

National Quality Improvement Conference

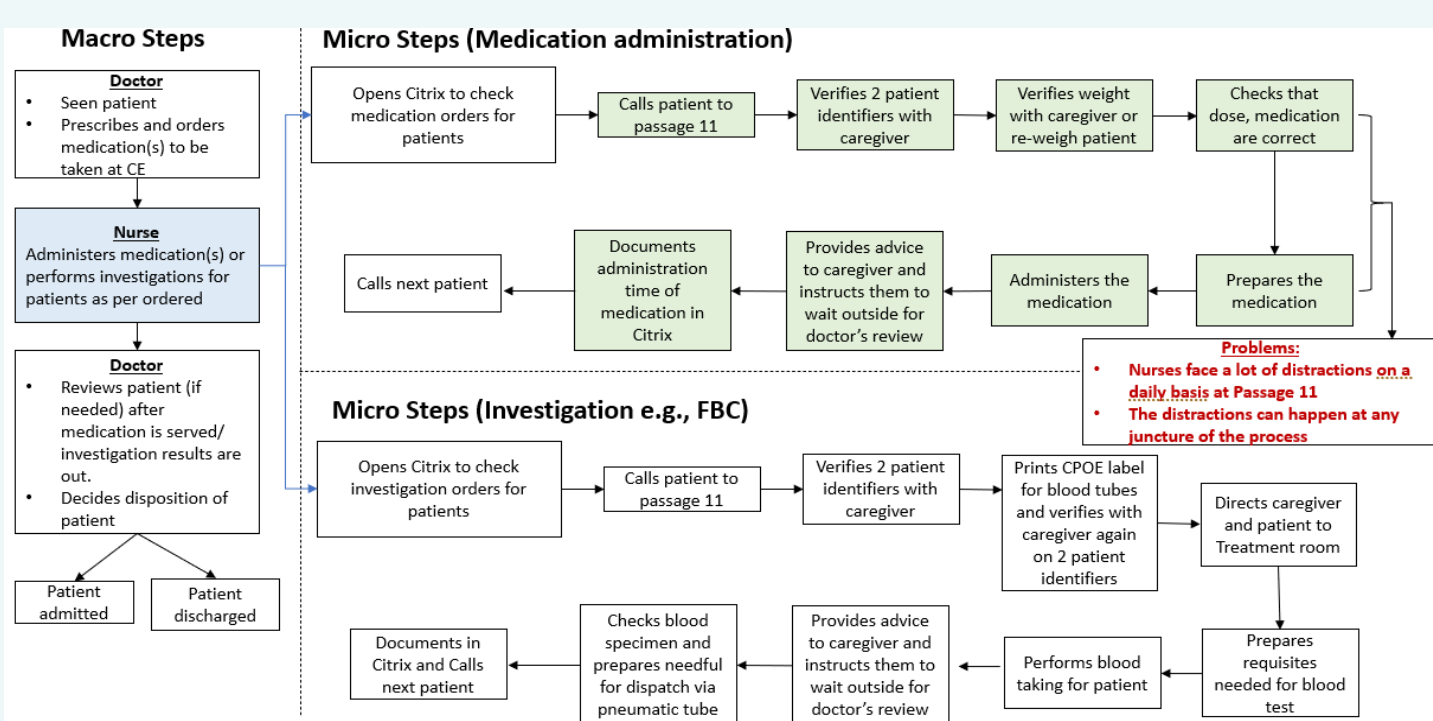
Distractions Away - Reduce % of Inappropriate distractions for Medication nurses at Children's Emergency (CE)

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Problem Statement

The total number of medication administered in CE, KKH totaled to 390 (average). The nursing medication administration involves steps which should be performed without distractions. Due to the physical erection of a wall to separate ARI and non-ARI zone during COVID-19, Passage 11 which was the designated medication administration area experienced high human traffic.



Potential Solutions

Part 1: Re-designate Room 12 for medication administration

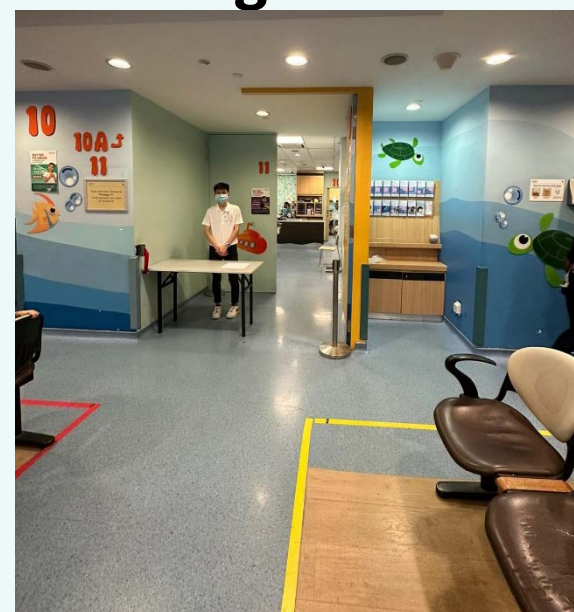


Passage 11 (pre-implementation)



(post-implementation) Room 12 re-designated as the medication administration area; this area is enclosed, as compared to Passage 11 which was open

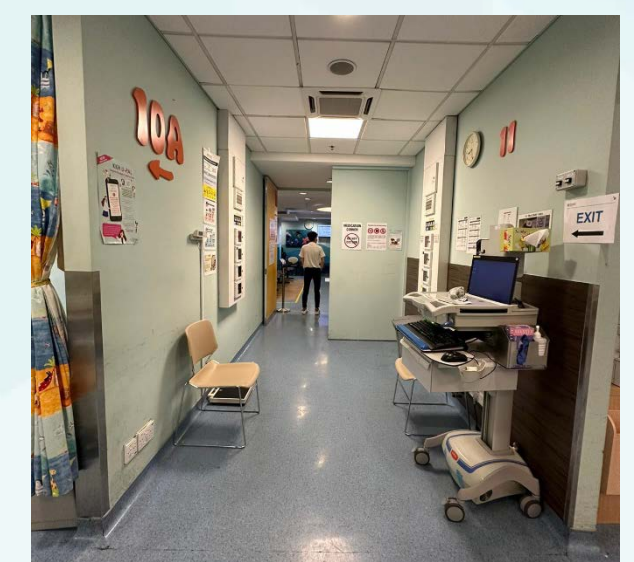
Part 2: "Concierge" outside Passage 11 to attend to caregivers' queries



(post-implementation) A table is placed outside Passage 11 with a permanent staff to help answer caregivers' queries. These queries range from wayfinding, waiting time to consultation and other miscellaneous queries e.g., getting blanket or extra plastic bag for vomiting.

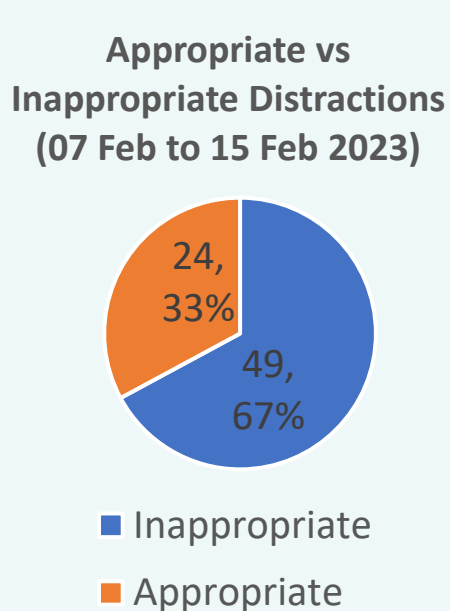
Part 3: Segregate another area for MDI administration

(post-implementation) Besides the existing MDI station at Observation 1, the existing passage 11 (interior) is segregated to add another area for MDI administration



Project Aim

To reduce the % of Inappropriate# distractions at CE for Medication Nurses at 15 minutes interval from **75%** to **25%** within 6 months.



#: Inappropriate distractions are defined as non-nursing, or non-related to the medication nurse's responsibilities.

Categories	Count
Inappropriate	24
Waiting Time for consultations	17
Wayfinding to different places	10
Measure vitals	7
Consultation at room 10A (wanted to go there)	3
Personal request (ask for blanket, drink, extra pants)	3
Miscellaneous	2
PA system unclear (cannot hear PA, come and ask)	2
Ask for consumable (doctor ask)	1
Status/ Advice on Investigation	2
Status of consultation	1
Translation for VWB (Chinese speaking)	1
Appropriate	49
Administration of MDI	8
Pass Samples (Urine)	8
Advice on Medication (time interval between paracetamol and ibuprofen)	4
Change to patient's condition (child having fits)	2
2nd review after medication	1
Assistance of investigation (doctor needs nurse help to paste urine bag)	1
Grand Total	73

Lessons Learnt

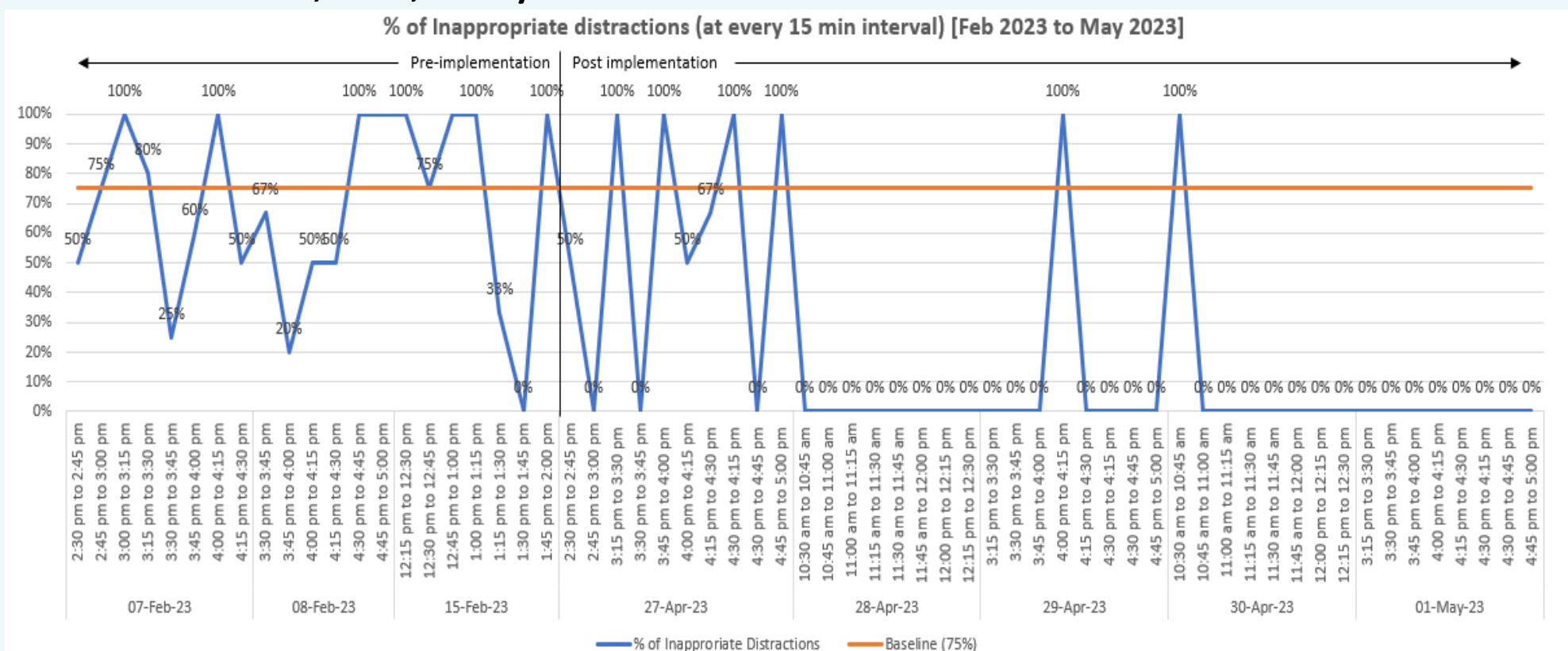
Distractions not only cause inefficiency in medication administration, it may lead to medication errors by nurses. By redesignating a separate room, redesigning the layout and upskilling the non-medical staff to handle queries, there is a significant reduction in the cognitive load by medication nurses due to inappropriate distractions, which will impact patient safety positively.

These solutions had shortened the time to first dose for time-sensitive medications slightly. Note that time to first dose is dependent on uncontrollable factors e.g., fretful child or uncontactable caregivers.

	Before	After
Paracetamol Suspension	13.38	13.50
Salbutamol 100mcg Inhaler	31.20	30.33
Oral Rehydration Salts Solution	17.14	17.03
Ipratropium Br 20mcg Inhaler	34.53	34.41
Ondansetron Ampoule	15.12	14.67
Ibuprofen Syrup	14.58	13.88
Magnesium Carbonate Aromatic Mixture	18.28	17.14
Prednisolone Syrup	18.15	17.29
Dexamethasone Tablet	15.80	15.58
Fleet Enema For Children	18.04	18.08

Outcomes & Impacts

The % of inappropriate distractions for medication nurses at 15 minutes interval was reduced from median of **75%** to **0%**. There was a reduction of the median number of distractions (appropriate and inappropriate) every 15 minutes, from **4** to **0**. The 100% post implementation was due to the small denominator, i.e., only 1 distraction at that interval.



More than 90% of nurses strongly agrees and agrees that their morales were boosted as compared to previous set-up and that Room 12 is a conducive environment to serve medications.

