

INTUBATION MED KIT IN SICU

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Aim

The **aim of this project** is to implement a **streamlined workflow** for the medication retrieval process from the Automated Dispensing Cabinet (ADC) required for intubation.

This initiative seeks to **reduce unnecessary delays** and ensures **timely** and **accurate administration** of **critical medications**.

Background

Intubation is a medical procedure whereby an Endotracheal Tube (ETT) is inserted to help patients breathe. There are many steps during intubation, such as **preparation of medication** and assisting the Doctors with the intubation items .

Nurses retrieve the medications from the ADC console and fridge upon doctor's order. This process is **time consuming** as it requires nurses to login to the ADC, enter and retrieve the required medications from the compartment and fridge multiple times. Should there be any new orders during the intubation, nurses are required to make another trip to the ADC. This **causes further delay** in the intubation process.

All the medications were placed in **multiple kidney dishes** illustrated in the picture, which appears **cluttered** and may lead to **potential medication error**.



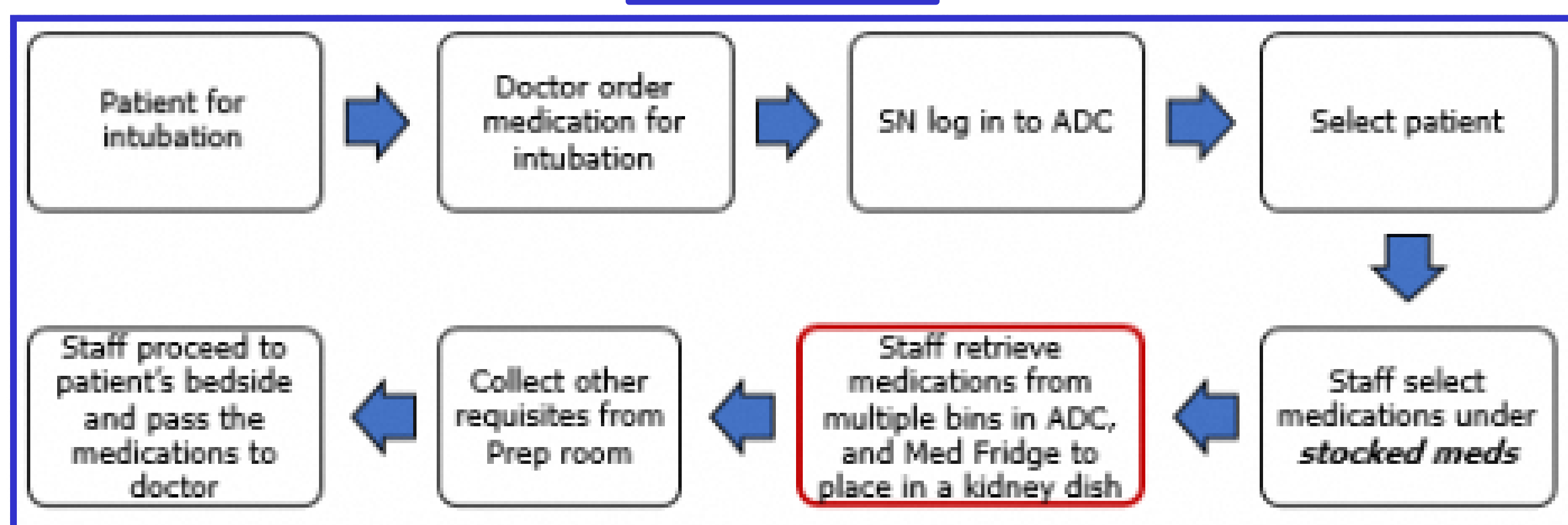
Team Members

Name	Designation	Department
Adeline Wee	Principal Clinical Pharmacist	Pharmacy
Tenorio Chiara Angela Marquez	Senior Staff Nurse	B36
Sonia Vasanthan	Senior Staff Nurse	B36

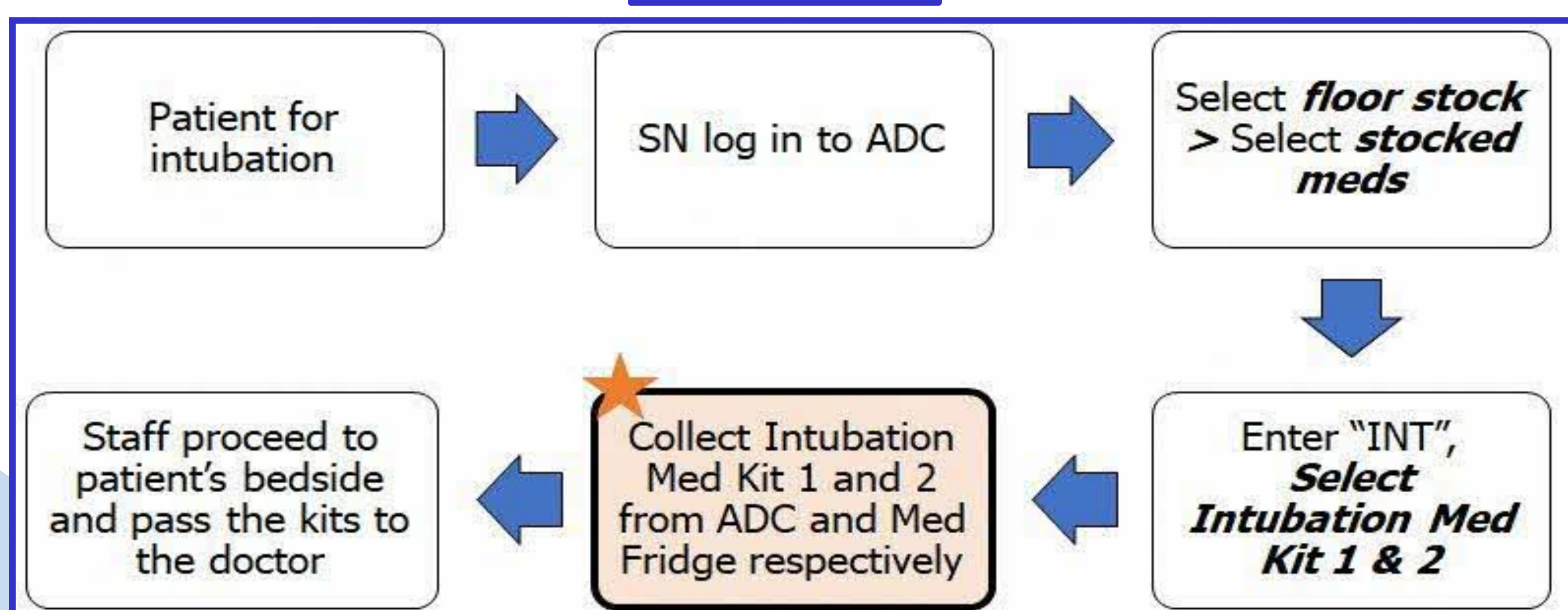
Interventions / Implementation

A list of frequently used medications for intubation were standardised after discussion with **ICU Director** and **Pharmacists**. Intubation med kits were designed to store the medications and requisites, with clearly labelled compartments. This simplifies the medication retrieval process for nurses.

As Is



To Be

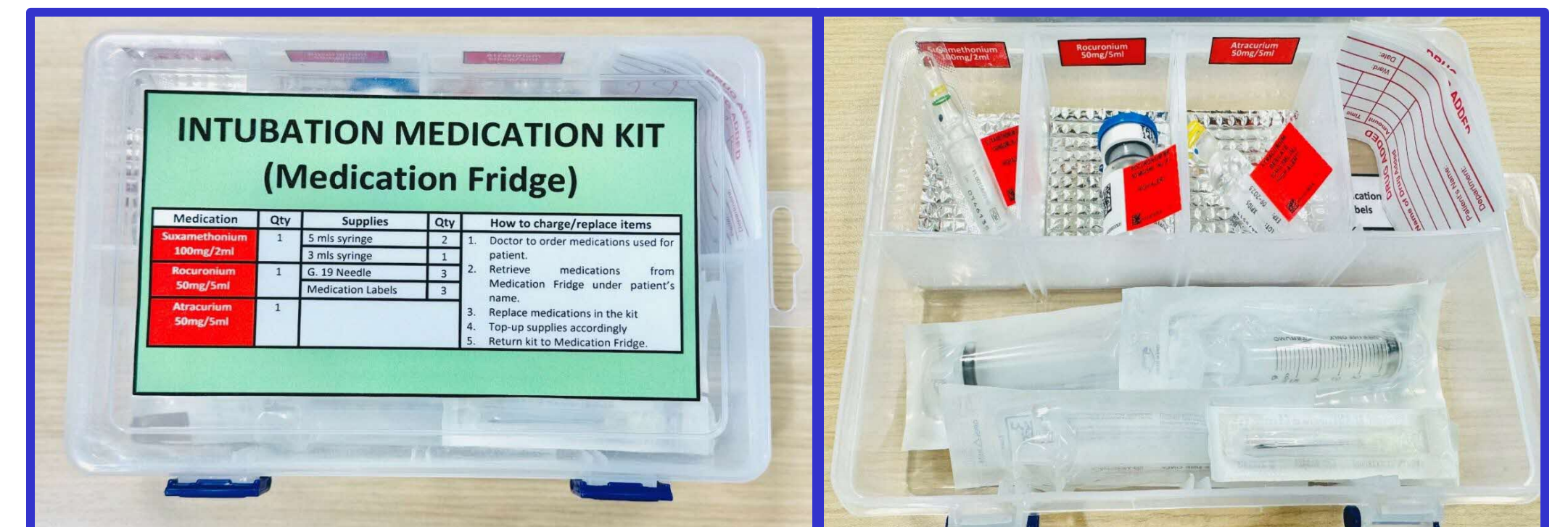


Intubation Medication Kits

Kept in ADC



Kept in Med Fridge



Checklist

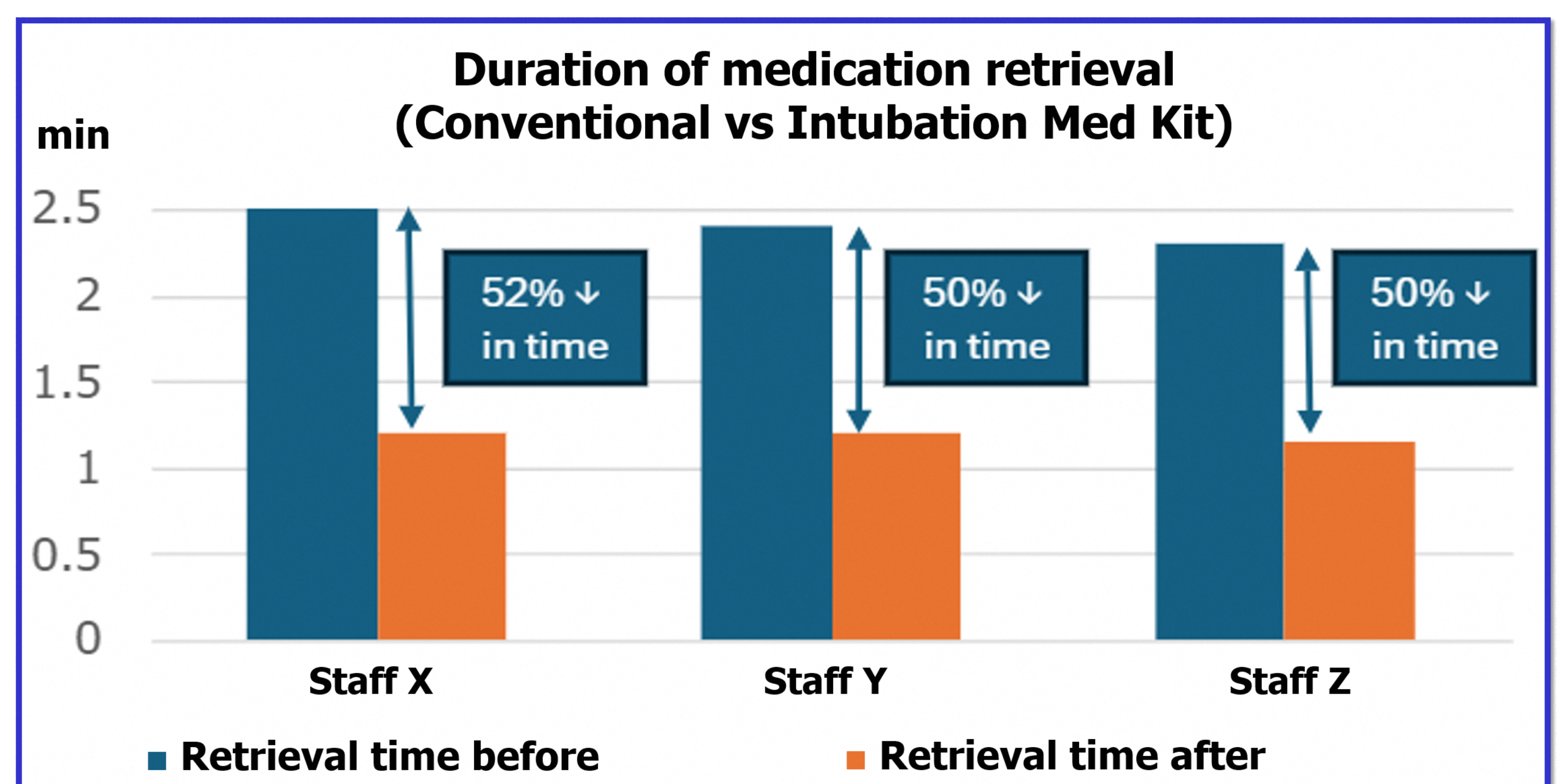
ICU B36 INTUBATION MEDICATION KIT CHECKLIST (ADC)			ICU B36 INTUBATION MEDICATION KIT CHECKLIST		
Medication / Supplies	Par Level	Date and Time	Medication / Supplies	Par Level	Date and Time
Midazolam 5mg/ml	1	Expiry Date	Suxamethonium 100mg/2ml	1	Expiry Date
Propofol 200mg/20mls	1	Expiry Date	Rocuronium Bromide 50mg/5ml	1	Expiry Date
Phenylephrine 1mg/10ml	1	Expiry Date	Atracurium 50mg/5ml	1	Expiry Date
10 mls syringe	3		5 mls syringe	2	
5 mls syringe	1		3 mls syringe	1	
19G Needle	4		19G Needle	3	
Medication Labels	4		Medication Labels	3	
Remarks			Remarks		
Staff Name and Signature			Staff Name and Signature		
Staff Name and Signature			Staff Name and Signature		

The intubation med kits will be topped up by **two Staff Nurses** according to the checklist **after each use**. This ensures that the kits are **ready for the next use**. This workflow has been implemented since October 2023.

Onward 2026

Introduction of the Intubation Med Kits is a **time saving process** and **improves efficiency**, which aligns with the NHG strategic priorities in ensuring **Quality and Patient Safety**.

Results & Outcomes



In a critical care setting such as the ICU, **every second counts**. Since the project's implementation, the time required to retrieve intubation medications has been **reduced by 50%**. Thus, improving patient's outcome.

Conclusion

Implementing a structured workflow **enhances efficiency**, reduces delays and minimizes errors in healthcare settings. Timely and precise task completion **improves patient safety** and allows healthcare team to focus on delivering **high-quality, patient-centred care** in an ICU setting.