to 25/11/2016) study was conducted that involved two staff from different area of work to exchange their job. This is to have a overall understanding of each other's work and gain experience of the challenges.

As it deviates from the norm, trainings were held to ensure that staff are adequately equipped for the change.

## RESULTS | CONCLUSION

The result can be briefly summarized to two:-

### Intangible:-

1. **Flexibility** within the team to distribute their work without having to depend on the completion of tasks by the other team. e.g. the second team can start compiling without having to wait.
2. **Less conflicts** and tensions between the two teams due to disagreement in submission timelines e.g. previously the first team has to submit the list to the second team (9.15am, 12.30pm, 3.30pm). Now they set their own dateline so long as they can provide the medical records before appointment.
3. With the exchange, staff have **more understanding** of each other's responsibilities and how their actions has impact on each other.
4. Staff who used to be compiling based on first team input does not need to do "eyeball" checking and reading handwritten status. It can be quite illegible sometimes 😊.

### Tangible:-

1. In terms of time savings
  - **For tracers, 1hr per day per staff, total 20 tracers → 20 hrs per day. [fig on the right]**
  - **For compiler of list, 1.5 to 2.5hr per day per staff, total 2 compilers → 3 to 5 hrs per day**
2. The 20 tracers redirect time saved to quality checks to reduce their "outstanding" i.e. cases which requires more time searching. In total to date, 1-4 outstanding cases for entire team.
2. On days of severe manpower shortage, staff may stay as late as 10:30pm (8am to 10:30pm). Now, they do not need to go beyond 8.30pm. **2 hrs more to spend time with family.**
3. Due to the flexibility of distribution of work for compiling of list based on statuses from system, the overall overtime for 2<sup>nd</sup> team has **reduced by 30% per month, average 32 hrs per month** (comparison was done from Aug to Nov 2016).

DATE & DAY	Monday, 14/11/2016	Tuesday, 15/11/2016	Wednesday, 16/11/2016	Thursday, 17/11/2016	Friday, 18/11/2016
DUTIES	8:00 am - Sort of OCLXJCL (Small) 8:30 am - Loading of Digit 25-29 & For Files 9:00 am - Filing of Digit 25-29 10:00 am - Trading of 2nd Supp & Supp (Buddy-train) List 11:00 am - Trading of Advance List (OCLA & ALLEROY) 12:00 pm - LUNCH 1:00 pm - Continue Trading of Advance List (OCLA & ALLEROY) 4:00 pm - Trading of Manpower Down (IVAN - OCLA (BHT)) 5:00 pm - Checking OUT of Advance List & Downloading of Escal (SAP) 6:00 PM - Checking IN of return Trolley - OCLXJCL (Small) 7:00 pm - FINISH	8:00 am - Sort of OCLXJCL (Small) 8:30 am - Loading of Digit 25-29 & For Files 9:00 am - Filing of Digit 25-29 10:00 am - Trading of 2nd Supp & Supp (Buddy-train) List 11:00 am - Trading of Advance List (OCLA & ALLEROY) 12:00 pm - LUNCH 1:00 pm - Continue Trading of Advance List (OCLA & ALLEROY) 3:00 pm - Trading of Manpower Down (IVAN - OCLA (BHT)) 4:30 pm - Checking OUT of Advance List & Downloading of Escal (SAP) 5:00 PM - Checking IN of return Trolley - OCLXJCL (Small) 6:00 pm - FINISH	8:00 am - Sort of OCLXJCL (Small) 8:30 am - Loading of Digit 25-29 & For Files 9:00 am - Filing of Digit 25-29 10:00 am - Trading of 2nd Supp & Supp (Buddy-train) List 11:00 am - Trading of Advance List (OCLA & ALLEROY) 12:00 pm - LUNCH 1:00 pm - Continue Trading of Advance List (OCLA & ALLEROY) 4:00 pm - Trading of Manpower Down (IVAN - OCLA (BHT)) 5:00 pm - Checking OUT of Advance List & Downloading of Escal (SAP) 6:00 PM - Checking IN of return Trolley - OCLXJCL (Small) 7:00 pm - FINISH	8:00 am - Sort of OCLXJCL (Small) 8:30 am - Loading of Digit 25-29 & For Files 9:00 am - Filing of Digit 25-29 10:00 am - Trading of 2nd Supp & Supp (Buddy-train) List 11:00 am - Trading of Advance List (OCLA & ALLEROY) 12:00 pm - LUNCH 1:00 pm - Continue Trading of Advance List (OCLA & ALLEROY) 4:00 pm - Trading of Manpower Down (IVAN - OCLA (BHT)) 5:00 pm - Checking OUT of Advance List & Downloading of Escal (SAP) 6:00 PM - Checking IN of return Trolley - OCLXJCL (Small) 7:00 pm - FINISH	8:00 am - Sort of OCLXJCL (Small) 8:30 am - Loading of Digit 25-29 & For Files 9:00 am - Filing of Digit 25-29 10:00 am - Trading of 2nd Supp & Supp (Buddy-train) List 11:00 am - Trading of Advance List (OCLA & ALLEROY) 12:00 pm - LUNCH 1:00 pm - Continue Trading of Advance List (OCLA & ALLEROY) 3:00 pm - Trading of Manpower Down (IVAN - OCLA (BHT)) 4:00 pm - Checking OUT of Advance List & Downloading of Escal (SAP) 5:00 pm - FINISH
COVERING	IVAN	IVAN	IVAN	IVAN	HAZLAN
SPEED OF TRACING	- 1 casenote (59 seconds) - 33 casenotes (per hour) - 176 casenotes (5 hours)	- 1 casenote (24 seconds) - 32 casenotes (per hour) - 162 casenotes (5 hours)	- 1 casenote (50 seconds) - 30 casenotes (per hour) - 148 casenotes (5 hours)	- 1 casenote (51 seconds) - 37 casenotes (per hour) - 183 casenotes (5 hours)	- 1 casenote (63 seconds) - 38 casenotes (per hour) - 151 casenotes (4 hours)
SAVING TIME	1 Hour - between 4pm - 5pm	1 Hour - between 4pm - 5pm	1 Hour - between 4pm - 5pm	1 Hour - between 4pm - 5pm	1 Hour - between 4pm - 5pm