

Inpatient Radiological Preparation Using Sunrise Clinical Manager (SCM)

Wee Jun Chiang, S Perama Latha, Charlyn Chai Hoon Chee,
Ashikin Binte Osman, Nur Fhasha Binte Mohd (Radiography)
Pearlyn Tan Wee Ting (Nursing Informatics)
Changi General Hospital



BACKGROUND

When a Radiology request was scheduled, the Radiography Assistant (RA), as schedulers, would print the sticky label with patient appointment details, and give it to the Radiology Patient Service Associate (PSA). The PSA would email this information with preparation instructions to the ward. Ward PSA would then print these instructions for the nurses, and if there was no print-out, the ward Nurse would access them via email when required.



PROBLEMS

- Potential human errors such as:
 - RA printed the wrong information
 - PSA copied and pasted incorrect details
 - PSA sent the email to the wrong ward
 may lead to incorrect or missed preparation instructions and caused delays in radiological investigations
- Busy ward nurses may lack time to access emails, leading to scan preparation instructions being overlooked or unacknowledged
- High usage of resources like paper and cartridge ink to print out preparation instructions



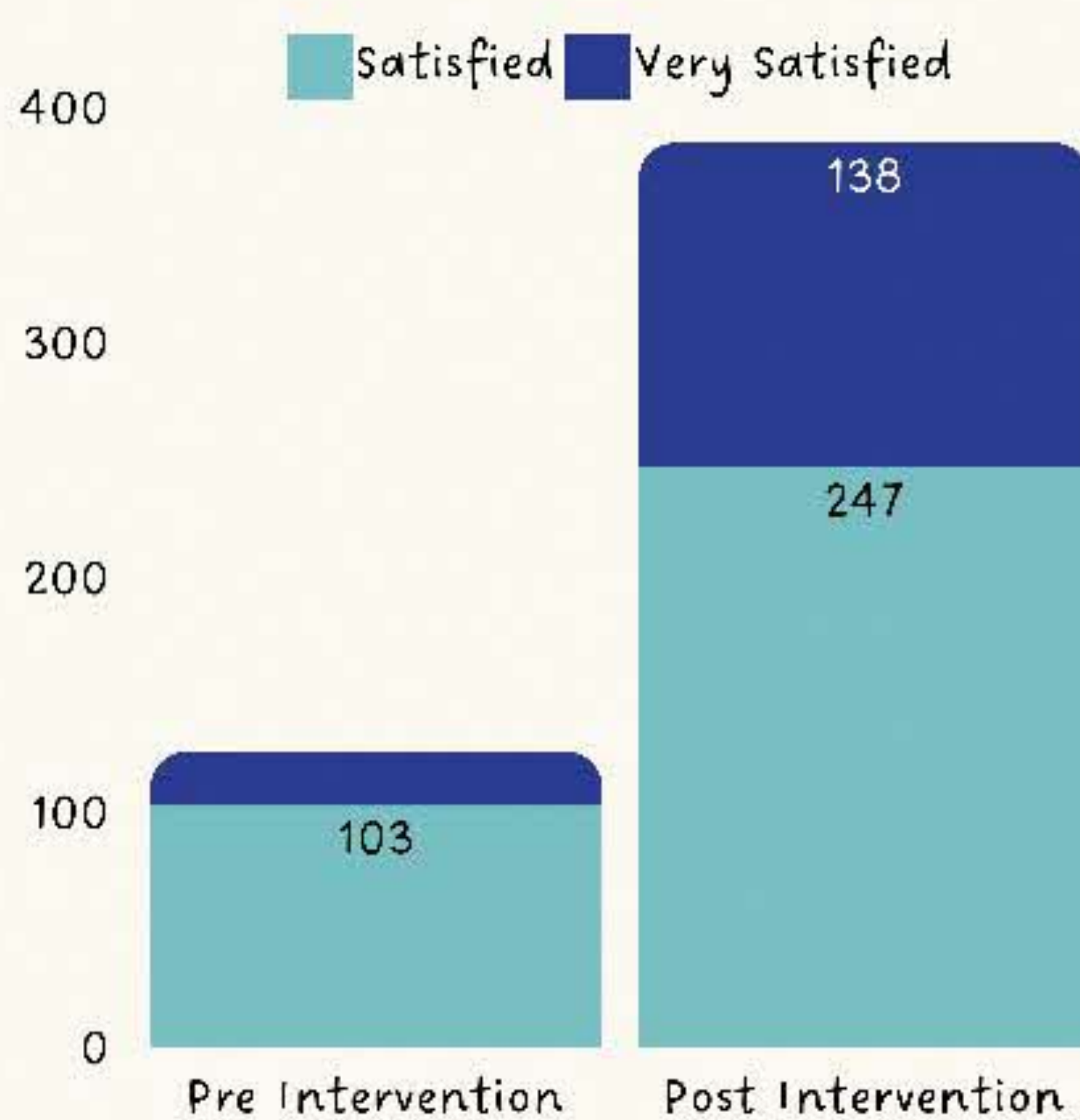
METHOD/SOLUTIONS

- SCM was chosen as the ideal platform where end-users can conveniently access the scan preparation instructions
- Preparation instructions were integrated into SCM and Radiology Information System (RIS) with collaboration from Radiology IT
- Radiology scheduler selects the scan preparation instructions from a drop-down list in RIS, which seamlessly flows into SCM
- Ward nurse checks appointment date/time and preparation instructions conveniently in one platform (SCM)

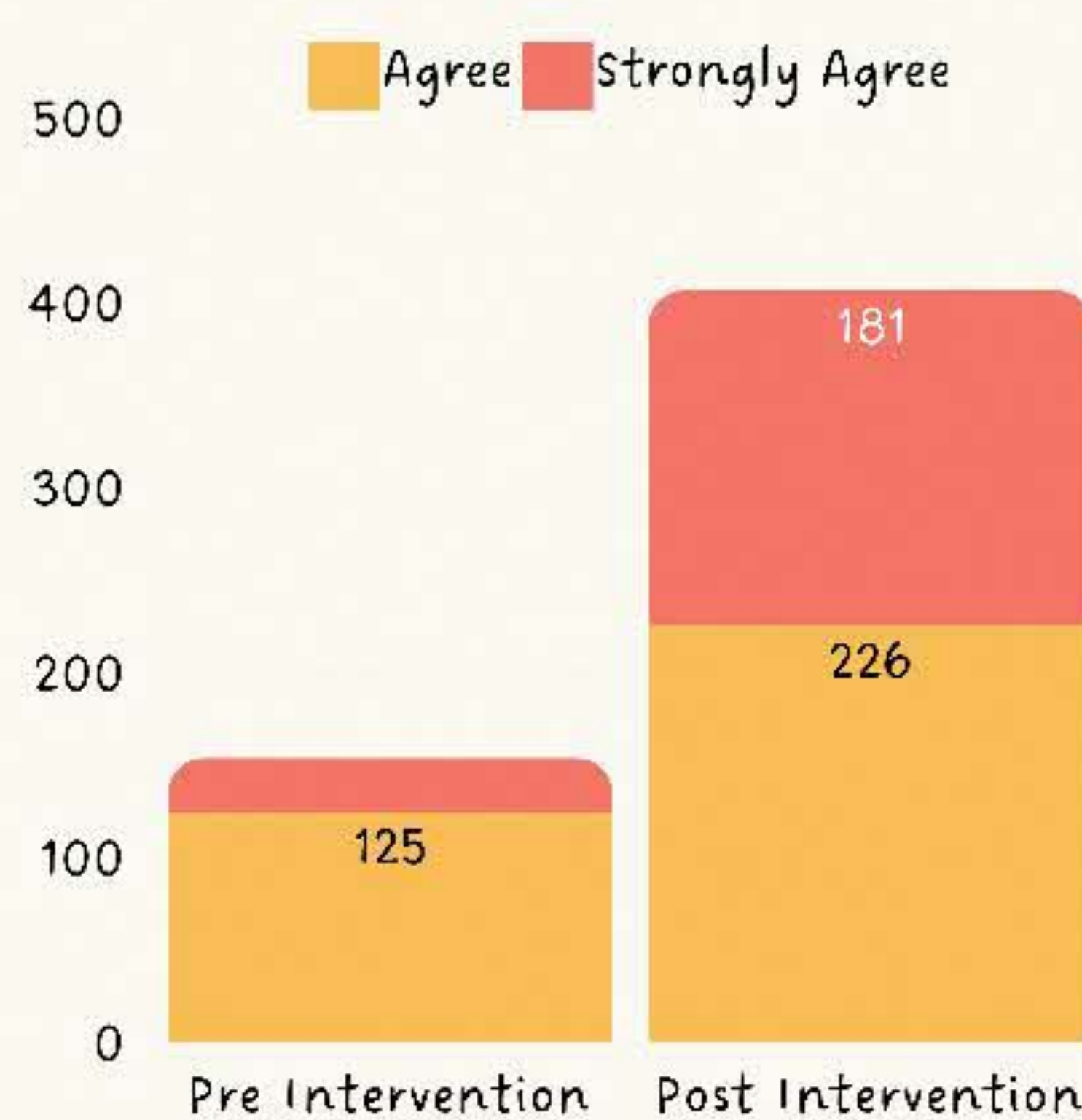
RESULTS

Pre implementation survey was conducted via FormSG before implementation. 581 staff participated, including Nurses, Radiography Assistants, and Radiology PSAs. A follow-up survey was administered 6 months later in December 2024. Post implementation data showed a **threefold increase in ease of retrieval of instructions, productivity increased by 2.64 times and errors reduced by 2.27 times.**

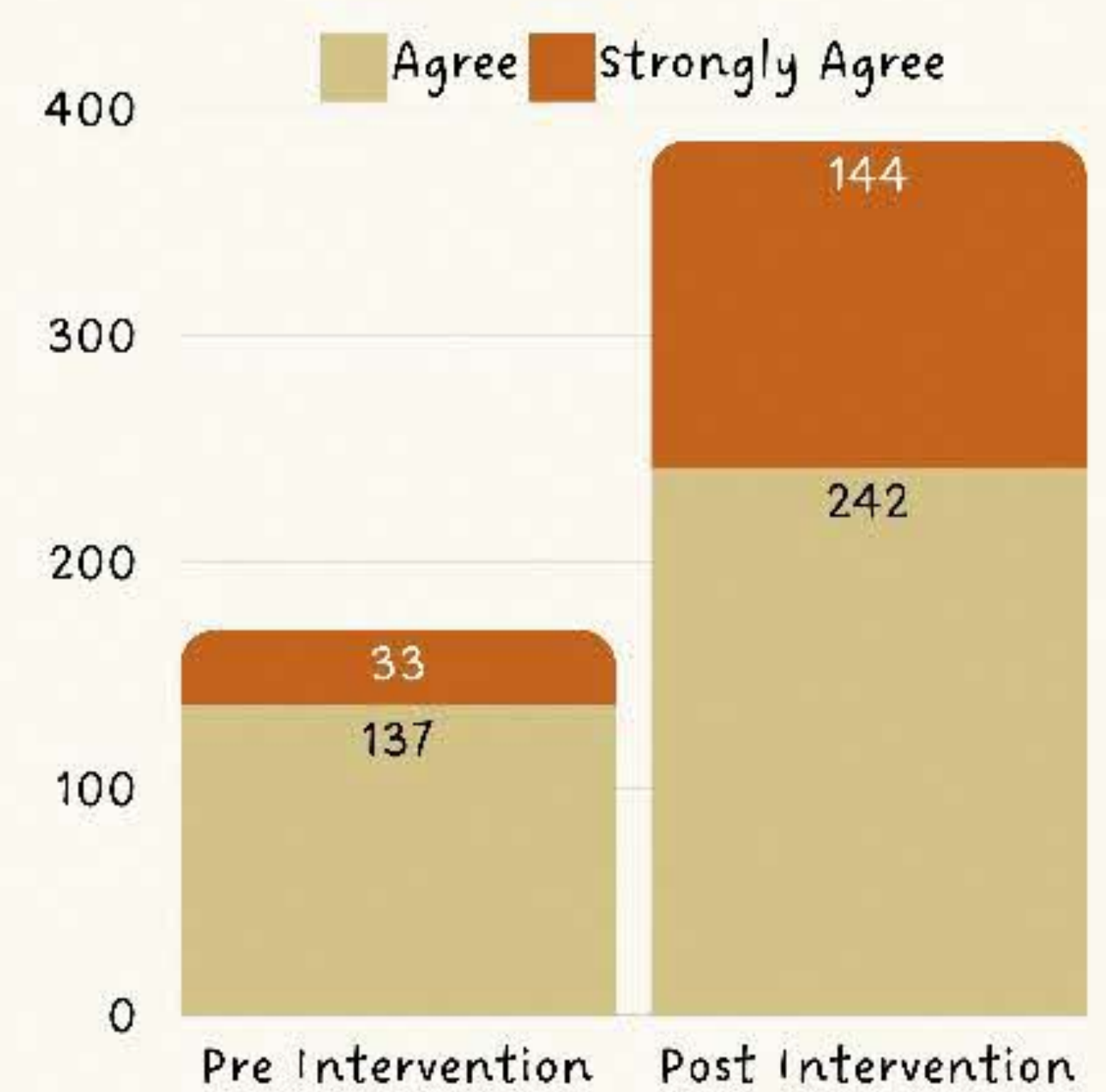
EASE OF RETRIEVAL OF INSTRUCTIONS



IMPROVEMENT IN PRODUCTIVITY



REDUCTION IN ERROR



IMPACT/ EXTENT OF SCALE

- Number of stakeholders involved in the process were reduced from 5 to 2, to minimize any potential human errors
- Number of steps from appointment booking to dissemination of preparation instructions to nurses were reduced, which led to significant reduction in duration of appointment process from 10 mins to 2 mins
- Ease of workload for Radiology and ward PSA to focus on other patient care areas
- Cost savings due to elimination of paper and printing costs



CONCLUSION

Future improvements may include integration into future systems to ensure this seamless workflow remains relevant and convenient for all stakeholders

