



Singapore Healthcare Management 2022

To reduce medication rate at SKCH to below 0.3 per 1000 patient days (CH average) over 1 year

¹CI Asst Prof Xu Bangyu, ²Nagavali, ²Soong Sau Leng, ³Joey Tan, ³Adeline Cheong, ⁴Nurina and ⁵Angeline Lim

¹PACC, ²Nursing, ³Pharmacy Services, ⁴Clinical Governance Office and ⁵QI facilitation office



Bright Vision • Outram • Sengkang

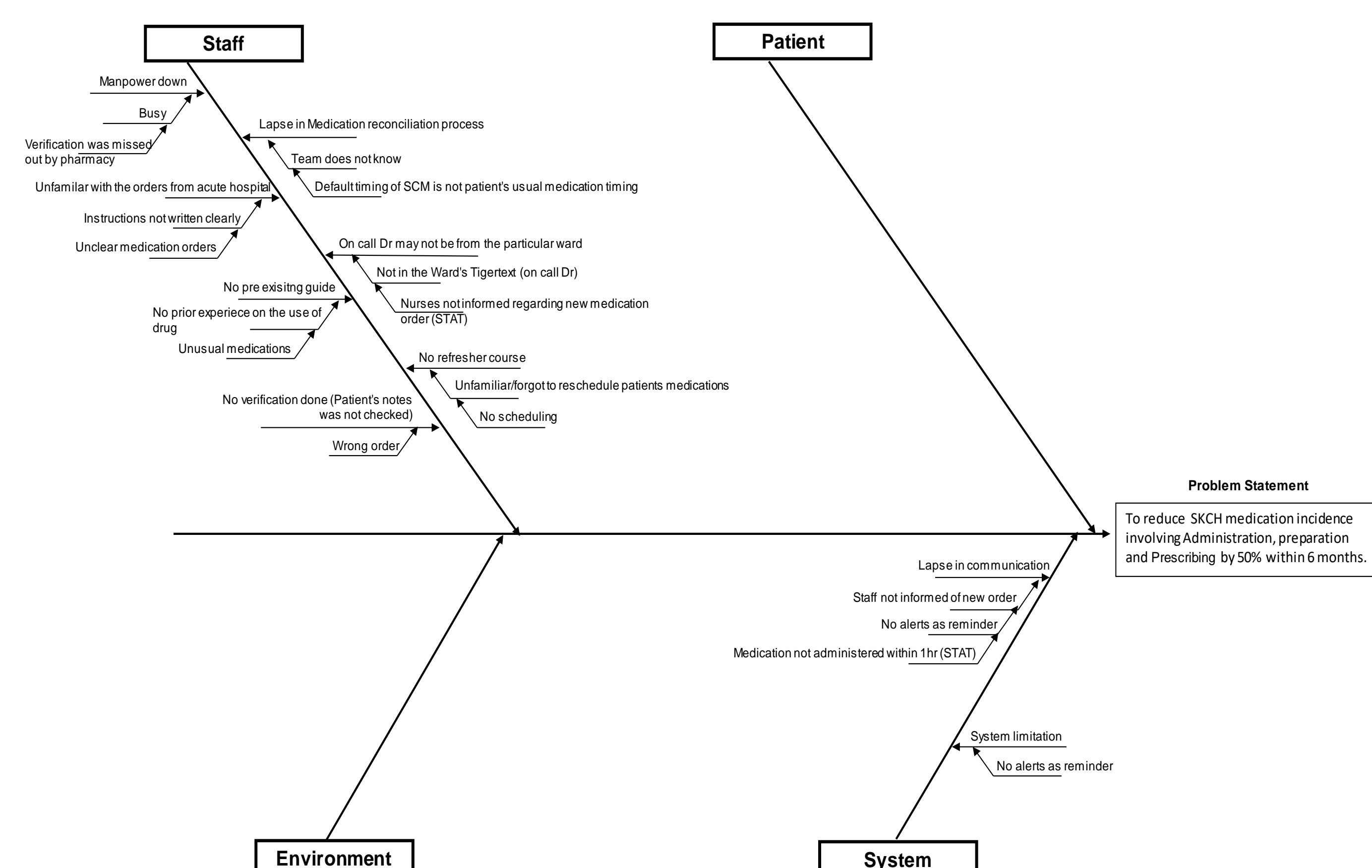
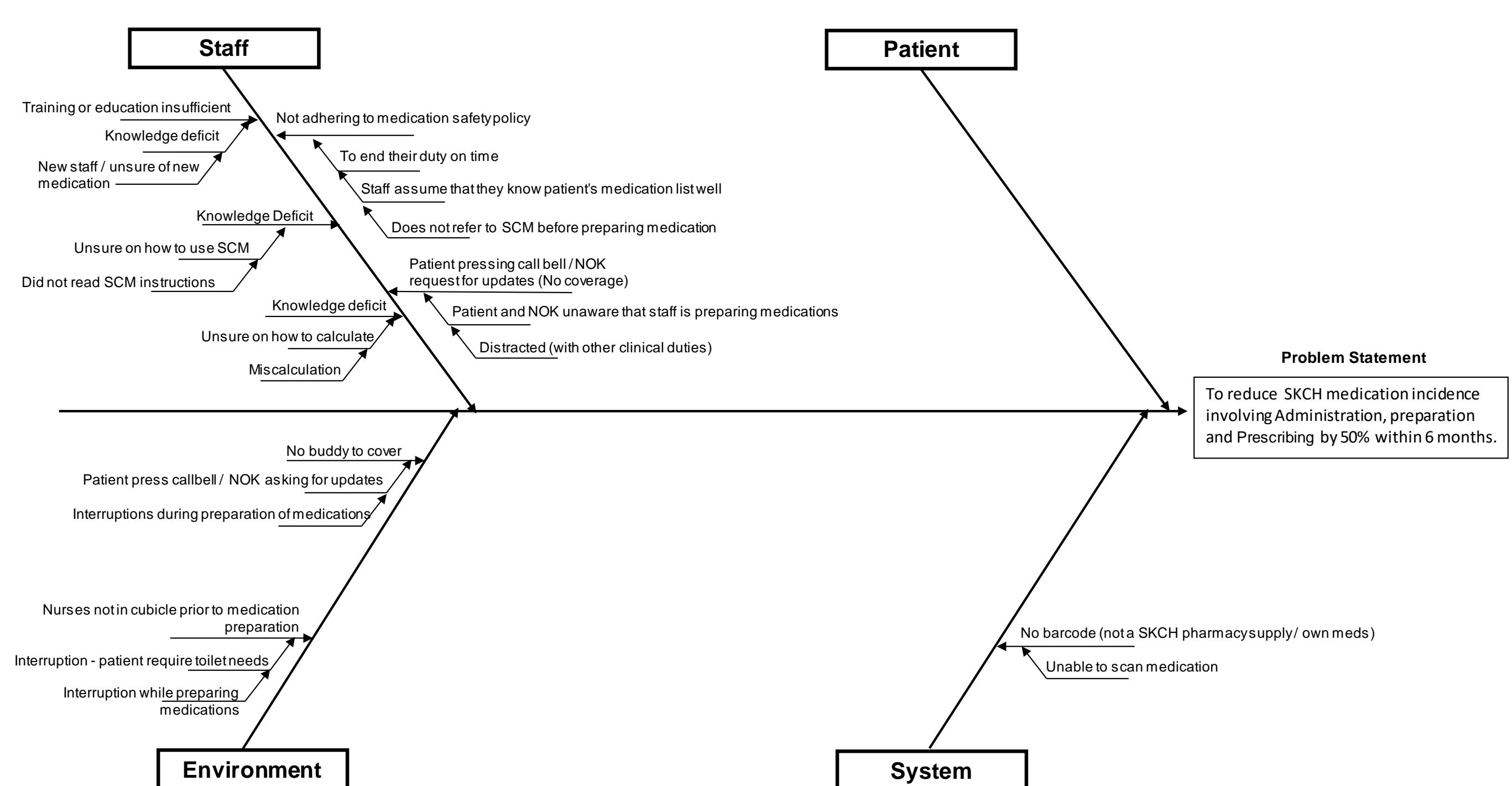
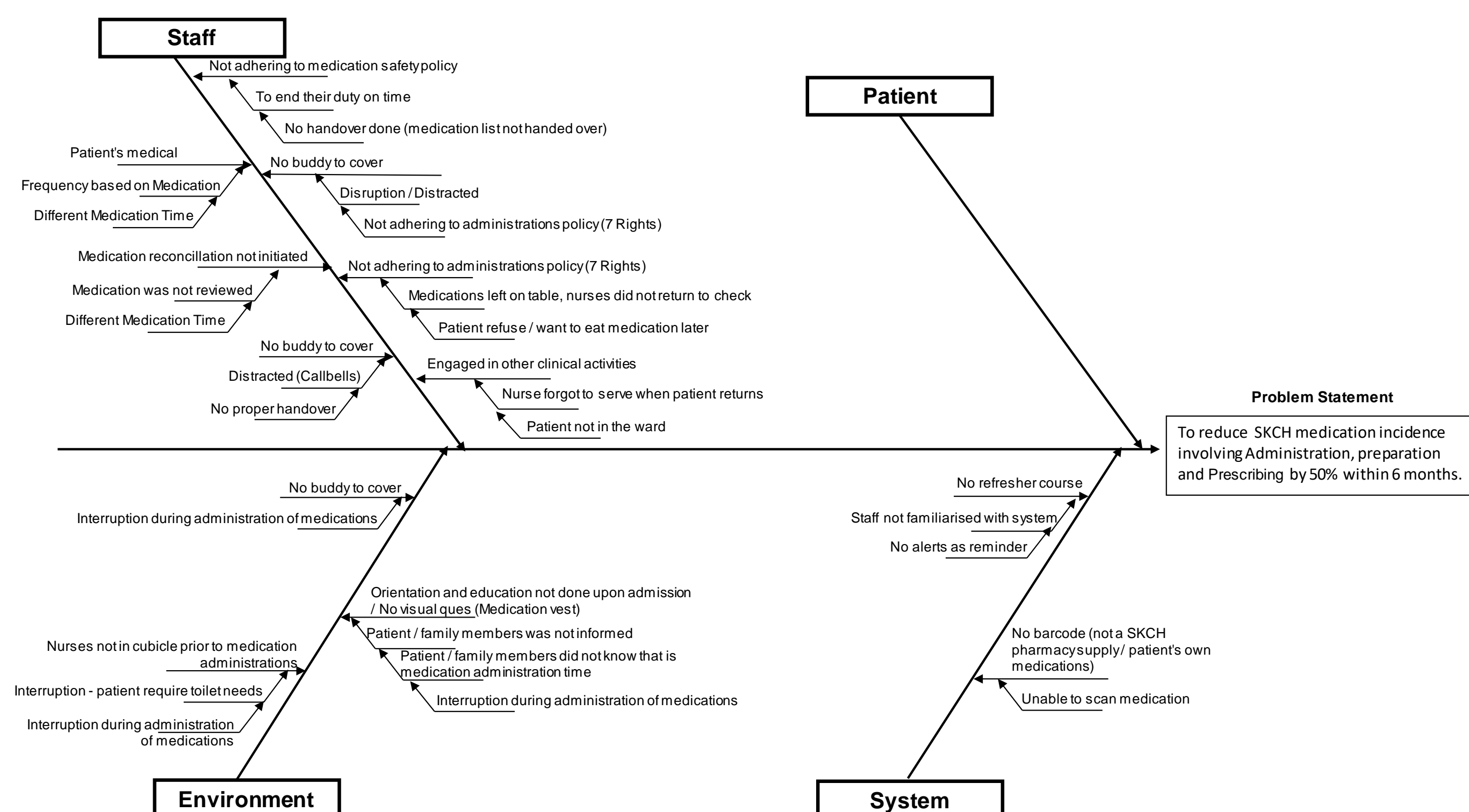
BACKGROUND

SKCH medication rate was 0.56 per 1000 patient days (Jul 19 - Jun 20). The QI project started in June 2020 where the team has implemented various interventions to mitigate the root causes leading to medication incidents at SKCH.

MISSION STATEMENT

To reduce medication rate at SKCH to below 0.3 per 1000 patient days (CH average) over 1 year.

ANALYSIS OF PROBLEM

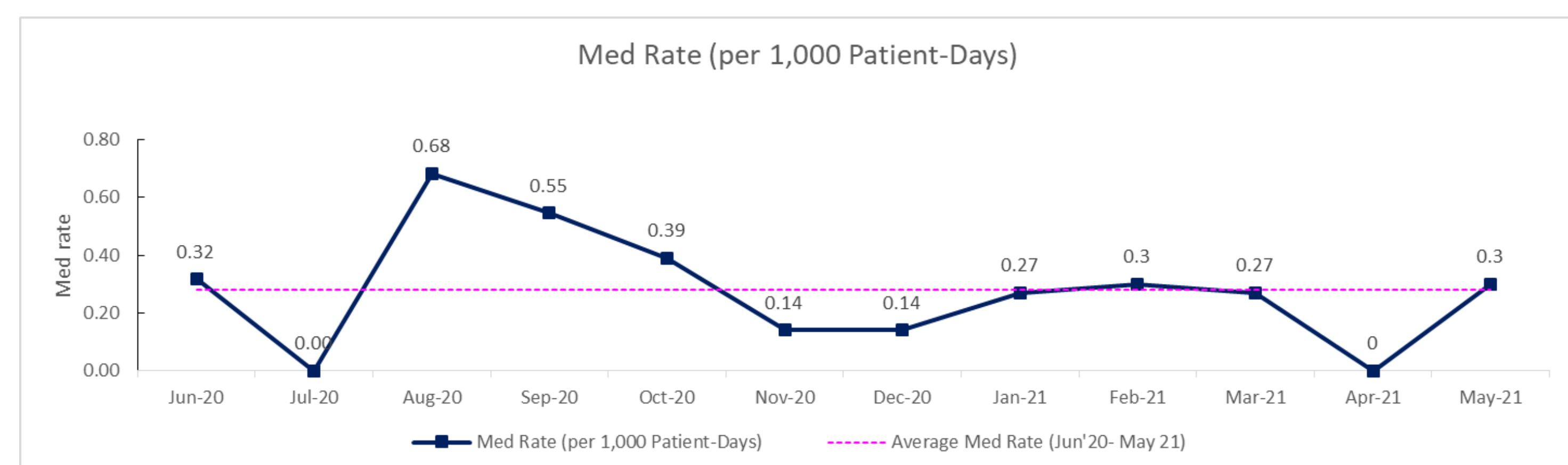


INTERVENTIONS / INITIATIVES

The medical, nursing and pharmacy team collaborated to established the following interventions,

1. In reducing omission due to medications stock not available in SKCH or SKH pharmacy, the ward pharmacy and nursing team will perform handover to account for the number of medications left in the patient's medication box. The data will be documented in counting sheet and staff could raise new medication order once the current stock depleted. Nursing team will notify medical team if items are not a SKH or SKCH available formulary. Medical team will temporarily suspend the medication order if there is no clinically impact on the patient.
2. Alps team will check expiry date of ward stock every month and expiring items are removed 3 months prior to expiry for safety purpose.
3. Wrong supply from formulary was addressed by implementing non alphabetical bin location at pharmacy. Non alphabetical bin location allow pharmacy team to arrange look alike sounds alike medication to different shelves to improve safety on picking and packing of medications. The team will continual review and reshuffle the bin location of the medications periodically.
4. Auto-perfection function in SCM was disabled to prevent system auto select lowest dose for verification which lead to downstream wrong labelling of patients own medications. Disabling the auto perfection acts as a prompt to pharmacy team to check patient's own physical item before perfection in system and labelling.
5. Nursing-in house training modules established to train nursing staff on medication management.
6. Sharing of medication incident with learning points to all staff via monthly bulletin.
7. The use of medication vest was also piloted in the ward. The number of medication incidents reduced during the test period.
8. Medication safety champions at each ward were identified and they will reinforce the correct practices to ground staff and create awareness.
9. Complicated medications scheduling in SCM is done by medical, which will then be verified by pharmacist prior to nursing administration.

RESULTS



SKCH medication rate has reduced to 0.28 per 1000 patient days (Jun 20 – May 21). The rate of 0.28 per 1000 patient days is below CH average of 0.3 per 1000 patient days

SUSTAINABILITY AND SPREAD

The interventions piloted are implemented permanently to drive medication safety at SKCH!

Medication Reconciliation by Pharmacy

- Improved safety of care because patient will not consume their own medications aside from those being supplied by the hospital which could lead to double serving

Nursing-in house modules

- Could be spread and adopted by other SingHealth Institutions. In this way, a wider topics can be covered and no replication of modules required as it can be shared across other institution via learning blackboard.

Medication Safety Champion

- Improve safety of care by sharing medication safety practices with their colleagues
- Staff felt more confident with medication administration process when they are equipped with the right knowledge