Ministry of Health Malaysia



Malaysian Patient Safety Goals 2.0

Guidelines on Implementation & Surveillance

Patient Safety Council Malaysia
&
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia

Ministry of Health Malaysia

Malaysian Patient Safety Goals 2.0

Guidelines on Implementation & Surveillance

Patient Safety Council Malaysia
&
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia

2021

Copyright © Medical Care Quality Section, Medical Development Division, Ministry of Health Malaysia

All rights reserved. This book may not be reproduced, in whole or in part, in any form or means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system now known or here after invented, without written permission from the producer.

MALAYSIAN PATIENT SAFETY GOALS 2.0 |
GUIDELINES ON IMPLEMENTATION AND SURVEILLANCE

ISBN: 978-967-2625-00-1

October 2021

Produced & distributed by:

Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia
Level 4, Block E01, Complex E
Federal Government Administrative Centre
62590 Putrajaya.

Contents

Main Page		Page
4	**Foreword**	4
6	**Message**	6
7	**Acknowledgement**	7
11	**Chapter 1- Introduction, Process & Summary**	
	• Introduction	12
	• MPSG- The Past & The Future	12
	• About the Guidelines	13
	• Objectives, Philosopy of MPSG	14
	• Data Collection System	15
	• Summary of MPSG 2.0	16
	• MPSG 2.0 Flow Chart	18
19	**Chapter 2- Technical Specification of Malaysian Patient Safety Goals 2.0**	
	• Goal 1 - Infection Prevention & Control	20
	• Goal 2 - Surgical Safety	26
	• Goal 3 - Medication Safety	31
	• Goal 4 - Transfusion Safety	35
	• Goal 5 - Patient Fall Prevention	39
	• Goal 6 - Correct Patient Identification	41
	• Goal 7 - Incident Reporting & Learning System	43
45	**Chapter 3- Reporting of Malaysian Patient Safety Goals 2.0 Performance Via e-goals Patient Safety**	
	• MPSG 2.0 Form	46
	• Reporting Performance Via e-goals Patient Safety	47
49	**APPENDICES**	
	• Appendix i - WHO Hand Hygiene Observation Form	50
	• Appendix ii - Catheter Associated Blood Stream Infection	54

FOREWORD BY



Tan Sri Dato' Seri Dr. Noor Hisham Abdullah
Director-General of Health Malaysia

The Malaysian Patient Safety Goals (MPSG) has been implemented since 2013 to outline priority areas on patient safety and monitor the progress of patient safety initiatives in Malaysia. Since its implementation, Malaysia has seen an incredible outcome that was unexpected and beyond the initial designated objectives. The MPSG has actualised significant impact in promoting and highlighting the importance of patient safety in this country.

Since its establishment eight years ago, the Ministry of Health has witnessed a remarkable improvement in the annual MPSG reporting performance among the MoH hospitals, private hospitals, ATM hospitals, university hospitals, health clinics, and dental clinics. The effort and commitment of healthcare organisations in improving the performance of the MPSG are visible throughout the country that is impossible without tremendous effort, teamwork and transformative initiatives to improve patient safety nationwide. I am proud that Malaysian healthcare is at the forefront of innovative and customised National Patient Safety Goals that are worthy of exemplary to the global arena.

As we navigate through the COVID-19 pandemic, the Ministry of Health will be introducing the new Malaysian Patient Safety Goals 2.0 starting January 2022. This new MPSG 2.0 is a transformative innovation following detailed analyses from the report of engagement series with the stakeholders. The MPSG 2.0 will be more concise and implementable by utilising outcome indicators instead of process indicators allowing successful nationwide implementation.

The new MPSG 2.0 has integrated the World Health Organization (WHO) Global Patient Safety Challenges including hand hygiene compliance, surgical safety, and prevention of medication error. This inclusion is vital following the launch of the Global Patient Safety Action Plan 2021-2030 by Dr. Tedros Adhanom Ghebreyesus in August 2021. The Director-General of the WHO has included Global Patient Safety Challenges as one of the strategies to eliminate avoidable harm in healthcare.

Malaysia has come long way in its journey to improve patient safety since the implementation of incident reporting in 1999. Preventing patient harm can only be achieved with an improvement of the healthcare system and every one of us plays an important role. Although the mindset of achieving zero harm seems to be elusive and idealistic, we need a paradigm shift from accepting the current status where preventable harm is still happening towards "zero harm". This transformation can lead to a significant reduction in patient harm.

On behalf of the Ministry of Health Malaysia, I would like to express my gratitude to everyone who has contributed knowledge, ideas, and time in formulating this document. The highest commendations to the Technical Secretariat of Patient Safety Council Malaysia and the Medical Care Quality Section, Medical Development Division for the success of this publication and tireless effort in ensuring national patient safety. In the wise words of the father of medicine, Hippocrates of Kos, **"Make a habit of two things - to help or at least to do no harm"**.

Tan Sri Dato' Seri Dr. Noor Hisham Abdullah
Director-General of Health Malaysia
Chairman of Patient Safety Council Malaysia

18th October 2021

MESSAGE

We would like to thank the following individuals and organizations for their invaluable contribution to the preparation and production of this manual:

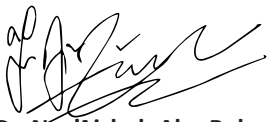
Tan Sri Dato' Seri Dr. Noor Hisham Abdullah
Director General of Health Malaysia
@ Chairman of Patient Safety Council, Malaysia

Members of the Patient Safety Council Malaysia

Contributors involved in formulating the
Malaysian Patient Safety Goals 2.0

My team from Medical Care Quality Section,
Medical Development Divison, Ministry of Health Malaysia especially Patient Safety Unit

We would also like to thank all individuals and organizations that have contributed in producing this guideline. Immense gratitude is also extended in advance to everyone who will be involved in implementing and monitoring of the Malaysian Patient Safety Goals. Let us make patient safety our priority and work together for patient safety.



Dr. Nor'Aishah Abu Bakar
Deputy Director
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia
@ Head of Technical Secretariat
Patient Safety Council of Malaysia

18th October 2021

ACKNOWLEDGEMENT

ADVISORS

Tan Sri Dato' Seri Dr. Noor Hisham Abdullah
Director General of Health Malaysia

Dato' Dr. Asmayani Khalib
Deputy Director General of Health (Medical)
Ministry of Health Malaysia

Dr. Mohd Fikri Ujang
Director of Medical Development Division
Ministry of Health Malaysia

PRINCIPAL AUTHORS

Dr. Nor'Aishah Abu Bakar
Public Health Physician
Deputy Director
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia
@Head of Technical Secretariat
Patient Safety Council of Malaysia

Dr. Ahmad Muzammil Abu Bakar
Senior Principal Assistant Director
Patient Safety Unit
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia
@Technical Secretariat
Patient Safety Council of Malaysia

CONTRIBUTORS

(According to alphabetical order)

Dr. Ahmad Tajuddin Mohamad Nor
Consultant Emergency Physician
Ministry of Health Malaysia

Dr. Alan Pok Wen Kin
Consultant Geriatrician
Ministry of Health Malaysia

Dato' Dr. Anwar Hau Abdullah
National Head of Service, Orthopedic
Ministry of Health Malaysia

Ms. Azieta Yusof
Nursing Matron
Ministry of Health Malaysia

Ms. Baljit Jaj Kaur
Nursing Matron
Ministry of Health Malaysia

Dr. Carol Lim Kar Koong
Consultant Obstetrician and Gynecologist
Ministry of Health Malaysia

Dr. Elizabeth Chong
Consultant Geriatrician
Ministry of Health Malaysia

Ms. Faridah Derani
Nursing Matron
Ministry of Health Malaysia

Ms. Hairul Nur Atiqah Idris
Medical Laboratory Technologist
Ministry of Health Malaysia

Dr. Hazaimah Shafii
Primary Care Section
Family Health Development Division
Ministry of Health Malaysia

Dr. Idaleswati Nor Mohamed
Transfusion Medicine Specialist
Ministry of Health Malaysia

Ms. Julaida Embong
Physiotherapist
Ministry of Health Malaysia

Dr. Khairulina Haireen Khalid
Senior Principal Assistant Director
Patient Safety Unit
Ministry of Health Malaysia

Dato' Dr. Hj. Khalid Ibrahim
Former State Director
Selangor State Health Department

Dr. Maimunah Fadzil
Consultant Obstetrician and Gynecologist
Ministry of Health Malaysia

Dr. Marzilawati Abd. Rahman
Consultant Physician
Ministry of Health Malaysia

Dr. Mithali Abdullah @ Jacquline
Hospital Director
Ministry of Health Malaysia

Dr. Mohamad Nurfadli Senin
Obstetrician and Gynecologist
Ministry of Health Malaysia

Dato' Seri Dr. Mohamad Yusof Hj. Abdul Wahab
National Head of Service Surgical
Ministry of Health Malaysia

Assoc. Prof. Dr. Mohd Izwan Zakaria
Consultant Emergency Physician
Head of Department
Quality & Medical Development
UMMC

Dr. Mohd Suffian Mohd Dzakwan
Senior Principal Assistant Director
Patient Safety Unit
Ministry of Health Malaysia

Ms. Monica Chee Soon Nyuk
Nursing Matron
Ministry of Health Malaysia

Ms. Munira Muhammad
Deputy Director
Pharmacy Practice & Development Division
Ministry of Health Malaysia

Dr. Nasuha Yaacob
Obstetrician and Gynecologist
Ministry of Health Malaysia

Ms. Nazariah Haron
Chief Pharmacy Officer
Ministry of Health Malaysia

Dr. Nazura Karim
Obstetrician and Gynecologist
Ministry of Health Malaysia

Dr. Hajah Noorisah Hj. Mahat Nor
Deputy Director (Medical)
Perak State Health Department
Ministry of Health Malaysia

Dr. Nor Amiza Mat Amin
Transfusion Medicine Specialist
Ministry of Health Malaysia

Dr. Hajah Nor Fariza Ngah
National Head of Service
Opthalmology
Ministry of Health Malaysia

Dr. Nor Hafizah Ahmad
Transfusion Medicine Specialist
Ministry of Health Malaysia

Dr. Noraini Mohd Yusof
Public Health Physician
Family Health Development Division
Ministry of Health Malaysia

Ms. Norendah Mahani
Nursing Matron
Ministry of Health Malaysia

Ms. Norhayati Musa
Senior Principal Assistant Director
Pharmacy Practice & Development Division
Ministry of Health Malaysia

Ms. Norlela Abdul Jalil
Nursing Matron
Ministry of Health Malaysia

Dr. Noryati Abu Amin
Director
National Blood Center
Ministry of Health Malaysia

Ms. Nurhaslina Nahar
Statistician
Patient Safety Unit
Ministry of Health Malaysia

Dr. PAA Mohamed Nazir Abdul Rahman
Former Senior Deputy Director
Medical Care Quality Section
Ministry of Health Malaysia

Dr. Ravichandran Jeganathan
National Head of Service
Obstetric and Gynecology
Ministry of Health Malaysia

Ms. Roslawati Ramli
Nursing Sister
Ministry of Health Malaysia

Ms. Rozima Samion
Nursing Sister
Ministry of Health Malaysia

Dr. Rozita Zakaria
Family Medicine Specialist
Ministry of Health Malaysia

Dr. Sally Suriani Ahip
Family Medicine Specialist
Ministry of Health Malaysia

Dr. Sharifah Balqis Sayed Abdul Hamid
Senior Principal Assistant Director
Patient Safety Unit
Ministry of Health Malaysia

Ms. Sharmila Mat Zain
Nursing Matron
Ministry of Health Malaysia

Dr. Sheela Theivanthiran
Rehabilitation Medicine Physician
Ministry of Health Malaysia

Ms. Suhadah Ahad
Pharmacist
Ministry of Health Malaysia

Dr. Suhaimi Mahmud
Emergency Physician
Ministry of Health Malaysia

Dr. Suraya Amir Husin
Head of Infection Control &
Prevention Unit
Ministry of Health Malaysia

Dato' Dr. Suresh Kumar Chidambaram
Consultant Physician of
Infectious Disease
Ministry of Health Malaysia

Dr. Zainal Abidin Othman
Consultant Anaesthsiology
Ministry of Health Malaysia

Dr. Zaleha Md Nor
Public Health Physician
Head of Patient Safety Unit
Ministry of Health Malaysia

Dr. Zawaniah Brukan Ali
Senior Principal Assistant Director
Infection Control & Prevention Unit
Ministry of Health Malaysia

Ms. Zohara Amin
Nursing Matron
Ministry of Health Malaysia

CHAPTER 1

INTRODUCTION, PROCESS & SUMMARY

INTRODUCTION

In 2013, Malaysia has become one of the few countries which has it's own national patient safety goals used by all healthcare facilities throughout the nation. The Malaysian Patient Safety Goals (MPSG) has also brought a new light to patient safety in Malaysia as the country continuously make a solidarity effort to achieve the goals. Apart from being a singular benchmarking for patient safety in Malaysia, it has ignited a massive interest on patient safety throughout the country. Since its implementation, MPSG has become the "in-thing" and a "branding" of its own throughout Malaysia, both in public and private sector-hospitals and clinics. Although the initial intention of establishing Malaysian Patient Safety Goals is to outline key priority areas on patient safety and provide overall patient safety status in Malaysia, it somehow created a bigger impact in highlighting the importance of patient safety among the healthcare staff and patients.

The annual performance of MPSG is reported to Patient Safety Unit, Medical Care Quality Section, Ministry of Health Malaysia. The performance is presented to Patient Safety Council Malaysia every year and shared in the Patient Safety Council Malaysia website. Actions are taken:

I) At national level such as: (i) Establishing a new Programme, policy or guideline (ii) Strengthening existing programme (iii) Disseminating information by conducting training, seminar (iv) Promoting various aspect of patients (v) Improving the healthcare system.

II) At facility level in which MPSG performance allows the facility to compare it's own patient safety status with others and to take appropriate action in improving patient safety.

MALAYSIAN PATIENT SAFETY GOALS - THE PAST & THE FUTURE

The initial Malaysian Patient Safety Goals implemented since 2013 consists of 13 goals (for hospitals with ICU), 11 goals (for hospitals without ICU) and 4 goals (for clinics-Health Clinics and GP Clinics). After many years of implementation it is learnt that:

- Government hospitals reported their performance consistently.
- Performance of some goals have shown improvement, especially when there is existing programs to achieve the goals (e.g: Hand Hygiene Compliance, Safe Surgery Saves Lives Programme).

- Sentinel events are still occurring and some show increasing trend. Probably due to improvement in reporting of incident.
- Few goals are not suitable to be monitored at national level but can be intergrated as part of monitoring at facility level. Examples are Clinical Governance, Critical Value Notification for lab result.
- Selection of goals and KPI need to consider various factors:
  - o Practicality for the healthcare facility to monitor.
  - o The usefulness for country improvement.
  - o Validity of the data sent.

Hence, a more consolidated and practical goals are selected as the priority areas in patient safety that need to be monitored and achieved. Series of engagement sessions were conducted to formulate the MPSG 2.0. The new Malaysian Patient Safety Goals 2.0 is a combination of global and national goals. This will enable Malaysia to make a comparison with other countries and at the same time focus on crucial patient safety issues in Malaysia. Only 7 goals, 9 KPIs are included for hospitals and 4 goals, 4 KPIs for clinics. Most are "outcome based indicators" instead of "process indicators".

Although some of the previous goals are not included in the MPSG 2.0, the implementations of programmes associated with these goals such as Crical Value Notification or Ventilated Associated Pneumonia can be monitored at facility level.

ABOUT THE GUIDELINES

This document, Malaysian Patient Safety Goals 2.0 – Guidelines on Implementation & Surveillance explains the details of the new Malaysian Patient Safety Goals, known as MPSG 2.0. It describes the:

- Malaysian Patient Safety Goals & KPIs.
- The technical specification of the associated KPIs (i.e., rationale, strategies & implementation, definition, inclusion and exclusion criteria, formula of KPI, numerator, denominator and target for each goal).
- The data collection process and format.

Hopefully this guidelines will assist healthcare facilities in the implementation and surveillance of the Malaysian Patient Safety Goals in order to ensure objective, systematic and standardize measurement.

OBJECTIVES OF THE MALAYSIAN PATIENT SAFETY GOALS

1. To challenge and motivate healthcare organization in Malaysia in improving patient safety.
2. To outline key priority areas on patient safety.
3. To act as a Singular Benchmarking on patient safety in Malaysia.
4. To be used by Patient Safety Council of Malaysia to monitor the status of patient safety in Malaysia.

PHILOSOPHY OF MALAYSIAN PATIENT SAFETY GOALS

- "Primum non nocere (First do no harm)".
- "Patient safety should be given a prime importance in healthcare".
- "Preventable adverse event should be avoided at all costs".

TARGET SETTING

The targets are based on:

1. Current Ministry of Health Malaysia standards.
2. World Health Organization target.
3. Previous performance of Malaysian Patient Safety Goals.
4. Consensus of experts and stakeholders.

WHO SHOULD REPORT MPSG 2.0?

1. All Public or Private Hospitals/Medical institutions that treat patient.
2. Stand alone MoH Health Clinics/MoH Dental Clinics
   - Non stand alone clinics such as KKIA, Klinik Desa, Klinik Komuniti, UTC Clinics and mobile clinics should report their performance combined with its parent organisation - Health/Dental Clinics.
3. Private General Practitioner clinics.

EVALUATION OF MALAYSIAN PATIENT SAFETY GOALS & INDICATOR

The goals, indicators and targets will be reviewed by the Patient Safety Council regularly.

DATA COLLECTION SYSTEM

- At facility level, each healthcare facility is required to collect the data based on the data collection format (MPSG 2.0 Form, refer page 46).

- The data need to be analysed by the facility at regular intervals (e.g. every month) and presented at the Patient Safety Committee Meeting, chaired by the - Hospital Director/CEO of hospital, Head of District/Dental Health Office, Officer In Charge of Health Clinic or Head of GP Clinics.

- The facility also need to take corrective action to improve the performance or prevent recurrence of similar incident at the facility.

- The data need to be submitted to the Technical Secretariat of the Patient Safety Council Malaysia which is Medical Care Quality Section, MoH once a year only (before or by 31st January of the following year).

- The Technical Secretariat of the Patient Safety Council analyses the performance received and present it to the Patient Safety Council. The performance is used to plan actions in order to further improve patient safety at the national level.

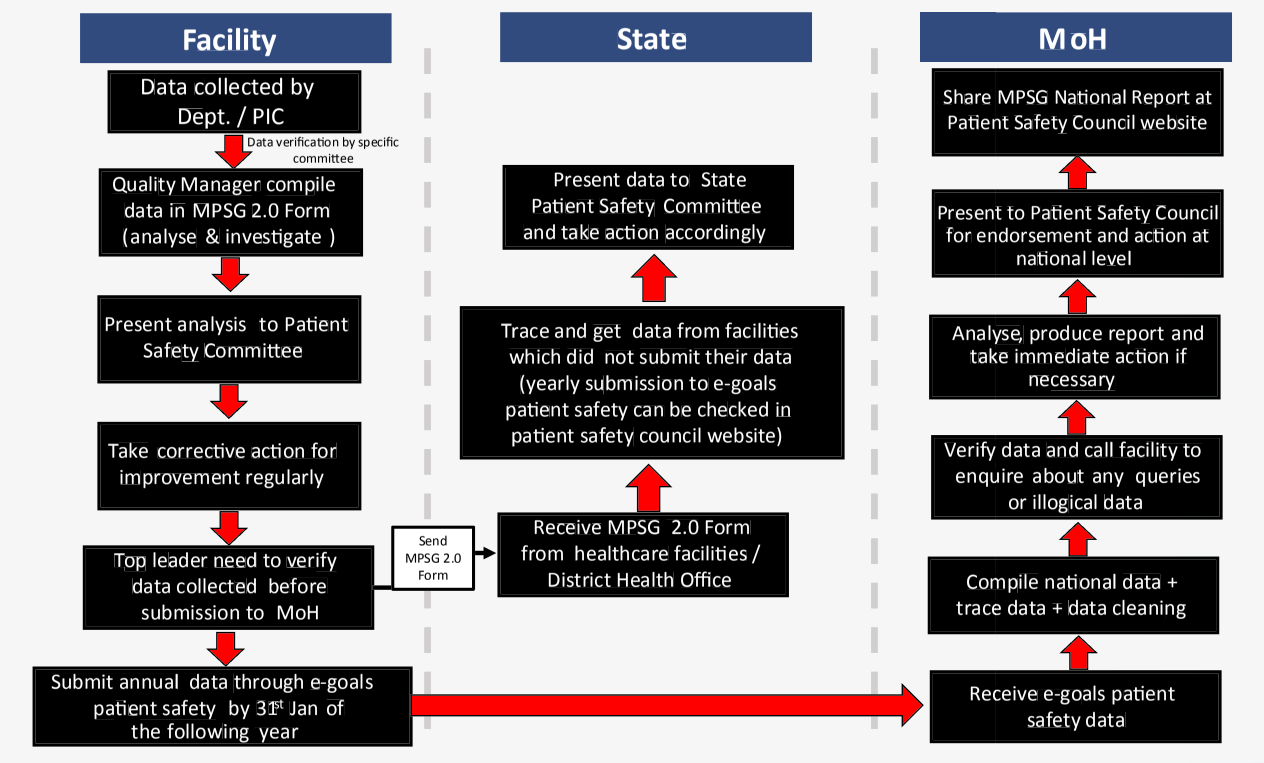
SUMMARY OF MPSG 2.0 – THE GOALS & KPIs

GOAL NO.	PATIENT SAFETY GOALS	KPI	TARGET	APPLICABLE TO		FREQUENCY OF MONITORING
				Hospital	Clinic	
1	Infection Prevention & Control	1. Hand Hygiene Compliance Rate	≥75% compliance rate at each audit	√		Twice a year- 6 monthly audit
		2. Rate of Catheter Associated Blood Stream Infection (CABSI) (i.e Number of CABSI per 100 admissions)	≤ 0.5 per 100 admissions			Once a year (Point Prevalence Survey for 2 weeks)
2	Surgical Safety "Safe Surgery Saves Lives"	3. Number of "Wrong Surgery performed"	Zero Case	√		Continuously throughout the year, compile once a month
		4. Number of "Unintended Retained Surgical Item" (URSI)	Zero Case of URSI Category 2 & 3			
3	Medication Safety "Medication Without Harm"	5. Number of Medication Error Related to Severe Harm or Death	Zero Case	√	√	
4	Transfusion Safety	6. Number of Incorrect Blood Component Transfused (IBCT)	Zero Case	√		

GOAL NO.	PATIENT SAFETY GOALS	KPI	TARGET	APPLICABLE TO		FREQUENCY OF MONITORING
				Hospital	Clinic	
5	Patient Fall Prevention	7. Rate of Patient Fall	Inpatient: ≤ 5 per 1,000 patient-day Outpatient/Clinic: ≤ 5 %	√	√	Continuously throughout the year, compile once a month
6	Correct Patient Identification	8. Number of Incidents Caused by Wrong Patient Being Identified (Detected through incident reporting & investigation)	Zero Case	√	√	
7	Incident Reporting & Learning System	9. Implementation of Patient Safety Incident Reporting and Learning System	System Implemented	√	√	

Remarks:
All goals are applicable to hospitals with OT, Goal No. 2 is not applicable for Hospital without OT.
Goal no. 3, 5, 6 and 7 are applicable to clinics.

MPSG 2.0 FLOW CHART



CHAPTER 2

TECHNICAL SPECIFICATION OF MALAYSIAN PATIENT SAFETY GOALS 2.0

GOAL No.1

INFECTION PREVENTION & CONTROL



Rationale

Infection prevention and control is acknowledged universally as a key strategy in preventing healthcare associated infection. The 1st Global Patient Safety Challenge was initiated by the WHO in late 2004 and mandates signatory countries to work towards the reduction of healthcare associated infection and the consequences.

Strategies & Implementation

1. Hand Hygiene Campaigns and Training Programmes are regularly conducted.
2. To implement and audit Catheter Care Bundle:
   a. Hand hygiene
   b. Catheter insertion under aseptic precautions
   c. Scrub the hub
   d. Daily review of line necessity with prompt removal of unnecessary line

Key Performance Indicator 1

Hand Hygiene Compliance Rate

Key Performance Indicator 2

Rate of Catheter Associated Blood Stream Infection (CABSI) - Number of CABSI per 100 admissions

Hand Hygiene Compliance Rate

GOAL No.1
KPI 1

DEFINITION

Hand hygiene: Any action of hand cleansing 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 Indication: Indications are reference points in time that is before and after contact. The "5 moments in Hand Hygiene" are the 5 "indications" for hand hygiene in healthcare facilities. The "5 moments" are - Before patient contact, Before aseptic task, After body fluid exposure risk, After patient contact, After contact with patient surrounding.

The opportunity: Is an accounting unit for the action of hand hygiene. An opportunity exists when an action of hand hygiene is required. One opportunity may consist of single or multiple moments to perform one hand hygiene.

INCLUSION CRITERIA

Any health care worker involved in direct or indirect patient care.

KPI NO. 1	HAND HYGIENE COMPLIANCE RATE
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
DATA COLLECTION AT FACILITY LEVEL	6-monthly (twice a year).
APPLICABLE FOR	All hospitals and medical institutions that treat patient.

HAND HYGIENE COMPLIANCE RATE

MONITORING METHODS

Using the WHO Hand Hygiene Observation Form (Refer Appendix i)

- Hand hygiene compliance audit should be conducted by trained and validated Infection Control Nurse (ICN) or Link Nurse.
- The auditor should identify the auditees (those who are to be audited) based on the distribution of the job categories and the minimum requirements of each department.
- The auditor should identify the appropriate place to conduct the audit without interrupting the patient's privacy and patient care.
- The auditor should record only what she/he observes without assuming.
- Each health personnel should not be audited more than three times for each term.
- Report and feedback should be given to the audited health personnel once the audit is completed.
- The number of opportunities depends on the number of beds in the hospital.

Number of Hospital beds	Number of minimum opportunities by Department	Total number of opportunities
<100	NA	150
101-150	30	200
151-250	40	250
251-350	55	350
351-450	65	400
451-550	75	450
551-650	80	500
651-750	90	550
751-850	100	600
851-950	105	650
951-1150	115	700
>1150	125	750

For Psychiatric hospital - need to conduct audit on 200 opportunities only during each audit term.

For Specialist Hospital - only 6 main departments need to be involved in the hand hygiene audit at national level. However, audit of other departments are strongly encouraged and analysis can be conducted at the hospital level. The six departments involved are:

i. Medical Department
ii. Surgical Department
iii. Paediatric Department
iv. Anaesthesiology Department
v. Obstetrics and Gynaecology Department
vi. Orthopaedic Department

For Non-Specialist Hospital, audit should be conducted in all wards (multi disciplines).

Audit should be conducted twice a year:

- First Term (Jan-June)
- Second Term (July-December)

Hospital level analysis should be carried out according to category of staff, department, ward and overall performance.

If the current performance showed significant discrepancy compared to the previous audit, a cross audit is necessary.

GOAL No.1 KPI 2

Catheter Associated Blood Stream Infection (CABSI) Rate

DEFINITION

CABSI:

- A laboratory-confirmed bloodstream infection (LCBI) where a blood catheter either central or peripheral was inserted for more than 48 hours on the date of event with day of device placement being Day 1 **AND,**
- Catheter still in situ when infection happen or just being removed within 24 hours.
- If patient is admitted or transferred into a facility with catheter still in place, day of *first access to the catheter at the current facility is considered as Day 1.
  **First access is defined as the first contact to the device in the current facility for any procedures related to the device.*

LCBI:

1) Patient of any age has a recognized pathogen, which is an organism not included on the National Healthcare Safety Network (NHSN) common commensal list, identified from one or more blood specimens obtained by a culture or non-culture based microbiologic testing method AND organism(s) identified in blood is not related to an infection at another site.
2) Patient of any age has at least one of the following signs/symptoms: fever (>38.0°C), chills, or hypotension AND organism(s) identified in blood is not related to an infection at another site AND the same NHSN common commensal is identified by a culture or non-culture based microbiologic testing method, from two or more blood specimens collected on separate occasions.
3) Patient ≤ 1 year of age has at least one of the following signs or symptoms: fever (>38.0°C), hypothermia (<36.0°C), apnea, or bradycardia AND Organism(s) identified in blood is not related to an infection at another site AND the same NHSN common commensal is identified by a culture or non-culture based microbiologic testing method, from two or more blood specimens collected on separate occasions.

INCLUSION CRITERIA

Any case that meets the criteria for CABSI (per definition) which is not secondary to an infection from another body site.

EXCLUSION CRITERIA

- Cases from Emergency department, clinic, or other outpatient services.
- Cases previously identified at other hospitals.
- Cases from screening culture.
- Cases with organisms identified as contaminants.
- Secondary blood stream infection (LCBI related to an infection at another site).

KPI NO. 2	RATE OF CATHETER ASSOCIATED BLOOD STREAM INFECTION (CABSI) - NO. OF CABSI PER 100 ADMISSIONS
NUMERATOR (N)	Total number of CABSI cases.
DENOMINATOR (D)	Total number of hospital admission.
FORMULA	(N/D) x 100
TARGET	≤0.5 PER 100 ADMISSIONS
DATA COLLECTION A FACILITY LEVEL	Once a year, over a period of 2 weeks. (Refer to Appendix ii)
MONITORING METHODS	It is a hospital wide, cross sectional, point prevalence survey conducted once a year. Population under surveillance: All in-patients during the survey period. (Refer Appendix ii for form and method of survey)
APPLICABLE FOR	All hospitals and medical institutions that treat patient.

GOAL No.2

SURGICAL SAFETY



"Safe Surgery Saves Lives"

Rationale

"Safe Surgery Saves Lives Programme" and the use of "Peri-operative Check List" help to ensure that the opearating team consistently follow a few critical safety steps before, during and after surgery. Hence, minimize the most common and avoidable risks endangering the lives and well-being of surgical patients.

Strategies & Implementation

Director General of Health Malaysia Circular No. 23/2009 & No. 4/2018 clearly instruct the implementation of Safe Surgery Saves Lives Programme in all hospitals performing surgeries starting from 2009. Safe Surgery Check List 2.0 need to be used from 1st January 2019, including the use of Multi-Disciplinary Check List. (Please refer to MoH Guidelines on Safe Surgery Saves Lives 2.0) for details.

Safe Surgery Committees at - Ministry, state and hospital level need to spearhead this initiative and monitor the implementation aspect.

Key Performance Indicator 3

Number of "Wrong Surgeries Performed"

Key Performance Indicator 4

Number of "Unintended Retained Surgical Item"

Number of "Wrong Surgeries" Performed

GOAL No.2
KPI 3

DEFINITION

"Wrong surgery" include the followings:

- Wrong patient
- Wrong site/side surgery
- Wrong procedure:
  - o Totally different procedure performed (e.g: Consent for below knee amputation, instead the surgery end up with above knee amputation)
  - o Non-conformance between consent and procedure (i.e. "do more/do less"):
    - Do more – Example: Patient consented for herniotomy only, but in addition circumcision was done.
    - Do less – Example: Patient consented for C-section + BTL, but BTL was not done.
- Wrong implant: Which cause harm to patient (e.g: Wrong power of intraocular lens used, implant failure secondary to wrong screw size used for plating of bone fracture).

INCLUSION CRITERIA

Surgery/procedure involving general, regional and/or local anaesthesia, sedation, performed in operating theatre.

EXCLUSION CRITERIA

Surgery/procedure performed outside operating theatre.

KPI NO. 3	NUMBER OF "WRONG SURGERIES" PERFORMED
DATA TO BE REPORTED	1. Total number of "Wrong Surgeries Performed". 2. Total number of surgeries/procedures performed in the hospital's operating theater.
TARGET	ZERO CASE OF WRONG SURGERY
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All hospitals and medical institutions with operating theatre.

Number of "Unintended Retained Surgical Item"

GOAL No.2
KPI 4

DEFINITION

UNINTENDED RETAINED SURGICAL ITEM (URSI)

Unintended retention of a foreign object/surgical item in a patient after completion of surgery/procedure. The item does not include item intentionally implanted as part of the planned intervention or item present prior to the surgery that is intentionally retained.

Surgical item is defined as material, instrument or device that is used in performing surgical procedure. The item can be further classified as:

I. Soft goods:
   - Surgical Sponge
   - Surgical Towel
   - Dressing sponge, drape towel, pack, prep swab, gauze, wound vac sponge

II. Sharps/Needle

III. Instrument

IV. Small miscellaneous item; e.g., vessel loop, "bulldog clamp"

V. Device such as guide wire or catheter:
   - Inadvertently left in body or
   - Un-retrieved broken device fragments
   - Un-retrieved Unrecognized device fragments

DEFINITION OF UNINTENDED RETAINED SURGICAL ITEM - 3 CATEGORIES

- **CATEGORY 1**: The surgical team is aware of the RSI; however, the surgeon determines the risk of retrieval is more than the risk of retention and thus leaving the item in the patient (e.g. broken drill bit in the bone).
- **CATEGORY 2**: The surgical team is aware of the count discrepancy or broken surgical item(s), but unable to locate the item even after thorough search according to SOP.
- **CATEGORY 3**: The surgical team is not aware at all of the retained surgical item (RSI) at the end of surgery. The RSI is only discovered after the patient presents with symptoms or accidentally detected.

*Any material that is left intentionally for therapeutic/safety reasons is not considered as unintended retained surgical item.

INCLUSION CRITERIA

Surgery/procedure involving general, regional and/or local anaesthesia sedation performed in operation theatre.

EXCLUSION CRITERIA

Procedure or surgery performed outside operating theatre.

KPI NO. 4	NUMBER OF "UNINTENDED RETAINED SURGICAL ITEM"
DATA TO BE REPORTED	1. Total number of Unintended Retained Surgical Item for Category 1, 2 and 3. 2. Total number of surgeries/procedures performed in the hospital's operating theater.
TARGET	ZERO CASE OF CATEGORY 2 & 3 UNINTENDED RETAINED SURGICAL ITEM
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All hospitals and medical institutions that treat patient.

MEDICATION SAFETY

GOAL No.3

"Medication Without Harm"

Rationale

Unsafe medication practice and medication error are a leading cause of avoidable patient harm. According to WHO, "Medication Without Harm" aims to reduce severe avoidable medication-related harm by 50%, globally in the next 5 years. Since Malaysia has started this initiative much earlier, the aim is to prevent medication error leading to severe harm or death to zero.

Strategies & Implementation

4 key components of medication safety strategies are:

- Empower patient and the public in ensuring medication safety.
- Develop and enhance policy and guideline related to safety use of medicines.
- Strengthen education and training of healthcare professionals.
- Monitor and enhance system and practice of medication management.

Prioritizes on 3 key areas to protect patient from harm

- High-risk situations
- Polypharmacy
- Transitions of care

Key Performance Indicator 5

Number of Medication Error Related to Severe Harm or Death

GOAL No.3 KPI 5

Number of Medication Error Related to Severe Harm or Death

DEFINITION

MEDICATION ERROR

"A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures and systems, including prescribing, order communication, product labelling, packaging, and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use."

ACTUAL MEDICATON ERROR

- Medication error occured and reached the patient.
- If the error is detected by the patient, it is considered as actual error.

NEAR MISS MEDICATON ERROR

- Medication error that has the potential to cause an adverse event (patient harm) but did not reach the patient because of chance or because it is intercepted in the medication use process.
- If the healthcare personnel detected and corrected the error BEFORE it reaches the patient, it is considered as near miss.

(Source: MoH Guideline on Medication Error Reporting System, 2019)

Classification of Medication Error Outcome/Severity

Medication error may lead to various harm. Its causal effect may range from “no harm” to disability and death. The error outcome can be classified as below:

Error Outcome	Description of Severity	ME Category
Potential Error	Circumstances or events that have the capacity to cause error.	A
Error, No Harm	An error occurred but the error did not reach the patient (An "error of omission" does reach the patient).	B
	An error occurred that reached the patient but did not cause patient harm.	C
	An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm.	D
Error, Harm	An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention.	E
	An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization.	F
	An error occurred that may have contributed to or resulted in permanent patient harm.	G
	An error occurred that required intervention necessary to sustain life.	H
Error, Harm, Death	An error occurred that may have contributed to or resulted in the patient’s death.	I

(Source: MoH Guideline on Medication Error Reporting System, 2019)

INCLUSION CRITERIA

Medication error leading to severe harm or death includes Category F to Catetori I.

EXCLUSION CRITERIA

Other categories (i.e. Category A to Category E).

KPI NO. 5	NUMBER OF MEDICATION ERROR LEADING TO SEVERE HARM OR DEATH
DATA TO BE REPORTED	1. Total number of Actual Medication Error. leading to severe harm or death (ME category F to I). 2. Total number of Actual Medication Error (ME category C to I). 3. Total number of Near-Miss Medication Error. 4. Total number of hospital admission, clinic visit.
TARGET	ZERO CASE OF MEDICATION ERROR LEADING TO SEVERE HARM OR DEATH (CATEGORY F TO I)
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All healthcare facilities (i.e. hospitals, medical institutions, health/dental clinics and GP clinics).



TRANSFUSION SAFETY

GOAL No.4

Rationale

1. Transfusion process involve series of inter-connected steps which include:
   - prescription and ordering of blood products,
   - patient identification,
   - collection and labelling of patient's blood sample in the clinical area,
   - pre-transfusion compatibility procedures and issue of blood in the blood bank,
   - collection and transportation of blood units within the hospital,
   - handling of blood units in the clinical area, blood administration,
   - monitoring of patients,
   - management of adverse event.

2. Error which can lead to incorrect blood component transfused (IBCT) or near miss can occur at any phase of the transfusion process. It can be divided into:
   i. Error in sampling or labelling (clinical department).
   ii. Error in the blood bank laboratory.
   iii. Error during administration of blood at patient's bedside.

3. IBCT can contribute to severe morbidity and even mortality. IBCT is preventable and therefore must be monitored and investigated for the purpose of improvement and to prevent similar incident from happening.

Strategies & Implementation

1. Compliance to the Transfusion Practice Guidelines for Clinical and Laboratory Personnel when using blood/blood products and during transfusion process is essential.
2. Reporting of the error in transfusion process is mandatory and RCA report must be submitted to Malaysian Patient Safety Goal (MPSG) and National Haemovigilance Coordinating Centre (NHCC), Pusat Darah Negara.
3. Root Cause Analysis (RCA) need to be conducted following an incident of IBCT and near miss using RCA 2 (Root Cause Analysis & Action) format (Refer - Guidelines on Implementation Incident Reporting & Learning System 2.0 for Ministry of Health Malaysia Hospitals).

Key Performance Indicator 6

Number of Actual Incorrect Blood Component Transfusion Error (IBCT)

DEFINITION

BLOOD

Human blood that is collected, including whole blood and blood component collected by apheresis, either for direct transfusion or for preparation of human medicinal product.

BLOOD COMPONENT

Therapeutic components of blood (red cell, white cell, platelet, plasma) that can be prepared by centrifugation, filtration and freezing using conventional blood bank methodology.

INCORRECT BLOOD COMPONENT TRANSFUSED (IBCT)

An episode where a patient is transfused with a blood component or plasma product which does not meet the appropriate requirements or which is intended for another patient.

NEAR MISS IBCT

An error which if undetected can result in the determination of a wrong blood group, issue, collection or administration of an incorrect, inappropriate or unsuitable blood or blood component. However, the error is recognized before the actual transfusion process take place.

INCLUSION CRITERIA

Actual IBCT that occur during the request for blood and blood components intended for transfusion.
*Near miss IBCT is also needed for the purpose of MPSG reporting

EXCLUSION CRITERIA

1. Non-ABO/Rh specific blood or blood component given to patients in situation such as:
   - Rh positive red cells transfused in Rh negative patients in emergency situation.
   - Rh positive components such as Fresh Frozen Plasma (FFP), Cryoprecipitate, Platelets transfused to Rh negative patients.
   - Group O red cell transfused to a non-group O patient in an emergency situation.
   - Group A or Group B red cells and components transfused to Group AB patients either in the absence of Group AB blood and blood component or as planned transfusion.
   - Specific components for neonatal transfusion such as group O packed cell or AB plasma as planned transfusion.
   - Urgent transfusion of red cells for patients with rare blood group.

2. Other incidents related to transfusion process.
   - Sharing same ID.
   - Possible blood grouping error in other hospitals/clinics.
   - Error in previous admission.

GOAL No.4 KPI 6

Number of Actual Incorrect Blood Component Transfused (IBCT)

KPI NO. 6	NUMBER OF ACTUAL INCORRECT BLOOD COMPONENT TRANSFUSED (IBCT)
DATA TO BE REPORTED	1. Total number of Actual Incorrect Blood Component Transfused (IBCT). 2. Total number of Near Miss Incident Incorrect Blood Component Transfused (IBCT).
TARGET	ZERO CASE OF ACTUAL INCORRECT BLOOD COMPONENT TRANSFUSED (IBCT)
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All hospitals and medical institutions.



PATIENT FALL PREVENTION

GOAL No.5

Rationale

- Patient fall has potential to cause severe harm. It can lead to prolong hospital stay, morbidity or even mortality.
- Patient fall is preventable with suitable safety measures such as safer environment, assessment of patient's risk and reducing the risk, close monitoring of patient.

Strategies & Implementation

- Create awareness regarding the importance of patient fall to staff, patient and family members.
- Educate staff on the risk reduction strategies to prevent patient fall.
- Making environment safer to reduce the risk of patient fall.

Key Performance Indicator 7

Rate of Patient Fall

DEFINITION

Fall is an unintentional descent to a lower level, which may or may not result in injury. For the purpose of MPSG reporting, patient fall include witnessed and unwitnessed incidents occurring in all inpatient and outpatient healthcare facilities. However, it does not include fall due to events such as seizures, loss of consciousness, paralysis or cardiac arrest and due to external forces, non injurious developmental fall among infant/toddler or fall related to suicidal attempt.

GOAL No.5 KPI 7

Rate of Patient Fall

INCLUSION CRITERIA

Case of unintentional patient fall that happen within the compound of healthcare facility.

EXCLUSION CRITERIA

- Fall due to events such as seizures, loss of consciousness, paralysis or cardiac arrest and due to external forces.
- Non injurious developmental fall among infant/toddler.
- Intentional fall due to suicidal attempt.

KPI NO. 7	RATE OF PATIENT FALL
FORMULA	**Inpatient** $\frac{\text{Total number of falls}}{\text{Total number of patient-days in the facility}} \times 1{,}000$ = Fall rate per 1, 000 patient-days **Outpatient and Primary Healthcare Facilities** $\frac{\text{Total number of falls}}{\text{Total number of clinic attendance}} \times 100\%$ = Fall rate
TARGET	**Inpatient** **≤ 5 per 1000 patient-days**
	Outpatient and Primary Healthcare Facilities **≤ 5 %**
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All hospitals, medical institutions & clinics that treat patient.



CORRECT PATIENT IDENTIFICATION

GOAL No.6

Rationale

Correct patient identification is essential step in ensuring that the correct investigation, procedure or treatment involves the correct patient.

Strategies & Implementation

- Implement the use of at least two identifiers (e.g: Full name of patient, Registration or NRIC Number) before conducting any investigation, procedure or treatment.
- Report and investigate incident involving wrong patient identification through incident reporting and learning system.
- Take necessary action to prevent incident due to wrong patient identification.

Key Performance Indicator 8

Total Number of Patient Safety Incident Which Occur Due to Wrong Patient Being Identified (Detected Through Incident Reporting & Investigation)

DEFINITION

Patient identifier: Person-specific information that can be used to identify specific patient among other patients.

"Acceptable method of Identification": Ask patient's full name, check using patient's tag, registration number (RN), NRIC. Minimum of 2 identifiers need to be used.

"Unacceptable method of Identification": Patient's room number or patient's bed number.

GOAL No.6 KPI 8

Number of Incident Caused by Wrong Patient Identification

INCLUSION CRITERIA

Patient safety incident which occur due to wrong patient identification. It is detected through incident reporting and investigation (e.g: Root Cause Analysis).

EXCLUSION CRITERIA

Incident involves stolen identity.

KPI NO. 8	NUMBER OF PATIENT SAFETY INCIDENT WHICH OCCUR DUE TO WRONG PATIENT BEING IDENTIFIED (DETECTED THROUGH INCIDENT REPORTING & INVESTIGATION)
DATA TO BE REPORTED	Total number of patient safety incidents which occur due to wrong patient being identified.
TARGET	ZERO INCIDENT DUE TO WRONG PATIENT BEING IDENTIFIED
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All healthcare facilities (i.e. hospitals, medical institutions, health/dental clinics and GP clinics).



INCIDENT REPORTING & LEARNING SYSTEM

GOAL No.7

Rationale

The fundamental role of incident reporting systems is to improve patient safety by investigating the incident, take effective risk reduction strategies and learn from the previous incident.

Strategies & Implementation

- Patient Safety Incident Reporting and Learning System need to be implemented in all healthcare facilities.
- Investigate Patient Safety Incidents by using tools such as the Root Cause Analysis and Action (RCA2) especially when the incident lead to severe harm or death of patient.
- Take effective risk reduction strategies to improve the system and prevent similar incident from happening.
- Share with others as part of learning.

* *Refer to MoH Guidelines on Implementation - Incident Reporting & Learning System 2.0*

Key Performance Indicator 9

Implementation of Patient Safety Incident Reporting and Learning System

GOAL No.7 KPI 9

Implementation of Patient Safety Incident Reporting and Learning System

INCLUSION CRITERIA

Incident Reporting established specifically for staff to report patient safety incident. Specific team/committee is also established to investigate the incident and take risk reduction strategies to prevent similar incident from happening.

EXCLUSION CRITERIA

Incident related to staff safety should not be included. Instead it should be notified according to Occupational Safety & Health Act.

KPI NO. 9	IMPLEMENTATION OF PATIENT SAFETY INCIDENT REPORTING AND LEARNING SYSTEM
DATA TO BE REPORTED	• Total number of patient safety incident reporting done (for year of reporting). • Total number of patient safety incident with severe or death outcome. • Total number of patient safety incident with severe or death outcome that are investigated and corrective action taken.
TARGET	INCIDENT REPORTING AND LEARNING SYSTEM IMPLEMENTED
DATA COLLECTION AT FACILITY LEVEL	Data (numbers of cases) to be collected on a monthly basis. The monitoring should be done continously.
APPLICABLE FOR	All healthcare facilities (i.e. hospitals, medical institutions, health/dental clinics and GP clinics).

CHAPTER 3

REPORTING OF MALAYSIAN PATIENT SAFETY GOALS 2.0 PERFORMANCE VIA e-goals Patient Safety

MPSG 2.0 FORM

MPSG Form 2.0

Performance Indicator Matrix: Annual Performance (Jan-Dec)

State: _____
MOH/University/ Private: _____
Hospital/Clinic: _____
Year: _____

Type of facility		Goal No	PI	Indicator	Target	Frequency of monitoring	Annual Performance J	F	M	A	M	J	J	A	S	O	N	D	Total	Average
INFECTION PREVENTION AND CONTROL																				
	Hosp	1	1	Hand Hygiene Compliance Rate	≥ 75%	6 Monthly														
	Hosp		2	Rate of Catheter Associated Blood Stream Infection (CABSI) - No. of CABSI per 100 admissions	≤ 0.5 Per 100 Admissions	Once / Year														
SAFE SURGERY SAVES LIVES																				
	Hosp with OT	2	3	Number of "Wrong Surgeries" performed	Zero (0)	Monthly														
	Hosp with OT		4	Number of Unintended Retained Surgical Item	-	Monthly for Category 1														
	Hosp with OT				Zero (0)	Monthly for Category 2														
	Hosp with OT				Zero (0)	Monthly for Category 3														
	Hosp with OT			Total no. of surgeries/procedures performed in the hospital's operation theater	-	Monthly														
MEDICATION WITHOUT HARM																				
Clinic	Hosp	3	5	Number of Medication Error related to Severe Harm or Death	Zero (0)	Monthly														
Clinic	Hosp			Number of Actual Medication Error	-	Monthly														
Clinic	Hosp			Number of Near Miss Medication Error	-	Monthly														
	Hosp			Total no. of hospital admission (exclude clinic attendance)	-	Monthly														
Clinic	Hosp			Total no. of clinic attendance	-	Monthly														
TRANSFUSION SAFETY																				
	Hosp	4	6	Number of actual Incorrect Blood Component Transfusion Error (IBCT)	Zero (0)	Monthly														
	Hosp			Number of near miss Incorrect Blood Component Transfusion Error (IBCT)	-	Monthly														
PREVENTION OF PATIENT FALL																				
	Hosp	5	7	Rate of patient fall (inpatient) - per 1000 bed-days	≤5 per 1000 patient-days	Monthly														
Clinic	Hosp			Rate of patient fall (outpatient or clinics) - per 100 clinics attendance	≤5 %	Monthly														
PATIENT IDENTIFICATION																				
Clinic	Hosp	6	8	Number of incidents caused by wrong patient identification (detected through incident reporting & investigation)	Zero (0)	Monthly														
IMPLEMENTING INCIDENT REPORT AND LEARNING SYSTEM																				
Clinic	Hosp	7	9	Implementation of Incident Reporting System or other Methods To Investigate Incidents	System Implemented	Yearly	Yes / No												_	
Clinic	Hosp			Total no. of patient safety incident reporting done (for year of reporting).	-	Monthly														
Clinic	Hosp			Total no. of patient safety incident with severe or death outcome.	-	Monthly														
Clinic	Hosp			Total no. of patient safety incident with severe or death outcome that were investigated and action taken.	-	Monthly														

Officer compiling the data

Name: _____ Designation: _____

Date: _____ HP./Fax/ E-mail: _____

Officer reviewing and verifying the data (Head of Department/ Quality officer/ Hospital Director/CEO)

Name: _____ Designation: _____

Date: _____ HP./Fax/ E-mail: _____

This form is to be used by health care facilities to quantify annual performance measurement at their level and it **must be kept** for their record and monitoring.

The health care facilities also need to fill in the **e-goals-patient safety** form which can be assessed via Patient Safety Council website.

Reporting Performance Via e-goals Patient Safety

How to report your performance through the e-goals Patient Safety online reporting system:

1. Reporting should be done only once a year through the e-goals Patient Safety online reporting system. Report must be submitted within 1st to 31st January of each year for previous year performance reporting.

2. To access the e-goals Patient Safety, go to https://patientsafety.moh.gov.my/v2/ and click on e-goals patient safety (refer image below).



3. Once the page is loaded, click on the e-goals Patient Safety button. Follow the instruction given in the online reporting form.

4. To check the status of your reporting, scroll down in the same page (https://patientsafety.moh.gov.my/v2/?page_id=556) and there will be list of facilities that had submitted their reporting. The list will automatically update every 5 minutes.

5. Further information and tools on reporting MPSG 2.0 performance is available at: https://patientsafety.moh.gov.my/v2/?page_id=60.

APPENDICES

i. WHO Hand Hygiene Observation Form

ii. Catheter Associated Blood Stream Infection Manual

i. WHO Hand Hygiene Observation 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		
Code			Code			Code			Code		
N°			N°			N°			N°		
Opp.	**Indication**	**HH Action**	**Opp.**	**Indication**	**HH Action**	**Opp.**	**Indication**	**HH Action**	**Opp.**	**Indication**	**HH Action**
1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves

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

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.
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

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

General Recommendations

(refer to the Hand Hygiene Technical Reference Manual)

1. In the context of open and direct observations, the observer introduces him/herself to the health-care worker and to the patient when appropriate, explains his/her task and proposes immediate informal feed back.
2. The health-care worker, belonging to one of the main four following professional categories (see below), is observed during the delivery of health-care activities to patients.
3. Detected and observed data should be recorded with a pencil in order to be immediately corrected if needed.
4. The top of the form (header) is completed before starting data collection (excepted end time and session duration).
5. The session should last no more than 20 minutes (± 10 minutes according to the observed activity); the end time and the session duration are to be completed at the end of the observation session.
6. The observer may observe up to three health-care workers simultaneously, if the density of hand hygiene opportunities permits.
7. Each column of the grid to record hand hygiene practices is intended to be dedicated to a specific professional category. Therefore numerous health-care workers may be sequentially included during one session in the column dedicated to their category. Alternatively each column may be dedicated to a single health-care worker only of whom the professional category should be indicated.
8. As soon as you detect an indication for hand hygiene, count an opportunity in the appropriate column and cross the square corresponding to the indication(s) you detected. Then complete all the indications that apply and the related hand hygiene actions observed or missed.
9. Each opportunity refers to one line in each column; each line is independent from one column to another.
10. Cross items in squares (several may apply for one opportunity) or circles (only a single item may apply at one moment).
11. When several indications fall in one opportunity, each one must be recorded by crossing the squares.
12. Performed or missed actions must always be registered within the context of an opportunity.
13. Glove use may be recorded only when the hand hygiene action is missed while the health-care worker is wearing gloves.

Short description of items

Facility:	to complete according to the local nomenclature	
Service:	to complete according to the local nomenclature	
Ward:	to complete according to the local nomenclature	
Department:	to complete according to the following standardized nomenclature:	
	medical, including dermatology, neurology, haematology, oncology, etc.	surgery, including neurosurgery, urology, EENT, ophthalmology, etc.
	mixed (medical & surgical), including gynaecology	obstetrics, including related surgery
	paediatrics, including related surgery	intensive care & resuscitation
	emergency unit	long term care & rehabilitation
	ambulatory care, including related surgery	other (to specify)
Period N°:	1) pre- / 2) post-intervention; and then according to the institutional counter.	
Date:	day (dd) / month (mm) / year (yy)	
Start/end time:	hour (hh) / minute (mm).	
Session duration:	difference between start and end time, resulting in minutes of observation.	
Session N°:	attributed at the moment of data entry for analysis.	
Observer:	observer's initials (the observer is responsible for the data collection and for checking their accuracy before submitting the form for analysis.	
Page N°:	to write only when more than one form is used for one session.	
Prof.cat:	according to the following classification:	
	1. nurse / midwife	1.1 nurse, 1.2 midwife, 1.3 student.
	2. auxiliary	
	3. medical doctor	3.1 in internal medicine, 3.2 surgeon, 3.3 anaesthetist / resuscitator / emergency physician, 3.4 paediatrician, 3.5 gynaecologist, 3.6 consultant, 3.7 medical student.
	4. other health-care worker	4.1 therapist (physiotherapist, occupational therapist, audiologist, speech therapist), 4.2 technician (radiologist, cardiology technician, operating room technician, laboratory technician, etc), 4.3 other (dietician, dentist, social worker and any other health-related professional involved in patient care), 4.4 student.
Number:	number of observed health-care workers belonging to the same professional category (same code) as they enter the field of observation and you detect opportunities.	
Opp(ortunity):	defined by one indication at least	
Indication:	reason(s) that motivate(s) hand hygiene action; all indications that apply at one moment must be recorded	
	bef.pat: before touching a patient	aft.b.f: after body fluid exposure risk
	bef.asept: before clean/aseptic procedure	aft.pat: after touching a patient
		aft.p.surr: after touching patient surroundings
HH action:	response to the hand hygiene indication(s); it can be either a positive action by performing handrub or handwash, or a negative action by missing handrub or handwash	
	HR: hand hygiene action by handrubbing with an alcohol-based formula HW: hand hygiene action by handwashing with soap and water	Missed: no hand hygiene action performed

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.
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.

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

Observation Form – Basic Compliance Calculation

	Facility:						Period:			Setting:					
	Prof.cat.			Prof.cat.			Prof.cat.			Prof.cat.			Total per session		
Session N°	Opp (n)	HW (n)	HR (n)	Opp (n)	HW (n)	HR (n)	Opp (n)	HW (n)	HR (n)	Opp (n)	HW (n)	HR (n)	Opp (n)	HW (n)	HR (n)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
Total															
Calculation	Act (n) = / Opp (n) =			Act (n) = / Opp (n) =			Act (n) = / Opp (n) =			Act (n) = / Opp (n) =			Act (n) = / Opp (n) =		
Compliance															

Compliance (%) = $\frac{\text{Actions}}{\text{Opportunities}}$ x 100

Instructions for use

1. Define the setting outlining the scope for analysis and report related data according to the chosen setting.
2. Check data in the observation form. Hand hygiene actions not related to an indication should not be taken into account and vice versa.
3. Report the session number and the related observation data in the same line. This attribution of session number validates the fact that data has been taken into count for compliance calculation.
4. Results per professional category and per session (vertical):
   - 4.1 Sum up recorded opportunities (opp) in the case report form per professional category: report the sum in the corresponding cell in the calculation form.
   - 4.2 Sum up the positive hand hygiene actions related to the total of opportunities above, making difference between handwash (HW) and handrub (HR): report the sum in the corresponding cell in the calculation form.
   - 4.3 Proceed in the same way for each session (data record form).
   - 4.4 Add up all sums per each professional category and put the calculation to calculate the compliance rate (given in percent)
5. The addition of results of each line permits to get the global compliance at the end of the last right column.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.
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.

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

Observation Form – Optional Calculation Form

(Indication-related compliance with hand hygiene)

	Facility:						Period:			Setting:					
	Before touching a patient			Before clean/ aseptic procedure			After body fluid exposure risk			After touching a patient			After touching patient surroundings		
Session N°	Indic (n)	HW (n)	HR (n)	Indic (n)	HW (n)	HR (n)	Indic (n)	HW (n)	HR (n)	Indic (n)	HW (n)	HR (n)	Indic (n)	HW (n)	HR (n)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
Total															
Calculation	Act (n) = / Indic1 (n) =			Act (n) = / Indic2 (n) =			Act (n) = / Indic3 (n) =			Act (n) = / Indic4 (n) =			Act (n) = / Indic5 (n) =		
Ratio act / indic*															

Instructions for use

1. Define the setting outlining the scope for analysis and report related data according to the chosen setting.
2. Check data in the observation form. Hand hygiene actions not related to an indication should not be taken into account and vice versa.
3. If several indications occur within the same opportunity, each one should be considered separately as well as the related action.
4. Report the session number and the related observation data in the same line. This attribution of session number validates the fact that data has been taken into count for compliance calculation.
5. Results per indication (indic) and per session (vertical):
   - 4.1 Sum up indications per indication in the observation form: report the sum in the corresponding cell in the calculation form.
   - 4.2 Sum up positive hand hygiene actions related to the total of indications above, making the difference between handwash (HW) and handrub (HR): report the sum in the corresponding cell in the calculation form.
   - 4.3 Proceed in the same way for each session (observation form).
   - 4.4 Add up all sums per each indication and put the calculation to calculate the ratio (given in percent)

***Note:** This calculation is not exactly a compliance result, as the denominator of the calculation is an indication instead of an opportunity. Action is artificially overestimated according to each indication. However, the result gives an overall idea of health-care worker's behaviour towards each type of indication.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.
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.

ii. Catheter Associated Blood Stream Infection Manual

INTRODUCTION

Catheter Associated Blood Stream Infection (CABSI) in this manual describes as a healthcare associated blood stream infection originating from a peripheral or central intravenous or intra-arterial catheter and it is a laboratory-confirmed bloodstream infection (LCBI).

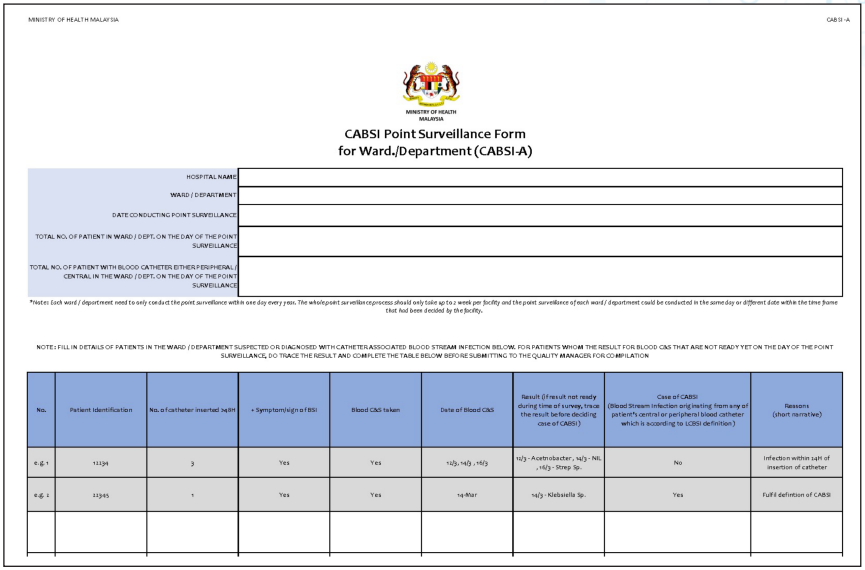
The KPI is measured using **Point Prevalence survey**. Point Prevalence for this KPI is the **Number of CABSI over the patient admission** during the period of survey.

POINT PREVALENCE SURVEY

How to conduct the survey:

1. **Decide the period of survey**. It should be conducted once a year and the whole survey process should be done within 2 weeks.
2. **Select representative** from each ward/department (inpatient, refer exclusion criteria) of the hospital/health institution.
3. **Representative of each ward/department should only conduct and collected survey data of CABSI for 1 day within the period of survey. The representative may select any day within this period.**
4. **Brief the representative** on the required data to be collected during the survey.
5. **Representative of each ward/department conduct the survey using form CABSI-A.**
6. **Send completed form CABSI-A** to Quality Manager (ensure all Blood C&S result completed before sending).
7. **Quality Manager of facility collect form CABSI-A** from each ward/ department and compile into form CABSI-B.
8. **Record the performance in MPSG Form 2.0 and submit performance via e-goals patient safety** once a year (submit previous year performance, **latest by 31st January of the following year**).

Form CABSI-A (for ward/department use during point surveillance)



MINISTRY OF HEALTH MALAYSIA

CABSI -A

MINISTRY OF HEALTH MALAYSIA

CABSI Point Surveillance Form for Ward./Department (CABSI-A)

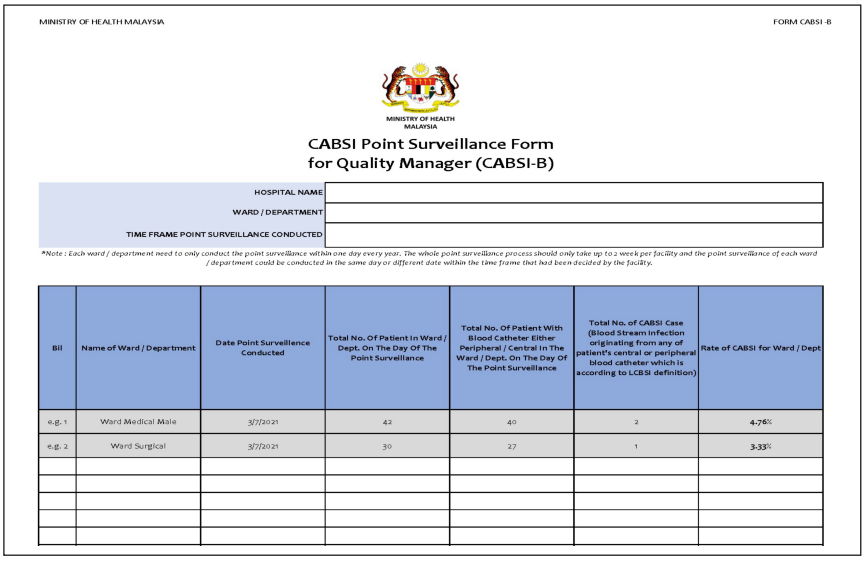
HOSPITAL NAME	
WARD / DEPARTMENT	
DATE CONDUCTING POINT SURVEILLANCE	
TOTAL NO. OF PATIENT IN WARD / DEPT. ON THE DAY OF THE POINT SURVEILLANCE	
TOTAL NO. OF PATIENT WITH BLOOD CATHETER EITHER PERIPHERAL/ CENTRAL IN THE WARD / DEPT. ON THE DAY OF THE POINT SURVEILLANCE	

*Notes: Each ward / department need to only conduct the point surveillance within one day every year. The whole point surveillance process should only take up to 2 week per facility and the point surveillance of each ward / department could be conducted in the same day or different date within the time frame that had been decided by the facility.

NOTE: FILL IN DETAILS OF PATIENTS IN THE WARD / DEPARTMENT SUSPECTED OR DIAGNOSED WITH CATHETER ASSOCIATED BLOOD STREAM INFECTION BELOW. FOR PATIENTS WHOM THE RESULT FOR BLOOD C&S THAT ARE NOT READY YET ON THE DAY OF THE POINT SURVEILLANCE, DO TRACE THE RESULT AND COMPLETE THE TABLE BELOW BEFORE SUBMITTING TO THE QUALITY MANAGER FOR COMPILATION

No.	Patient Identification	No. of catheter inserted >48H	+ Symptom/sign of BSI	Blood C&S taken	Date of Blood C&S	Result (if result not ready during time of survey, trace the result before deciding case of CABSI)	Case of CABSI (Blood Stream Infection orig inating from any of patient's central or peripheral blood catheter which is according to LCBSI definition)	Reasons (short narrative)
e.g. 1	12394	3	Yes	Yes	12/3, 14/3 , 16/3	12/3 - Acetrobacter , 14/3 - NIL , 16/3 - Strep Sp.	No	Infection within 14H of insertion of catheter
e.g. 2	22345	1	Yes	Yes	14-Mar	16/3 - Klebsiella Sp.	Yes	Fulfil defintion of CABSI

Form CABSI-B (for facility Quality Manager)



MINISTRY OF HEALTH MALAYSIA

FORM CABSI -B

MINISTRY OF HEALTH MALAYSIA

CABSI Point Surveillance Form for Quality Manager (CABSI-B)

HOSPITAL NAME	
WARD / DEPARTMENT	
TIME FRAME POINT SURVEILLANCE CONDUCTED	

*Note : Each ward / department need to only conduct the point surveillance within one day every year. The whole point surveillance process should only take up to 2 week per facility and the point surveillance of each ward / department could be conducted in the same day or different date within the time frame that had been decided by the facility.

Bil	Name of Ward / Department	Date Point Surveillence Conducted	Total No. Of Patient In Ward / Dept. On The Day Of The Point Surveillance	Total No. Of Patient With Blood Catheter Either Peripheral / Central In The Ward / Dept. On The Day Of The Point Surveillance	Total No. of CABSI Case (Blood Stream Infection originating from any of patient's central or peripheral blood catheter which is according to LCBSI definition)	Rate of CABSI for Ward / Dept
e.g. 1	Ward Medical Male	3/7/2021	42	40	2	4.76%
e.g. 2	Ward Surgical	3/7/2021	30	27	1	3.33%

Download the form at ⟶ https://patientsafety.moh.gov.my/v2/?page_id=60



Ministry of Health Malaysia



Patient Safety Council Malaysia
&
Medical Care Quality Section
Medical Development Division
Ministry of Health Malaysia

ISBN 978-967-2625-00-1

9 789672 625001