

## **Project Title**

Blood Specimen Requirement Chart & Order of Draw to Ensure Safe Draw Upon Collection of Blood Specimen

## **Project Lead and Members**

Project lead: Choy Qiyun Grace

Project members: Terry Ann

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Healthcare Family Group Involved in this Project**

Nursing

## **Applicable Specialty or Discipline**

Intensive Care Unit

## **Aims**

For ICU/HD nurses to refer to the blood specimen bedside checklist reference guide when in doubt, and also to ensure correct patient specimen being dispatched and amount of blood in the specimen tube is adequate to eliminate errors from happening and thus, promoting safe delivery of patient care.

## **Background**

See poster attached/ below

## **Methods**

See poster attached/ below

## **Results**

See poster attached/ below

## **Lessons Learnt**

The bedside checklist and reference guide ultimately aims to promote overall patient safety and provide a safe environment for the patients and healthcare providers.

## **Conclusion**

See poster attached/ below

## **Project Category**

Care & Process Redesign, Quality Improvement, Value Based Care, Safe Care

## **Keywords**

Blood Collection, Specimen Requirement

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# BLOOD SPECIMEN REQUIREMENT CHART & ORDER OF DRAW TO ENSURE SAFE DRAW UPON COLLECTION OF BLOOD SPECIMEN

- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

MEMBERS: CHOY QIYUN GRACE, TERRY ANN

## Define Problem/Set Aim

The procedure of collecting blood from patient plays a vital role in the hands of nurses. There are several incidences where blood was taken from patient, however 2 patient identifier was not checked and wrong patient sticker was pasted and send to the laboratory. This resulted in the need for another blood collection from patient to re-send the specimen.

This could post serious adverse problem if the blood results were process for the wrong patient, as potential different treatment will be rendered to the patient depending on the blood results.

Beside that, in another situation of multi-tubes blood test. It is recommended to arrange the tubes in the standard order to avoid cross-contamination of additives between tubes and to maintain sterility so that patient's blood will not get clotted and thus, have accurate results. Currently, nurses not aware of sequence of blood tube draw and also the hassle to refer to intranet.

### Aim

The ultimate aim is for ICU/HD nurses to refer to the blood specimen bedside checklist reference guide when in doubt, and also to ensure correct patient specimen being dispatched and amount of blood in the specimen tube is adequate to eliminate errors from happening and thus, promoting safe delivery of patient care.

## Establish Measures

### Blood specimen bedside checklist reference guide

**Be Safe! Use the bedside checklist**

**SAFETY ALERT**

**Specimen Requirement Chart**

**Order of Draw**

4.5 ml → 6 ml → 5 ml → 4 ml → 6 ml → 3 ml → 2 ml

PT, APTT, D-Dimer, Lupus, Anticoagulant, Protein C, Protein S, DIC Screening, Fibrinogen

Cold Agglutinin, Cryoglobulin, Red cell Auto/AlloAntibody Identification

General Chemistry Test, E.g: CK/CKMB, RP, Bone Metabolism, HIV

Ketons, Toxicity

Type & Screen, Red Cell Direct coombs Test

FBC, Malaria Parasite, ESR, Thalassemia Screening, HbA1c, ACTH, Renin

Lactate, Glucose

Invert 3-4 Times, Invert 5 Times, Invert 5 Times, Invert 8-10 Times, Invert 8-10 Times, Invert 8-10 Times, Invert 8-10 Times

**\*Please ensure correct patient's identify prior to dispatching\***

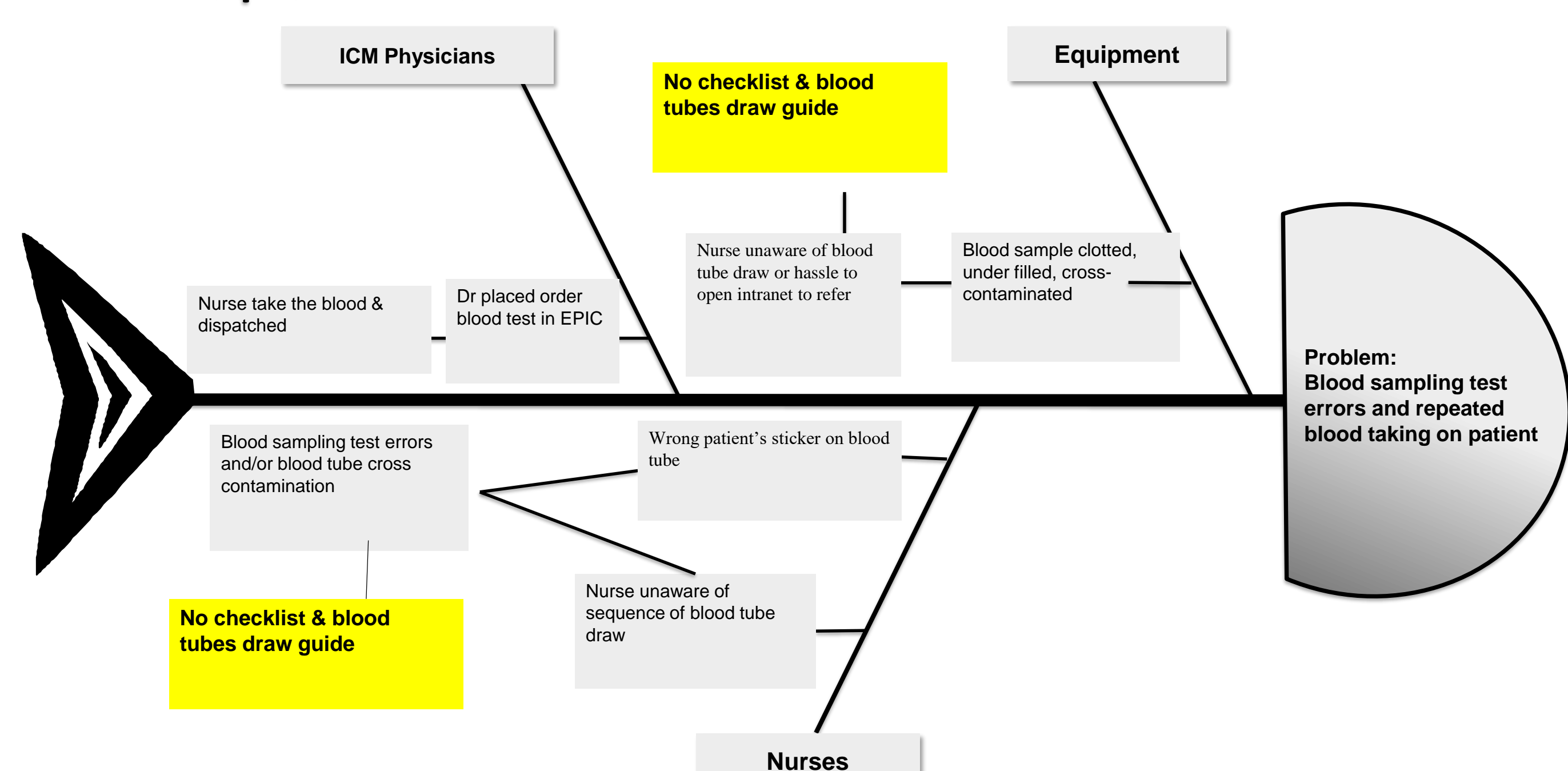
## Analyse Problem

### What is your current process?

- Once physician have ordered blood investigations in the system.
- Nurses will verify the order in Epic.
- The nurse will print the sticker out from epic followed by collectig the required blood tubes. Then, proceed with the blood collection followed by print lab sticker on Epic. OR collect the required blood tube, proceed with blood taking then print lab sticker from Epic.
- Once sticker is printed, verify patient name together with NRIC (patient able to verbalise) or with another nurse (for patient unable to verbalise name & NRIC) before dispatching blood.  
(Some of this steps was missed resulting in errors.)

- There are reference guide available in the intranet under laboratory manual to help nurses identify the standard of draw. However, there is no pictorial guide.
- Nurses need to manually go to the intranet which take up majority of their time.

### What are the probable root causes?



## Select Changes

### What are the probable solutions?

With errors occur and nurses will need to go into the intranet under laboratory manual to read the words and identify the sequence of draw as there is no pictorial guide.

Hence, a small pocket size bedside checklist & reference guide is implemented to create awareness for all nurses and to establish measures to prevent further errors from happening.

## Test & Implement Changes

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

CYCLE	PLAN	DO	STUDY	ACT
1	To ensure that correct patient blood specimen was dispatched	Good Feedback on "Be safe: use bedside checklist" as it acts as a reminder.	Review of the usage of the bedside checklist & reference guide	No errors or cross contamination of blood taking sample
2	Blood tubes 'order of draw' chart	Pictorial guide shows clear information on the sequence and requirement of draw.	Review of the usage of the bedside checklist & reference guide	No errors or cross contamination of blood taking sample

## Spread Change/Learning Points

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

The small and easily accessible checklist attached to the side pendant was place in all individual rooms in POD 2, 3 & 5 to create awareness to all ICU/HD nurses on the importance of blood collection process.

After implementation of the bedside checklist, there is zero errors of blood specimen dispatched.

### What are the key learnings?

This bedside checklist & reference guide ultimately aims to promote overall patient safety and also to conduct a safe environment for the both the patients and healthcare provider.

