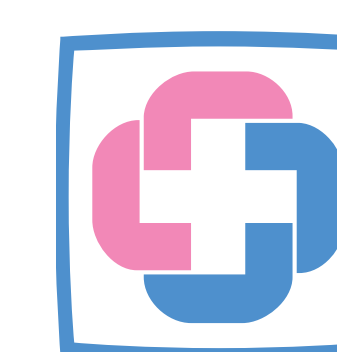


New Patient Scheduling Workflow for Extemporaneous Orders



**KK Women's and
Children's Hospital**
SingHealth

Gwee Yong Sheng, Tay Meiqi Cheralyn, Lee Sze Huay Dorothy,
Desi Ema Wati, Chui Nee Hock Alan, Ng Ai Shing
Department of Pharmacy, KK Women's and Children's Hospital

Introduction

Extemporaneous preparations are drugs prepared specially by pharmacy staff when an appropriate drug or dosage form is not readily available. In KKH Outpatient Pharmacy, requests for patients' extemporaneous preparation orders were previously documented in a record book, which was used for:

1. Consolidation of daily requests
 2. Searching and verification of records
 3. Monthly reporting on workload
- However, as the book could only be used/accessed by one user each time, documentations into the book were occasionally delayed or overlooked.
 - This resulted in miscommunication and loss of information among Pharmacy staff-users, which lead to the preparations not being prepared on time.
 - A significant amount of time was also required to transcribe orders from prescriptions to book records; and to search for orders for amendments.

A new workflow of using a centralised shared spreadsheet was hence designed and built to cater to the above functions and mitigate the issues.

Aims

- To improve accessibility, communication and usability among users.
- To increase convenience and facilitate the order-requests coordination.

Methodology

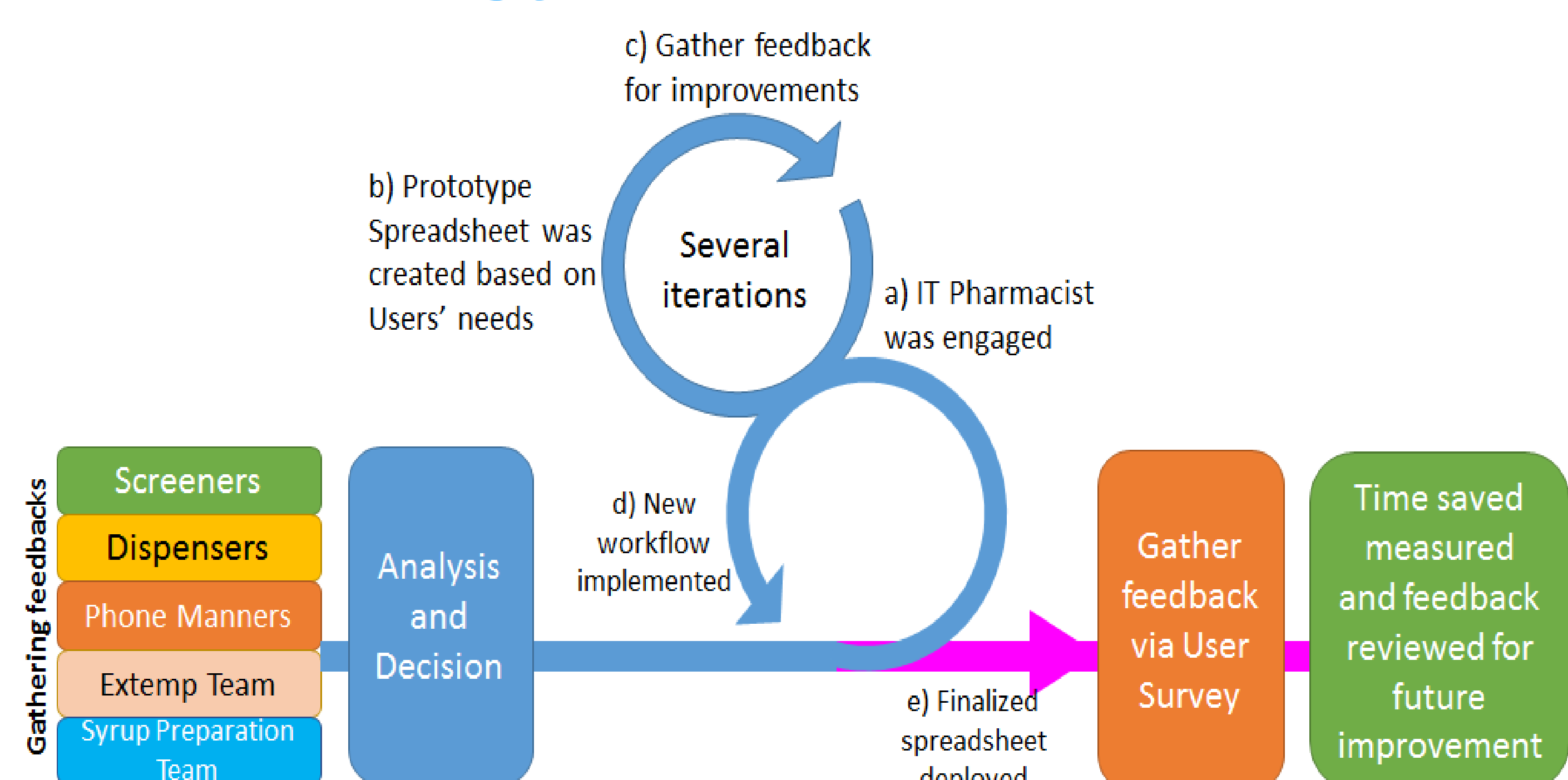


Diagram 1. Solution evolved through cross-functional user-teams in a collaborative effort

Incremental-iterative feedback was gathered from the various users throughout the process (Diagram 1).

- Based on initial feedback gathered, IT pharmacist was engaged to design a prototype spreadsheet (Diagram 2).
- Post implementation of the spreadsheet and user feedback was gathered. Taking into consideration current workflows and procedures, a new workflow incorporating the use of the spreadsheet was implemented (Diagram 3)

Diagram 2. Extemporaneous syrup order requests spreadsheet

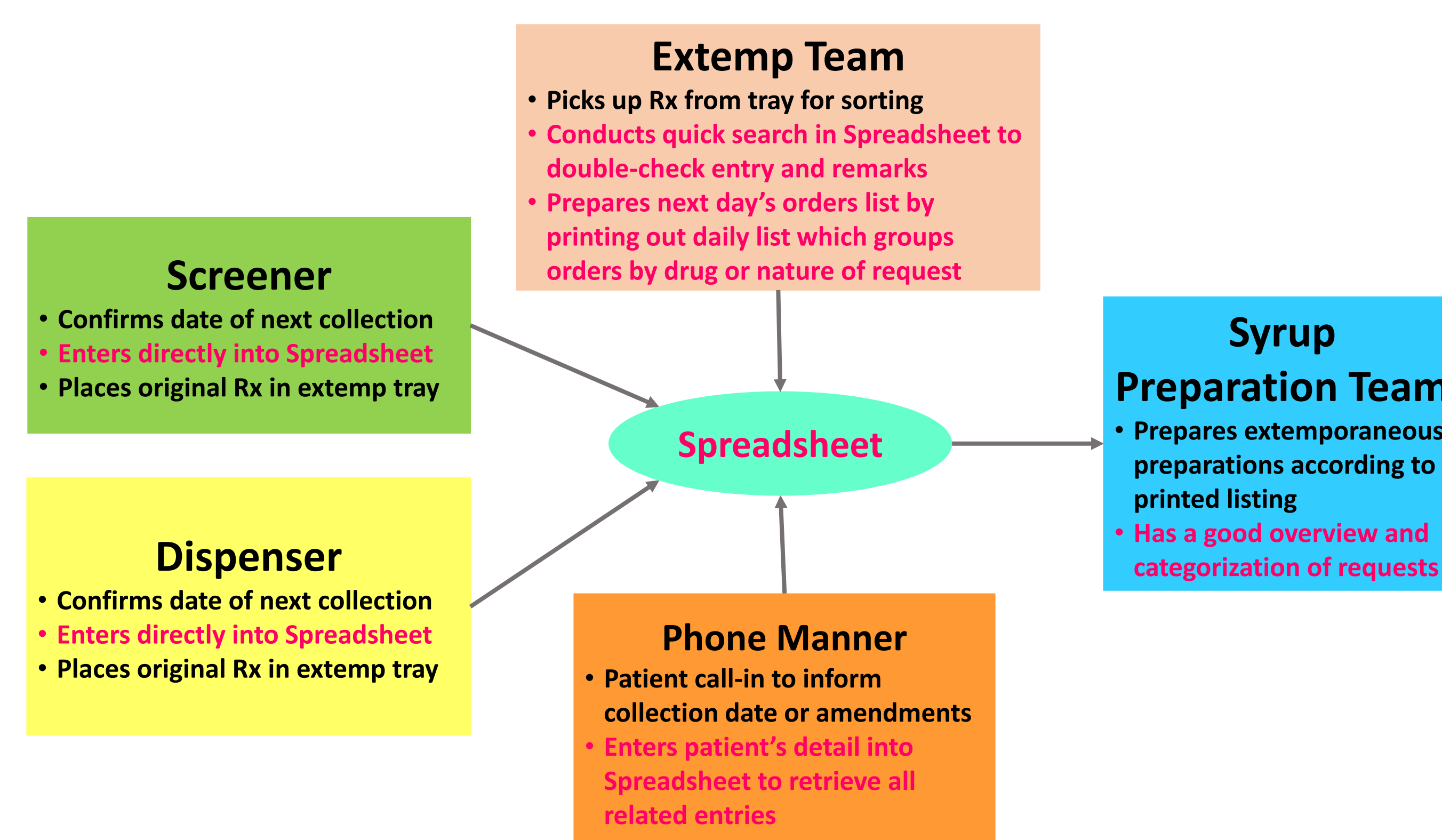


Diagram 3. Workflow after Spreadsheet Implementation

Results

- 1) 80% of User-respondents agree that:
 - the new workflow is **easy to access and use**.
 - it is **faster and more efficient to search** for patients when required.
- 2) All User-respondents (100%) agree that the new workflow **improves clarity in communication and handover** to the extemporaneous team as remarks can be indicated clearly and neatly.
- 3) Extemporaneous coordination team saved an average of 20 minutes in their work each day.

Other observations

- ✓ Multi-users allowed
- ✓ Multi-tasks allowed
- ✓ Clear order instructions
- ✓ No missing information
- ✓ Easy search function
- ✓ Easy consolidation of orders for patients and resource planning
- ✓ No missed out orders so far compared to book recording
- ✗ IT downtime consideration - To have a periodic backup copy in the Extemp Team computer

Conclusion

Users were satisfied with the initiative. They agreed that the new workflow incorporating the spreadsheet helps them to perform their tasks efficiently and effectively. Users also find that it helps to eliminate manual searching and paper transcribing.