Elevating Efficiency in Planned Oncology Patient Admissions

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AIM Statement: By early June 2024, for planned hematology admissions, decrease the length of time from admission to initiation of chemotherapy treatment by at least 25%.

PROBLEM DEFINITION

Patients admitted to the C7 oncology floor experience delays averaging 1.6 days in starting chemotherapy treatment, leading to longer patient stays and increased patient and physician frustration.

ROOT CAUSE ANALYSIS

Developed a process map to determine where the delay occurred in the patient journey, from outpatient doctor visit to chemotherapy initiation

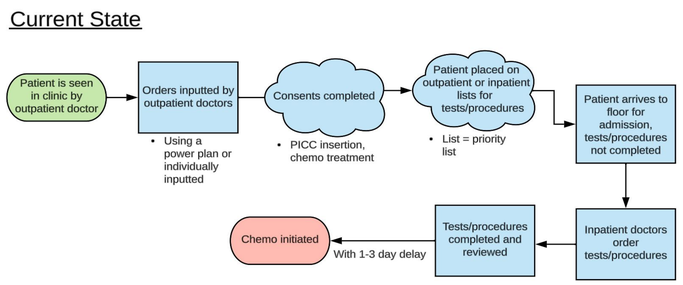


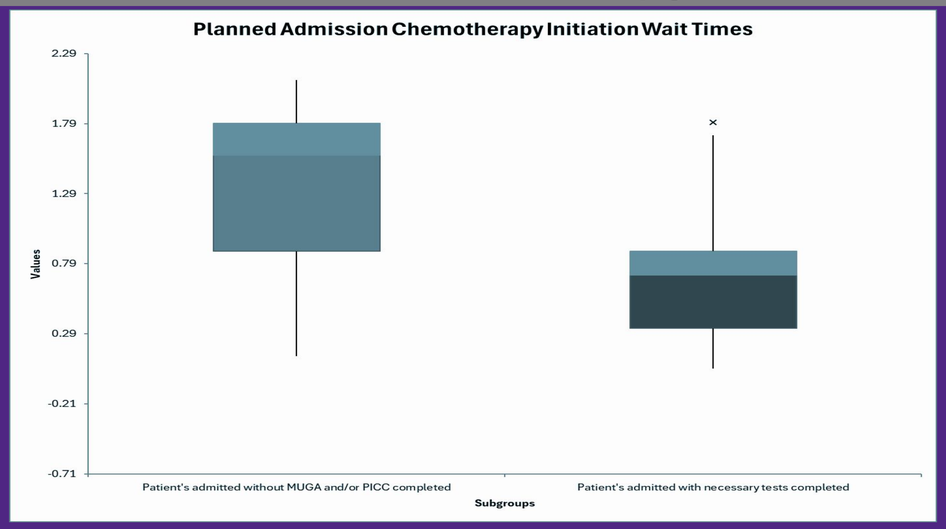
Figure 1: Process map for planned chemotherapy patients (Victoria Hospital)

Stakeholder Interviews: Interviewed VAST team, Nuclear Medicine, Nurse Practitioners, and C7 Doctors to identify potential root causes.

Concerns:

- Physicians were not placing required test orders prior to admission
- Incorrect orders were being placed, and the orders were not acted on

- PICC Line Insertions and MUGA tests were found to be the key issue upon analysis of baseline data collected from Informatics (**Figure 2)**



	Low Whisker	Q1	Q2 (Median)	Q3	High Whisker	Outliers
Admissions without MUGA and/or PICC	0.13	0.88	1.565	1.79	2.1	-
Admitted with necessary tests completed	0.04	0.33	0.71	0.88	1.7	1.8

Figure 2: Planned admission chemotherapy initiation wait times

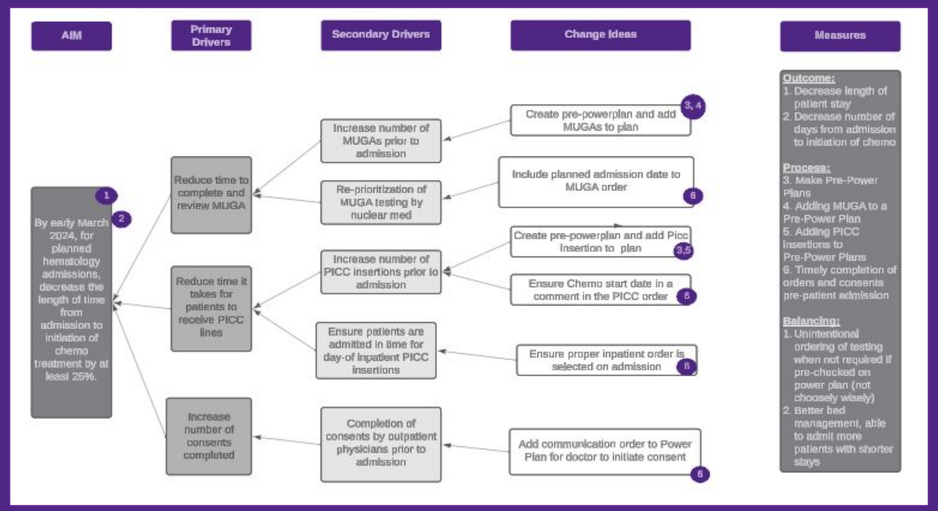


Figure 3: Driver diagram exhibiting stakeholder analysis identifying root causes

IMPLEMENTATION

Cycle 1 Plan: Create and test new healthcare pre-power plan by securing approvals, educating staff, and assessing impact via feedback and wait time data. Set to roll out within a month by Group 3 leaders at LRCP.

Anticipated challenges include successful education of physicians to ensure correct and/or consistent usage of the pre-power plans.

MEASUREMENT & RESULTS

Process measures: Adding MUGA and PICC insertions to pre-power plans

Balancing measure: Not choosing wisely. Unintentional ordering of testing when not required if pre-checked on power plan.

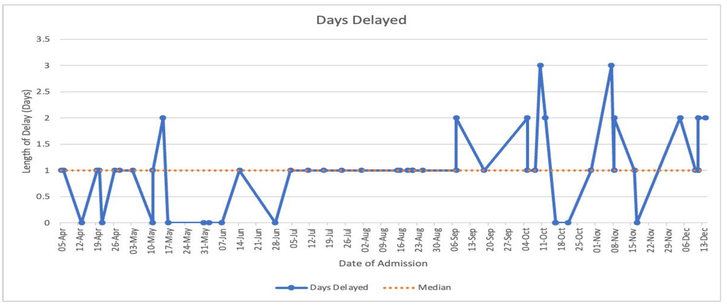


Figure 4: Run chart shows days delayed pre-implementation. Modeling shows 90 more bed days post implementation (30 more patients to be treated, and $126,000 in savings)

SUSTAINABILITY

Post implementation of pre-power plan, group 3 leaders will monitor pre-power plan usage via clinical informatics and track decrease in patient wait times via decision support pending further PDSA cycles.