

## **Project Title**

Blood Test Validity For Chemotherapy Patients

## **Project Lead and Members**

Project lead: Caroly Wong Yi Lin

Project members: Chan Mei Ying, Pong Lee Yeng, Haleeza, Dr Nesa, Dr Lim Yi Wan

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Aims**

To standardise the blood test validity to minimise patient's unnecessary visits to hospital purely for blood taking and in preparation for their chemo treatment. We also aim to improve the patient satisfaction Score and the waiting time to proceed with their treatment by reducing repeated blood taking

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

With the implementation of standard guidelines for blood validity, clarifications with medical oncologists were reduced, as the need for repeated blood taking were minimised and patients' chemotherapy treatment was not delayed. It is also better to standardise practices based on evidence as compared to subjective opinions which can vary among clinicians

**Conclusion**

See poster appended/ below

**Project Category**

Care & Process Redesign

**Keywords**

Ng Teng Fong General Hospital, Service Design, Quality Improvement, Improvement Tools, Ishikawa, Blood Test, Chemotherapy

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# BLOOD TEST VALIDITY FOR CHEMOTHERAPY PATIENTS

- ✓ SAFETY
- ✓ PRODUCTIVITY
- ✓ PATIENT EXPERIENCE
- ✓ QUALITY
- ✓ COST

CAROLY WONG YI LIN, CHAN MEI YING, PONG LEE YENG, HALEEZA, DR NESA, DR LIM YI WAN

## Define Problem/Set Aim

### Opportunity for Improvement

There is no standard guideline for patient's blood results validity especially prior to their first chemotherapy treatment in A71 Chemotherapy Unit. It has been a challenge to gauge if their blood samples should be re-obtained prior to their treatment. Between June to Dec 2018, an average of 20% (which consist of 5-8 additional visits per month) of the chemotherapy patients had to make repeated trips to hospital purely for blood taking or need to delay their treatment due to lack of recent blood test. This lack of consistent practices result in patient's unnecessary trips to hospital for blood taking; in some cases may delay their treatment therapy.

### Aim

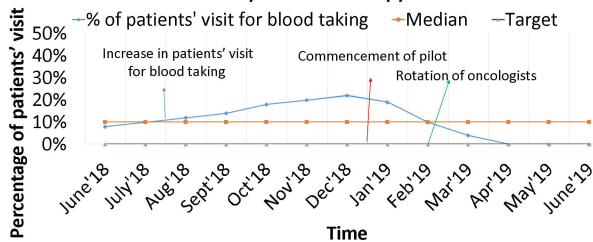
We aim to standardize the blood test validity to minimize patient's unnecessary visits to hospital purely for blood taking and in preparation for their chemo treatment.

We also aim to improve the Patient Satisfaction Score and the waiting time to proceed with their treatment by reducing repeated blood taking.

## Establish Measures

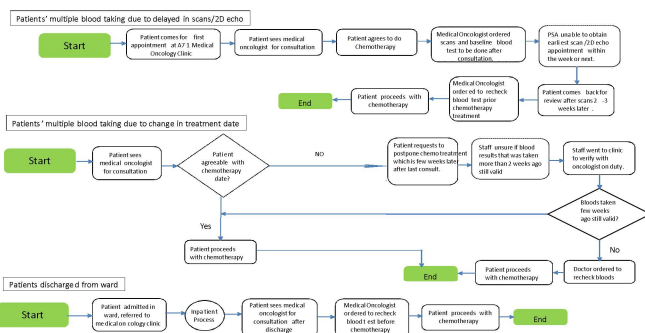
### What is your current performance?

% of Patients' visits Purely for blood taking prior to their 1st cycle chemotherapy

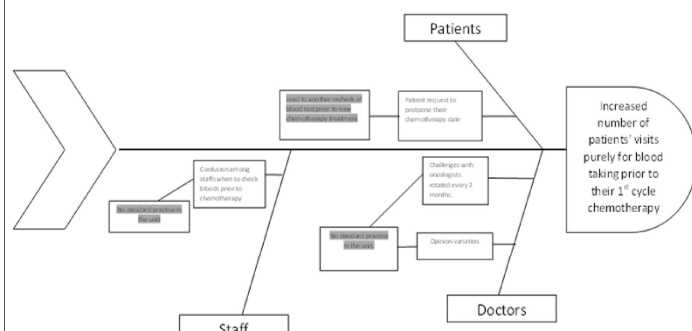


## Analyse Problem

### What is your current process?



### What are the probable root causes? Include pareto (if any)



## Select Changes

### What are the probable solutions?

The project team members did a literature search and reviewed patients' past blood records to derive on the following blood test validity period. Discussion and advice were sought with some of the oncologists to come to a consensus on a guideline for blood test validity prior to their first chemotherapy. Target groups for the guidelines include the oncologists and the chemo unit nurses.

Baseline blood tests taken before 1st Cycle Chemotherapy	
Validity Period : 14 - 21 Days	

## Test & Implement Changes

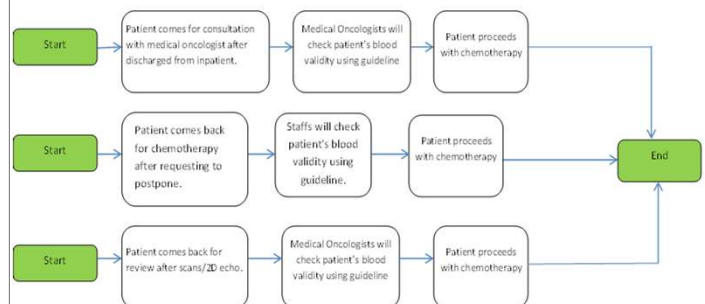
### How do we pilot the changes? What are the initial results?

1. Roll call to all staff to note implementation
2. Blood validity guidelines were distributed to each consultation rooms to be pinned on the noticeboard for all medical oncologist to take note

### Results:

- Work process in Chemotherapy unit has improved with 0% repeated blood taking. It was ran more efficiently with the reduction of movement in and out of consult rooms seeking advice from Medical Oncologist to clarify validity of blood results
- Patient has good experience with no unnecessary blood taking and can proceed with chemotherapy treatment according to plan.

### After Implementation



## Spread Changes/Learning Points

### What are the strategies to spread change after implementation?

After the implementation, we managed to reduce the rate of patients making repeated trips back to hospital purely for blood taking or delay their treatment. Despite the rotation of the Oncologists every two months, the process of achieving full success rate was not compromised with the reinforcement of the guidelines for all the Oncologists that come on board to follow.

### What are the key learnings?

- With the implementation of standard guidelines of blood validity, patients' repeated blood taking were minimized, followed by their chemotherapy treatment not delayed.
- Work process in Chemotherapy unit was ran more efficiently and smoothly with the reduction of need to clarify with medical oncologists.
- Having a standard guideline of blood validity also prove to be evidence-based practiced to standardize practices vs subjective opinion which may varied among the clinicians.