MALAYSIAN PATIENT SAFETY GOALS

Nurses Roles And Responsibilities

NURSING DIVISION
MINISTRY OF HEALTH MALAYSIA
First Edition JUN 2015

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FOREWORD

BY THE DIRECTOR-GENERAL OF HEALTH

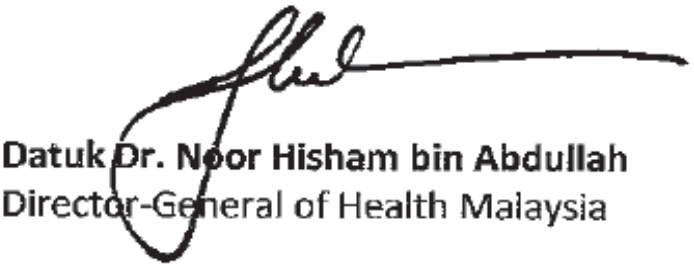
Patient safety has always been a major concern to all of us, the healthcare providers – leaders, administrators, doctors, nurses, allied health professional etc. We are directly or indirectly involved in the provision of patient care at various areas of the healthcare settings, 24 hours a day , 7 days a week and 365 days in a year. Nurses spend 24 hours a day with patients providing direct patient care. They have a huge responsibility to ensure compliance to the Malaysian Patient Safety Goals. Therefore, having sound knowledge of patient safety in the healthcare setting is of vital importance to ensure patient safety is at all times.

The publication of this book, "Malaysian Patient Safety Goals - Nurses Roles and Responsibilities" is therefore timely and of utmost importance. Having nurses with sound knowledge on patient safety, enables nurses to play an effective role in patient care. Patient safety is not merely correct practice, but it involves nurses to be vigilant to be able to identify risks and to make improvement. irrespective of whether you are nursing leaders, nursing administrator or nursing staff. Each and every nurse plays a critical role in ensuring safety of our patients and preventing adverse events despite their busy schedule.

At national level, the 13 Patient Safety Goals were developed by the Patient Safety Council of Malaysia in 2013 to improve Patient Safety issues. These goals are applicable to both public and private healthcare facilities in Malaysia. Systematic surveillance was also established. This initiative is consistent with our Ministry of Health 'Vision For Health' which mandates the development of a healthcare system that is attained through combined effort of various stakeholders.

I would like to take this opportunity to congratulate the Nursing Division on the successful publication of the first edition of “Malaysian Patient Safety Goals - Nurses Roles and Responsibilities “ to guide nurses in their practice, to prevent error and reduce risk of adverse events. The Nursing Division, has a vital role in ensuring the competence of all the nurses in the country and addressing patient safety issues in the clinical area. With increasing diversity and the move to meet the increasing challenges in the healthcare arena, this publication will serve as an excellent resource to promote patient safety and excellence in nursing practice. The Nursing Division is also entrusted to lead national effort in creating a positive image in the nursing profession.

Patient safety is everybody’s business. Let us work together with the spirit of teamwork, caring and professionalism to improve our nursing care system.



Datuk Dr. Noor Hisham bin Abdullah
Director-General of Health Malaysia

FOREWORD

BY THE DEPUTY DIRECTOR-GENERAL OF HEALTH (MEDICAL)

Today patient safety is a popular terminology or "tag line", both in the public and private healthcare organizations. It is an essential and vital component of good quality nursing care and an integral part of clinical governance.

As the front liners or the gatekeepers in healthcare delivery, nurses play an important role in preventing error or patient safety incident from happening.

This book will be useful for nurses to have a better understanding nurses on the implementation of Malaysian Patient Safety Goals.

The MOH has adopted the system approach in managing patient safety issues and internalization of safety culture. Ministry of Health has been promoting patient safety for many years and will continue to do so to ensure safety of patient at all times and also protecting them from unethical practices and harmful. Staff are kept up-to-date with the current medical advances through conference and implementation of CME, CPD and other quality initiatives. In the effort to ensure risk management initiatives are implemented at all times in the clinical area. As patients become more educated and empowered in their demand for health care, there must be effective communication between all parties involved in patient care to ensure correct practice according to clinical guidelines and standard procedures.

In nursing, safe patient care has started during the era of Florence Nightingale, who advocated that “nurses should put their patients in the best condition possible for nature to act upon”.

Nurses need to continuously upgrade their knowledge and skills as patient safety cannot be compromised. The unique roles and responsibilities of the nurses in patient safety must be clearly understood and implemented.

Finally, I would like to congratulate the Nursing Division Of Ministry of Health and those who are involved in producing this guideline for their effort.

I also would like to thank all the nurses for their hard work in ensuring safe patient care.

Thank you.

Datuk Dr. Jeyaindran Tan Sri Dr. Sinnadurai
Deputy Director-General of Health (Medical)

MESSAGE

BY THE DIRECTOR OF NURSING, MALAYSIA

Patient Safety is of high priority to all professionals. Nursing personnel often being the front line of defense in the healthcare industry, providing major proportion of direct patient care, are committed to quality and safe care.

The Malaysian Patient Safety Goals (MPSGs) has become the benchmark for the Nursing Division in its effort to improve the safety of healthcare delivery by nurses. The Nursing Division Malaysia has shown its commitment to patient safety with the integration of the 13 Patient Safety Goals by the nurses in their provision of nursing care.

The fact that nursing practice is often a shared care, makes nurses committed to all of the Patient Safety Goals. The Nursing Division has been monitoring some of the goals by conducting periodic audits at the healthcare facilities. The findings and report have been discussed in several platforms followed by focus improvement to further upgrade the services and also to overcome shortfall in quality. The standards set also have been reviewed periodically. The nursing staff are trained continuously in these fields to ensure competency in service delivery. Nurses contribution toward the achievement of the Patient Safety Goals cannot be ignored.

This guideline was develop to help nurses in knowing their roles and responsibilities for each of the Patient Safety Goals. Each chapter explains the necessary steps for nurses to adhere in ensuring safe care and preventing patient safety incident.

I would like to thank all the nurses who are involve in producing this guidelines and Dr. Nor 'Aishah for editing this guideline.

TSelvin A/P Subramaniam
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ACKNOWLEDGEMENT

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INTRODUCTION

Developing a safety culture in a healthcare organization needs strong leadership planning and monitoring. All healthcare providers, patients and carers, can help to improve the safety of patients.

The Roles and Responsibilities clearly explain the functions of the nurses in the implementation of 13 Malaysian Patient Safety Goals. In some goals their roles are complex while in others their roles are quite straight forward. Nurses, who take the lead in the successful implementation and achievement of these patient safety goals, need to be competent by staying current with their knowledge on patient safety and skillful on all nursing procedures.

As quoted by the Deputy Director General Of Health medical) “Patient Safety is an integral part of Clinical Governance, as such, all practitioners of clinical governance will automatically be advocates of patient safety”

As front liners, nurses play an important role in ensuring patienty safety. At times, they were blamed because they are right at the end of “swiss cheese model”, although the incident happened because of “ system failure”

BACKGROUND

The Patient Safety Council of Malaysia is committed to establishing a safe Malaysian healthcare system. Hence, the Malaysian Patient Safety Goals were developed by the Patient Safety Council of Malaysia to encourage and challenge our healthcare organizations to improve some of the most significant, challenging and enduring patient safety issues in Malaysia. These goals are applicable to both public and private healthcare facilities in Malaysia.

The Malaysian Patient Safety Goals will allow systematic monitoring and evaluation of patient safety status in Malaysia. The first version of these goals was prepared by Dr. PAA Mohamed Nazir bin Abdul Rahman and included 15 goals and 59 KPIs. Subsequently, Dr. Nazir and Dr. Nor'Aishah, through a series of consultative meetings with the key stakeholders, reduced them to a more implementable 13 safety goals and 19KPIs.

The goals, strategies, key performance indicators and targets are based on the WHO's as well as international goals for patient safety as well as national issues. They were developed as a result of discussions with various stakeholders including the MSQH, University Hospitals, the Malaysian Medical Association, other associations, hospital directors and clinicians as well as discussions with Sir Liam Donaldson (Advisor to WHO Director-General on strategic issues in patient safety and former Principal Advisor to National Health Services, United Kingdom).

Adopted from:
Malaysian Patient Safety Goals
Guidelines on Implementation & Surveillance
First Edition 2013

OBJECTIVES

i To educate the nurses on the 13 Malaysian Patient Safety Goals and its corresponding 19 Patient Safety Key Performance Indicator (KPI)

ii To identify the nurses roles and responsibilities for each of the Patient Safety Goals

iii To standardize the Nursing Action Plan for each of the 13 Patient Safety Goals.

iv To prevent patient safety incidents or sentinel events

v To motivate and facilitate nurses in implementing safe nursing practice.

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 1	**To implement Clinical Governance**
Rationale	**Clinical Governance** is the systematic framework of accountability for the health care sector that integrates quality, safety and risk management. It is also known as corporate responsibility for safe care and encompasses executive management being accountable for patient safety. The objectives of clinical governance are: • To ensure that there is a systematic framework for the healthcare sector to support and drive the provision of safe health care • To drive core programs for quality, safety and risk management • To ensure that the appropriate accountability, leadership and oversight arrangements are in place to institutionalize and internalize quality and safety
Strategies & Implementation	Set up organizational structure/ accountability arrangements. Six (6) essential underpinning requirements need to be implemented for Clinical Governance to function in an organization and they are: 1. Communication and consultation with key stakeholders 2. Clear accountability arrangements 3. Adequate capacity and accountability 4. Standardised policies, procedures, protocols and guidelines 5. Monitoring and review arrangements 6. Assurance arrangements
KPI No. 1	Implementation of Clinical Governance
Definition of Terms	**Clinical governance** is a framework of accountability through which organizations are accountable for continually improving the quality of their health services and safe-guarding high standards of care by creating an environment in which excellence in clinical care will flourish. It is also defined as corporate accountability for clinical performance.
Indicator	Implementation of Clinical Governance (i.e. good clinical governance will be manifested as compliance to the patient safety goals)
Reference	Information on Clinical Governance is available in "Achieving Excellence In Clinical Governance", produced by the Patient Safety Council of Malaysia & Ministry of Health Malaysia (*http://patientsafety.moh.gov.my/*)

PATIENT SAFETY GOAL NO. 1
IMPLEMENTATION OF CLINICAL GOVERNANCE

KPI NO. 1: IMPLEMENTATION OF CLINICAL GOVERNANCE

INTRODUCTION

Clinical governance is the foundation to good quality care and patient safety.
It is the 1st Malaysian Patient Safety Goals.
CG was first introduced to improved the quality and safety of healthcare in a systematic, integrated and organized manner.
It involves each and everyone in the healthcare organization

DEFINITION

" Clinical governance is a **system** through which(NHS) organisations are **accountable** for **continuously improving** the **quality** of their services and **safeguarding high standards of care** by creating an **environment** in which **excellence in clinical care** will flourish." (Scally and Donaldson 1998, NHS UK)

OBJECTIVES

To be part of the organisation which is accountable to improve quality and safety in systematic, integrated and organized manner

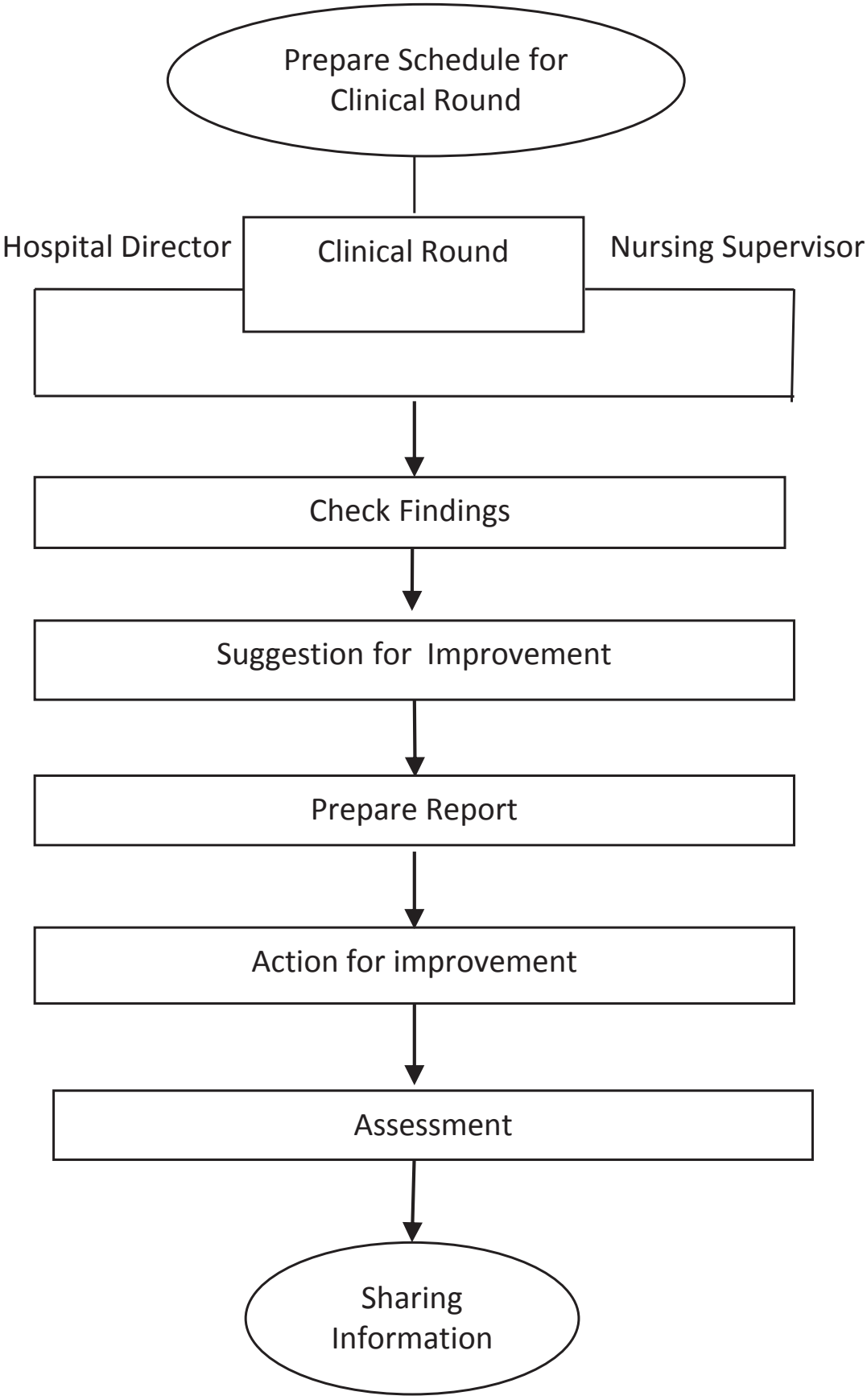
ROLES AND RESPONSIBILITIES OF NURSES IN CLINICAL GOVERNANCE

- Education, training and continuous professional development
- Risk management
- Clinical audit
- Evidence- based care and effectiveness
- Patient and carer experience and involvement
- Staffing and staff management

COMPARISON OF ORGANISATION WITH AND WITHOUT CLINICAL GOVERNANCE

WITHOUT CLINICAL GOVERNANCE	WITH CLINICAL GOVERNANCE
No quality and safety culture	Quality and safety culture are important
Blaming culture	Learning culture
Secrecy culture	Transparency culture
No standard procedures, protocol, guideline	Standard procedures,protocol,guideline are available & used
No checking system	Checking/ audit system implemented
Performance not monitored	Performance monitored
Less emphasis on patient exoerience	Patient experience is essential

FLOW CHART
CLINICAL ROUND



TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 2	**To implement the WHO's 1st Global Patient Safety Challenge:"Clean Care is Safer Care"**
Rationale	Infection control is acknowledged universally as a key patient safety issue as nosocomial (healthcare –associated) infections are a major cause of morbidity and mortality in healthcare facilities world-wide. The 1st Global Patient Safety Challenge was initiated by the WHO in late 2004 and mandates signatory countries to work diligently towards the reduction of healthcare-associated infections and their consequences. Malaysia became one of the earliest signatories in the world, in early 2005, to the promotion and implementation of hand hygiene in its health care facilities.
Strategies & Implementation	Hand Hygiene Campaigns and Training Programmes are regularly conducted.
KPI No. 2	Hand Hygiene Compliance Rate
Definitions	**Hand hygiene**: Any action of hygienic hand antisepsis in order to reduce transient microbial flora (generally performed either by hand rubbing with an alcohol-based formulation or hand washing with plain or antimicrobial soap and water) **The opportunity**: is an accounting unit for the action; it determines the need to perform hand hygiene action, whether the reason (the indication that leads to the action) be single or multiple
Inclusion Criteria	Any health care worker involved in direct or indirect patient care
Numerator (N)	Number of hand hygiene actions (wash or rub) performed
Denominator (D)	Number of opportunities observed
Formula	(N/D) x 100
Target	≥75% compliance rate at each audit (quarterly audit)
Data collection at facility level	Quarterly (every 3 months)
Remarks	5 indications have been adopted for the assessment of hand hygiene performance 'My 5 Moments for Hand Hygiene': • Before patient contact • Before aseptic task • After body fluid exposure risk • After patient contact • After contact with patient's surroundings

PATIENT SAFETY GOAL NO.2
TO IMPLEMENT THE WHO'S 1st GLOBAL PATIENT SAFETY CHALLENGE : "CLEAN CARE IS SAFER CARE"

KPI NO.2 HAND HYGIENE COMPLIANCE RATE

INTRODUCTION

Infection control plays an important role in reducing Hospital Aquired Infection (HAI), as it is one of the main cause of morbidity and mortality in healthcare facilities.

In order to reduce healthcare associated infection (HAI) Ministry of Health Malaysia has implemented hand hygiene programe.

The principles of 5 moments hand hygiene is strictly adhered in healthcare facilities where the nurses and doctors remind each other.

OBJECTIVE

To achieve ≥ 75% compliance on hand hygiene practices.

ROLES AND RESPONSIBILITIES OF NURSES

1.Education and Training

1.1 Orientation

- Hospital level - by Infection Control Nurses
  i. All new staff
  ii. All trained nurses in Hospital
- Department and ward level - by Ward Link Nurse
  i. All new staffs in the ward
  ii. Student nurse who practice in the ward
  iii. All in patient during admission or transfer in

1.2 CME / CNE

- Tentative with the schedule set by Nursing unit
- Tentative with the schedule set by Department

1.3 Demonstration - by Infection Control Nurse & Ward Link Nurse who have been trained according to WHO 5 Moments Hand Hygiene

2. Observation And Implementation By Matron/ Ward Sister/ Link Nurse/ Infection Control Nurse

- Ensure hand rubs at strategic area eg: cardiac table, rounds trolley, procedure trolley, medication trolley etc.
- Ensure 5 moments of hand hygiene were practiced by doctor and nurses during rounds and procedures.
- Ensure the nurses and doctors remind each other regarding 5 moments hand hygiene.

3. Audit- By Infection Control Nurse and Ward Link Nurse using Annex 34 Form

4. Report - By Infection Control Nurse

Monthy - Hospital Director
- Head of Department
- Head Matron / Area Matron

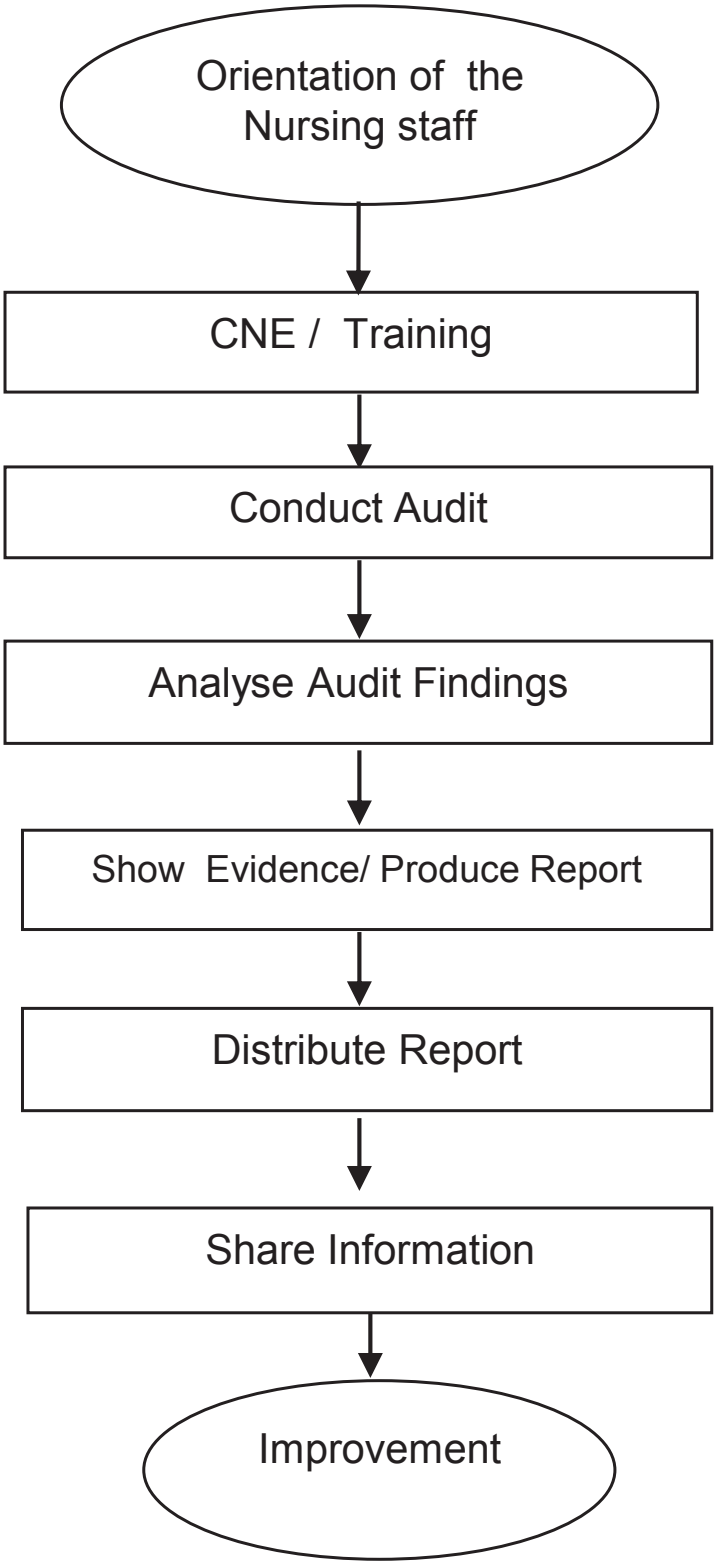
3 Monthly – State Health Office Ministry Of Health

5. Dissemination of Information / Report

Audit report is discussed during the Nursing Technical Meetings.

Discipline or wards which did not meet the target need to think of suitable strategies for improvement.

FLOW CHART
AUDIT HAND HYGIENE



Hand Hygiene Audit Form

World Health Organization | Patient Safety — A World Alliance for Safer Health Care | SAVE LIVES Clean Your Hands

Observation Form

Facility:		**Period Number*:**		**Session Number*:**	
Service:		**Date:** (dd/mm/yy)	/ /	**Observer:** (initials)	
Ward:		**Start/End time:** (hh:mm)	: / :	**Page N°:**	
Department:		**Session duration:** (mm)		**City**:**	
Country:**					

Prof.cat		Prof.cat		Prof.cat		Prof.cat	
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* To be completed by the data manager.
** **Optional**, to be used if appropriate, according to the local needs and regulations.

WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.
Revised August 2009

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 3	**To implement the WHO's 2nd Global Patient Safety Challenge: "Safe Surgery Saves Lives"**
Rationale	The regular use of Surgical Checklists can increase adherence to safety standards and prevent errors during surgery. It can also reduce the rate of complications and mortality associated with surgical care.
Strategies & Implementation	As per the WHO "Safe Surgery Saves Lives" implementation guidelines. Each healthcare facility is required to establish the relevant committees and to either adopt the WHO check-list or develop their own local check-list to suit their local conditions. The related WHO videos on this topic can be downloaded from the WHO website.
KPI No. 3	Number Of "Wrong Surgeries" Performed
Target	Zero (0) cases
KPI No. 4	Number Of Cases Of "Unintended Retained Foreign Body"
Target	Zero (0) cases
Definitions of Terms	• **Wrong surgeries performed:** surgery which involved wrong-procedure, wrong-person or wrong-site surgery. Risks can be reduced with compliance to Surgical Safety Peri-operative Checklist, pre-operative verification process, surgical site marking and conducting a time-out. • **Unintended retained foreign body in patients:** surgical instruments, gauze, abdominal packs or any unintended objects that were left in the patients' body peri-operatively. • **Surgical Safety Checklist**: This is a check list developed by World Health Organization to ensure surgical safety. This check list was adapted, modified and standardized for the used in MOH hospitals and known as the 'Peri-operative Check List'.
Inclusion Criteria	Surgery involving general or regional anesthesia.
Data collection at facility level	Data (numbers of cases) to be collected on a monthly basis.

PATIENT SAFETY GOAL N0 3: "SAFE SURGERY SAVES LIVES"

KPI 3: NUMBER OF "WRONG SURGERIES PERFORMED"
KPI 4: NUMBER OF "CASES OF UNINTENDED RETAINED FOREIGN BODY"

INTRODUCTION

In MOH, Safe Surgery Saves Lives program has been implemented since 2009. The theme is "Safer Surgery Through Better Communication ." It has been adopted from WHO programme and modified to suit Malaysian scenario.

The team will effectively communicate and exchange critical patient information to ensure safe conduct of the surgery.

OBJECTIVES

- To improve and to promote surgical safety
- To minimize surgical adverse events such as wrong surgery and unintended retained foreign body.

ROLES AND RESPONSIBILITIES OF NURSES

Education and training

- Orientation Program to new staff
- CNE Hospital / Department and Unit level
- Mentor-mentee Program to all new staff or staff that just join the team.
- The use of related forms such as PERI-OPERATIVE CHECK LIST (SSSL_POCL_09 Version 1.0).
- National Operating Room Nursing Audit (NORNA) to be practiced in order to upgrade knowledge and be competent nurses in the Operating Room.
- All staff nurses in OT should be credentialed and privileged.

NURSE INVOLVED

1. Ward Nurses
2. Operating Room Nurses

ROLES AND RESPONSIBILITIES OF WARD STAFF:

Ward Nurses should abide and fill up appropriate Pre Operative Check List which include:

1. Patient profile
2. Pre - Transfer Check List

The checking mechanism should be done properly and the Safe Surgery Check List should be completed.
This checking can prevent error from happening.
The safe surgery check list consist of 4 parts .

1. Peri-Operative Check List
2. Operating team checklist
3. Swab and instrument count form
4. Pre discharge check

ROLES AND RESPONSIBILITIES OF OPERATING ROOM NURSE :

1.Reception Area/ airlock

During receiving patients, all Operating Room Nurses need to ensure that the Pre- Operative Check List form has been filled in completely and correctly by the ward nurses

ROLES AND RESPONSIBILITIES OF OPERATING ROOM NURSE :

2. In Operating Room before surgery is performed

- Circulating Nurse need to ensure that the information on operating room form in POCL page 1 is completed
- Circulating Nurse must make sure that the patient has initials the consent before Induction of Anesthesia by Anesthetist.
- Circulating Nurse must make sure that the check list must be filled in by the Anesthetist, Scrub Nurse and Surgeons before the procedure.
- Scrub Nurse and circulating nurse must calculate number of sponges, instruments and sharps, and record the calculation in Swab and Instrument Count Form.
- Accurate calculation of swab and equipment.
- Intra abdominal pads used during surgery will also be written on the white board.
- Nurses must keep all the wrapper of gauzes, abdominal packs, sutures and others for counter check to prevent miscalculation.
- Amount of gauze, abdominal pack or swab received per pack should be consistent with the numbers documented on the list. If not consistent (less or more) discard the pack.
- Nurses must use all radio opaque gauzes in all types of operations.
- Nurses must use all green gauze for the anesthetic procedures.
- Time out must be done by Circulating Nurses and ensure that :
- Ensure that necessary information has been written on the white board by the doctor correctly and completely

- Surgeon, Anesthetist, Scrub Nurse and GA Nurse introduce themselves by name and designation.
- Confirm :
  - Patients name is correct
  - Types of Surgical procedure is correct
  - Site and side of the operation are correct
  - Antibiotic is given
  - Blood availability

ROLES AND RESPONSIBILITIES DURING INTRA OPERATIVE

•Intra operative communication is being done – important information and concern communicated among team members.

•Scrub and Circulating Nurse performed Swabs, Instruments and Sharps Counts (Initial Count, 2nd Count and Final Count.)

ROLES AND RESPONSIBILITIES BEFORE SURGERY END

- Scrub and Circulating Nurses performed sign out

To ensure:
- Final name of procedure
- Final count of instrument, sponges and sharps are correct

(This is an important aspect to prevent incident of unintended retained foreign body).

KPI 4: Number of "Cases Of Unintended Retained Foreign Body"

- Circulating Nurse must keep all the wrappers such as gauzes, abdominal sutures and others to prevent miscalculation.
- Circulating Nurse must remove all incorrect amount of gauzes or abdominal packs from Operating Room immediately.
- Radio opaque gauzes should be used for all types of Surgery.
- Anesthetic Nurse should use only green gauze for anesthesia procedure
- Tampons usage are discourage, but if used it must be recorded.
- Document all faulty instruments immediately
- Take instruction from Surgeon and Anesthetist during reversal of patient.
- Circulating Nurse needs to ensure that Surgeon initial the Swab & Instrument Count form.
- Anesthetic Nurse should assist and hand over patient to Recovery Nurse
- Recovery Nurse hands over the right patient to Ward Nurse according to the details on Pre Discharge Check-list.
- Recovery and Ward Nurse should write their names, initials, date, time and , stamp on the Pre Discharge check-list form.

PERI-OPERATIVE CHECK LIST

PRE-OPERATIVE CHECK LIST

PATIENT PROFILE

(To be filled by Ward Staff)

Name : ..... I.C. no. : .....

Age : ..... Sex : ..... Race : ..... Reg. no. : .....

Unit : ..... Ward : ..... Weight : .....

Diagnosis : .....

Operation : .....

Checked by (Ward Staff) : ..... Date : ..... Contact person & HP No. : .....

PRE-TRANSFER CHECK

(Is done by the Ward Nurse before sending patient to OT and at Reception Area in OT by the OT Reception Nurse)

		Ward	OT	Remarks
1.	Patient's Name ☐ Identity Tag ☐	☐	☐	
2.	Consent for ☐ Surgery ☐ Anaesthesia ☐ Transfusion	☐	☐	
3.	Check **side** of operation ☐ **LEFT** ☐ **RIGHT** ☐ **NA**	☐	☐	
4.	Site (location) of operation marked? ☐ **YES** ☐ **NO** ☐ **NA**	☐	☐	
5.	Last meal : Date ..... Time	☐	☐	
6.	Check for dentures, jewellery, contact lenses etc:	☐	☐	
7.	Premedication (write drug given)	☐	☐	
8.	Blood availability (write what is available)	☐	☐	
9.	Case notes ☐ Old notes ☐ X-rays ☐	☐	☐	
10.	B/P : ..... Pulse rate :	☐	☐	
		☐	☐	

Handed over by (Ward Nurse) : .....

Received by (OT Nurse) : .....

INFORMATION ON OPERATING ROOM / SURGEON / TIME OF SURGERY

(Written in OR by Circulating Nurse)

Operating room no : .....

Anaesthetist : .....

Surgeons : .....

Time start : ..... Time complete : .....

OPERATING TEAM CHECKLIST

OPERATING TEAM CHECKLIST

BEFORE INDUCTION OF ANAESTHESIA

SIGN IN

- ☐ **Checked patient's**
  - Identity
  - Site
  - Procedure
  - Consent
- **Site marked** ☐ Yes ☐ No ☐ NA
- ☐ **Checked GA machine**
- ☐ **Pulse oximeter on patient and functioning**
- **Checked patient's :**

  Allergy?
  ☐ No ☐ Yes

  Airway / Aspiration risk?
  ☐ No ☐ Yes

  Risk of > 500ml blood loss (adult)
  (>7 ml/kg in children)?
  ☐ No ☐ Yes

  Adequate IV access?
  ☐ No ☐ Yes

Anticipated critical events

- ☐ **Surgeon reviews :** Any special steps, estimated duration, possible excessive blood loss?
- ☐ **Anaesthesia team reviews :** Any patient–specific concerns?
- ☐ **Nursing team reviews :** Instrument sterility confirmed, implants / prosthesis available / critical equipment available and functioning?

BEFORE SKIN INCISION (OR BEFORE INDUCTION OF ANAESTHESIA)

TIME OUT

- ☐ **"White board" written**
- ☐ **Team members have introduced themselves by name and role**
- ☐ **Surgeon, anaesthesia professional and nurse have verbally confirmed**
  - Patient
  - Site
  - Procedure
  - Consent

Has antibiotic prophylaxis been given?
☐ Yes ☐ No ☐ Not applicable

Is essential imaging displayed?
☐ Not applicable ☐ Yes

DURING PROCEDURE

INTRA-OPERATIVE COMMUNICATION

- ☐ **Check-in**
- ☐ **Periodic updates**
- ☐ **Shout-out**
- ☐ **Pre-closure disclosure**

BEFORE PATIENT LEAVES OPERATING ROOM

SIGN OUT

Nurse verbally confirms with the team :

- ☐ **The final name of the procedure** (With proper spelling)
- ☐ **Final count of instrument, sponges and needles is correct**
- ☐ **How specimens are labelled** (Including patient's name)
- ☐ **Whether there are any equipment problems to be addressed** (Note in swab count form - incidents / equipment failure section)
- ☐ **Any special instructions from surgeon or anaesthesia professional during recovery and management of patient**
- ☐ **Inform the relatives**

Checklist co-ordinator : .....
(Name)

SWAB & INSTRUMENT COUNT FORM

SETS & INSTRUMENT

Basic set :

1. .....
2. .....
3. .....
4. .....

Supplementary :

.....

.....

.....

.....

Items	Initial count	Additional	Extra count	Additional	2nd count	Additional	Final count
Gauze							
Abdominal pack							
Blade							
Atraumatic needle							
Loose needle							
Diathermy cleaner							

Operation(s) done : .....

SPECIMENS SENT :	INCIDENTS / EQUIPMENT FAILURE :
1. ..... 2. ..... 3. ..... 4. ..... 5.	

1st Scrub Nurse :	*Signature* : .....
2nd Scrub Nurse :	*Signature* : .....
Circulating Nurse :	*Signature* : .....

PRE-DISCHARGE CHECK

(Is done by the Ward Nurse with the Recovery Nurse before the patient leaves the OT)

	Checked	Remarks
1. Patient's name ☐ Identity tag ☐	☐	
2. Consciousness level: ☐ Alert ☐ Drowsy ☐ Intubated	☐	
3. Inform vital signs & pain score	☐	
4. Check operative site / dressing	☐	
5. Check drains, tubes and urinary catheter	☐	
6. Check IV lines and infusions	☐	
7. Blood used and unused	☐	
8. Specimens	☐	
9. Case notes ☐ Old notes ☐ X-rays ☐ Operative notes ☐ GA form ☐	☐	
10. Check post-operative pain relief order	☐	
11.	☐	
12.	☐	
13.	☐	
14.	☐	
15.	☐	
16.	☐	

OT Nurse : ..... *Ward Nurse* : .....
(Name) *(Name)*

Date : ..... *Time* : .....

"Safer Surgery Through Better Communication"

Patient Safety Initiative

Quality in Medical Care Section
Medical Development Division
Ministry of Health Malaysia

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 4	**To implement the WHO's 3rd Global Patient Safety Challenges- "Tackling Antimicrobial Resistance"**
Rationale	Antimicrobial resistance poses a growing threat to the treatment and control of infections.
Strategies & Implementation	1. The Malaysian National Antibiotic Guidelines are implemented. 2. National and State Campaign on Containment of Antimicrobial Resistance 3. Antibiotic Stewardship Programme
KPI No. 5	Incidence Rate Of MRSA Infection
Numerator (N)	Number of patients with MRSA infection in the hospital
Denominator (D)	Total number of hospital admissions
Formula	(N/D) x 100
Target	≤0.4%
KPI No. 6	Incidence Rate Of ESBL- *Klebsiella pneumonia* Infection
Numerator (N)	Number of patients with ESBL- *Klebsiella pneumoniae* infection in the hospital
Denominator (D)	Total number of hospital admissions
Formula	(N/D) x 100
Target	≤0.3%
KPI No. 7	Incidence Rate Of ESBL- *E.coli* Infection
Numerator (N)	Number of patients with ESBL- *E.coli* infection in the hospital
Denominator (D)	Total number of hospital admissions
Formula	(N/D) x 100
Target	≤0.2%
Definition of Terms	**Case definitions:** MDRO (Multi-Drug Resistant Organisms) case definition must fulfill ALL of the following criteria: 1)Isolation of an MDRO from any body sites 2)The patient must be admitted to the ward 3)The case must be "Newly Identified" **"Newly Identified" include:** I.MDRO identified for the first time during current hospital admission II.Cases that have been identified at your site but acquired "new infection" (infection with organism having different antibiogram or defined as new infection by the attending clinician) **Population under surveillance is all in-patients - Exclusion:** 1)Cases from Emergency department, clinic or other outpatient services 2)Cases previously identified at other acute care facilities/hospitals 3)Cases re-admitted with same alert organisms within one year 4)Cases with insufficient information on healthcare exposure 5)Cases from screening culture 6)Coloniser
Data collection at facility level	Monthly
Reference	Alert Organism Surveillance Manual, Ministry Of Health 2012

PATIENT SAFETY GOAL NO.4 - TO IMPLEMENT THE WHO'S 3RD GLOBAL PATIENT SAFETY CHALLENGES - "TACKLING ANTIMICROBIAL RESISTANCE"

KPI 5: INCIDENCE RATE OF MRSA INFECTION
KPI 6: INCIDENCE RATE OF ESBL-KLEBSIELLA PNEUMONIA INFECTION
KPI 7: INCIDENCE RATE OF ESBL- E- COLI INFECTION

INTRODUCTION

Antibiotic resistance (bacteria are resistant to the antibiotic) spread globally and has dramatically threaten the effectiveness of modern drugs used to treat diseases. Continuous and effective surveillance can detect early outbreak so that immediate action can be taken.

OBJECTIVE:

1. To reduce morbidity and mortality from infection
2. To optimize antimicrobial therapy by promoting judicious use of antimicrobial.

ROLES AND RESPONSIBILITIES OF NURSE

1. Education and training - by Infection control nurse, link nurse to tighten infection control practices.

ROLES AND RESPONSIBILITIES OF NURSE

2. When the lab calls or when the results are traced, the nurse must ensure the following :

- Inform the doctor
- Document accurately and completely
- Inform infection control nurse
- Practice contact precaution

3. Action by infection control nurse :

- Receive laboratory result
- Identify case and patient location
- Do ward rounds
- Verification from a doctor to determine the case of infection or colonizer
- Practice contact precaution

4. Documentation and Reporting every month to :
   - Hospital Director
   - Head of Department
   - Chief Matron / Area Matron
   - Department of State Health
   - Ministry of Health Malaysia

ALERT ORGANISM SURVEILLANCE FORM

ALERT ORGANISM SURVEILLANCE FORM
MINISTRY OF HEALTH MALAYSIA
MDRO/KKM/2012/1

HOSPITAL: _____ DATE: _____

A. DEMOGRAPHIC DETAILS:

1. Name: _____
2. MRN: _____ 3. IC/ Passport No: _____
4. Date of Admission: _____
5. Ward on Admission: _____
6. Diagnosis on Admission: _____
7. Previous Encounter to Health Facility/ long Term Nursing Care: ☐ No ☐ Yes

If yes to (7), specify:
Name of Health Facility/ Long Term Nursing Care: _____
Date of Discharge: _____

B. POSITIVE CULTURE:

1. Diagnosis on Specimen Taken: _____ 2. Date of Positive Report: _____
3. Date of Specimen Taken: _____ 4. Specimen Type: _____
5. Location (Ward) During Specimen Collection: _____

C. ORGANISM ISOLATED:

1. MRSA ☐ 2. ESBL *Klebsiella pneumoniae* ☐
3. ESBL *Escherichia coli* ☐ 4. MDR *Acinetobacter baumannii* ☐
5. Carbapenem resistant *Enterobacteriaceae* ☐

ALERT ORGANISM SURVEILLANCE FORM

D. ISOLATE STATUS:

1. Infection ☐
2. Colonization ☐ [Proceed to (F)]
3. Contaminant ☐ [Omit Subsequent Questions]

E. TYPE OF INFECTION:

1. Blood stream infection [Primary infection] ☐
2. Surgical site infection ☐
3. Urinary tract infection ☐
4. Ventilator acquired pneumonia ☐
5. Hospital acquired pneumonia (non-VAP) ☐
6. Clinical Sepsis ☐
7. OTHERS , specify ☐ _____

F. CULTURE POSITIVE STATUS

1. Health Care-Associated, Own Facility ☐
2. Health Care-Associated, other MOH Facility ☐
3. Health Care-Associated, non MOH Facility ☐
4. Not Health Care Associated ☐

G. **ANTIBIOTIC (s) EXPOSURE WITHIN LAST 3 MONTHS

1. Third Generation Cephalosporin ☐
2. Carbapenem ☐
3. Quinolone ☐

** (√) where appropriate

Reported by

Name:

Designation:

Date:

Verified by

Name:

Designation:

Date:

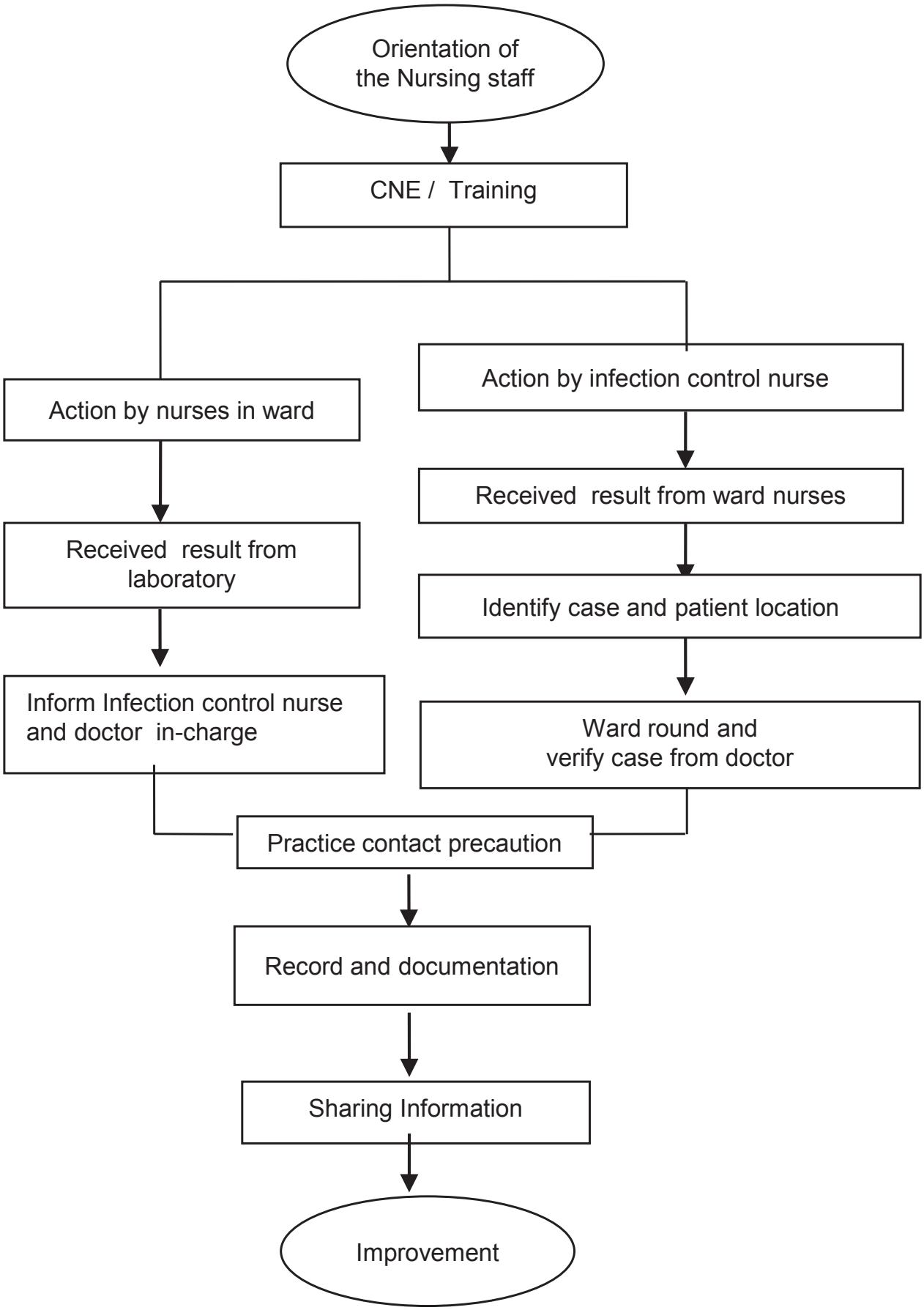
LINE LISTING FORM

MONTH..... YEAR.....

No	Name	IC/ Passport	SD No.	Specimen No	DOA	Ward On Adm	Diagnosis On Admission	Previous Encounter	Date Of Discharge	Diagnosis On Specimen Taken	Date Of Report	Date Of Specimen	Type Of Specimen	Ward	Organism Isolated	Isolate Status	Type Of Infection	HCAI Status

LINE LISTING FORM

FLOW CHART
CONTROL OF INFECTION



TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 5	**To improve the accuracy of patient identification**
Rationale	Patient identification is essential step in ensuring that the correct treatment is being given to the correct patient.
Strategies & implementation	To implement the use of at least two identifiers for a patient at point of providing care, treatment or health services.
KPI No. 8	Compliance Rate For "At Least 2 Identifiers Implemented" (refer page 41)
Definition of Terms	• **Patient identifier**: person-specific information, not the medium on which that information resides • **The opportunity**: is an accounting unit for the action; it determines the need to perform or observe process of patient identification at point of providing care, treatment or health services **"Acceptable method of Identification"**: Patient's name, patient's tag, registration number (RN), NRIC and date of birth **"Unacceptable method of Identification"**: Patient's room number or patient's bed number
Examples of processes /procedures requiring patient identification	• upon admission or transfer/ transport to another hospital or other care setting • administration of all medicines • X- ray or imaging procedures • Surgical intervention or procedures • Blood transfusion or blood products • Collecting of patient's bodily fluid samples • Confirmation of death
Numerator (N)	Number of process whereby at least 2 identifiers are being used
Denominator (D)	Number of opportunities observed
Formula	(N/D) x 100
Target	100% compliance rate at each audit
Data collection at facility level	6 monthly

G0AL 5 - TO IMPROVE THE ACCURACY OF PATIENT IDENTIFICATION

KPI 8 : COMPLIANCE RATE FOR AT LEAST 2 IDENTIFIERS IMPLEMENTED

INTRODUCTION:

Patient identification is an essential step to ensure that the correct treatment is being given to the correct patient.

Nurses must use at least two identifiers for a patient at point of providing care, treatment or healthcare services as follows:

- Name (full name includes surname)
- Identification card number
- Registration number
- Passport number
- Date of birth
- Wrist band/ Identification tag

OBJECTIVE

To ensure correct patient receive right treatment or right procedure.

ROLES AND RESPONSIBILITIES OF NURSES

On Admission

1. Once the patient is admitted, prepare patients printed wristband that states her/his name, identification number or registration number.
2. Put the wristband on patient's wrist (before that check that the wristband belong to the right patient). Ask patient full name using identification card. If the patient is unable to tell their name (unconscious patient, babies, children, mentally disable or patient with dysphasia) ask the caregiver or relatives or check any available identification.
3. Replace immediately previous patients name on the bed.
4. Ensure correct patient by using 2 identifiers. Ask patients names, RN or IC number.
5. Check with the patient's previous health record.
6. Use a translator if necessary.
7. The inability to identify patient accurately by using methods given, must be documented properly in the Patient's Record (BHT)

DO NOT state their name first and then ask to confirm or deny by yes/no response.

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No 6	**To ensure the safety of transfusion of blood and blood products**
Rationale	The need to ensure the provision of universal access to safe, quality and efficacious blood and blood products for transfusion, their safe and appropriate use and also ensuring blood donor and patient safety are key elements of a safe and high quality transfusion programme
Strategies & Implementation	1. To ensure that the use of blood and blood products adhere to the National Transfusion Guidelines 2. A local hemo-vigilance programme is developed
Definitions	**Transfusion error**: Wrong pack of blood or its product for the intended patient is given **"Near miss"**: transfusion error that almost occurs but was prevented/ intervened resulting in no harm
KPI No. 9	Number of Transfusion Errors ("Actual")
Target	Zero (0) cases
KPI No. 10	Number of Transfusion Errors ("Near Misses")
Target	To be determined later pending national data analysis and trending
Data Collection at Facility Level	Monthly

SAFETY GOALS NO.6 - TO ENSURE THE SAFETY OF TRANSFUSION OF BLOOD AND BLOOD PRODUCTS.

KPI 9 – NUMBER OF TRANSFUSION ERRORS (" ACTUAL").
KPI 10 – NUMBER OF TRANSFUSION ERRORS ("NEAR MISSES").

INTRODUCTION

Blood transfusion if transfused correctly can save life and improve health. However, there are risks associated with blood transfusion. Human error is the highest factor leading to the complications that can be serious and life threatening associated with the blood transfusion.
Nurses responsibilities are to ensure and comply to proper practice according to protocol guideline to prevent transfusion error.

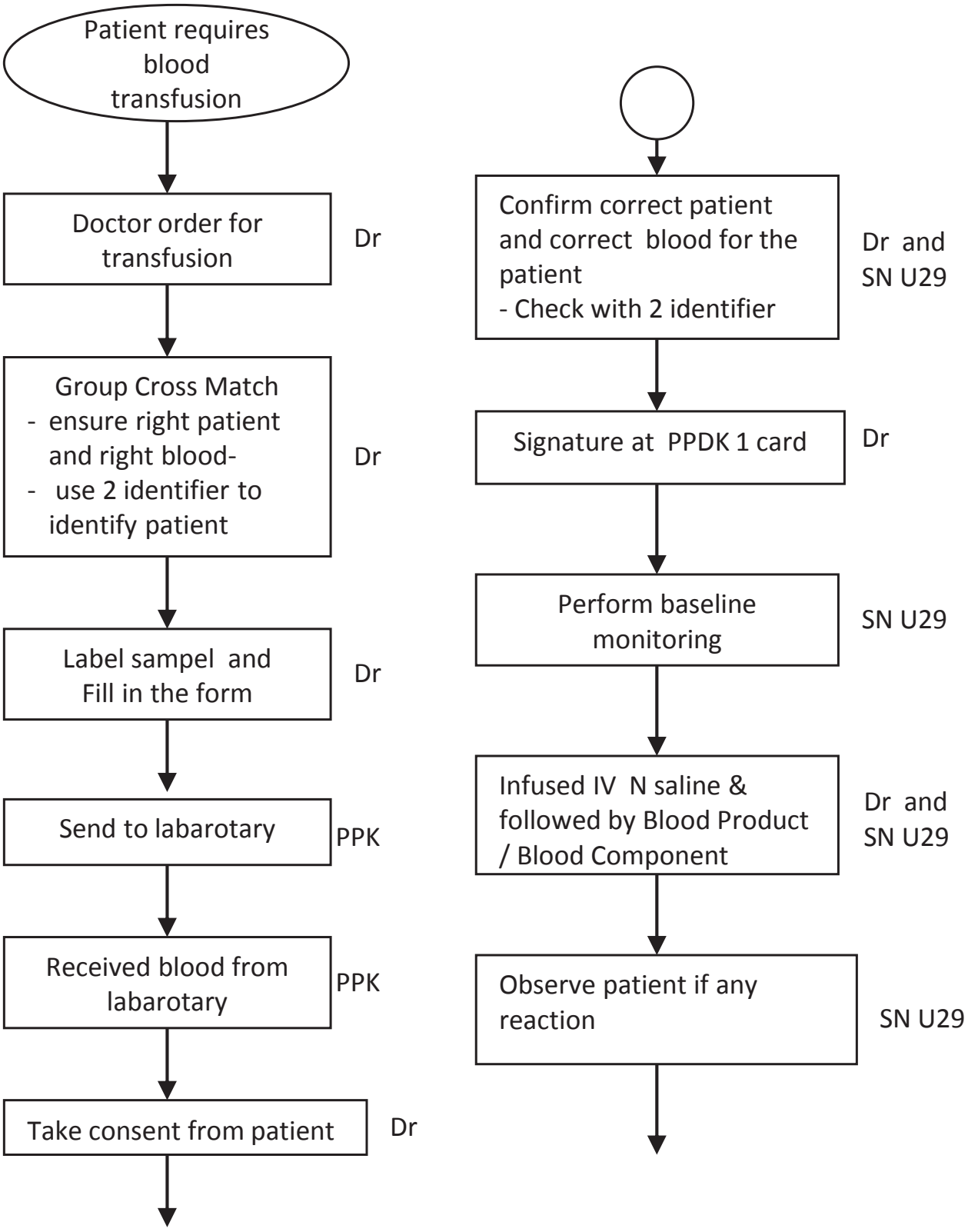
OBJECTIVE

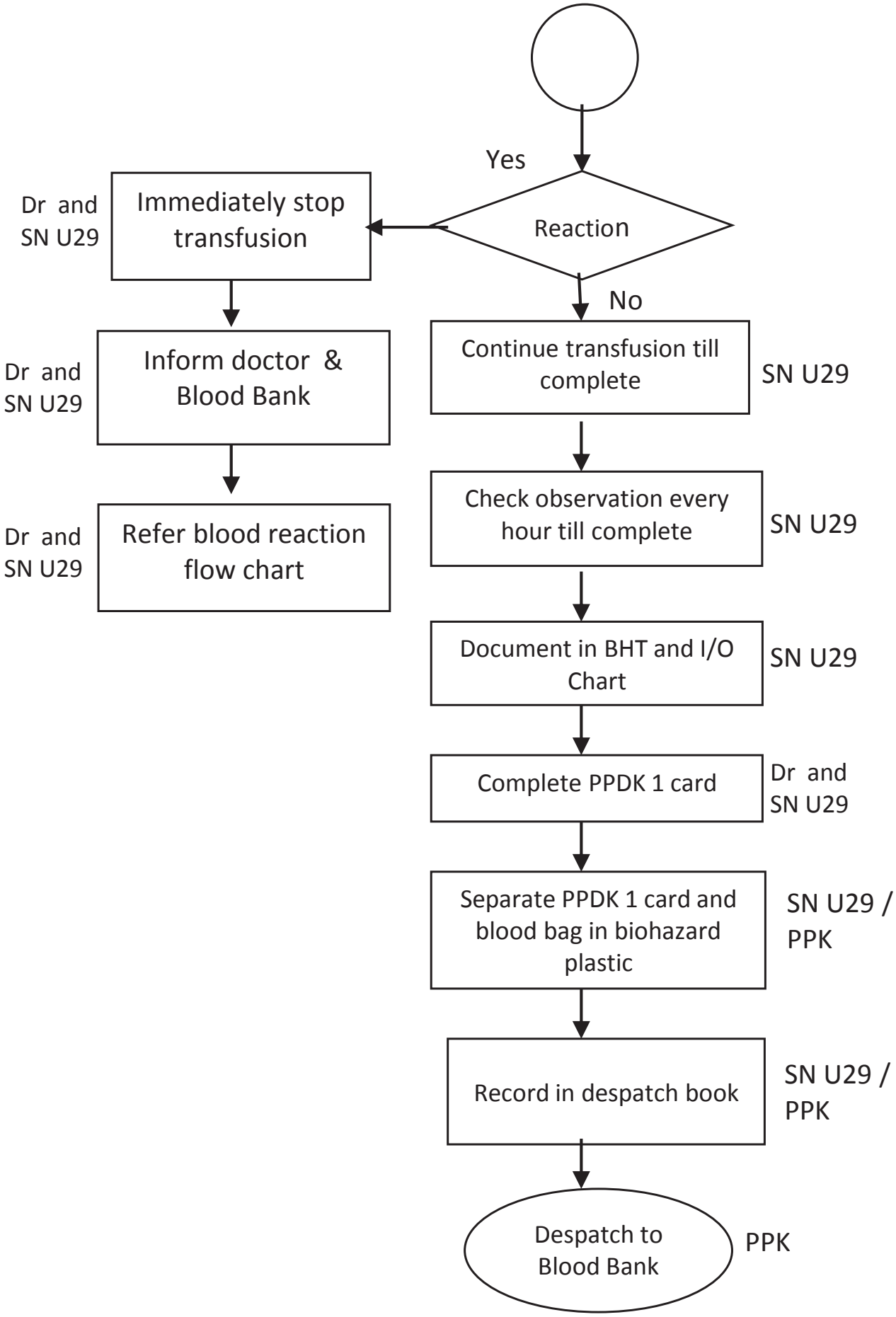
1. To ensure blood transfusion / blood component is safely given to patient.
2. To prevent transfusion error
3. To ensure reactions related to blood / blood component transfusion are detected, reported and action taken immediately.
4. To ensure documentation is done accurately and completely to the relevant records (eg: patient's case notes, observation chart, intake- output chart).

ROLES AND RESPONSIBILITIES OF NURSES

1. Health education and continuous training given to staff :
   - Continuous Nursing Education (CNE)
   - Orientation and mentoring program
   - Bedside teaching
   - National Nursing Audit according to KKM schedule.
2. Ensure blood samples are taken from the correct patient by the doctor.
3. Ensure Group & Cross Match form and specimen bottle are correctly labeled by the doctor and sample taken at the patient's bedside.
4. Ensure that blood collection slip and blood component is correctly checked to avoid error.
5. Ensure consent is taken and initial by doctor, patient or patient's relative and witnessed by the nurse in charge.
6. Ensure blood and blood component and checklist form are checked and completed by the doctor and the nurse in-charge before the blood / blood component is given to the patient.
7. Ensure blood transfusion procedure follows the Standard Of Procedure (SOP) e.g.:
   - Vital sign for baseline
   - Branula functioning well
   - Infuse IV Normal saline before blood transfusion.
8. Identify the correct patient with 2 identifier (Name, Registration Number, Identification Number) before blood transfusion .
9. Adhere to National Transfusion Guidelines
10. Adhere to the transfusion checklist
11. Notify all incidents.
12. Become part of team member to do Incident Reporting and conduct RCA.

FLOW CHART
BLOOD TRANSFUSION




Yes
Reaction
No
Dr and SN U29
Immediately stop transfusion
Dr and SN U29
Inform doctor & Blood Bank
Dr and SN U29
Refer blood reaction flow chart
Continue transfusion till complete
SN U29
Check observation every hour till complete
SN U29
Document in BHT and I/O Chart
SN U29
Complete PPDK 1 card
Dr and SN U29
Separate PPDK 1 card and blood bag in biohazard plastic
SN U29 / PPK
Record in despatch book
SN U29 / PPK
Despatch to Blood Bank
PPK

CONSENT FORM FOR BLOOD OR BLOOD COMPONENT TRANSFUSION

Date:

Patient's Name : Age:

Identity Card No: Sex:

Address:

Attending Medical Practitioner: Dr.

Identity Card No.:

I, the above-named/parent/guardian/spouse/next of kin of the above-named*, have been informed of the need for a blood transfusion of the patient. The attending medical practitioner has explained to me the risk and benefits involved in the transfusion as well as answering
all my inquiries satisfactorily. I understand that despite testing and screening on the blood/blood components for HIV, Hepatitis B, Hepatitis C and Syphilis according to established standard, there are still risks of developing the disease.I also understand that unavoidable complications of transfusion may also occur.

I fully understood the above and hereby agree to the blood/blood component transfusion.

……..

Signature of the patient/ Signature of Attending
Parent/guardian/spouse/next of kin* Medical Practitioner

Name of parent/guardian/spouse/next of kin**
:

Identity Card No. of the above
:

I was present while the above matter was explained to the patient/ parent/ guardian/ spouse/next of kin* whose signature appears above. In my opinion, the person referred to has understood the contents of this form and agreed to the transfusion willingly.

……

Signature of witness

Name of witness :

Identity Card No. :

*Delete appropriately

**if necessary

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 7	**To ensure medication safety**
Rationale	Medication errors may occur at various points of care and often go undetected. Some error may lead to serious morbidity and even mortality. Hence, ensuring medication safety is vital.
Strategies & Implementation	1. Implement information technology to support prescribing, dispensing and administering medicine – example: Computerised Prescribers' Order Entry (CPOE) 2. Report medication errors through the Medication Error Reporting System (MERS) to enable sharing of lesson learnt 3. Implement safety solutions for "Look Alike Sound Alike (LASA) medication" 4. Control of concentrated electrolyte solutions 5. Application of 7Rs and verbalization when administering injectable medication
KPI No. 11	Number of Medication Errors ("Actual")
Target	Zero (0) cases
KPI No. 12	Number of Medication Errors ("Near Misses")
Target	To be determined later pending national data analysis and trending
Definition of Terms	• **Medication error:** an error occurred and reached the patient • **Near miss:** any medication error that doesn't reach patient • **Concentrated Electrolyte Solution**: examples include Sodium Chloride more than 0.9%, Potassium Chloride or Phosphate • **7Rs:** During administering any medication; it is proposed that the healthcare providers check whether it is the RIGHT patient, medication, time, dose and route (per oral, sublingual, patch, etc), documentation
Types of medication error	Prescribing error, Omission error, Wrong time error, Unauthorized drug error, Dose error, Dosage form error, Drug preparation error , Route of administration error, Administration Technique error, Deteriorated drug error, Monitoring error, Compliance error (from MERS, Pharmaceutical Service Division, MOH)
Data collection	Monthly

PATIENT SAFETY GOAL NO.7 – TO ENSURE MEDICATION SAFETY

KPI 11: NUMBER OF MEDICATION ERRORS ("ACTUAL")
KPI 12: NUMBER OF MEDICATION ERRORS ("NEAR MISSES")

INTRODUCTION

Administration of medications (oral / injection) is the main task of nurses during serving medications. The nurses should always practice the principles of 7R's as to prevent medication errors.

OBJECTIVE

To ensure that all medications are given correctly according to the principles of 7R's.

- RIGHT PATIENT

Ensure that the Name, Identification Card number or Registration Number are correct before giving the medication (use at least 2 identifier)

- RIGHT DRUG

Check the label, name and dose of the medication **before, during, and after** dish out the drugs from the bottle.

- RIGHT DOSE

Ensure the dosage is calculated accurately, if unsure ask more knowledgeable staff.

- RIGHT ROUTE

Ensure the medication is administered through correct route
(oral or injection)

- RIGHT TIME

Ensure the medication is served according to the right time as prescribed.

- RIGHT DOCUMENTATION

Ensure documentation is done accurately after the administration of medication

- RIGHT TO REFUSE

Patient has the right to refuse the medication prescribed. The nurse must document correctly and completely if this happen.

ROLES AND RESPONSIBILITIES OF NURSES

1. Education and training - continuous learning to all nurses.
   - Continuous Nursing Education /Continuous Medical Education Hospital / Department / Unit level
- Label **High Alert Medication** for example Potassium Chloride
- Ensure calculate the right dose
- Storing medications in a proper manner (LASA)
   - Orientation for new staff.
   - Bedside Teaching

2 Implement proper medication storage system for Look Alike Sound Alike (LASA). For Sound Alike medication use TALL MAN lettering.
   eg: CeLEBREX (an anti-inflammatory)
   CeREBRYX (an anticonvulsant)
   CeLEXA (an antidepressant)

- Separate LOOK ALIKE medications further from each other.
- Provide a list of LASA medications from the Pharmacy and alert to the attention of the nurses (display).

3. Ensure that there are written instructions from doctor before serving medicine to avoid medication error eg:
   Ambiguous nomenclature – Tegretol 1.0mg subcutaneous / Tegretol sublingual 10 mg
4. Implement Principle of 7R's when administering medication.
5. Carry out Internal audit
   - Using National Nursing Audit tool ,Ministry Of Health Malaysia Version 4
6. Use 'medication nurse' vest to avoid interference from others while administering medication.
7. Use 2 identifier of patient before administering medication
8. Nurses serving medication must be knowledgeable and updated on the medication.
9. Communicate effectively with the patient.
10. Encourage patient to be actively involved in the process.
11. Report and learn from medication errors.

TYPES OF MEDICATION ERROR ARE AS FOLLOWS:

NO.	TYPES OF MEDICATION ERROR	DEFINITION
1.	Prescribing errors	• Incorrect drug selection (based on indications, contraindications, known allergies, existing drug therapy, and other factors) • Incorrect dose, dosage form, quantity, route, concentration, rate of administration, or instructions for use of a drug product ordered or authorized by physician (or other legitimate prescriber) • illegible prescriptions or medication orders that lead to errors that reach the patient
2.	Omission error	The failure to administer an ordered dose to a patient before the next scheduled dose
3.	Wrong time error	Administration of medication outside a predefined time interval from its scheduled administration time
4.	Unauthorized drug error	Administration to the patient of medication not authorized by a legitimate prescriber for the patient
5.	Dose error	Dispensing/ administration to patient of a dose that is > or < than amount ordered by prescriber or administration of multiple doses
6.	Dosage form error	Dispensing or administration to patient of a drug product is in a different dosage form than that ordered by prescriber
7.	Drug preparation error	Drug products are incorrectly formulated or manipulated before dispensing or administration to the patient
8.	Deteriorated Drug Error	Drug that has expired or the physical or chemical dosage form integrity has changed is being dispensed or administered to a patient
9.	Route of Administration Error	Wrong route of administration is being given for the correct drug
10.	Monitoring error	Failure in reviewing a prescribed regimen for appropriateness and detection of problems or failure to use appropriate clinical or laboratory data for adequate assessment of patient response to prescribed therapy
11.	Compliance error	Inappropriate patient behavior regarding adherence to a prescribed medication regimen
12.	Other medication error	Any other errors which does not fall into one of these predefined categories

Contributing Factors To Medication Errors

- Absence of safety culture in the organisation systems.
- Failure to learn from incident, and near miss.
- Unsafe practice eg: not following protocol/guideline.
- Unsafe condition - poor storage especially for LASA medication
  - cluttered
  - No labelling

How To Prevent Medication Error:

1. TALLMAN lettering may help us in selecting the correct medication with similar names. For example carBIMazole and carBAMAZepine.

2. Warning labels such as High Alert Medication can help us to be more vigilant.

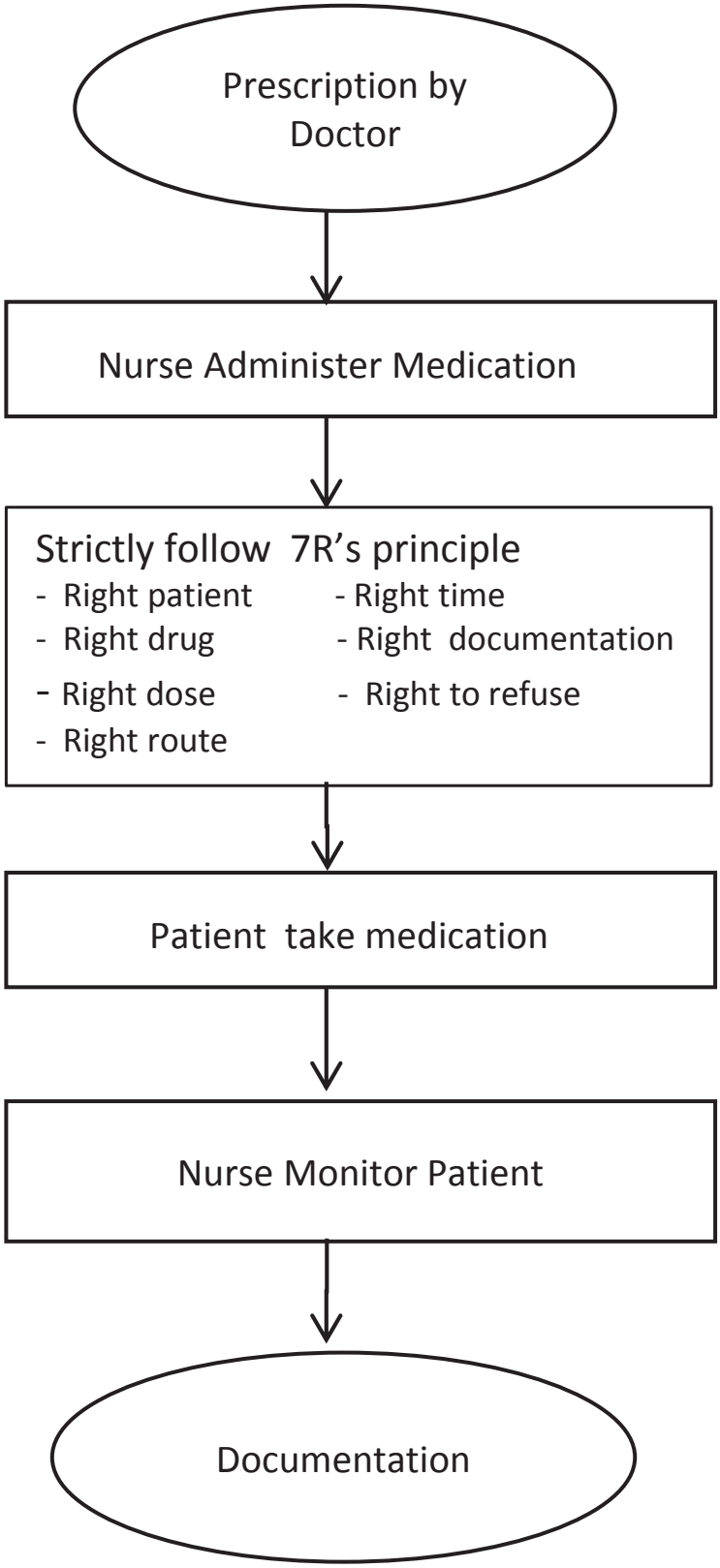
3. Drugs which Look Alike or Sounds Alike (LASA) should be kept far from each other to prevent us from picking up the wrong drug. For example, ProGYLUTON & ProGYNOVA should be kept away from each other to prevent errors from happening.

4. Medications must always be updated and reviewed from time to time to ensure right storage and not expired.

5. The information on LASA must also be disseminated to all healthcare providers. This can be done by distributing posters on LASA to every wards and clinics to ensure that everyone is alert on this issue.

DRUG NAME WITH TALL MAN LETTERS	CONFUSED WITH
chlorproMAZINE	chlorproPAMIDE
DOBUTamine	DOPamine
ALPRAZolam	LORazepam
cefTRIAXone	cefTAZidime
AMPIcillin	AMOXYcillin
Trimetazidine	Trimetazidine MR (not available in HPJ)
isosrbide DInitrate	isosorbide MONOnitrate
CLOXAcillin	AMOXYcillin AMPIcillin
budesonide and FORMOTEROL (Symbicort)	budesonide

FLOW CHART
ADMINISTRATION OF MEDICATION



TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 8	**To improve clinical communication by implementing a critical test and critical value programme**
Rationale	Failure of timely communication and follow-up of critical laboratory values (results) can lead to errors, increased morbidity and mortality.
Strategies & Implementation	1. Identify and maintain the list of critical values for the laboratory (Ref: ISO 15189:2008: *Medical Laboratories – the particular requirements for quality and competence* in clause 5.8.8 "*In order that local clinical needs can be served, the laboratory shall determine the critical properties and their 'alert/critical' intervals, in agreement with the clinicians using the laboratory")* 2. Establish procedures for immediate notification of critical laboratory values and establish records of turnaround time for the notification (ISO 15189:2007 clause 5.8.7) 3. Analysis of specimen (routine/urgent/stat) and if the results are within critical limits:- a) Verify the results and check for common analytical interferences or *pre-analytical, analytical* and *post-analytical* factors that can affect the test result. b) Notify the results immediately to the requestor or any authorized personnel through suitable mechanism. What to inform : - Informer name and designation - Patient ID (name and RN/IC) - Sample date & time - Test name and result c) Ask the recipient to **read back the results** which was notified. d) Maintain records of the notification and the relevant information such as :- ▪ Informer name and designation ▪ Patient destination (location) ▪ Patient ID (name and RN/IC) ▪ Test name and result ▪ Sample date & time ▪ Name of recipient 4. Dispatch the original report to the requestor

KPI No. 13	Percentage Of Critical Values Notified Within 30 Minutes or Less
Definition of Terms	**1) Critical laboratory value (results)** Test result or value that falls outside the critical limits or the presence of any unexpected abnormal findings, cells or organisms which may cause imminent danger to the patient, and/or require immediate medical attention. **2) Critical limits** Boundaries of low and high laboratory test values beyond which may cause imminent danger to the patient and/or require immediate medical attention.
Inclusion Criteria	Critical laboratory value (results) for the identified Chemical Pathology and Hematology tests for the laboratory.
Numerator (N)	Total number of critical laboratory values (results) notified within 30 minutes or less
Denominator (D)	Total number of critical laboratory values (results) identified and notified for the month
Formula	(N/D) x 100
Target	100%
Data collection at facility level	Monthly
References	1. Lily M, Sararaks S, Norita TTY, Noor Aishah MD, Low LL, Ainul NMH, Keah KC, Mohdsadek, Maimunah AH, Habibah B, Irdayu H &Suria J. 2010. Improving Notification Of Critical Results In MOH Hospitals. A Project for Improving Patient Safety [Lab 7; PS 21/2010 (∑41)] Institute for Health Systems Research, Kuala Lumpur, Malaysia. 2. Massachusetts Coalition for the Prevention of Medical http://www.macoalition.org/Initiatives/docs/CTRgriswold.pdf

PATIENT SAFETY GOAL 8: TO IMPROVE CLINICAL COMMUNICATION BY IMPLEMENTING CRITICAL VALUES PROGRAMME

KPI 13: PERCENTAGE OF CRITICAL VALUES NOTIFIED WITHIN 30 MINUTES OR LESS

INTRODUCTION

Critical value is defined as any test result that may require rapid clinical attention to avert significant patient morbidity and mortality.
Failure of timely communication and follow up of critical laboratory values (results) can lead to delay action being taken which may lead to morbidity or mortality.

OBJECTIVE

Improve communication of critical value of laboratory results

ROLES AND RESPONSIBILITIES OF NURSES

1.Education and training

• Conduct Continuous Nursing Education (CNE) at Hospital / Department / Unit levels
- Effective communication
- Importance of knowing the parameters and the critical values.
- Knowledge on turn around time on laboratory tests
- Reinforce the work process of critical values and immediate action

•Orientation
- To all new staff
- Introduced work process (Refer Flow chart)

• Bed side teaching
By Nursing Supervisor
By Nursing Sister

2. Receiving And Relying Information On Critical Value

- Ward / clinic staff receive result of critical value via phone/verbal/ IT system from the lab.
- Record information received in Critical Value Result Book :
  - Patient's name
  - Registration number
  - Laboratory critical result
  - Date and time of notification
  - Name of recipient and informer

- Read back the information that was recorded to informer to prevent misscommunication
- Informed the critical value result accordingly

- For Inpatient :
  - Immediately notify the critical value to the doctor who ordered the test or other doctor who is currently in charge of the patient.
  - If no action taken, remind the doctor again.
  - If still no action taken, then inform specialist.
  - Identify and maintain the list of tests which require monitoring of critical value. All nurses in the ward / unit should aware of the list and their turnaround time.
  - Be alert to the work process for immediate notification of critical lab results.
  - Document all notification diligently and accurately
  - Record appropriate detail on patients record
  - Attach the lab forms with the results on the patient's BHT.

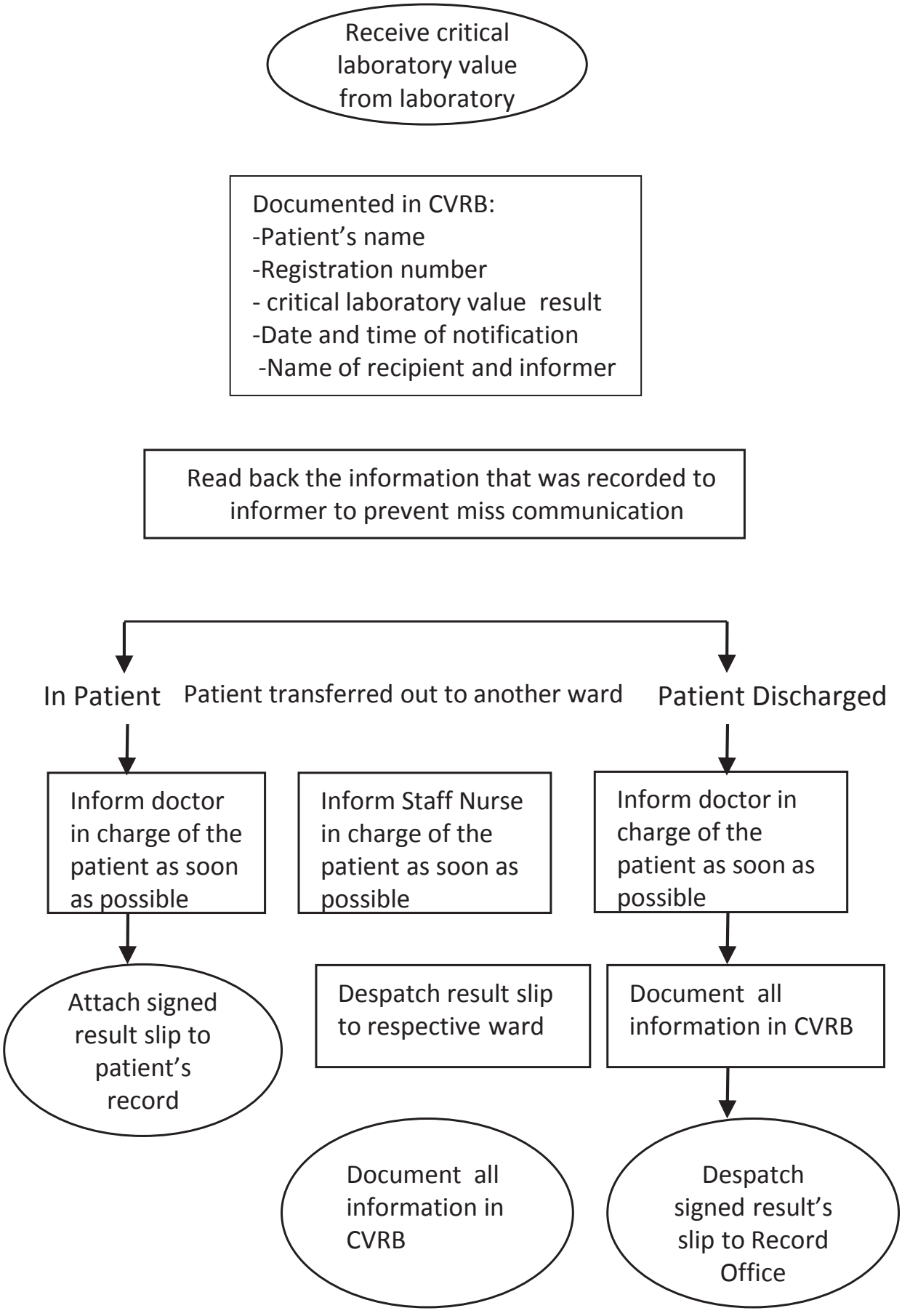
- Patient Transfer out to another ward :

  i) To Inform immediately staff of respective ward.
  ii) Record appropriate detail in Critical Laboratory Value Record Book (CVRB)

- Patient already discharge :
  i) Immediately inform the Medical Officer (MO) or Specialist in charge of the patient.
  ii) Take action as instructed by doctor.

- Document every communication and action related to the issue in nursing report.
- Ensure the doctor in charge signed on the result's slip and attached it to the patient's record before despatch to record office.

FLOW CHART
RECEIVING TEST RESULTS WITH CRITICAL VALUES



CRITICAL LABORATARY VALUE RECORD BOOK

Date & Time	Patient's - Name MRN / IC No	Test	Result	Name and position of informer	Name of receiver	Date doctor notified	Time doctor notified	Remarks

Key: CVRB - Critical Value Record Book

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 9	**To reduce patient falls**
Rationale	Patient falls are a potentially serious form of incident and are considered largely preventable
Strategies & Implementation	To implement a patient fall prevention program
KPI No. 14	Percentage reduction in the Number of falls (adults)
Formula	No. of falls this year –(minus) no. of falls last year x 100 No. of falls last year
Target	10% reduction or more *negative value means reduction in the number of falls whereas positive value means increment in the number of falls
KPI No. 15	Percentage reduction in the Number of falls (paediatric patients)
Formula	No. of falls this year –(minus) no. of falls last year x 100 No. of falls last year
Target	10% reduction or more *negative value means reduction in the number of falls whereas positive value means increment in the number of falls
Definition of Terms	Fall: fall that happens at the facility's premises Paediatric fall: fall amongst patients aged 12 years old and below
Exclusion Criteria	Exclusion criteria for paediatric fall: **non injurious** developmental fall for infants/ toddlers as they are learning to walk
Data collection at facility level	Monthly

PATIENT SAFETY GOALS : NO.9 TO REDUCE PATIENT FALLS

SAFETY KPI 14 : PERCENTAGE REDUCTION IN THE NUMBER OF FALLS (ADULTS)
SAFETY KPI 15 :PERCENTAGE REDUCTION IN THE NUMBER OF FALLS (PAEDIATRIC)

INTRODUCTION

Fall is a sudden, uncontrolled, unintentional, downward displacement of the body to the ground.

A near fall is a sudden loss of balance that does not result in a fall or other injury. This can include a person who slips, stumbles or trips but is able to regain control prior to falling.

Patient falls is the high risk incidence that requires close monitoring by the nurses . Effects of the falls are injuries, discomfort and increase morbidity among the patients, and will defect the quality care of the patients.

Patient falls are a potential serious form of incident and are considered largely preventable.
If a patient experiences a fall during his stay in the ward, probably there is an SIQ in nursing provided.

OBJECTIVES

To prevent the incidence of falls in hospital.

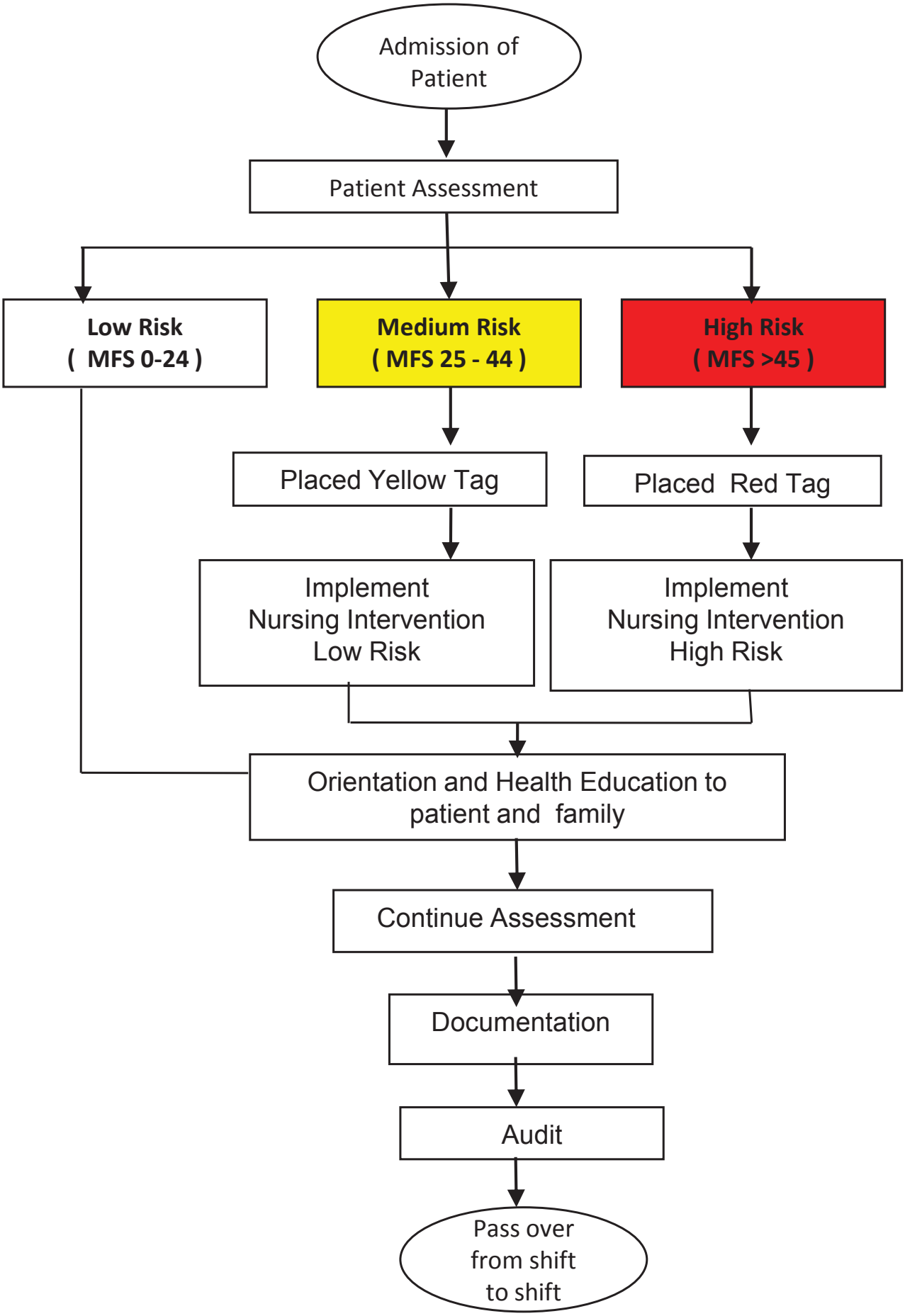
ROLES AND RESPONSIBILITIES OF NURSES

1. To conduct Continuous Nursing Education and Continuous Medical Education regarding awareness of falls to all unit, department and hospital level.
2. Education and training
   - Mentor - mentee program.
   - Orientation program for new staffs.
3. Pre Fall
   Patient Assessment
   - Assessment of patient on admission using the Morse Fall Scale.
   - Put proper signage on patient's bed based on Fall Risk Assessment Score

Fall Risk Assessment Score
(i) No risk – Score 0 - 24 (No signage)
(ii) Low risk – Score 25 - 44 (Yellow signage)
(iii) High risk – Score > 45 (Red signage)

4. Patients who are at high risk (red signage) and low risk (yellow signage) should be placed in cot bed with side railing up and placed near the nursing counter.
5. Risk assessment of the patient should be done whenever necessary.
6. Orientation and health education will be given to patient and family/ relatives :
   - Predisposing factors that lead to fall
   - Prevention of fall.
   - Allow family member to accompany patient in the ward

FLOW CHART
MANAGEMENT OF PATIENT FALL RISK



MORSE FALL SCALE (ASSESSMENT ON ADMISSION)

BKJ-BOR-PPK-

BAHAGIAN KEJURURAWATAN
KEMENTERIAN KESIHATAN MALAYSIA Lampiran 2

MORSE FALL SCALE

NAMA :		NO.DAFTAR :		WAD :	
DIAGNOSE :		UMUR :		TARIKH MASUK :	

PERKARA	TARIKH																						
	SKALA	Pg	Pt	M	Pg	Pt	M	Pg	Pt	M	Pg	Pt	M	Pg	Pt	M	Pg	Pt	M	Pg	Pt	M	
Sejarah jatuh																							
Baru jatuh	Tidak : 0																						
Jatuh dalam masa 3 bulan	Ada : 25																						
(History of falling, immediate																							
or within 3 months)																							
Primary atau SecondaryDiagnosis																							
seperti: Dm, Hypertension,	Tidak : 0																						
Post CVA, Epilepsy dan lain-lain	Ada : 25																						
Bantuan Pergerakan																							
Rehat di katil atau dibantu	0																						
Walking frame atau tongkat	15																						
Memegang katil atau kerusi	30																						
semasa berjalan .																							
Pesakit di atas troli atau kerusi roda	30																						
IV / Venofix / Syringe Pump	Tidak:0																						
	Ada : 20																						
Rangka Badan / Pergerakan																							
Normal/rehat di katil / tidak boleh	0																						
bergerak																							
Lemah	10																						
Kurang upaya/OKU/Post Amputasion	20																						
Status Mental																							
Sedar dan waras	0																						
Ingatan terhad/ Pelupa/ Delirium/	15																						
Psychiatric Patient																							
Jumlah skor																							

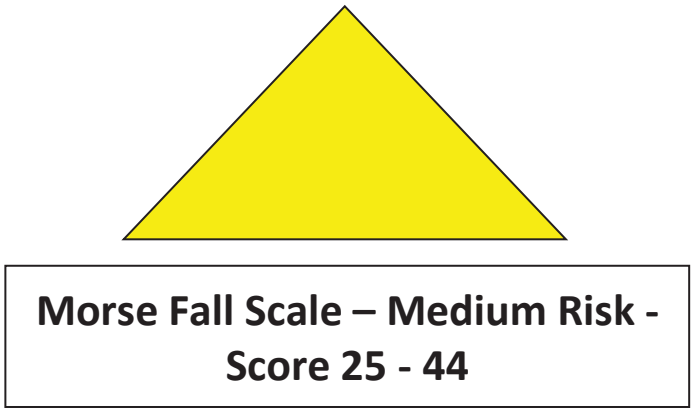
TAHAP RISIKO	PURATA MFS	KOD WARNA
Tiada Risiko	0 - 24	N / A
Risiko Rendah	25 - 50	KUNING
Risiko Tinggi	> 50	MERAH

NURSING INTERVENTION FOR LOW AND HIGH RISK PATIENTS.

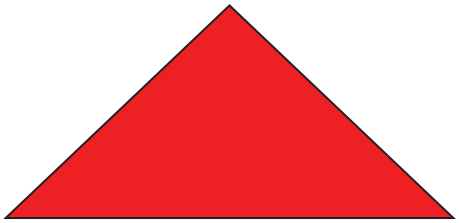
ITEMS	LOW RISK	HIGH RISK
1. Implement 'triage' system for all admissions according to the check list.	✓	✓
2. Signages for '*low risk*' and '*high risk*' *are tag at patient's bed accordingly.*	✓	✓
3. Approriate bed given to patient according to 'triage'score.	✓	✓
4. Orientation for patient and relatives: a)Do not leave patient unattended and nurses should be informed by relative before leaving. b)Ensure bed railing is raise at all time c)Ensure *locker* and patient's belonging is close to patient's bed. d) Do not leave patient who is weak alone on the chair. e) Educate patient on method of using call bell.	✓	✓
5. Waiting pass will be issued to relatives of patient with risk of fall	✓	✓
6. Continuous education to relatives and patient.	✓	✓
7. Nurses should do frequent rounds on high risk patient to ensure patient's safety.		✓
8. All high risk cases must be documented in BHT and passed every shift by nurses.		✓

NURSING INTERVENTION AFTER INCIDENCE OF FALL

1. Place patient in bed with railing.
2. Assess patient physical and monitor vital signs.
3. Inform medical officer immediately
4. Inform ward sister or sister on call.
5. Treatment to be given according to injury or doctors order.
6. Document incident in nursing report.
7. Complete the Incident Reporting form
8. Conduct investigation on the incident together with investigation team.



Morse Fall Scale – Medium Risk - Score 25 - 44



Morse Fall Scale – High Risk - Score > 45

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 10	**To reduce the incidence of Healthcare-Associated Pressure Ulcers**
Rationale	Pressure ulcers cause considerable harm to patients and can lead to morbidity, mortality. Moreover, it is largely preventable.
Strategies & Implementation	To implement healthcare-associated pressure ulcer prevention programmes
KPI No. 16	Incidence Rate Of Pressure Ulcers
Definition of Terms	**Pressure ulcer**: an area of localised damage to the skin and underlying tissue caused by pressure, shear, friction and/or a combination of these **Immobilized patient**: patient who is unable to carry out activities of daily living (e.g. unable to feed or bathe by him/herself)
Criteria	**Inclusion criteria:** 1)Immobilized patient 2)Pressure ulcer developed 48 hours after admission 3)No sign of pressure ulcer during admission **Exclusion criteria**: Pre-existing pressure points prior to admission
Numerator (N)	Number of immobilized patients who develop pressure ulcer more than 48 hours after admission
Denominator (D)	Total number of immobilized patients
Formula	(N/D) x 100
Target	≤ 2.1%
Data collection at facility level	Quarterly

PATIENT SAFETY GOAL NO 10 : TO REDUCE THE INCIDENCE OF HEALTHCARE ASSOCIATED PRESSURE ULCER

SAFETY KPI NO 16: INCIDENCE RATE OF HEALTHCARE ASSOCIATED PRESSURE ULCERS

INTRODUCTION

Pressure ulcer are areas of injured skin and tissue due to the prolonged pressure. The prolonged immobility and pressure which lead to reducing the blood supply to the skin and tissue, resulting in damaging the areas involved, example of causing pressure ulcer is sitting or lying in one position for too long.

Healthcare Associated Pressure Ulcer has 3 criteria :

1. Immobilized patient
2. Pressure ulcer developed 48 hours after admission
3. No sign of pressure ulcer during admission

OBJECTIVE

To ensure patient do not get pressure ulcer during hospitalization in the ward thus reduce the morbidity and discomfort of patients and also decrease the length of stay .

ROLES AND RESPONSIBILITIES OF NURSES TOWARDS REDUCING THE INCIDENCE OF HEALTHCARE ASSOCIATED PRESSURE ULCERS

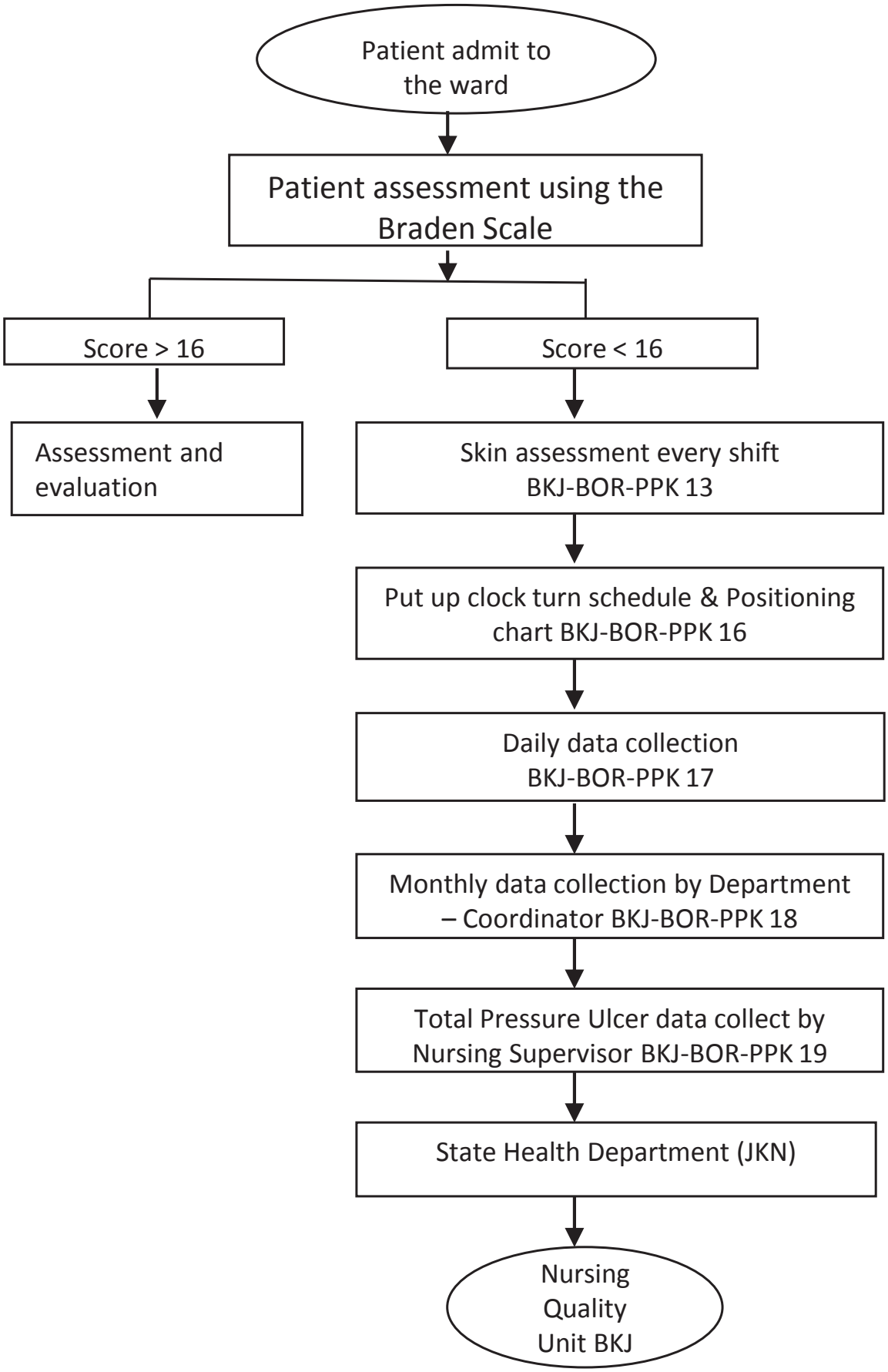
1. Education and Training:

- Ensure all the nurses attend courses of awareness on pressure ulcer and the importance of reducing pressure ulcer - Continuous Nursing Education (CNE) / Continuous Medical Education (CME) Hospital level / department / unit.
- Bedside teaching given by the Nursing Sisters or Nursing Supervisors.
- Provide orientation to new graduate staffs .
- Mentor - Mentee program for all newly qualified staff and transfer in nurses.

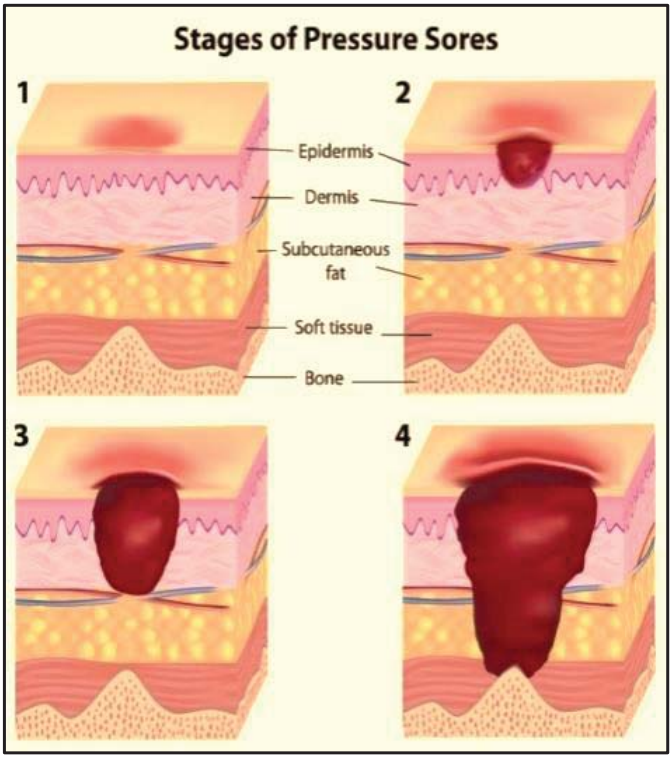
ROLES AND RESPONSIBILITIES OF NURSES TOWARDS REDUCING THE INCIDENCE OF HEALTHCARE ASSOCIATED PRESSURE ULCERS

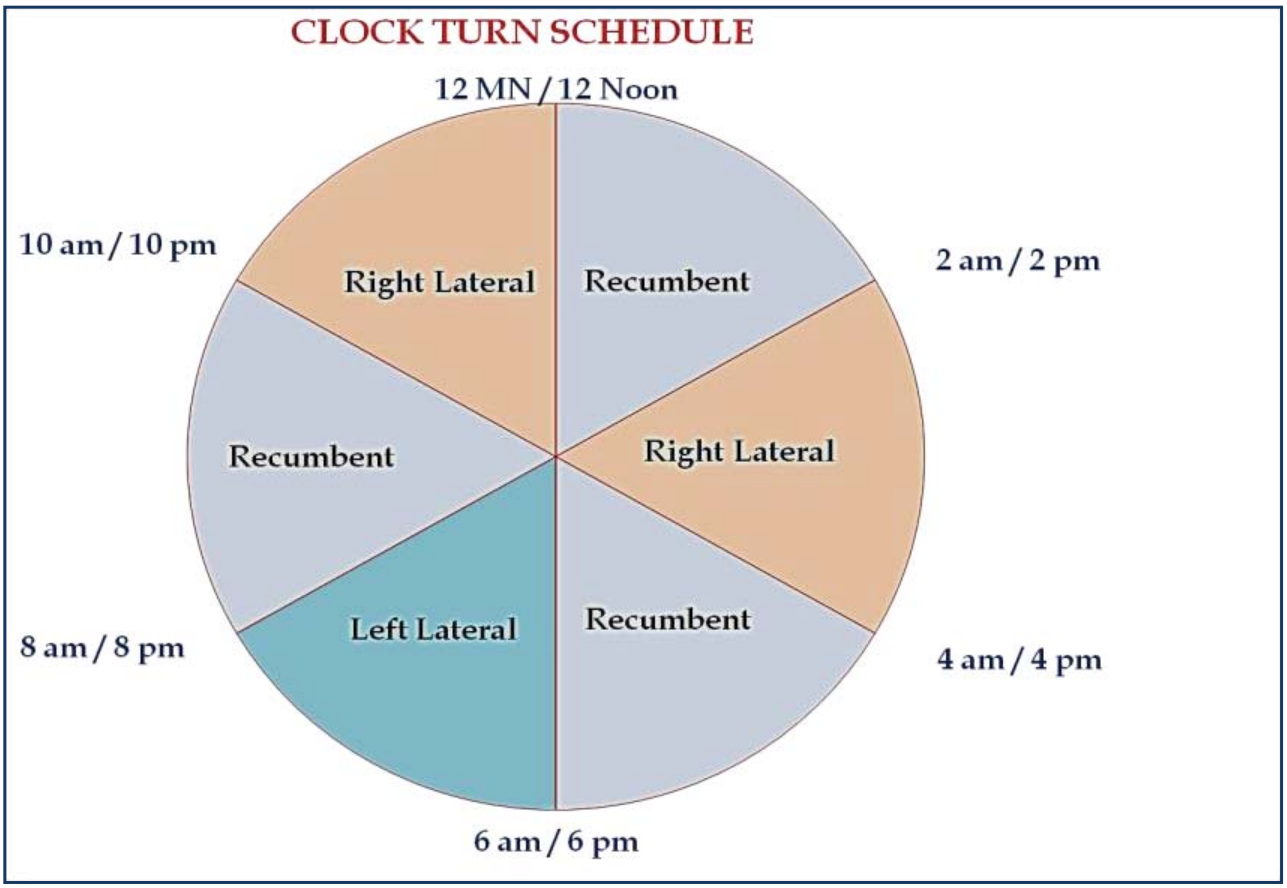
2. Risk assessment and skin assessment
   - Assess patient during admission to the ward using Braden scale form (BKJ-BOR-PPK 20).
   - Assessment should be done on every shift to those patients who are prone or risk to get pressure ulcer using form - (BKJ-BOR-PPK 13).
   - Assess patient weekly using the Braden scale form (BKJ-BOR-PPK 20).
3. Positioning patient every two hourly interval on ripple mattress
4. Mobilization of patient
   - maximize activity and facilitate mobilization
   - use of devices that assist individuals activity and mobilization
5. Proper lifting and manual handling techniques to prevention of shear and friction
6. Massage over bony prominences - rubbing stimulate blood flow and increased oxygen and nutrition
7. Total relief pressure from the heels -use of heel protectors such as gel/cushioned booties
8. Data Collection
   - Data collection should be done every day by using form - (BKJ-BOR-PPK 17).
   - Data are collected and despatch to the Nursing Supervisor every month using form – (BKJ-BOR- PPK 18).
   - Nursing Supervisor despatch the data to the Quality Unit and State Health Department (JKN) using form (BKJ-BOR-PPK 19).

FLOW CHART
MANAGEMENT OF PRESSURE ULCER



STAGING OF PRESSURE ULCER AND CLOCK TURN SCHEDULE





TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 11	**To reduce Catheter-Related Blood Stream Infections in the ICU***
Rationale	The occurrence of catheter-related bloodstream infections, particularly in intensive care patients, can be serious or even life threatening
Strategies & Implementation	To implement Central Venous Catheter Care Bundle (CVC-CB). It consists of five evidence-based procedures recommended by the CDC (Centres for Disease Control and Prevention): 1.Hand hygiene 2.Maximal barrier precautions upon insertion 3.Chlorhexidine 4% skin antisepsis 4.Optimal catheter site selection, with subclavian vein as the preferred site for non-tunneled catheters 5.Daily review of line necessity with prompt removal of unnecessary line
KPI No. 17	Rate of CRBSI (number of CRBSI per 1000 catheter-days)
Definition of Terms	**CRBSI Definition:** CRBSI is defined as "the presence of a short -term Central Venous Catheter (CVC) in a patient with clinical evidence of infection (fever, chills and/or hypotension) in the absence of other identifiable course of infection with concordant growth of the same organism from the peripheral blood and the catheter hub **CRBSI Diagnosis:** A definitive diagnosis of CRBSI requires the **same organism** growing from the blood cultures with either: 1. quantitative cultures of blood samples having a ratio of >3:1cfu/ml of blood (catheter: periphery) 2. Differential time to positivity (DTP) of at least 2 hours: growth from catheter hub of at least 2 hours earlier than the periphery However, the Malaysian Registry of Intensive Care (MRIC) diagnoses CRBSI by just having concordant growth of the same organism from the catheter hub and periphery only (because the current practice is unable to use either of the methods above to diagnose CRBSI)
Numerator (N)	No. of cases of CRBSI
Denominator (D)	Total number of catheter days for all patients with catheter
Formula	(N/D) X 1000 catheter-days
Target	<5 per 1000 catheter-days
Data collection at facility level	Monthly

PATIENT SAFETY GOAL NO 11: TO REDUCE CATHETER- RELATED BLOOD STREAM INFECTIONS (CRBSI) IN THE INTENSIVE CARE UNIT (ICU)

SAFETY KPI 17: RATE OF CRBSI (NUMBER OF CRBSI PER 1000 CATHETER –DAYS)

INTRODUCTION:

A Central Venous Catheter (CVC) is a catheter inserted into the blood vessel of critically ill patient for fluid and medication infusion. However the insertion of these catheter may cause Catheter-Related Blood Stream Infections (CRBSI) or Central Line Associated Infection (CLBSI) if appropriate measure are not taken.

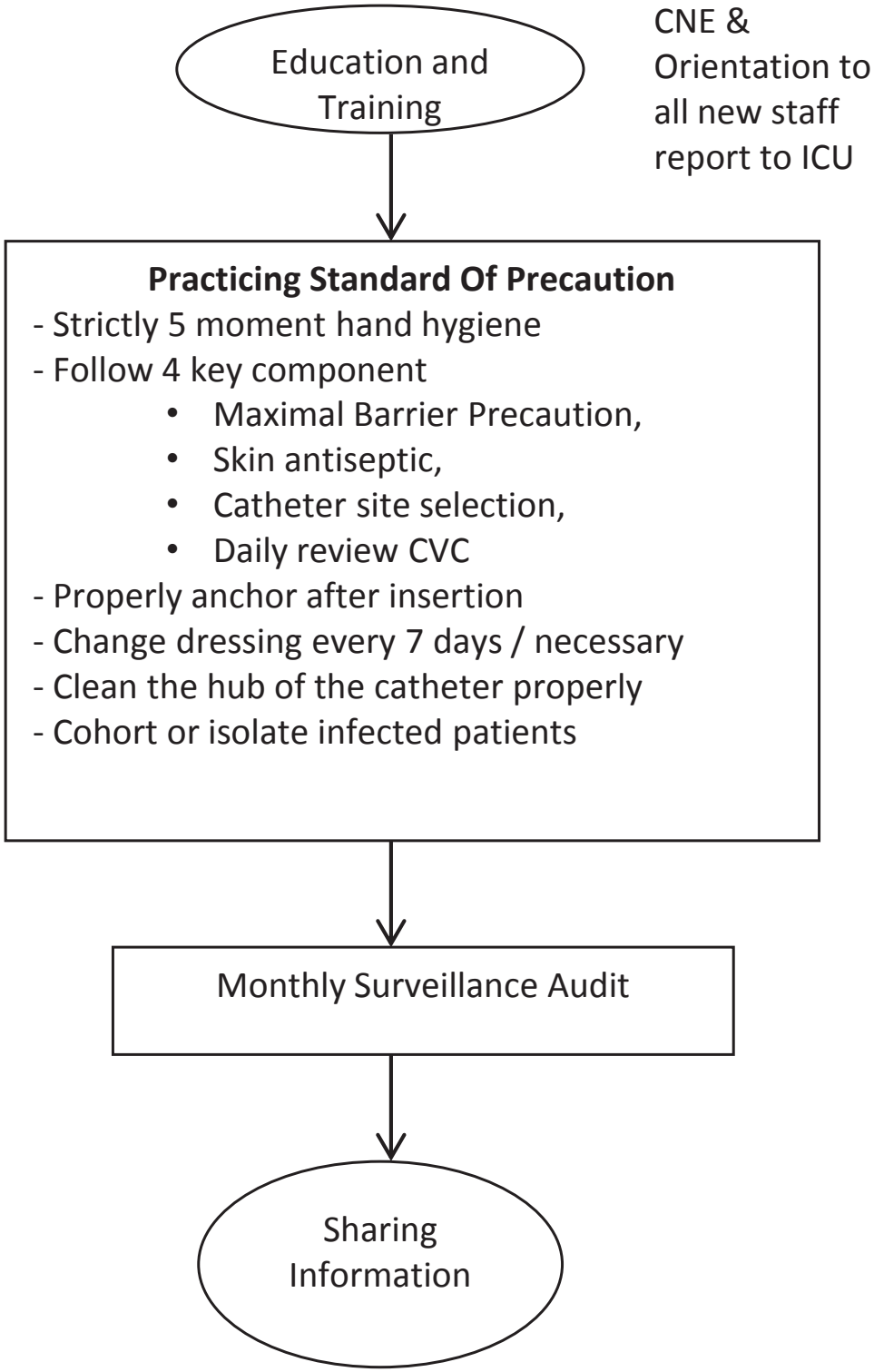
OBJECTIVE

To reduce the incidence of the CRBSI in Intensive Care Unit, which can be serious or even life threatening

ROLES AND RESPONSIBILITIES OF NURSES

1. Education and Training
    a) Continuous Nursing Education in the unit/ department/ hospital
    b) Orientation and Mentor-Mentee program to new nurses who report duty and those transfer in to the Intensive Care Unit.
2. Practicing Standard Of Precaution (SOP)
    a) strict adherence practice to 5 moments of hand hygiene
    b) Procedure is conducted following the four key components:
    i) Maximal Barrier Precautions - strict sterility during procedure
    ii) Chlorhexidine 4% skin antiseptic
    iii) Optimal catheter site selection
    iv) Daily review of Central Venous Catheter (CVC) at 8pm everyday until catheter is removed.
    - Remind the doctor on the line necessity with prompt removal of unnecessary line.
    c) Ensure the catheter are properly anchored after insertion and cover with transparent dressing. Date of insertion is written on the transparent dressing.
    d) Change transparent dressing and perform site care with a Chlorhexidine - based antiseptic every 7 days or whenever necessary if the dressing is soiled, loose or damp.
    e) Change all infusion tubing within 72 hours and for lipid infusion to change within 24 hours.
    f) Ensure all the hub of the catheter is clean properly using alcohol swab before infuse any drugs.
    g) Immediately notify doctor when there are sign and symptom of infection.
    h) Change all stoppers to needleless stopper.
    i) Cover all central catheters with sterile towel or follow the unit policy.
    j) Cohort or isolate infected patients.
    k) Accurate and prompt documentation
3. Monthly surveillance audit sent to State Health Department and Ministry.

FLOW CHART
MANAGEMENT OF REDUCE CRBSI



CENTRAL VENOUS CATHETER CARE BUNDLE COMPLIANCE CHECKLIST

MALAYSIAN REGISTRY OF INTENSIVE CARE

Central Venous Catheter Care Bundle Compliance Checklist

Hospital _____

No. : ..... **Month : .....**

Name of patient: ..... **R/N : .....**

Name of Dr. : ..... **Name of attending SN:.....**

Indicate Yes/ No for each of the following

1. Hand hygiene

Did the doctor wash his/her hands with chlorhexidine 4% with 4% isopropyl alcohol? *Yes / No*

2. Maximal barrier precautions

Did the doctor doing the procedure,

- *wear cap?* *Yes / No*
- *wear mask to cover nose and mouth?* *Yes / No*
- *wear sterile gown?* *Yes / No*
- *wear sterile gloves?* *Yes / No*
- *use large drapes to cover the site of insertion?* *Yes / No*

Did the assistant dropping items onto the field,

- *wear cap?* *Yes / No*
- *wear mask to cover nose and mouth?* *Yes / No*

Is there any other doctor assisting in the insertion? *Yes / No*

If 'Yes', did he/she follow all the above barrier precautions? *Yes / No*

3. Chlorhexidine skin antisepsis

Did the doctor clean the site of insertion with chlorhexidine 2% aqueous or chlorhexidine 2% in 70% alcohol? Yes / No

4. Catheter site selection

Is the subclavian route of insertion chosen? *Yes / No*

If 'No', doctor to fill the reason/s :-

- *High risk of bleeding* *Yes / No*
- *Failed subclavian insertion* *Yes / No*
- *Infected insertion site* *Yes / No*
- *Inexperience* *Yes / No*
- *Distorted anatomy* *Yes / No*
- *No more subclavian site* *Yes / No*
- *Risk of subclavian vein thrombosis in dialysis catheters* *Yes / No*

5. Daily review of CVC (at 8pm everyday until the catheter is removed)

Is there still an indication for CVC? Fill the box with 'Y' if Yes and 'N' if No

Date														
Day of CVC	2	3	4	5	6	7	8	9	10	11	12	13	14	15
On inotropes in the last 24 h														
On TPN in the last 24 h														
On dialysis														
Unable to set peripheral venous lines														
Need for monitoring														
Need for infusion of hypertonic solution														
Catheter removed														
Signature of nurse														

INCIDENCE OF CATHETER – RELATED BLOODSTREAM INFECTION FORM

Incidence of Catheter-Related Bloodstream Infection

Hospital _____

Year _____

Month	No. of episodes of catheter-related bloodstream infection	No. of catheter days	Incidence of CRBSI per 1000 catheter days
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
	Total = A	Total = B	C = (A/ B) X 1000

Incidence of Catheter-Related Bloodstream Infection in Year 20 ____ = (A/B) x 1000

= _____ per 1000 catheter days

AUDIT ON CATHETER – RELATED BLOODSTREAM INFECTION FORM

MALAYSIAN REGISTRY OF INTENSIVE CARE

AUDIT ON CATHETER-RELATED BLOODSTREAM INFECTION

Intensive Care Unit, Hospital _____

Month: _____ **Year:** _____

Date	Number of patients with central venous catheter
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
Total	A

Total number of patients with central venous catheter	**A**
Number of days counted in the month	**B**
Average number of central venous catheter per day	**C = A/B**
Number of days in the month	**D**
Total central venous catheter days for month	**E = C X D**
Number of episodes of CRBSI for month	**F**
Incidence of CRBSI for month (per 1000 catheter days)	**[F/E] X 1000**

Compliance to Central Venous Catheter Care Bundle

Hospital _____ **Month:** _____ **Year:** _____

No. (B)	Date of insertion	Name of patient with CVC insertion	R/N	Compliance to components (Y / N)					
				Hand hygiene	Maximal barrier precaution	Chlor-hexidine antisepsis	Sub-clavian site	Daily review	Bundle compliance (A)
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Number of CVC insertions with bundle compliance = Total (Y) in column A						Number of CVC insertions surveyed = B			
Percentage of compliance to CVC Care Bundle for the month = (A/B) x 100									

Diagnosis of Catheter-related bloodstream infection (CRBSI)

ICU Hospital _____

Name : ..... R/N : .....

Date & Time of ICU admission : __ __ /__ __ /__ __ __ __ & __ __ __ __ *h* Date & Time of ICU discharge / death : __ __ /__ __ /__ __ __ __ & __ __ __ __ *h*

	1	2	3
Catheter type	□ Central venous □ Dialysis □ Pulm. artery □ PICC	□ Central venous □ Dialysis □ Pulm artery □ PICC	□ Central venous □ Dialysis □ Pulm artery □ PICC
Location of insertion	□ ICU □ Non-ICU	□ ICU □ Non-ICU	□ ICU □ Non-ICU
No of lumens	□ 1 □ 2 □ 3 □ 4 □ 5	□ 1 □ 2 □ 3 □ 4 □ 5	□ 1 □ 2 □ 3 □ 4 □ 5
Insertion site	□R □L subclavian □R □L int jugular □R □L femoral □R □L cubital □R □L ext jugular	□R □L subclavian □R □L int jugular □R □L femoral □R □L cubital □R □L ext jugular	□R □L subclavian □R □L int jugular □R □L femoral □R □L cubital □R □L ext jugular
Date & time of insertion	__ __/__ __/__ __ __ __ & __ __ __ __ *h*	__ __/__ __/__ __ __ __ & __ __ __ __ *h*	__ __/__ __/__ __ __ __ & __ __ __ __ *h*
Date & time of removal/death	__ __/__ __/__ __ __ __ & __ __ __ __ *h* □ Discharged with catheteri in-situ	__ __/__ __/__ __ __ __ & __ __ __ __ *h* □ Discharged with catheter in-situ	__ __/__ __/__ __ __ __ & __ __ __ __ *h* □ Discharged with catheter in-situ
Reasons for removal	□ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8	□ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8.....	□ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 .....
Signs of sepsis/septic shock	□ Yes □ No	□ Yes □ No	□ Yes □ No
No other identifiable source of infection	□ Yes □ No	□ Yes □ No	□ Yes □ No
Blood from CVC lumen sent	□ Yes □ No	□ Yes □ No	□ Yes □ No
If 'Yes', Date sent			
Organism/s			
Blood from peripheral vein sen	□ Yes □ No	□ Yes □ No	□ Yes □ No
If 'Yes', Date sent			
Organism/s			

Reasons for removal:
1. Blocked / leaking lumen
2. Tip not in desired position
3. Not intravascular/ slipped out
4. Pus/ inflammation at insertion site
5. ? CRBSI
6. Insufficient lumen
7. No more indicated
8. Others (please specify) .....

Causative organisms:
1. Acinetobacter spp
2. Burkholderia cepacia
3. Candida albicans
4. Candida non-albicans
5. Coagulase negative Staphylococcus
6. Enterobacter spp
7. Enterococcus spp
8. Escherichia coli
9. Klebsiella spp
10. Methicillin-resistant Staphylococcus aureus
11. Methicillin-sensitive Staphylococcus aureus
12. Other gram negative organisms
13. Other gram positive organisms
14. Pseudomonas aeruginosa
15. Pseudomonas non-aeruginosa
16. Stenotrophomonas maltophilia

DIAGNOSIS OF CATHETER – RELATED BLOODSTREAM INFECTION FORM

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 12	**To reduce Ventilator Associated Pneumonia In the ICU***
Rationale	The prevention of VAP can help reduce the time that the patient is on the ventilator, ICU and hospital stay as well as costs and mortality
Strategies & Implementation	To implement VAP Care Bundle: The ventilator care bundle has four key components: 1.Elevation of the head of the bed to between 30- 45 degrees 2.Daily "sedation vacation" 3.Peptic ulcer disease prophylaxis 4.Deep venous thrombosis prophylaxis (unless contraindicated)
KPI No. 18	Rate of VAP (Number of VAP per 1000 ventilator days)
Definition of Terms	**Ventilator-Associated Pneumonia (VAP):** Pneumonia that occurs after 48 hours of intubation
Numerator (N)	No. of cases of VAP
Denominator (D)	Total number of ventilator days for all ventilated patients
Formula	(N/D) x 1000 ventilator-days
Target	<10 per 1000 ventilator days
Data collection at facility level	Monthly

PATIENT SAFETY GOAL NO 12 : TO REDUCE VENTILATOR ASSOCIATED PNEUMONIA (VAP) IN THE ICU.

SAFETY KPI 18 : RATE OF VAP (NUMBER OF VAP PER 1000 VENTILATOR DAYS)

INTRODUCTION

Ventilator Associated Pneumonia is a Nosocomial Infection affecting patient on mechanical ventilator (endotracheal tube / tracheostomy). This infection is a major problem in ICU which may lead to prolong hospital stay morbidity or mortality.

OBJECTIVE

Reduce the incidence of Ventilator Associated Pneumonia (VAP).

ROLES AND RESPONSIBILITIES OF NURSES

1. Continuous Nursing Education and Training.

- Continuous Nursing Education at Unit level / Departmental / Hospital.
- Introduce VAP Care Bundle to all new nurses who report duty or transfer in to ICU through Orientation and Mentor - Mentee Program.

2. Standard Precaution And Implementation Of VAP Care Bundle

- Practicing 5 moments of hand hygiene.
- Ensure mouth toilet is done with Chlorohexidine 0.2% every 4 – 6 hours by using tooth brush and tooth paste.
- Suctioning is done in sterile technique and must be performed by 2 nurses.
- Ensure tracheal aspiration for C&S is collected on admission and weekly basis to identify any growth for further management or to follow unit policy.
- Ensure patient's head of bed is elevated to 30 – 45 degrees.
- Ensure the pressure of pilot balloon of endotracheal tube (ETT) / Tracheotomy tube is checked every shift (standard: 25 – 30 cmH_2O)
- Aspiration of secretion from ETT and mouth must be performed before extubation.
- Heat Moisture Exchanger (HME) is changed daily or when soiled or contaminated.
- Periodically drain and discard any condensate that collects in the ventilator tubing.

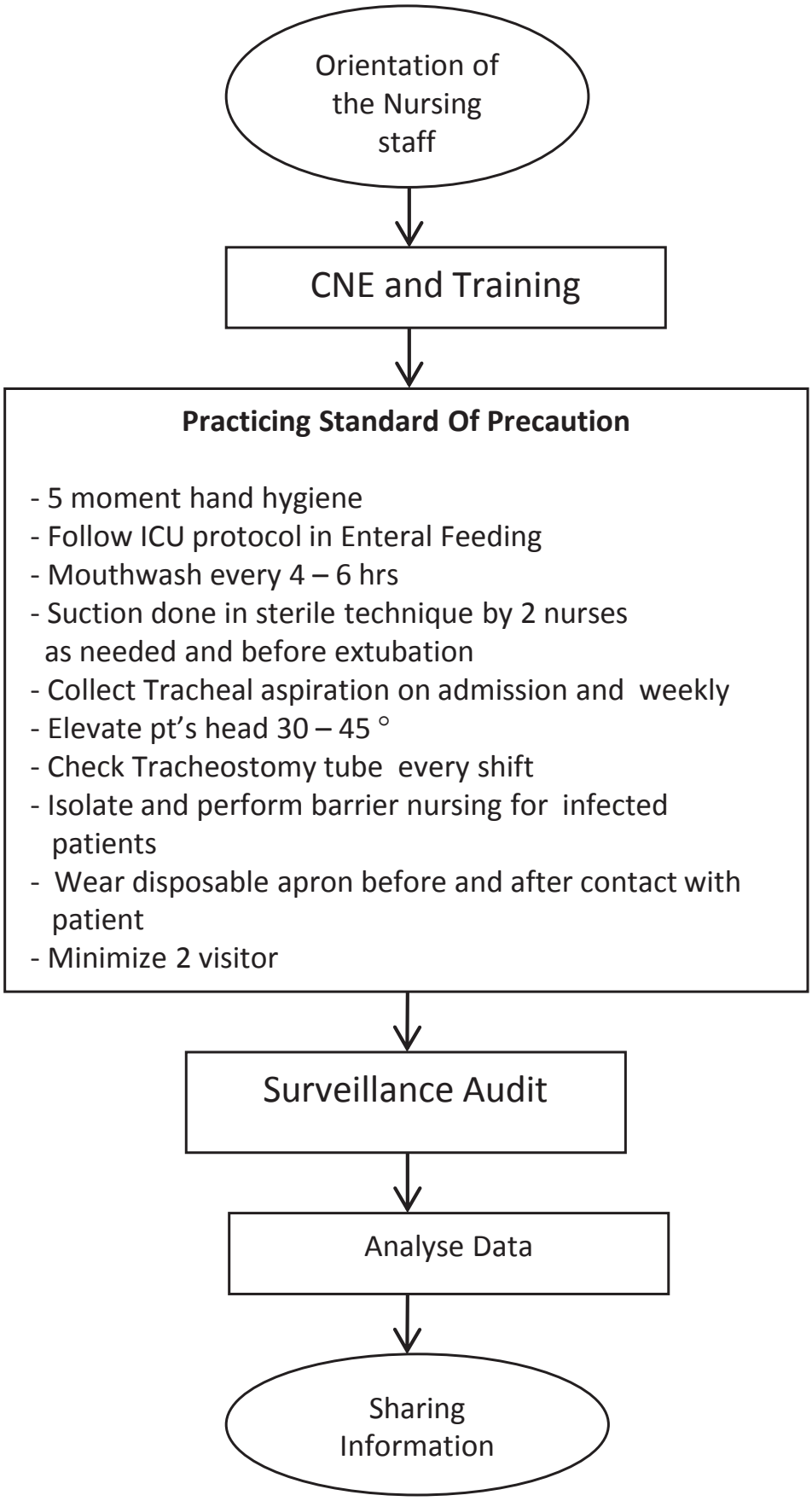
ROLES AND RESPONSIBILITIES OF NURSES

- Follow ICU protocol in giving Enteral Feeding, this is to avoid patient from vomiting or regurgitation.
- Isolate and perform barrier nursing for all Nosocomial Infected patients.
- All health personnel must wear plastic aprons and practice hand hygiene when attending before and after contact with patient. Use new aprons for all patients and procedures.
- Minimize to 2 visitors per visit and ensure they practice hand hygiene before and after visiting patient
- Ensure all ventilated patient are given Thrombosis Prophylaxis for example Heparine or low molecular weight heparine and sedation vacation.
- Perform Ventilator Care Bundle audit 3 times per month on 1st, 11th, and 21st at 4.00 pm. If not compliance towards ventilator care bundle, inform to the higher authority for the improvement.
- Accurate and prompt documentation
- Analyse data monthly and submit to Quality Unit, Jabatan Kesihatan Negeri and Ministry Of Health.

INSTRUCTIONS:

1. Record the number of patients in ICU that are on invasive mechanical ventilation should be done at the same time everyday
2. Encouraged to conduct daily surveillance the number of patients on invasive mechanical ventilation for the day and leave the cell empty if surveillance is not done
4. Record the number of episodes of VAP for the month.
5. Use the formula as shown in the table to obtain the incidence of VAP for the month.

FLOW CHART PREVENTION OF VENTILATOR – ASSOCIATED PNEUMONIA



DIAGNOSIS OF VENTILATOR – ASSOCIATED PNEUMONIA CHECKLIST

DIAGNOSIS OF VENTILATOR-ASSOCIATED PNEUMONIA
VAP CHECKLIST

Hospital:.....

Use separate sheet each patient if mechanically ventilated for ≥ 48 hours
Use separate sheet for each episode of VAP for the same patient

Name: .....

RN: .....

Ventilator-associated pneumonia

- Refers to nosocomial pneumonia developing in a patient receiving mechanical ventilation ≥ 48 hours
- Diagnosis based on
  - **(i) Suspicion of VAP**
  - **(ii) Chest X-rays shows new and or progressive pulmonary infiltrates**
  - **(iii) Presence of either 2 of the following 4 criteria**
    - **Fever ≥ 38.5°C or < 36°C within 24 hours**
    - **Total white cell count >12 000/mm^3 within 24 hours**
    - **Purulent tracheobronchial secretions within 24 hours**
    - **Reduction of PaO_2/FiO_2 ≥ 15% in the last 48 hours**
- The definition of VAP **does not** require positive bacteriological culture.
- Tick the relevant organism/s only if a diagnosis of VAP is confirmed.
- Refers to positive culture from tracheal aspirate, bronchoalveolar lavage or blood
- If a diagnosis of VAP is made, and no organism was isolated then circle "no organism isolated" option

1.	Patient ventilated for more than 48 hours	Yes / No
2.	Suspicion of VAP	Yes / No
3.	CXR shows new or progressive pulmonary infiltrates	Yes / No
4.	Presence of 2 out of following 4 criteria	
	▪ Fever ≥ 38.5°C or < 36°C within 24 hours	Yes / No
	▪ Total white cell count >12 000/mm^3 within 24 hours	Yes / No
	▪ Purulent tracheobronchial secretions within 24 hours	Yes / No
	▪ Reduction of PaO_2/FiO_2 ≥ 15% in the last 48 hours	Yes / No

Ventilator-associated pneumonia present Yes / No

Date of diagnosis __/__/____

Circle relevant organism

(1) Pseudomonas spp
(2) Acinetobacter spp
(3) Klebsiella spp
(4) S. maltophilia
(5) Other gram negative bacteria
(6) Staph aureus
(7) Coagulase negative Staph aureus (CoNS)
(8) Meticillin resistant Staph aureus (MRSA)
(9) Fungus
(10) Others (specify).....
(11)No organism isolated

If there is a positive culture, the organism isolated is multi resistant (MRO) Yes / No

Name of specialist: ..... Signature: .....

Date : .....

VENTILATOR CARE BUNDLE CHECKLIST

Ventilator Care Bundle Checklist

Hospital .....

Date: _____ **Day:** _____

Time: _____

Name: _____ **Bed No.:** _____

RN:

Circle the correct answer

Is the patient > 18 years old? ..... Yes / No

If Yes, proceed to the next question

Is the patient admitted to ICU>=12 hrs? ..... Yes / No

If Yes, proceed to the next question

Is the patient on invasive ventilation?..... Yes / No

If Yes, proceed to assess care bundle

(I) Head of bed elevation 30-45 degrees .....Yes / No

If No, is / does the patient:

on high doses of inotropes or vasopressors?	Yes / No
agitated and at risk of falling out of bed?	Yes / No
awaiting spinal clearance or suspected /confirmed spinal injury?	Yes / No
have thoracic or lumbar or cervical spine surgery?	Yes / No
have compromised circulation due to femoral lines?	Yes / No
having procedure/s being carried out on him / her?	Yes / No

(II) Sedation vacation (sedation has been stopped for >4 hours) .....Yes / No

If No, is the patient:

ventilated <= 24 hrs before the time of survey	Yes / No
on cerebral protection?	Yes / No
in septic shock on high inotropic support?	Yes / No
on high ventilatory support, i.e. FiO2 > 0.6?	Yes / No
on infusion of muscle relaxant?	Yes / No
in prone position?	Yes / No
diagnosed to have condition that requires continuous sedation e.g. ACS, asthma, tetanus, etc?	Yes / No
no longer on sedation?	Yes / No
on narcotic alone for control of pain?	Yes / No

(III) Peptic ulcer disease prophylaxis / treatment .....Yes / No

(IV) Deep vein thrombosis prophylaxis (heparin) / treatment .....Yes / No

If No, is / does the patient:

have a platelet count < 100,000/mL?	Yes / No
have a drop in platelet count of 30% - 50% from the initial value?	Yes / No
have an INR > 1.5 or an aPTT ratio > 1.5	Yes / No
have neurosurgery /neuro-trauma in the last 72 hrs?	Yes / No
scheduled for surgery with high risk of bleeding?	Yes / No
scheduled for epidural catheter removal or insertion?	Yes / No
have clinical signs of bleeding?	Yes / No
on renal replacement therapy?	Yes / No

INCIDENCE OF VENTILATOR – ASSOCIATED PNEUMONIA FORM

Incidence of Catheter-Related Bloodstream Infection

Hospital _____

Year _____

Month	No. of episodes of catheter-related bloodstream infection	No. of catheter days	Incidence of CRBSI per 1000 catheter days
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
	Total = A	Total = B	C = (A/ B) X 1000

Incidence of Catheter-Related Bloodstream Infection in Year 20 ____ = (A/B) x 1000

= _____ per 1000 catheter days

COMPLIANCE TO VENTILATOR CARE BUNDLE FORM BY YEAR

MALAYSIAN REGISTRY OF INTENSIVE CARE

Compliance to Ventilator Care Bundle

Hospital _____

Year _____

Month	No. of pts. compliant to Ventilator Care Bundle	No. of patients surveyed	Percentage of compliance to Ventilator Care Bundle
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
	Total = A	Total = B	C = (A/ B) X 100

Ventilator Care Bundle Compliance in Year 20____ = (A/B) x 100

= _____ %

COMPLIANCE TO VENTILATOR CARE BUNDLE FORM BY MONTH

MALAYSIAN REGISTRY OF INTENSIVE CARE

Compliance to Ventilator Care Bundle

Hospital _____ **Year** _____

Date of survey	No. of pts. compliant to bundle	No. of pts. surveyed
January		
January 1		
January 11		
January 21		
	Total = A	Total = B
% VCB compliance in January = (A/ B) X 100		
February		
February 1		
February 11		
February 21		
	Total =	Total =
% VCB compliance in February =		
March		
March 1		
March 11		
March 21		
	Total =	Total =
% VCB compliance in March =		
April		
April 1		
April 11		
April 21		
	Total =	Total =
% VCB compliance in April =		
May		
May 1		
May 11		
May 21		
	Total =	Total =
% VCB compliance in May =		
June		
June 1		
June 11		
June 21		
	Total = A	Total = B
% VCB compliance in June =		

COMPLIANCE TO VENTILATOR CARE BUNDLE FORM BY MONTH

Date of survey	No. of pts. compliant to bundle	No. of pts. surveyed
July		
July 1		
July 11		
July 21		
	Total	Total
% VCB compliance in July =		
August		
August 1		
August 11		
August 21		
	Total	Total
% VCB compliance in August =		
September		
September 1		
September 11		
September 21		
	Total	Total
% VCB compliance in September =		
October		
October 1		
October 11		
October 21		
	Total	Total
% VCB compliance in October =		
November		
November 1		
November 11		
November 21		
	Total	Total
% VCB compliance in November =		
December		
December 1		
December 11		
December 21		
	Total	Total
% VCB compliance in December =		

VCB compliance in Year 20__ = $\frac{\text{Total no. of pts. compliant to bundle in the year}}{\text{Total no. of pts. surveyed in the year}} \times 100$

= _____ %

Measures to reduce the incidence of Ventilator-associated pneumonia

1. Decontaminate hands by proper hand washing or use alcohol rub on clean hands –have touch patient / equipment.
2. Observe aseptic technique during endotracheal suction.
3. Try to maintain the semi-recumbent position (head up 30-45 degrees) of ICU patients all the time (especially those on enteral feeding).
4. Check cuff pressure of pilot balloon of ETT/tracheostomy tube daily (aim to maintain cuff pressure between 20 – 25 cm H2O). Standard 25 cm H2O. To check every shift and document.
5. Use NIPPV where possible.
6. Avoid repeat/unplanned endotracheal intubation where possible.
7. Perform oro tracheal rather than nasotracheal intubation.
8. Before deflating cuff of endotracheal tube (for tube removal or movement), ensure secretions are cleared from above the tube cuff.
9. Remove endotracheal, tracheostomy and/or enteral tubes as soon as feasible.
10. Change HME's not more frequently than every 48 hours and when soiled or contaminated.
11. Do not change breathing circuits on ventilated patients routinely and only when soiled and contaiminated.
12. For bronchodilation therapy of intubated and ventilated patients, use metered dose inhalers (MDI) instead of nebuliser. No HME's during MDI.
13. Ensure condensate in the ventilatory circuits do not gravitate towards the patient end.
14. Periodically drain and discard any condensate that collects in the tubing as clinical waste. Wear glove during discard. Hand washing after discard. Discard in clinical waste bin. Empty every 4 hours and PRN.
15. Prevent gastric over distension of patients who are being enterally feed.
16. Isolate or cohort 'infectious patients' where possible.
17. Ensure adequate decontamination of all reusable airway and respiratory equipment.
18. Conduct regular staff education on infection control at least 3 monthly.
19. Improve nurse to patient ratio and if possible have a dedicated infection control nurse in each ICU.
20. Disposable plastic apron is a MUST for all nurses, Drs during procedures and when come in contact with patient. To change whenever it become soiled with secretions.
21. Visitors not necessary to wear apron.
22. Strictly control visitors 2 person at one time. Advise to wash hands before and after touching the patient.

TECHNICAL SPECIFICATIONS OF MALAYSIAN PATIENT SAFETY GOALS & KPIs	
Patient Safety Goal No. 13	**To implement an Incident Reporting and Learning System**
Rationale	The fundamental role of incident reporting systems is to enhance patient safety by learning from failures of the healthcare system through the investigation of incidents (e.g. through RCA). In this way, a "non-blaming and learning culture" will be nurtured.
Strategies & Implementation	1. An Incident Reporting and Learning System with a mandatory reporting list is implemented 2. Capability and capacity to perform Root Cause Analysis (RCA) (or mini RCA) to support Incident Reporting is developed and strengthened
KPI No. 19	Implementation Of A Facility-Wide Incident Reporting System (Including Root Cause Analysis) Or Other Methods To Investigate Incidents (e.g. Clinical Audit, Enquiries Etc.)
Target	System implemented
Data collection at facility level	Yearly
Reference	PAA Mohamed Nazir AR, Lily M & Kalsom M. 2013. *Incident Reporting & Learning System From Information To Action Manual*. Medical care Quality Section, Medical Development Division, Ministry of Health Malaysia

PATIENT SAFETY GOAL NO. 13 : TO IMPLEMENT INCIDENT REPORTING AND LEARNING SYSTEM.

KPI NO. 19: IMPLEMENTATION OF A FACILITY- WIDE INCIDENT REPORTING SYSTEM (INCLUDING ROOT CAUSE ANALYSIS) OR OTHER METHODS TO INVESTIGATE INCIDENTS (EG: CLINICAL AUDIT, ENQUIRES ETC.)

INTRODUCTION :

According to the World Health Organization, (WHO) Incident Reporting is done to improve the safety and health system through:

- Reporting of incident
- Learning from incident
- Improvement or action taken following an incident
- Sharing the experience
- Prevent recurring of incident

MOH Incident Reporting is divided into:

- Mandatory where the incident must be reported immediately.
- Voluntary where the incident are "near misses", hazards and other incidents not listed in the mandatory lists.

(Refer to MOH Incident Reporting And Learning System Guideline)

OBJECTIVES

To report incident

To learn from the incident, take appropriate remedial actions, prevent recurring incidents , and share lessons from the incident.

ROLES AND RESPONSIBILITIES OF NURSES

1. All nurses must understand the policies and procedures regarding “Incident Reporting And Learning “. (Refer: Incident Reporting & Learning System: From Information to Action Manual 2013).
2. Take immediate action following incident
3. Assist in communication with patient/ family when incident happen.
4. Report incident.
5. Inform supervisor
6. Involve in investigation as part of team member

EDUCATION AND TRAINING

1. To enhance knowledge and responsibility on incident by conducting workshops for Training of Trainers in the hospital for at least once in a year
2. Education and training must be provided especially for new nurses in Mentor - Mentee program.
3. CME / CNE to be conducted at the unit / department / hospital level.

ENSURING INCIDENT IS REPORTED IMMEDIATELY

1. During office hours, all incidents must be reported to the Sister on duty and the parties concerned.
2. After office hours, all incidents must be reported to the Sister on call and the parties concerned.
3. If Sentinel Incident occurs, it must be reported to the Sister on call / duty, and the relevant authorities within 1 hour (e.g.: involving death).

INCIDENT REPORTING

1. All incidents are reported and recorded using IR1.1 Form
2. All incident reporting and investigation must be documented and filed for ease of discussion and to improve patient safety through the lessons learned from the incident.

PATIENT SAFETY INCIDENT – MANAGEMENT & REPORTING FORM

CONFIDENTIAL **FORM IR1.1**

PATIENT SAFETY INCIDENT - MANAGEMENT & REPORTING FORM
PART I – Initial Report

A. Incident particulars (refer to guidance notes for sentinel event and incident codes)

Enter Incident Code

Date of Incident (D D M M Y Y) Time of Incident (24 hour clock: H H M M) Date of reporting (D D M M Y Y)

Unit/Dept. Location where incident happened

Other departments involved (if any)

Race Communication problem with patient? Yes No

B. Patient particulars

Name Male Female Inpatient Outpatient

Date of admission (D D M M Y Y)

Date of birth

Age

Admission diagnosis

ID/Passport No. RN No.

Native language Language used to communicate

C. Incident description

Provide a brief description of the incident, the people involved (including staff), any harm suffered by patient and any immediate staff response. ***Please state facts and not opinion.***

People involved : Patient ☐ Family ☐ Staff ☐
Any Harm suffered : *No / Yes*
If yes, what type of harm:.....
Brief description of the incident:

Immediate correction:

*Full Name :*_____
*Designation :*_____
*Date:*_____

Continue on separate sheet if necessary.

PART II – Immediate Supervisor Report (e.g. specialist, consultant, ward manager, matron)

D. Immediate corrective action taken to reduce risk

Provide a brief description of any corrective action taken immediately following the incident

*Full Name :*_____
*Designation :*_____
*Date:*_____

Continue on separate sheet if necessary

PATIENT SAFETY INCIDENT – MANAGEMENT & REPORTING FORM

Part III – Designated Person Report – (Full name _____ Date _____)

E. Investigation priority assessment (triage) and respons

1. Actual patient impact/outcome (circle appropriate box/number)

	None	Minor	Moderate	Major	Death
	L	M	M	H	H

2.Duration of impact	Temp.		Permanent		N/A		Unsure	

3. Potential risk to future patients and organisation if no further action taken (circle)

	Most likely impact/outcome				
2. Likelihood	None	Minor	Moderate	Major	Death
Almost certain (99%)	L	M	M	H	H
Likely (90%)	L	M	M	H	H
Possible (50%)	L	M	M	M	M
Unlikely (10%)	L	L	M	M	M
Remote (1%)	L	L	L	L	L
L: Low		M: Moderate		H: High	

4. Circle the A(ctual impact) and P(otential risk) boxes.

** A full RCA may be required for accountability purposes.*

A	P	Response
H	H	Full RCA
H	M	Mini RCA*
H	L	Mini RCA*
M	H	Mini RCA
M	M	Mini RCA
M	L	Minimal
L	H	Mini RCA
L	M	Minimal
L	L	None

5. Investigation response

	Suggested	Actual
None		
Minimal		
Mini RCA		
Full RCA		

F. Contributing factors (select codes from list or write in words)

1	Patient	
2	Task and technology	
3	Individual staff	
4	Team	
5	Work and care environment	
6	Management and organisational	
7	External	

G. Further action proposed to reduce risk (write or attach a copy of RCA report with action plan

No	Description	Person responsible	Date action completed
1			
2			
3			
4			
5			

Continue on separate sheet if necessary.

PART IV – Head of Department Comments

H. Organisational impact/outcomes, learning points and general comment

Full name _____

Designation _____ **Date** _____

REFERENCES

1. Malaysian Patient Safety Goals – Guidelines on Implementation & Surveillance 2013
2. Manual Central Venous Catheter Care Bundle
   The National On Adult Intensive Care Units (NAICU) Manual
   Ventilator Care Bundle
   The National on Adult Intensive Care Units (NAICU)
   Jarris, W.R. (2012) "Prevention Of CLBSI And The Role Of Needless Connector –
   TSICP Manual Meeting.
   CDC Guidelines For The Prevention Of IV Catheter Related Infection, 2011
   One day prevalence study on Ventilator Associated Pneumonia in ICU 20
3. Policies and Procedures infection control MOH 2010
4. Policies and Guidelines Hand Hygiene compliance auditing 2013
5. Policies and Procedures infection control MOH 2010
6. Alert Organisms Surveillance Manual 1st edition November 2012
7. National Blood Centre, Ministry Of Health 3rd Edition March 2008
8. National Nursing Audit ,Ministry Of Health Malaysia Version 4 March 2011
9. Guide On Handling Look Alike, Sound Alike Medications
   Pharmaceutical Services Divison, Ministry Of Health Malaysia 2012