

Organisation	National University Cancer Institute, Singapore (NCIS)
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Defining the Problem and Goal

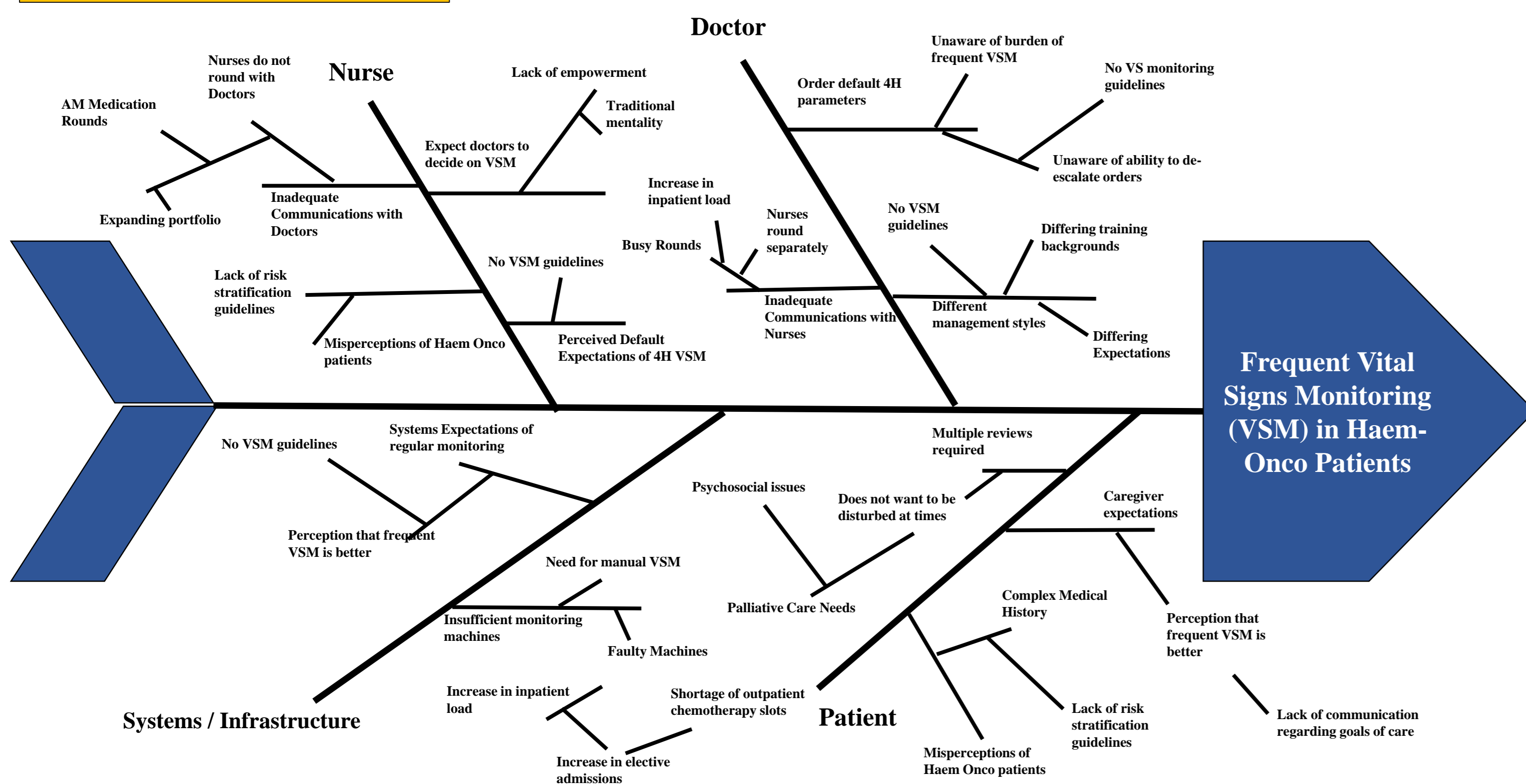
- Routine frequent vital signs monitoring (VSM) is often cited by Haematology-Oncology nurses as an area which impacts time and resources for other aspects of patient care. It is also disruptive to patients, especially those requiring palliative care.
- Published literature has shown that VSM can be de-escalated safely in Low Risk (LR) patients without adverse clinical outcome.
- Retrospective review of admissions to the Department of Haematology-Oncology at the National University Cancer Institute, Singapore (NCIS) from July-September 2016 showed 30% potentially did not require frequent VSM.
- Survey of Haematology-Oncology doctors (n=36) revealed 100% were comfortable with less frequent VSM (≤ 8 -hourly).
- We aim to reduce VSM of Low Risk Haematology-Oncology patients in NCIS safely by 50% using a Nurse-led approach.

Methodology

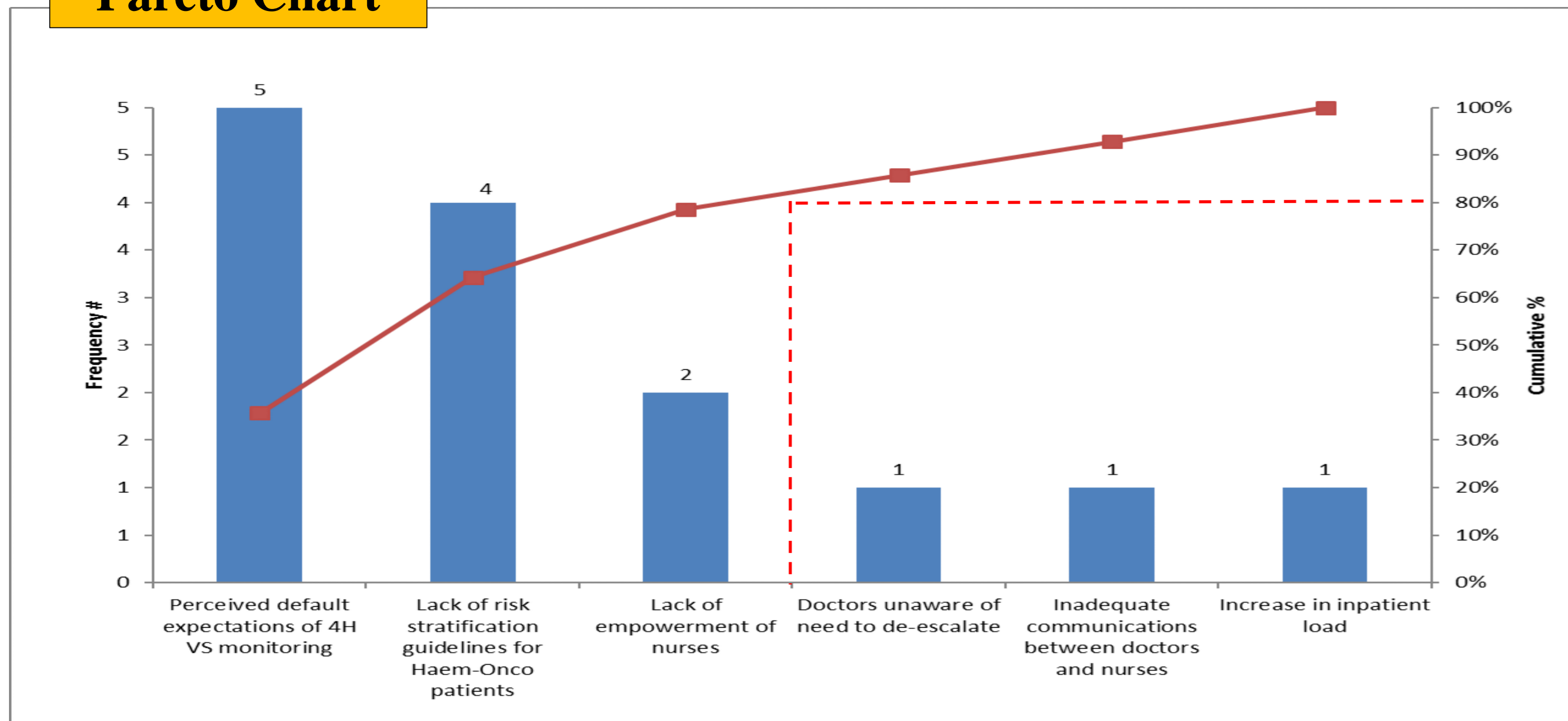
- A Quality Improvement Project was carried out in 4 Haematology-Oncology inpatient wards at NCIS from March 2017 – July 2017 (pilot phase) and October 2017 - September 2018 (maintenance phase).

Problem Analysis

Fishbone Diagram



Pareto Chart

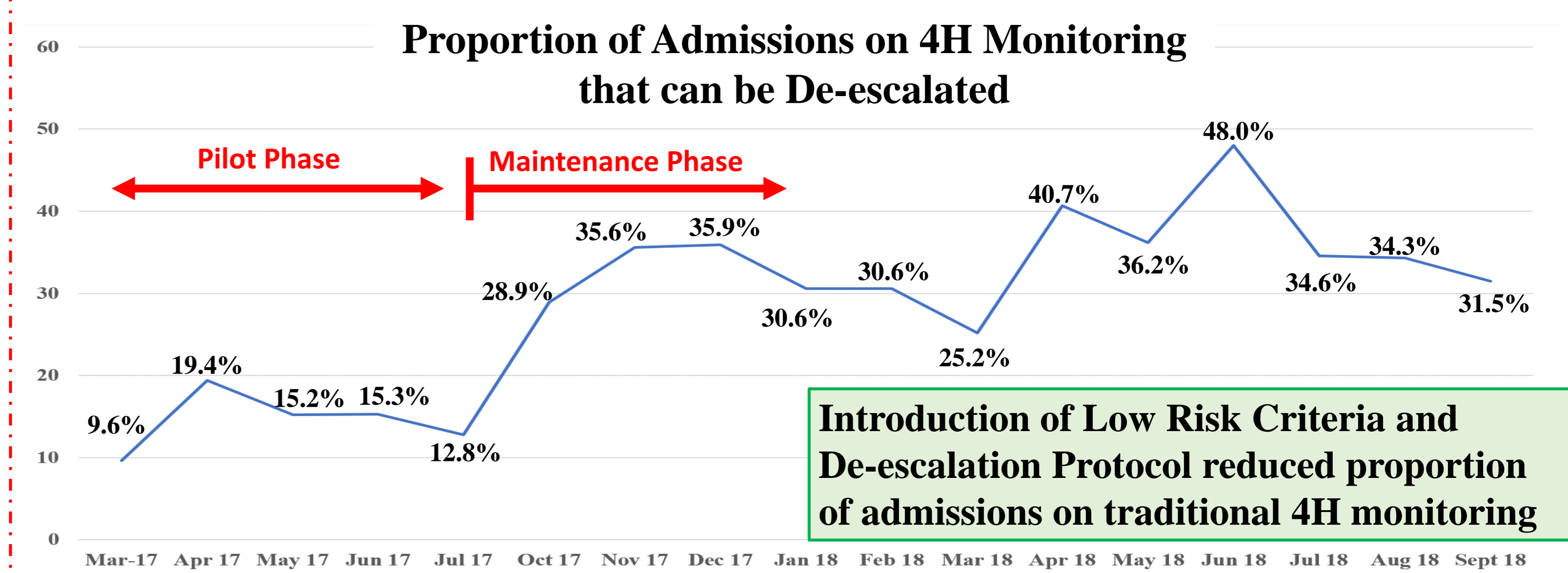


Strategy for Change

Problem	Intervention
Perceived Expectations	Consensus Criteria drawn up for Low Risk patients <ul style="list-style-type: none"> Brainstorming sessions; Survey of doctors and nurses Engaged stakeholders review of criteria
Lack of Empowerment of Nurses	Nurses engaged at Row Call / Meetings <ul style="list-style-type: none"> Senior Nurses served as role model
Lack of Guidelines for VSM	De-escalation Protocol formulated for VSM de-escalation of Low Risk patients <ul style="list-style-type: none"> Approved by ALL stakeholders Training sessions conducted for ALL ward nurses
Inadequate Communications	Reminder to Nurses / Doctors to communicate regarding VSM at daily ward rounds

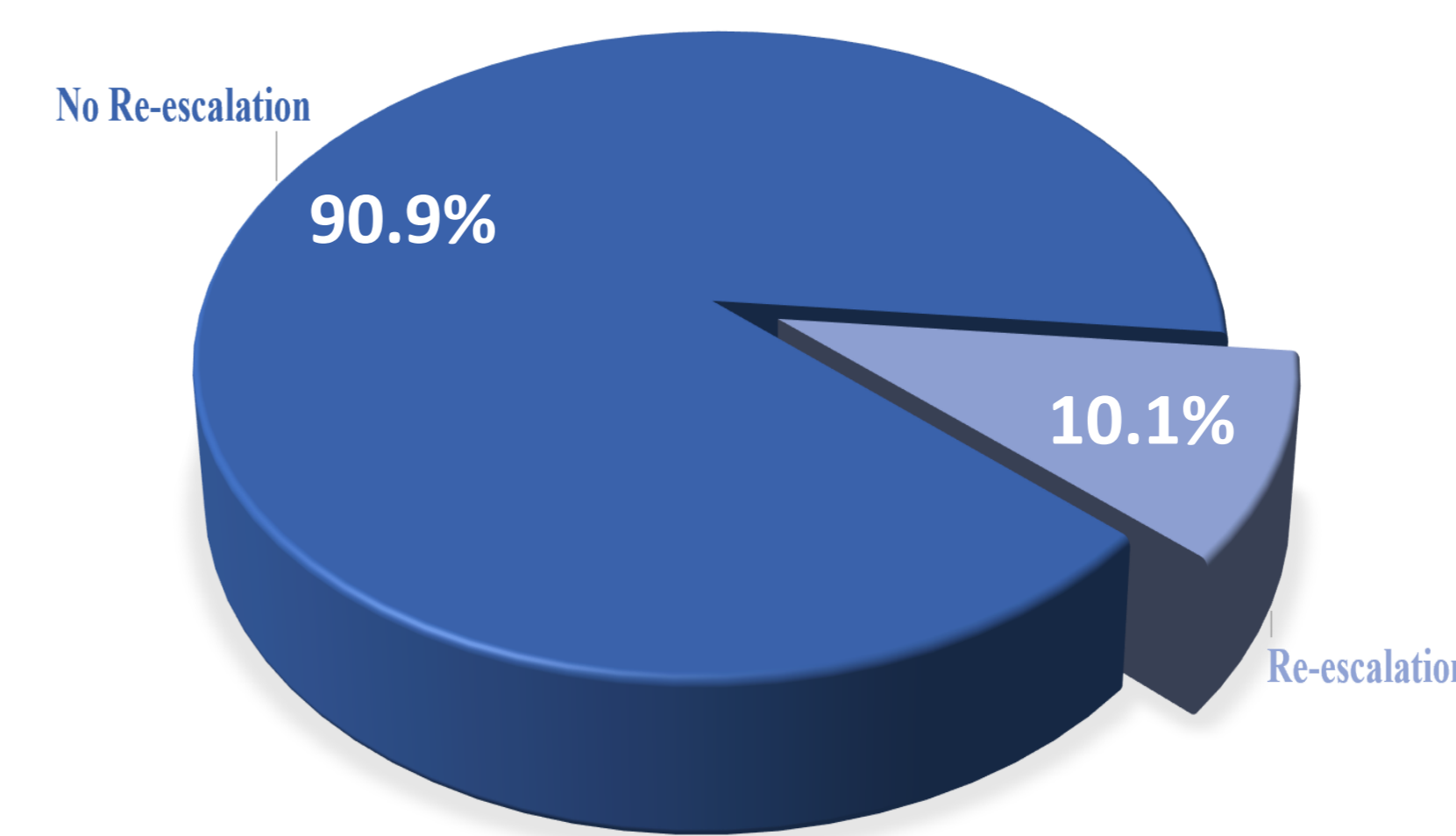
Measurement of Improvement / Effects

Successful / Safe De-escalation of Low Risk Patients



Introduction of Low Risk Criteria and De-escalation Protocol reduced proportion of admissions on traditional 4H monitoring

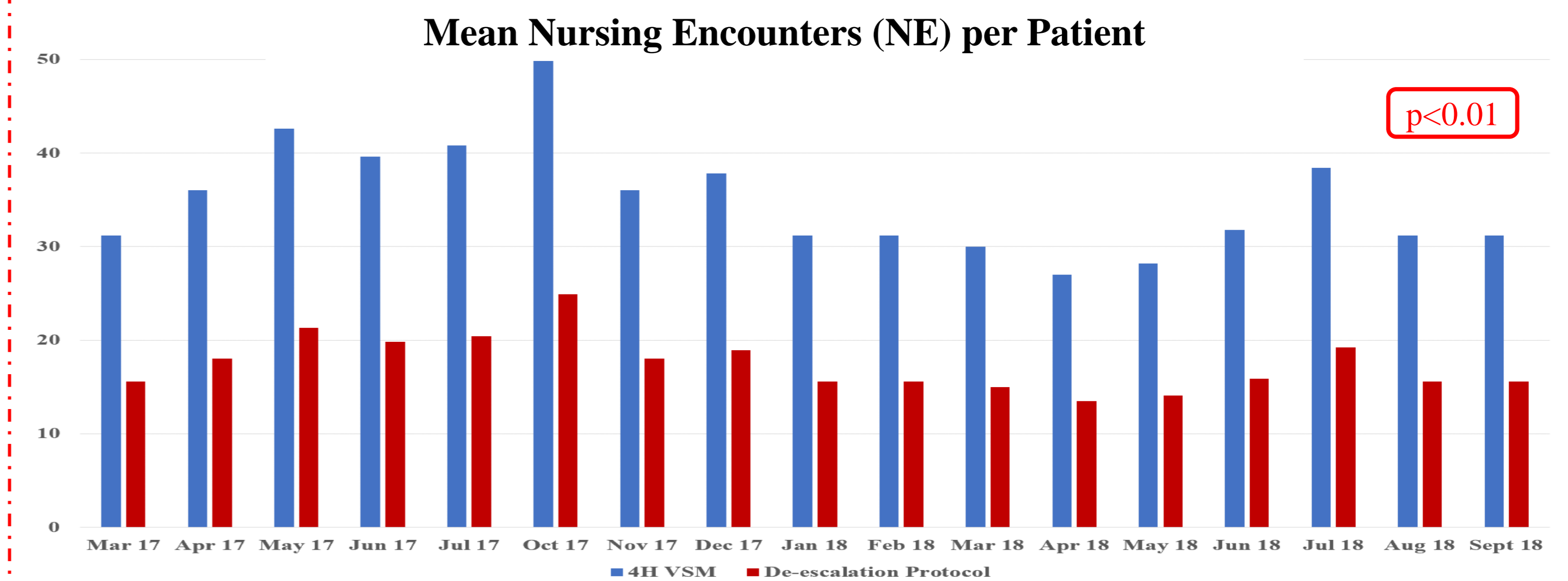
Proportion of Recruited Low-Risk Patients Requiring Re-escalation



Average of 10.1% of recruited patients required re-escalation of monitoring

- None were deemed preventable with more frequent VSM
- None resulted in unexpected death / severe deterioration
- 84.3% were initiated by nurses

50% Reduction in Measured Outcomes



Over a 17-month intervention period involving a total of 1065 LR patients, Nurse-led VSM De-escalation resulted in MEAN MONTHLY SAVINGS of:

- 948.4 Nursing Encounters (NE)
- 2731.5 NE-minutes

Time saved was used to ENHANCE other aspects of patient care:

- Patient and Family Education
- Nurse-Patient Interaction
- Patient Safety e.g. Falls Prevention
- Ward Equipment Checks, Ward Hygiene

Sustainability

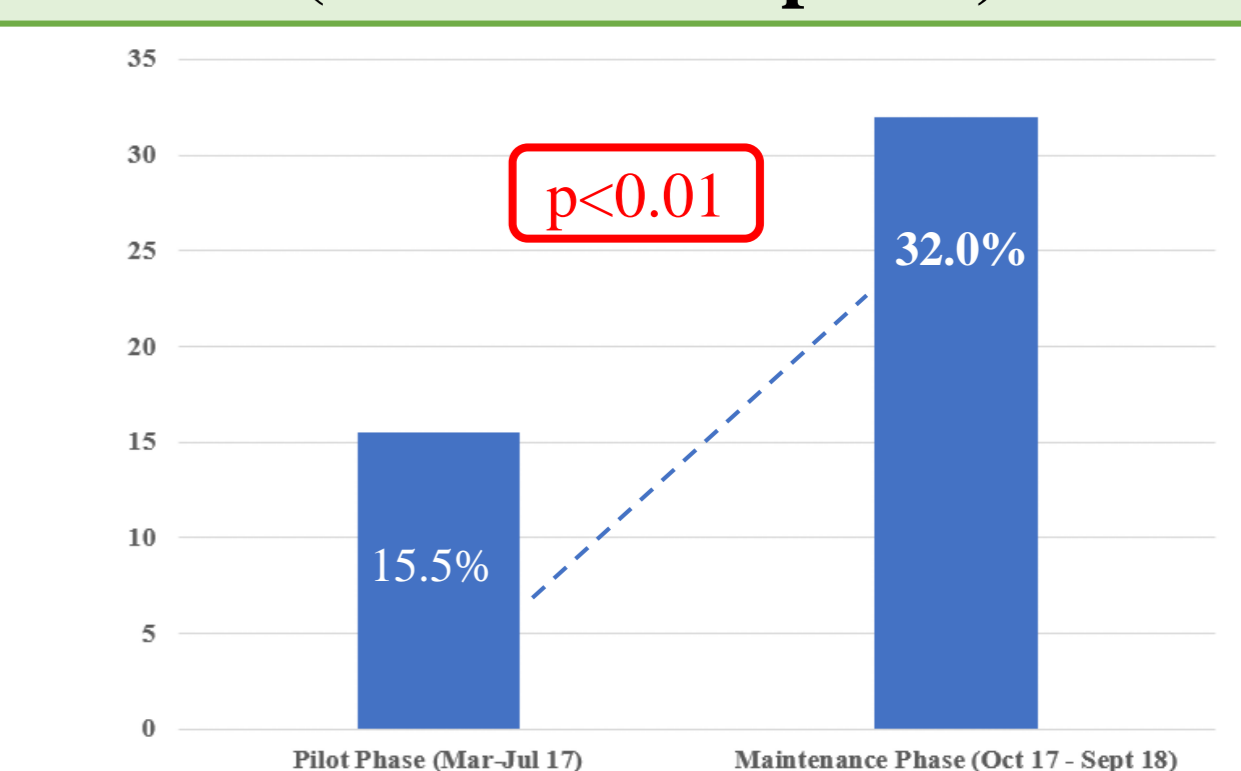
Issues during Pilot Phase

- Initial unfamiliarity with selection criteria and de-escalation protocol
- Non-uniform data capture

Rectification Measures

- Audits and one-to-one feedback by Ward Sisters
- Review of study protocol in the form of Video Tutorial during Roll Call

Recruitment of Low Risk patients increased from 15.5% (pilot phase) to 32.0% (maintenance phase)



Post-Implementation Survey of 39 Doctors & 136 Nurses

- Majority (95.9%) were supportive of continuing the initiative
- Greater empowerment of nurses led to greater confidence, positive behavioural change and greater satisfaction
- No impact was perceived by medical team on patient care

Conclusion

- Low Risk Haematology-Oncology patients can be readily identified using a Consensus Criteria approved by stakeholders
- Using a well-defined protocol, Nurse-led De-escalation of VSM in Low Risk Haematology-Oncology patients is safe, does not lead to increased incidence of adverse events, and is sustainable
- Resources saved with De-escalation can be diverted to enhance patient care