


**MINISTRY OF HEALTH MALAYSIA**
**ASSISTANT MEDICAL OFFICER SERVICES SECTION**

# NATIONAL CLINICAL AUDIT REPORT ASSISTANT MEDICAL OFFICER

# 2024

## 1. Introduction.

**1.1** There are 117 hospitals and 14 health clinics under the State and Federal Territories Department of Health involved in the national clinical audit of Assistant Medical Officers for the year 2024, which was conducted from August 19, 2024, to September 19, 2024, as per the letter KKM.500-5/1/96 JLD7(8), dated July 22, 2024. This clinical audit represents the first instance of digital implementation, utilizing a QR code scanning method. Auditors will record the audit results in an online Google Form, and the findings will automatically be entered into a database prepared by the technical audit team comprising Assistant Medical Officer personnel. This time, the clinical audit consists of seven (7) activities, two (2) new activities: pre-hospital care & ambulance services and management of deceased bodies in the Forensic Department. These activities are subject to the existing Standard Operating Procedures (SOP) or Clinical Practice Guidelines (CPG) as a reference and guideline.

**1.2** The activities audited are as follows:

i. Triage in the Emergency & Trauma Department.
ii. Asthma care in the Emergency & Trauma Department.
iii. Hemodialysis treatment via permanent vascular access in the Hemodialysis Unit.
iv. Plaster of Paris (POP) application in the Orthopedic Department.
v. Infection control (hand hygiene and environmental) in the Emergency & Trauma Department and Hemodialysis Unit.
vi. Pre-hospital care and ambulance services.
vii. Management of deceased bodies in the Forensic Department.

**1.3** The total audit sample is based on the specialized services designated for each hospital, as outlined in the table below:

| Activities | State Hospital | Major Specialist Hospital | Minor/ Non-Specialist Hospital |
|---|---|---|---|
| Triage | 50 Sample | 30 Sample | 20 Sample |
| Asthma care | 20 Sample | 10 Sample | 10 Sample |
| Hemodialysis treatment | 30 Sample | 20 Sample | 10 Sample |
| POP application | 30 Sample | 20 Sample | 10 Sample |
| Infection control | 30 Sample | 20 Sample | 10 Sample |
| Pre-hospital care and ambulance services | 6 Sample | 4 Sample | 3 Sample |
| Management of deceased bodies | 10 Sample | 10 Sample | 5 Sample |

**1.4** The three-way cross-audit schedule among hospitals within the Ministry of Health Malaysia for the Clinical Audit of Assistant Medical Officers in 2024.

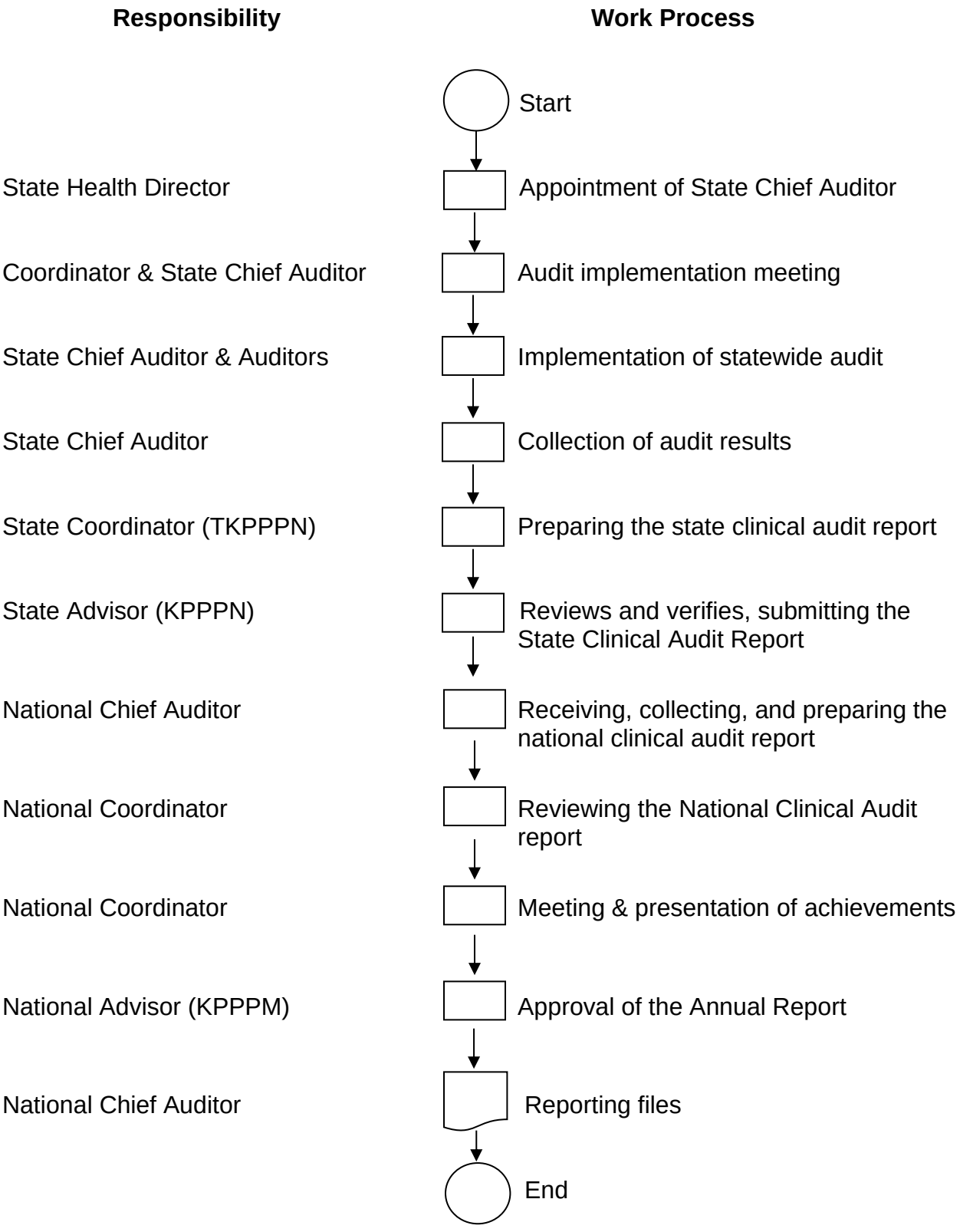
| No. | Auditors | Auditees |
|---|---|---|
| 1 | Sultanah Bahiyah Hospital, Kedah | Tuanku Fauziah Hospital, Perlis |
| 2 | Three-way cross-audit among hospitals in the state of Kedah except for Sultan Abdul Halim Hospital, which will be audited by the Auditor team from Tuanku Fauziah Hospital, Perlis | Hospitals in the state of Kedah |
| 3 | Tuanku Ja'afar Hospital, Seremban | Kuala Lumpur Hospital |
| 4 | Kuala Lumpur Hospital | Putrajaya Hospital |
| 5 | Three-way cross-audit among hospitals in the state of Negeri Sembilan except for Tuanku Ja'afar Hospital, which will be audited by the Auditor team from Putrajaya Hospital | Hospitals in the state of Negeri Sembilan |
| 6 | Sipitang Hospital, Sabah | Labuan Hospital |
| 7 | Three-way cross-audit among hospitals in the state of Sabah except for Beaufort Hospital, which will be audited by the Auditor team from Labuan Hospital | Hospitals in the state of Sabah |
| 8 | Three-way cross-audit among hospitals within their respective states | Other hospitals in all states |

*Note:*
*The Clinical Audit Coordinator for State/ Institutional Assistant Medical Officers is advised to schedule audits based on the suitability of their respective states. The audits should be conducted using a three-way cross-audit approach without reciprocal arrangements between the two hospitals.*

**1.5** Work Process for Clinical Audit of Assistant Medical Officers, Ministry of Health Malaysia (MOH).

| No. | Responsible Officer | Work Process | Duration |
|---|---|---|---|
| i. | State Health Director | Issued appointment letters as State Chief Auditor to Assistant Medical Officers | 1 day |
| ii. | State Coordinator & Chief Auditor | Conducting a meeting of the State Chief Auditor with the State Coordinators | 1 day |
| iii. | State Chief Auditor & Auditors | The implementation of statewide audits shall be conducted through a three-way cross-audit approach between hospitals on an ad-hoc basis. | 1-2 days |
| iv. | State Chief Auditor | Collecting audit findings and submitting them to the State Coordinator | 1-3 days |
| v. | State Coordinator (TKPPPN) | Preparation of state clinical audit report | 1-7 days |
| vi. | State Advisor (KPPPN) | Review and verify the state clinical audit report and send it to the Assistant Medical Officer Section | 1-2 days |
| vii. | National Chief Auditor | Receive and compile state audit clinical reports and prepare for national clinical audit reports | 1-14 days |
| viii. | National Coordinator | Analyzing the national clinical audit reports | 1-7 days |
| ix. | National Coordinator | Reviewing the comprehensive national clinical audit report of Assistant Medical Officers before presenting it at the annual performance meeting | 1-2 days |
| x. | National Advisor (KPPPM) | Approval of the National Clinical Audit Reports | 1-2 days |
| xi. | National Chief Auditor | Publish in the Annual Report of the Assistant Medical Officer Section, MOH | 1-2 days |

**1.6** Flowchart for the clinical audit process by Assistant Medical Officers, MOH.



## 2. List of Committee Members/ Auditors for the National-Level Clinical Audit of Assistant Medical Officers, 2024.

| No. | Name | Workplace | Committee |
|---|---|---|---|
| 1 | **Mohd Hairulnisham bin Mohd Senapi** | **Perlis State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 2 | Syed Emely Fadzlan bin Syed Mokhtar | Perlis State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 3 | Mohammad Faizan bin Zainal Abidin | Tuanku Fauziah Hospital | State Chief Auditor (Triage) |
| 4 | Mohd Shahfarin bin Shahidan | Tuanku Fauziah Hospital | State Chief Auditor (Asthma care) |
| 5 | Muhamad Zahir bin Ismail | Tuanku Fauziah Hospital | State Chief Auditor (Hemodialysis) |
| 6 | Mohd Faisol bin Yusof | Tuanku Fauziah Hospital | State Chief Auditor (POP) |
| 7 | Karunakaran a/l Arumugam | Tuanku Fauziah Hospital | State Chief Auditor (Infection control) |
| 8 | Khairil Amry bin Khairuddin | Tuanku Fauziah Hospital | State Chief Auditor (PHC) |
| 9 | Norazhalif bin Samsudin | Tuanku Fauziah Hospital | State Chief Auditor (Forensic) |
| 10 | **Hj Zamri bin Hj Abdul Hamid** | **Kedah State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 11 | Hj Afifudin bin Said | Kedah State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 12 | Zulkifli bin M. E. Abdul Salam | Sultanah Bahiyah Hospital | State Chief Auditor (Triage) |
| 13 | Norharyana binti Yahya | Sultan Abdul Halim Hospital | State Chief Auditor (Asthma care) |
| 14 | Asri bin Kassim | Sultan Abdul Halim Hospital | State Chief Auditor (Hemodialysis) |
| 15 | Shafie bin Abdul Wahab | Sultan Abdul Halim Hospital | State Chief Auditor (POP) |
| 16 | Ahmad Badri bin Ismail | Sik Hospital | State Chief Auditor (Infection control) |
| 17 | Ibrahim bin Abu Bakar | Sultanah Bahiyah Hospital | State Chief Auditor (PHC) |
| 18 | Hj. Mahyudin bin Ahmad | Sultanah Bahiyah Hospital | State Chief Auditor (Forensic) |
| 19 | **Mohd Amir bin Hashim** | **Penang State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 20 | Theayalan a/l Vasudevan | Penang State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 21 | Faizal Izzani bin Ahmad | Balik Pulau Hospital | State Chief Auditor (Triage) |

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|---|---|---|---|
| 22 | Mohd Azriq Nazwan bin Johary | Penang Hospital | State Chief Auditor (Asthma care) |
| 23 | Subramaniam a/l Ramasamy | Penang Hospital | State Chief Auditor (Hemodialysis) |
| 24 | Mohamad Nazri bin Abu Hassan | Seberang Jaya Hospital | State Chief Auditor (POP) |
| 25 | Mohd Husni bin Osman | Seberang Perai Tengah District Health Office | State Chief Auditor (Infection control) |
| 26 | Zaira Shahida binti Zainal Abidin | Penang Hospital | State Chief Auditor (PHC) |
| 27 | Mohamad Nazri bin Mahmud | Penang Hospital | State Chief Auditor (Forensic) |
| 28 | **Hj Abdul Aziz bin Mohd Nor** | **Perak State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 29 | Hj Baharul Rizal bin Baharuddin | Perak State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 30 | Mohamad Nazir bin Mohamad Isa | Teluk Intan Hospital | State Chief Auditor (Triage) |
| 31 | Hj. Fazli bin Ahmad | Ulu Kinta Bahagia Hospital | State Chief Auditor (Asthma care) |
| 32 | Roslan bin Hashim | Raja Permaisuri Bainun Hospital | State Chief Auditor (Hemodialysis) |
| 33 | Ahmad Suhaimi bin Razally | Raja Permaisuri Bainun Hospital | State Chief Auditor (POP) |
| 34 | Rozaidi bin Zainol | Ulu Kinta Bahagia Hospital | State Chief Auditor (Infection control) |
| 35 | Gilbert a/l Santiagoo | Raja Permaisuri Bainun Hospital | State Chief Auditor (PHC) |
| 36 | Raja Mangeet Singh a/l Basant Singh | Raja Permaisuri Bainun Hospital | State Chief Auditor (Forensic) |
| 37 | **P.Wilson a/l V.Perianayagam** | **Selangor State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 38 | Wan Mohd Rashid bin Wan Ghazali | Selangor State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 39 | Siti Nur Hidayat binti Sauti | Tengku Ampuan Rahimah Hospital | State Chief Auditor (Triage) |
| 40 | Anbalagan a/l Muthusami | Tengku Ampuan Rahimah Hospital | State Chief Auditor (Asthma care) |
| 41 | Hj Sarudin bin Zainul | Cyberjaya Hospital | State Chief Auditor (Hemodialysis) |
| 42 | Mohd Samsul bin Ahmad | Tengku Ampuan Rahimah Hospital | State Chief Auditor (POP) |
| 43 | Aminuddin bin Pa'chik | Ampang Hospital | State Chief Auditor (Infection control) |
| 44 | Hj. Syukri Hadafi bin Ahmad | Selayang Hospital | State Chief Auditor (PHC) |
| 45 | Muhamad Redzuan bin Aziz | Tengku Ampuan Rahimah Hospital | State Chief Auditor (Forensic) |

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|---|---|---|---|
| 46 | **Raman a/l Subramaniam** | **Kuala Lumpur Hospital** | **State Clinical Audit Advisor (KPPP)** |
| 47 | Hj Mohd Tarmizi bin Ariffin | Kuala Lumpur Hospital | State Clinical Audit Coordinator (TKPPP) |
| 48 | Mohan Raj a/l Muniandy | Kuala Lumpur Hospital | State Chief Auditor (Triage) |
| 49 | Kamarul Hazlam bin Mamat | Kuala Lumpur Hospital | State Chief Auditor (Asthma care) |
| 50 | Hj. A.Suhaili bin Shahri | Kuala Lumpur Hospital | State Chief Auditor (Hemodialysis) |
| 51 | Hairul Adley bin Saadon | Kuala Lumpur Hospital | State Chief Auditor (POP) |
| 52 | Mohd Muhsin bin Fadzil | Kuala Lumpur Hospital | State Chief Auditor (Infection control) |
| 53 | Ahmad Fauzi bin Md Shah | Kuala Lumpur Hospital | State Chief Auditor (PHC) |
| 54 | Muhd Yunus bin Muhamad Nor | Kuala Lumpur Hospital | State Chief Auditor (Forensic) |
| 55 | **Shafrizam bin Abd Wahab** | **Federal Territory of KL & Putrajaya** | **State Clinical Audit Advisor (KPPPN)** |
| 56 | Mohd Ridzuan bin Abdul Wahab | Federal Territory of KL & Putrajaya | State Clinical Audit Coordinator (TKPPPN) |
| 57 | Mohd Zuraidi bin Abdul Rahman | Putrajaya Hospital | State Chief Auditor (Triage) |
| 58 | Mohd Khabir bin Mohd Kalip | Putrajaya Hospital | State Chief Auditor (Asthma care) |
| 59 | Amir Fariq bin Azmi | Putrajaya Hospital | State Chief Auditor (Hemodialysis) |
| 60 | Muhamad Firdaus bin Abdul Latif | Putrajaya Hospital | State Chief Auditor (POP) |
| 61 | Alias bin Abd Rahman | Putrajaya Hospital | State Chief Auditor (Infection control) |
| 62 | Kuyilan a/l Muthusamy | Putrajaya Hospital | State Chief Auditor (PHC) |
| 63 | Izuan Shukri bin Mohamed Arif | Putrajaya Hospital | State Chief Auditor (Forensic) |
| 64 | **Hj Mohd Sulaiman bin Dalimi** | **Negeri Sembilan State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 65 | Hj Nawawi bin Samad | Negeri Sembilan State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 66 | Nanthakumar a/l Perumal | Tuanku Ja'afar Hospital | State Chief Auditor (Triage) |
| 67 | Hj M.Khabir bin Che Par | Tuanku Ja'afar Hospital | State Chief Auditor (Asthma care) |
| 68 | Kamal Ashraf bin Melak | Tuanku Ja'afar Hospital | State Chief Auditor (Hemodialysis) |
| 69 | Hazrulnizan bin Rusli | Port Dickson Hospital | State Chief Auditor (POP) |

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|---|---|---|---|
| 70 | Md Saiful Safari bin Md Shariff | Jempol District Health Office | State Chief Auditor (Infection control) |
| 71 | Siti Nurhidayah binti Mohd Noor | Tuanku Ampuan Najihah Hospital | State Chief Auditor (PHC) |
| 72 | Sharvinder Singh a/l Nermel Singh | Tuanku Ja'afar Hospital | State Chief Auditor (Forensic) |
| 73 | **Hj Rosman bin Jonet** | **Melaka State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 74 | Hj Mahadi bin Osman | Melaka State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 75 | Mohd Fairuz bin Abd Wahab | Melaka Hospital | State Chief Auditor (Triage) |
| 76 | Zulkariman bin Yusoff | Melaka Hospital | State Chief Auditor (Asthma care) |
| 77 | Mohd Lukman bin Awang Hamat | Melaka Hospital | State Chief Auditor (Hemodialysis) |
| 78 | Hj Mohd Iskandar Zulkarnain bin Harun | Alor Gajah Hospital | State Chief Auditor (POP) |
| 79 | Zulkifli bin Awang Din | Melaka Hospital | State Chief Auditor (Infection control) |
| 80 | Muhammad Khairy bin Rosli | Melaka Hospital | State Chief Auditor (PHC) |
| 81 | Mansor bin Md. Ali Hanafiah | Melaka Hospital | State Chief Auditor (Forensic) |
| 82 | **Mohd Yusra bin Mohd Yusof** | **Johor State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 83 | Nor Yazjehan binti Yahya | Johor State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 84 | Adnan bin Abdullah | Sultanah Aminah Hospital | State Chief Auditor (Triage) |
| 85 | Kamal Ariffin bin Jamil | Sultanah Nora Ismail Hospital | State Chief Auditor (Asthma care) |
| 86 | Mohd Rais bin Pariman | Sultanah Aminah Hospital | State Chief Auditor (Hemodialysis) |
| 87 | Raja a/l Peramal | Sultanah Aminah Hospital | State Chief Auditor (POP) |
| 88 | Samad bin Alias | Sultanah Aminah Hospital | State Chief Auditor (Infection control) |
| 89 | Rohaizat bin Muhammad | Sultanah Aminah Hospital | State Chief Auditor (PHC) |
| 90 | Ali bin Kassim | Sultanah Aminah Hospital | State Chief Auditor (Forensic) |
| 91 | **Hj Mohd Faudzi bin Salleh** | **Pahang State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 92 | Azman bin Mahmood | Pahang State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 93 | Saidinar bin Che Hassan | Jengka Hospital | State Chief Auditor (Triage) |

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| 94 | Hj Kamal Phami bin Mokhtar | Jengka Hospital | State Chief Auditor (Asthma care) |
| 95 | Hj Suzaini bin Zainol | Bentong Hospital | State Chief Auditor (Hemodialysis) |
| 96 | Mohd Jilani bin Nordin | Sultan Hj Ahmad Shah Hospital | State Chief Auditor (POP) |
| 97 | Mohd Fyrolikram bin Othman | Sultan Hj Ahmad Shah Hospital | State Chief Auditor (Infection control) |
| 98 | Ahmad Yushree bin Mohamed Salim | Tengku Ampuan Afzan Hospital | State Chief Auditor (PHC) |
| 99 | Mohajazaini bin Mohammad | Tengku Ampuan Afzan Hospital | State Chief Auditor (Forensic) |
| 100 | **Hj Shamsuri bin Mat** | **Terengganu State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 101 | Hj Mohd Johari bin Yusof | Terengganu State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 102 | Ahmad Zaki bin Abd. Halim | Dungun Hospital | State Chief Auditor (Triage) |
| 103 | Mohd Hamira Khamsari bin Hashim | Sultanah Nur Zahirah Hospital | State Chief Auditor (Asthma care) |
| 104 | Azha bin Mustafa | Sultanah Nur Zahirah Hospital | State Chief Auditor (Hemodialysis) |
| 105 | Hj Zakaria bin Abu Bakar | Sultanah Nur Zahirah Hospital | State Chief Auditor (POP) |
| 106 | Muhammad Aziman bin Ahmad | Sultanah Nur Zahirah Hospital | State Chief Auditor (Infection control) |
| 107 | Sharifuddin bin Ibrahim | Sultanah Nur Zahirah Hospital | State Chief Auditor (PHC) |
| 108 | Ahmad Syukri bin Abdullah | Sultanah Nur Zahirah Hospital | State Chief Auditor (Forensic) |
| 109 | **Abdul Basir bin Hj Ahmad** | **Kelantan State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 110 | Mohd Zamani bin Hj. Mat Noh | Kelantan State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 111 | Nor Najiehah binti Awang | Sultan Ismail Petra Hospital | State Chief Auditor (Triage) |
| 112 | Ahmad Martunis bin Daud | Raja Perempuan Zainab II Hospital | State Chief Auditor (Asthma care) |
| 113 | Hj Suzura bin Hassan | Raja Perempuan Zainab II Hospital | State Chief Auditor (Hemodialysis) |
| 114 | Wan Mohd Zaki bin Wan Ibrahim | Raja Perempuan Zainab Hospital | State Chief Auditor (POP) |
| 115 | Nik Abdul Aziz bin Raja Soh | KK Bandar, Pasir Mas District Health Office | State Chief Auditor (Infection control) |
| 116 | Hj. Muhammad Romzi bin Husain | Tanah Merah Hospital | State Chief Auditor (PHC) |
| 117 | Nik Fanizu bin Mohidin | Raja Perempuan Zainab II Hospital | State Chief Auditor (Forensic) |

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| 118 | **Siman bin Hj Entol** | **Sarawak State Health Department** | **State Clinical Audit Advisor & Coordinator (KPPPN)** |
| 119 | Hj Awang Sibini bin Awang Drahman | Sarawak State Health Department | State Chief Auditor (Triage) |
| 120 | Eldrie Robson anak Ismail | Sarawak State Health Department | State Chief Auditor (Asthma care) |
| 121 | Asmara bin Pata | Umum Sarawak Hospital | State Chief Auditor (Hemodialysis) |
| 122 | Mikim anak Radem | Umum Sarawak Hospital | State Chief Auditor (POP) |
| 123 | Mohamad Idzhar bin Mohamad Noh | Miri Hospital | State Chief Auditor (Infection control) |
| 124 | Mohd Faizal bin Mohamad @ Ismail | Umum Sarawak Hospital | State Chief Auditor (PHC) |
| 125 | Jibe anak Lakipo | Umum Sarawak Hospital | State Chief Auditor (Forensic) |
| 126 | **Jasni Gindono** | **Sabah State Health Department** | **State Clinical Audit Advisor (KPPPN)** |
| 127 | M Benly Rylxer Sami | Sabah State Health Department | State Clinical Audit Coordinator (TKPPPN) |
| 128 | Bells bin Gippa @ Pius | Queen Elizabeth Hospital | State Chief Auditor (Triage) |
| 129 | Jesuit Apolinario III | Queen Elizabeth Hospital | State Chief Auditor (Asthma care) |
| 130 | Amsain bin Inani | Queen Elizabeth Hospital | State Chief Auditor (Hemodialysis) |
| 131 | Mohammad Sukri bin Umar | Queen Elizabeth Hospital | State Chief Auditor (POP) |
| 132 | Mohd Zakwan bin Hamdan | Queen Elizabeth Hospital | State Chief Auditor (Infection control) |
| 133 | Rosheydee bin Rosley | Queen Elizabeth II Hospital | State Chief Auditor (PHC) |
| 134 | Demian bin George | Sabah State Health Department | State Chief Auditor (Forensic) |
| 135 | **Hj A.Ishak bin Rahmat** | **Federal Territory of Labuan** | **State Clinical Audit Advisor (KPPPN)** |
| 136 | Mazlan bin Musi | Federal Territory of Labuan | State Clinical Audit Coordinator (TKPPPN) |
| 137 | Hj. Razif bin Yasid | Labuan Hospital | State Chief Auditor (Triage) |
| 138 | Hj Aminuddin bin Mat Amin | Labuan Hospital | State Chief Auditor (Asthma care) |
| 139 | Rosli bin Laiman | Labuan Hospital | State Chief Auditor (Hemodialysis) |
| 140 | Fezli Lee bin Omar | Labuan Hospital | State Chief Auditor (POP) |
| 141 | Mohd Zaili bin Mohamad Zaini | Federal Territory of Labuan | State Chief Auditor (Infection control) |

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|---|---|---|---|
| 142 | Hj. Asyadzul Syazwan bin Kassim | Labuan Hospital | State Chief Auditor (PHC) |
| 143 | Mohd Fauzi bin Kallam | Labuan Hospital | State Chief Auditor (Forensic) |

## List of Main Committee Members for the National-Level Clinical Audit of Assistant Medical Officers, 2024

| No. | Name | Workplace | Committee |
|---|---|---|---|
| 1 | Zulhelmi bin Abdullah | Assistant Medical Officer Service Section, MOH | National Clinical Audit Advisor (KPPPM) |
| 2 | Alias bin Abu Hassan | Assistant Medical Officer Service Section, MOH | National Clinical Audit Coordinator |
| 3 | Nik Abdul Afiq bin Abdul Aziz | Assistant Medical Officer Service Section, MOH | National Chief Auditor |
| 4 | Mathavan a/l Pechy | Tengku Ampuan Rahimah Klang Hospital | National Chief Auditor (Triage) |
| 5 | Mazlan bin Zakariya | Tengku Ampuan Rahimah Klang Hospital | National Chief Auditor (Asthma care) |
| 6 | Saifullizan bin Mohamed | Selangor State Health Department | National Chief Auditor (Hemodialysis) |
| 7 | Mohd Nadzri bin Omar | Ampang Hospital | National Chief Auditor (POP) |
| 8 | Mohd Fyrolikram bin Othman | Sultan Hj Ahmad Shah Hospital | National Chief Auditor (Infection control) |
| 9 | Md Fairul Azizan bin Mukhtar | Sungai Buloh Hospital | National Chief Auditor (PHC) |
| 10 | Zainalabidin bin Mohamed | Sultanah Nora Ismail Batu Pahat Hospital | National Chief Auditor (Forensic) |
| 11 | Asmawi bin Abdullah | Assistant Medical Officer Service Section, MOH | National Clinical Audit Secretary |
| 12 | Mohd Suhaidi bin Mohd Ariffin | Assistant Medical Officer Service Section, MOH | National Clinical Audit Committee |

## 3. Checklist of procedures for the clinical audit of Assistant Medical Officers based on activities:

### 3.1 Triage in the Emergency & Trauma Department.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **RECEIVE PATIENTS**<br>**Approach and greet the patient** | | | |
| 1.1 | Does the Assistant Medical Officer go to the patient (proactive approach) | | | |
| 1.2 | The Assistant Medical Officer attends to all patients | | | |
| 1.3 | Ask appropriate questions | | | |
| 1.4 | Has eye contact with the patient | | | |
| **2** | **RECEIVE PATIENTS**<br>**Assist in extrication** | | | |
| 2.1 | Observe if proper and safe extrication is carried out | | | |
| 2.2 | Observe if non-walking patients are given a wheelchair or put on a trolley | | | |
| **3** | **PATIENT ASSESSMENT** | | | |
| 3.1 | Perform rapid visual assessment in < 5 sec | | | |
| 3.2 | Provide appropriate mode of transportation to the designated zones | | | |
| 3.3 | Provide appropriate immobilization and bandaging | | | |
| 3.4 | Obtain a brief history of critically ill patients | | | |
| **4** | **CATEGORIZE THE PATIENT INTO APPROPRIATE ZONES** | | | |
| 4.1 | Patients are sent to the appropriate zone | | | |
| 4.2 | Passing over vital information to the personnel in the zone | | | |
| **5** | **DOCUMENTATION** | | | |
| 5.1 | Record of Time | | | |
| 5.2 | Mode of Arrival | | | |
| 5.3 | Chief Complain | | | |
| 5.4 | Brief History of Present Illness | | | |
| 5.5 | Nutrition Status | | | |
| 5.6 | Hydration | | | |
| 5.7 | Pallor | | | |
| 5.8 | Cyanosis | | | |
| 5.9 | Edema | | | |
| 5.10 | Jaundice | | | |
| 5.11 | Capillary Refill Time < 2 Secs | | | |
| 5.12 | Blood Pressure | | | |
| 5.13 | Pulse Rate | | | |
| 5.14 | Respiratory Rate | | | |
| 5.15 | SPO2 | | | |
| 5.16 | Temperature | | | |
| 5.17 | Level Of Consciousness | | | |
| 5.18 | Pain Score | | | |
| 5.19 | Allergy | | | |

## 3.2 Asthma care in the Emergency & Trauma Department.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **Receive and greet patient (MINOR)** | | | |
| 1.1 | Greeting | | | |
| 1.2 | Dedicated Asthma Bay/ Cubicle | | | |
| 1.3 | Able to reassess the severity of asthma attacks and treatment of severity of asthma at different zones | | | |
| **2** | **Brief history taking and vital sign monitoring (MAJOR)**<br>**The AMO working in the asthma bay/ cubicle can take the following history of a patient** | | | |
| 2.1 | New or old case | | | |
| 2.2 | Last attack | | | |
| 2.3 | Medication on | | | |
| 2.4 | Place of follow-up | | | |
| 2.5 | Record & take initial measurements of patient vital signs<br>(Spo2, Blood Pressure, Pulse, Respiratory rate, Temperature, Pain score) | | | |
| **3** | **Perform Pre PEFR measurement & calculate the best predicted (MAJOR)** | | | |
| 3.1 | Able to perform Pre PEFR measurement | | | |
| 3.2 | Able to calculate predicted/ best PEFR | | | |
| **4** | **Assist in the examination of the patient (MINOR)** | | | |
| 4.1 | Patient comfort | | | |
| 4.2 | Patient privacy (Provides chaperones if necessary) | | | |
| **5** | **Initiate treatment plan as ordered by Medical Officer (MAJOR)** | | | |
| 5.1 | Initiate nebulizer therapy | | | |
| 5.2 | Give asthma medication as ordered (using 7 R's) | | | |
| 5.3 | Post PEFR after giving the nebulizer and informing the Medical Officer | | | |
| 5.4 | Record all medication or treatment given | | | |
| **6** | **Monitoring of patients in Asthma Bay/ Cubicle (MAJOR)** | | | |
| 6.1 | Perform continuous observation/ monitoring of the patient | | | |
| 6.2 | Able to evaluate patient response to treatment plan<br>(Good response/ incomplete/ poor response) | | | |
| 6.3 | The patient is informed of the treatment plan given | | | |
| 6.4 | Compliance of patient response to the treatment plan is recorded | | | |
| **7** | **Able to identify features of life-threatening acute asthma (MAJOR)** | | | |
| 7.1 | Central cyanosis | | | |
| 7.2 | Feeble respiratory effort/ silent chest | | | |
| 7.3 | Bradycardia/ hypotension | | | |
| 7.4 | Exhaustion/ confusion/ Unconscious | | | |
| 7.5 | Convulsion | | | |
| **8** | **Discharges post PEFR measurement (MAJOR)** | | | |
| 8.1 | Patient asthma education upon discharge (Avoidance of triggers and preventive measures) | | | |
| 8.2 | Follow up | | | |
| 8.3 | Medication/ dosages/ side effect education | | | |

| | | | | |
|---|---|---|---|---|
| 8.4 | The technique of using an inhaler and home management education plan | | | |
| **9** | **Compliance with Infection Control Guidelines (MAJOR)** | | | |
| 9.1 | Adhering to the technique of hand rub/ hand washing | | | |
| 9.2 | Disposal of nebulizer mask (discarded/ reused) | | | |
| 9.3 | Drug Used (Expiry & Open) | | | |

## 3.3 Hemodialysis treatment via permanent vascular access in the Hemodialysis Unit.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **Initiate Hemodialysis (Pre-Assessment)** | | | |
| 1.1 | Look for signs & symptoms of general appearance | | | |
| 1.2 | Pre-Hemodialysis vital signs observations | | | |
| 1.3 | Prepare sterile dressing set/ disposables items/ pharmaceuticals | | | |
| **2** | **Preparation of Anticoagulation** | | | |
| 2.1 | Heparin 10,000 units in 10/20 ml. Mark/ label on the syringe | | | |
| 2.2 | Prepare Heparin Saline (1000 units of heparin in 500 ml of normal saline). Mark/ label the saline bottle | | | |
| **3** | **Initiate Hemodialysis (Priming Procedure)** | | | |
| 3.1 | Ensure the right patient's name and date on the dialyzer | | | |
| 3.2 | Place arterial bloodline onto the machine | | | |
| 3.3 | Prime the arterial blood line and arterial chamber with a blood pump speed (Qb) of 150-250 ml/min of normal saline | | | |
| 3.4 | Place the tip of the venous bloodline into a receiver/ priming bag. If a receiver is used, ensure that the venous tip does not touch the receiver. | | | |
| 3.5 | Prime the venous blood line and venous chamber with Qb of 150- 250 ml/min of normal saline | | | |
| 3.6 | Continue to flush the bloodline and retain about 100 ml of heparinized saline | | | |
| 3.7 | Connect dialysate lines to the dialyzer during priming with heparinized saline (for the new dialyzer) | | | |
| 3.8 | Flush heparin line with a blood flow rate of less than 100 ml/min | | | |
| 3.9 | Continue priming until about 100 ml of heparinized saline remains in the bottle | | | |
| 3.10 | Test for residual sterilant at the end of the venous blood line. If the test is still positive, continue flushing. Stop the blood pump and keep about 100 ml of heparinized saline in the bottle. | | | |
| 3.11 | Lower the fluid level of both arterial and venous chambers | | | |
| 3.12 | Start the blood pump at a speed of 200 -350 ml/min for the recirculation procedure, which should take about 10-15 minutes. | | | |
| **4** | **Initiate Hemodialysis (Cannulate of AVF)** | | | |
| 4.1 | Ensure patient washes their hand and fistula arm PROPERLY | | | |
| 4.2 | Ensure the patient has a functioning fistula | | | |
| **5** | **Fistula Needle Cannulation** | | | |
| 5.1 | Swab the cannulation site with an antiseptic solution | | | |
| 5.2 | Cannulate the fistula and check the patency of blood flow | | | |
| 5.3 | Secure with plaster PROPERLY | | | |
| **6** | **Initiate Hemodialysis (Starting treatment)** | | | |
| 6.1 | Set hemodialysis parameters as prescribed | | | |
| 6.2 | Turn on the blood pump to a speed of 100-150 ml/min | | | |
| 6.3 | Inject bolus heparin as prescribed into the extracorporeal circuit when blood reaches the dialyzer and mount the syringe to the heparin pump. | | | |

| | | | | |
|---|---|---|---|---|
| 6.4 | Swab the needle end with the end of the venous blood line with an antiseptic swab before connecting | | | |
| 6.5 | Ensure the AIR BUBBLE DETECTOR is activated | | | |
| 6.6 | Turn dialyzer with arterial end-up | | | |
| 6.7 | Turn on the blood pump to a speed of 100-150 ml/min and observe for any swelling at the venous return and the status of venous pressure. Then, gradually increase the blood pump speed to the prescribed blood flow rate | | | |
| **7** | **Monitor and record the following observations This refers to activities carried out to monitor patient and treatment parameters during hemodialysis treatment to ensure safety and minimize complications.** | | | |
| 7.1 | Perform hourly observations and document them in the treatment record. | | | |
| 7.2 | Observe for critical incidents and take remedial action according to current Standing Orders and RRT Clinical Practice Guidelines | | | |
| 7.3 | Record critical incident and action in Hemodialysis treatment record | | | |
| **8** | **End of hemodialysis treatment.** | | | |
| 8.1 | Ensure return blood via the open method | | | |
| 8.2 | Return blood with pump speed 200-250 ml/ min | | | |
| 8.3 | Cap the arterial and venous fistula needle | | | |
| 8.4 | Remove arterial and venous fistula needles from the patient safely | | | |
| 8.5 | Apply sufficient pressure on the vein puncture site until the bleeding stops | | | |
| 8.6 | Apply a clean cotton dressing over the vein puncture site | | | |
| 8.7 | Take post-hemodialysis observation/ vital signs and record | | | |

## 3.4 Plaster of Paris (POP) application in the Orthopedic Department.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **A** | **Receive Instructions & Registration Patient** | | | |
| 1 | Receive written instructions/ Order slips from the doctor | | | |
| 2 | Check the Order Slip & ensure the correct patient | | | |
| 3 | Register patient | | | |
| **B** | **Patient Assessment /Examination** | | | |
| 4 | Greet patients and introduce self [2] | | | |
| 5 | Review patient X-Ray | | | |
| 6 | Confirm the affected limb as directed by the Doctor | | | |
| | **Assess the condition of the limb affected** | | | |
| 7 | Swollen | | | |
| 8 | Bruises | | | |
| 9 | Blister | | | |
| 10 | Tense | | | |
| 11 | Wound | | | |
| 12 | Record and assess the patient's circulation/ Neurovascular Status using 5P (Pain, Pallor, Pulseless, Paraesthesia, and Paralysis) of the limb | | | |
| 13 | Record Pain Score Chart | | | |
| 14 | Remove accessories, if any. eg: ring | | | |
| 15 | Refer to Doctor if any abnormalities | | | |
| **C** | **Equipment and Patients** | | | |
| 16 | Ensured the Plaster Cast Trolley was fully equipped and well-functioning | | | |
| 17 | Prepare a wound dressing set (if dressing is needed) | | | |
| 18 | Explain to the patient/relative about the procedure to be performed | | | |
| 19 | Confirm with the patient the affected limb | | | |
| 20 | Place the patient in a comfortable position. | | | |
| 21 | Place linen protector under the injured limb | | | |
| **D** | **Perform Procedure: Apply Plaster Cast according to SOP by KKM and Standard Practice Guideline for Assistant Medical Officer Discipline Orthopedic - Chapter Application Plaster Cast/ Slab** | | | |
| 22 | Perform hand hygiene | | | |
| 23 | Wear mask | | | |
| 24 | Wear glove | | | |
| 25 | Wear apron | | | |
| 26 | Make the patient comfortable and provide privacy | | | |
| 27 | Dress a wound - If indicated | | | |
| 28 | Instruct assistant to support and position affected limb in the proper technique | | | |
| 29 | Apply Stokinette/ Orthoban as required - by rolling the orthoban snugly from the distal end upward, covering at least 1/2 of the orthoban with every turn | | | |
| 30 | Wrap the soaked and squeezed plaster cast quickly | | | |
| 31 | Mold the plaster cast to the shape of the limb | | | |
| 32 | Fold up the edge of the Orthoban | | | |

| | | | | |
|---|---|---|---|---|
| 33 | Continue the next roll of Plaster Cast | | | |
| 34 | Continue molding the plaster cast to the shape of the limb | | | |
| 35 | Clean the affected limb | | | |
| 36 | Mark the window (if indicated) | | | |
| 37 | Clean the Plaster Cast trolley and equipment | | | |
| **E** | **Observation** | | | |
| 38 | Observe for 5 - 10 minutes and record neurovascular status. | | | |
| 39 | Record Pain Score Chart | | | |
| 40 | Refer to a doctor if any complication arises | | | |
| **F** | **Health Education Verbally** | | | |
| 41 | Plaster Cast / Slab care advice verbally | | | |
| 42 | Encourage minimal movement of extremities | | | |
| 43 | Care of wound - if any | | | |
| | **Advise the patient to return to the Orthopaedic Out-Patient Clinic/ Emergency Department immediately if any of the following develops:** | | | |
| 44 | Swelling | | | |
| 45 | Severe pain | | | |
| 46 | Numbness | | | |
| 47 | Change in color or extremities | | | |
| 48 | Fever | | | |
| 49 | Foul smell | | | |
| 50 | Broken Plaster Cast | | | |
| **G** | **Documentation** | | | |
| 51 | Record in procedure record system | | | |
| 52 | Date | | | |
| 53 | Time | | | |
| 54 | Type of procedure and signed | | | |
| 55 | The Plaster Cast Care advice slip must be given to the patient | | | |

## 3.5 Infection control (hand hygiene and environmental) in the Emergency & Trauma Department and Hemodialysis Unit.

### 3.5.1 Environmental.

| NO. | COMPONENT / ITEM | FC/ PC/ NC & NA |
|---|---|---|
| **1** | **HAND WASH FACILITIES** | |
| 1.1 | Hand washing solution in all sinks | |
| 1.2 | Tissues in all sinks | |
| 1.3 | Hand Soap Dispenser – clean and functional | |
| 1.4 | The sink bowl is in a clean condition | |
| 1.5 | Use of elbow taps at all sinks | |
| 1.6 | There are no used items such as urine bottles, etc | |
| 1.7 | Hand-washing technique posters are posted at all sinks | |
| 1.8 | ABHR (Alcohol-Based Hand Rub) is available at every counter, medication trolley, round trolley, and blood collection trolley | |
| 1.9 | Observation trolleys and patient bedside trolleys are available | |
| **2** | **AVAILABILITY OF PERSONAL PROTECTIVE EQUIPMENT** | |
| 2.1 | Goggle, Face Shield | |
| 2.2 | Mask | |
| 2.3 | Gloves | |
| 2.4 | Apron | |
| **3** | **ENVIRONMENT (HOUSEKEEPING)** | |
| 3.1 | Clean counter, no specimens, food, etc | |
| 3.2 | Clean and tidy patient environment | |
| 3.3 | Clean, tidy, odorless, and dry toilet | |
| 3.4 | Clean and tidy sluice room | |
| 3.5 | The treatment/procedure room is clean, tidy, and free of dust | |
| 3.6 | All sterile equipment is stored off the floor | |
| 3.7 | The environment appears clean, tidy, and free of dust | |
| 3.8 | Mops are coded correctly and are clean | |
| 3.9 | Disinfectant products are stored properly | |
| 3.10 | Dilution for cleaning is displayed | |
| **4** | **PATIENT CARE EQUIPMENT** | |
| 4.1 | Disinfectant - date, suitability | |
| | **Soaking Equipment is Not Recommended.**<br>**IF SOAKING IS DONE** | |
| 4.2 | Soaking containers must be covered | |
| 4.3 | Equipment being soaked must be completely submerged | |
| 4.4 | The date & time must be recorded | |
| **5** | **LINEN MANAGEMENT** | |
| 5.1 | Clean linen is neatly arranged in the cabinet | |

| | | |
|---|---|---|
| 5.2 | The cabinet is closed | |
| | **Dirty linen** | |
| 5.3 | Soiled linen is placed in the correct basket | |
| 5.4 | An alginate bag is provided | |
| 5.5 | The linen bag is covered | |
| **6** | **GENERAL & CLINICAL WASTE MANAGEMENT** | |
| 6.1 | Proper waste disposal | |
| 6.2 | Not overly full and covered | |
| 6.3 | Foot-operated and functioning | |
| 6.4 | Clean and tidy | |
| **7** | **SPILL MANAGEMENT (SPILLAGE)** | |
| 7.1 | The floor is clean and free of spills | |
| 7.2 | The spill kit is stored in the unit | |
| **8** | **SHARP EQUIPMENT MANAGEMENT** | |
| 8.1 | Sharp items are disposed of properly in the sharp bin | |
| 8.2 | Not exceeding 3/4 full | |
| 8.3 | The sharp bin is in a safe condition and placed in a strategic location | |
| **9** | **MEDICAL EQUIPMENT** | |
| 9.1 | All medical equipment is clean and free of dust | |
| **9.2** | **Suction Machine:** | |
| 9.2.1 | **Suction bottle/ Suction outlet -**<br>Ensure they are clean, not submerged, stored dry, and free of dust | |
| 9.2.2 | For reuse of suction on the same patient, ensure the suction tubing is clean, covered, and does not touch the floor | |
| **9.3** | **Oxygen Equipment:** | |
| 9.3.1 | **Humidifier -**<br>If in use, clean daily. If not in use, change the water daily.<br>Ensure the date and time are labeled | |
| 9.3.2 | **O2 Flowmeter outlet -**<br>Ensure it is clean, stored dry, and free of dust. If not in use, it must be kept closed | |
| **9.4** | **Thermometer:** | |
| 9.4.1 | Ensure it is clean, not submerged, stored dry, and free of dust | |
| **9.5** | **Medicine Trolley:** | |
| 9.5.1 | Clean and tidy | |
| 9.5.2 | The medicine bowl is clean and dry | |
| **9.6** | **Emergency Trolley:** | |
| 9.6.1 | Clean, tidy, and free of dust | |
| 9.6.2 | The laryngoscope is clean and free of any dirt | |
| **10** | **MEDICAL REFRIGERATOR** | |
| 10.1 | Clean inside and out and free of dust | |
| 10.2 | No unrelated food, drinks, or specimens | |
| 10.3 | No expired medication | |
| 10.4 | Opened medication must be labeled with the date | |
| 10.5 | Temperature is taken and recorded | |

| | | |
|---|---|---|
| **11** | **PATIENT'S OBSERVATION** | |
| **11.1** | **Urinary Catheter:** | |
| 11.1.1 | The urine bag is hung below the bladder | |
| 11.1.2 | The urine bag does not touch the floor | |
| 11.1.3 | Label the date the catheter was inserted | |
| **11.2** | **IV line:** | |
| 11.2.1 | Clean and dry | |
| 11.2.2 | The date and time are labeled | |
| 11.2.3 | No backflow | |
| 11.2.4 | Filtered IV tubing for blood transfusion is not used for administering IV fluids | |
| **12** | **IMPLEMENTATION OF PROCEDURE BY PERSONNEL** | |
| 12.1 | An Assistant Medical Officer needs to demonstrate hand hygiene | |
| 12.2 | An Assistant Medical Officer uses PPE correctly and appropriately for the task | |
| 12.3 | An Assistant Medical Officer demonstrates the use of a mask, apron, and gloves | |
| 12.4 | An Assistant Medical Officer needs to explain the SOP in case of a sharp injury | |
| 12.5 | An Assistant Medical Officer must explain the SOP in case of a spill. | |
| 12.6 | The cleaner needs to explain the SOP in case of a spill. | |
| **13** | **POLICIES AND GUIDELINES** | |
| 13.1 | Policy & Procedure of Infection Control 2019 | |
| 13.2 | Flow Chart For NSI | |
| 13.3 | Disinfectant Guidelines 2019 | |

### 3.5.2 Hand Hygiene.

| NO. | COMPONENT / ITEM | FC/ NC |
|---|---|---|
| **1** | **COMPLIANCE BY INDICATION** | |
| 1.1 | Before touching a patient | |
| 1.2 | Before the clean/ aseptic procedure | |
| 1.3 | After body fluid exposure risk | |
| 1.4 | After touching a patient | |
| 1.5 | After touching the patient's surroundings | |

## 3.6 Pre hospital care and ambulance services (PHC).

### 3.6.1 Clinical.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **Interpersonal Skills (Soft Skills)** | | | |
| 1.1 | Approaching, greeting, and introducing oneself to the patient or their family members | | | |
| 1.2 | Asking appropriate questions to obtain the patient's chief complaint | | | |
| 1.3 | Maintaining eye contact with the patient | | | |
| 1.4 | Providing an explanation and treatment plan to the patient | | | |
| **2** | **Adhering to Standard Practice Guidelines (SPG)/ Guidelines** | | | |
| 2.1 | Carrying out tasks according to the SOP/ SPG or any documents specified by the Department | | | |
| **3** | **Knowledge and Skills (Auditor refers to SPG)** | | | |
| 3.1 | Ask appropriate questions to the patient/ family member to obtain the patient's health history | | | |
| 3.2 | The patient/ next of kin understands the explanation from the responder | | | |
| 3.3 | AMO obtains medical direction when needed | | | |
| 3.4 | AMO can provide clarification when interacting with the auditor | | | |
| **4** | **Patient Care** | | | |
| 4.1 | AMO Triage follows the Malaysian Triage Scale (MTS) | | | |
| 4.2.1 | Perform physical examinations and provide interventions for patients | | | |
| 4.2.2 | Airway | | | |
| 4.2.3 | Breathing | | | |
| 4.2.4 | Circulation | | | |
| 4.2.5 | Disability | | | |
| 4.2.6 | Exposure | | | |
| 4.3 | Passover Case (MISTTT) | | | |
| **5** | **Clinical Documentation/ Patient Treatment Record** | | | |
| 5.1 | Scene assessment | | | |
| 5.2 | Chief complaint | | | |
| 5.3 | Warning signs/ life-threatening conditions | | | |
| 5.4 | Treatment given | | | |
| 5.5 | Vital signs are recorded | | | |
| 5.6 | POCT test (All point of care testing) is carried out | | | |
| 5.7 | Record of observations taken during transit (Observations taken on transit) | | | |
| 5.8 | Estimated time of arrival (ETA) | | | |
| **6** | **Manual Handling of Patient** | | | |
| 6.1 | Proper usage of lifting techniques | | | |
| 6.2 | Use of correct body mechanics | | | |
| 6.3 | Adequate use of strapping | | | |
| **7** | **Medication management (sedation/ analgesics/ others)** | | | |

| | | | | |
|---|---|---|---|---|
| 7.1 | Medication management (sedation/ analgesics/ others) | | | |
| 7.2 | Medicolegal case | | | |
| 7.3 | D.A.M.A/ No sign of life (No Sign of Life)/ Refused treatment | | | |
| 7.4 | Management of unsure cases | | | |
| **8** | **Security Issues** | | | |
| 8.1 | Safe handling of patients | | | |
| 8.2 | Comply with infection control management guidelines | | | |
| 8.3 | Maintain patient comfort and privacy | | | |
| **9** | **Others** | | | |
| 9.1 | Ensure that the patient's (unconscious patient's) personal belongings are collected, recorded, and handed over to the Officer on duty in the relevant Zone | | | |

### 3.6.2 Operations.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **VEHICLES AND EQUIPMENT** | | | |
| **1.1** | **The Ambulance Checklist is Conducted** | | | |
| 1.1.1 | The checklist is checked by the driver on each shift/ day | | | |
| 1.1.2 | Checklist verified by AMO/ Supervisor on duty | | | |
| **1.2** | **Exterior of the Ambulance** | | | |
| 1.2.1 | The road tax does not expire and is on display | | | |
| 1.2.2 | The ambulance is clean | | | |
| 1.2.3 | Vehicle lights/ emergency lights work well | | | |
| 1.2.4 | The external condition of the vehicle is in good condition and does not pose a danger to the team and other road users | | | |
| 1.2.5 | The sliding door works well | | | |
| 1.2.6 | The back door is working and functioning | | | |
| 1.2.7 | All windows are functional and in good condition | | | |
| 1.2.8 | The mirror is in good condition | | | |
| **1.3** | **The Equipment Checklist is Conducted** | | | |
| 1.3.1 | Ambulance Preventive Maintenance Plan (PPM) is carried out according to the set schedule | | | |
| 1.3.2 | Plan Preventive Maintenance (PPM) of medical equipment is carried out according to the set schedule | | | |
| 1.3.3 | Medical equipment is clean and in good working order | | | |
| 1.3.4 | The Stretcher Preventive Maintenance Plan (PPM) is carried out according to the set schedule, and it is complete and functioning well | | | |
| 1.3.5 | Ensure that the stretcher has a minimum of 3 safety strapping and that all of them work properly | | | |
| 1.3.6 | Ensure fire extinguishers (2 units) are in the ambulance and maintained by the concessionaire | | | |

| | | | | |
|---|---|---|---|---|
| **1.4** | **Interior Condition of the Ambulance Cabin** | | | |
| 1.4.1 | The cabin is clean and odorless | | | |
| 1.4.2 | The passenger seat is in good condition and safe to use | | | |
| **1.5** | **Maintenance and Labeling** | | | |
| 1.5.1 | The Responder's/ medical bag is checked by the Responder on every shift/ day | | | |
| 1.5.2 | Items in the Responder Bag by minimum and maximum amount | | | |
| 1.5.3 | Medicines and disposable equipment in the Responder Bag are still within the valid period of use | | | |
| 1.5.4 | The cabin is well-labeled and tidy | | | |
| 1.5.5 | Equipment is placed in a properly labeled section | | | |
| **2** | **COMMUNICATION EQUIPMENT** | | | |
| **2.1** | **Communication Checklist (GIRN)** | | | |
| 2.1.1 | A checklist of communication equipment is done daily | | | |
| 2.1.2 | The device is charged, and the battery is above 80% | | | |
| 2.1.3 | The checklist is approved by the Supervisor | | | |
| 2.1.4 | The Supervisor has acted upon all complaints | | | |
| **2.2** | **Usage of Communication Equipment** | | | |
| 2.2.1 | Checklists and communication tests (test calls) are carried out every day | | | |
| 2.2.2 | Communication during ambulance call response (en route, at the scene, at the patient, transporting, at the hospital) | | | |
| 2.2.3 | Communicate according to established radio etiquette (clearly and according to the radio code) | | | |
| 2.2.4 | Notify the MECC of ambulance readiness for the next case response | | | |
| **3** | **ADHERENCE TO AMBULANCE DRIVING ETHICS** | | | |
| 3.1 | Use of safety belts | | | |
| 3.2 | Stop at a red light | | | |
| 3.3 | Stop at the intersection | | | |
| 3.4 | Obey the posted speed limit | | | |
| 3.5 | Correct use of sirens | | | |
| **4** | **TEAM DISCIPLINE** | | | |
| 4.1 | Wearing complete uniform | | | |
| 4.2 | Personal image/ skills of the responder team | | | |
| **5** | **DOCUMENTATION** | | | |
| 5.1 | Ambulance activation time (Hospital ≤ 8 minutes/ Clinic ≤ 18 minutes) | | | |
| 5.2 | Complete patient care documentation (Forms used by PRPA) | | | |
| 5.3 | The ambulance logbook is recorded and signed after use | | | |
| **6** | **OTHERS** | | | |
| 6.1 | Supervision of the responder's health level (OSH, KOSPEN, and others) | | | |

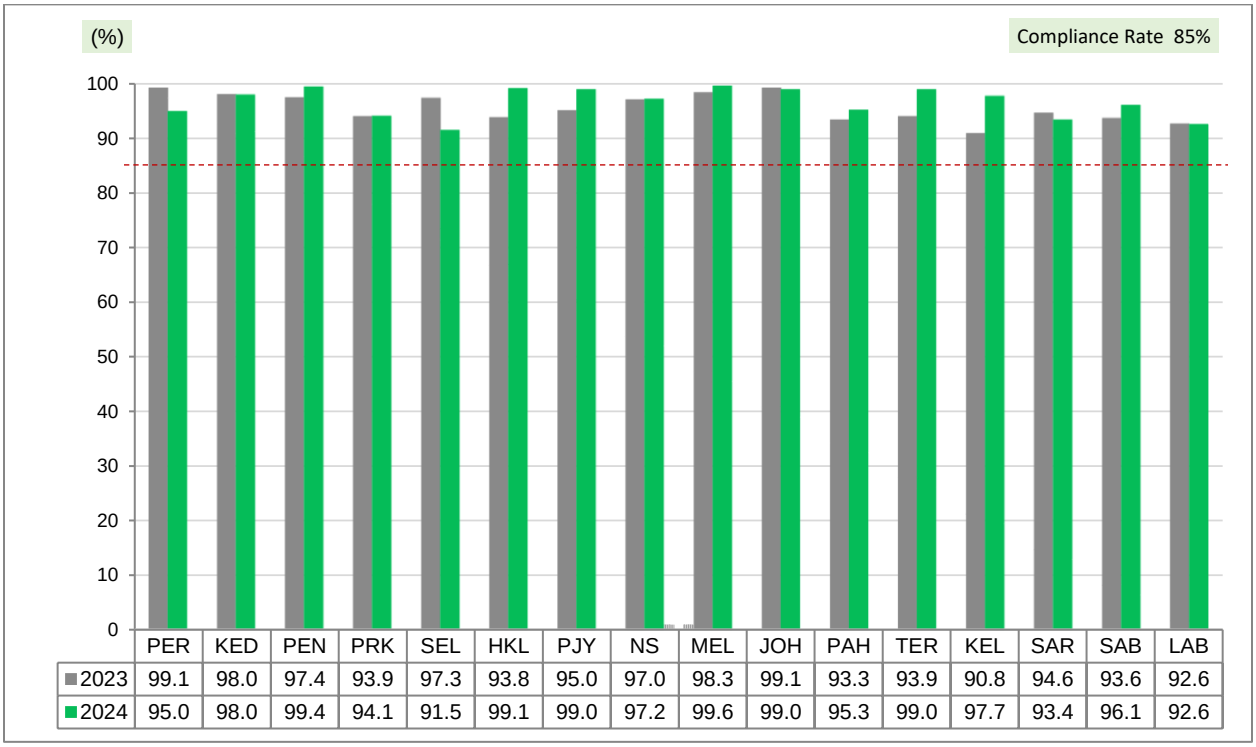
## 3.7 Management of deceased bodies in the Forensic Department.

| NO. | COMPONENT / ITEM | Y | N | NA |
|---|---|---|---|---|
| **1** | **RECEIPT OF THE DECEASED (Registration of Death)** | | | |
| 1.1 | Date and time of registration in Forensic (Major) | | | |
| **1.2** | **Demographic information of the deceased (Major)** | | | |
| 1.2.1 | Name | | | |
| 1.2.2 | Address | | | |
| 1.2.3 | Identification/ Passport Number | | | |
| 1.2.4 | Gender | | | |
| 1.2.5 | Age | | | |
| 1.2.6 | Ethnicity/ Nationality | | | |
| 1.2.7 | Religion | | | |
| **1.3** | **Demographic information of death (Minor)** | | | |
| 1.3.1 | Date and time of death | | | |
| 1.3.2 | Cause of death | | | |
| 1.3.3 | Place/ ward of death | | | |
| 1.3.4 | Date and time of ward admission | | | |
| 1.3.5 | Hospital registration number | | | |
| 1.3.6 | Death registration form number and burial permit (JPN LM02)/ Form B-CAP. 123 (Sabah)/ CAP. 10 (Sarawak) | | | |
| 1.3.7 | Officer certifying death | | | |
| 1.3.8 | Name & signature of the Assistant Medical Officer receiving the case | | | |
| **1.4** | **Demographic information for police cases (Minor)** | | | |
| 1.4.1 | Autopsy number (if receiving Cadaver Examination Request Form (POL. 61) for body examination | | | |
| 1.4.2 | Date & time of receiving Cadaver Examination Request Form (POL.61) | | | |
| 1.4.3 | Police report number | | | |
| 1.4.4 | Investigate the police officer's name and rank number | | | |
| 1.4.5 | Registration for police cases recorded using red ink | | | |
| **2** | **STORAGE OF DECEASED (Major)** | | | |
| **2.1** | **Demographic information for storage of the deceased (Major)** | | | |
| 2.1.1 | One (1) completed identification tag affixed to the body or body bag | | | |
| 2.1.2 | The body is stored in the mortuary refrigerator (after 3 hours of forensic registration, depending on hospital policy) | | | |
| 2.1.3 | One (1) identification tag on the mortuary refrigerator door | | | |
| 2.1.4 | Details and location of the body are recorded in the mortuary statement board/ existing storage record system | | | |
| 2.1.5 | Body freezer temperature within (2°C - 6°C) | | | |
| 2.1.6 | Body freezer temperature recorded twice (2) daily | | | |
| 2.1.7 | Temperature chart displayed in the storage area | | | |
| 2.1.8 | If malfunctioning, report to hospital support services (label as faulty with date of complaint) | | | |
| **3** | **RELEASING OF BODY** | | | |

| | | | | |
|---|---|---|---|---|
| 3.1.1 | Name | | | |
| 3.1.2 | Address | | | |
| 3.1.3 | Identification/ passport number | | | |
| 3.1.4 | Relationship | | | |
| 3.1.5 | Phone number | | | |
| 3.1.6 | Signature/ thumbprint of the claimant | | | |
| 3.2.1 | Face or clothing/ jewellery identification | | | |
| 3.2.2 | Other identification methods (if 3.2.1 is not applicable)<br>(physical marks/ fingerprints/ odontology/ DNA) | | | |
| 3.2.3 | Name and signature/ thumbprint of the person making the identification | | | |
| 3.3.1 | Death registration form number and burial permit (JPN LM02)/ form B-CAP. 123 (Sabah)/ CAP. 10 (Sarawak) | | | |
| 3.3.2 | Medical officer's certificate of cause of death (JPN LM09) - if applicable | | | |
| 3.3.3 | Medical officer's certificate of cause of death (JPN LM10) (for post-mortem cases) - if applicable | | | |
| 3.3.4 | Claimant's information (refer to 3.1) | | | |
| 3.3.5 | Signature/ thumbprint of the claimant | | | |
| 3.3.6 | Handover of foreign deceased (attach a copy of the embassy letter) - if applicable | | | |
| 3.3.7 | Date and time of deceased handover to claimant | | | |
| 3.3.8 | Name and signature of the Assistant Medical Officer handing the deceased and documents | | | |
| **4** | **REFERENCE DOCUMENTS (Minor)** | | | |
| 4.1 | Standard operating procedures of Forensic Medicine Services Ministry of Health February 2012 | | | |

## 4. Comparative graph and performance of the national-level clinical audit of Assistant Medical Officers in the Ministry of Health Malaysia based on activities in each State and Federal Territory.

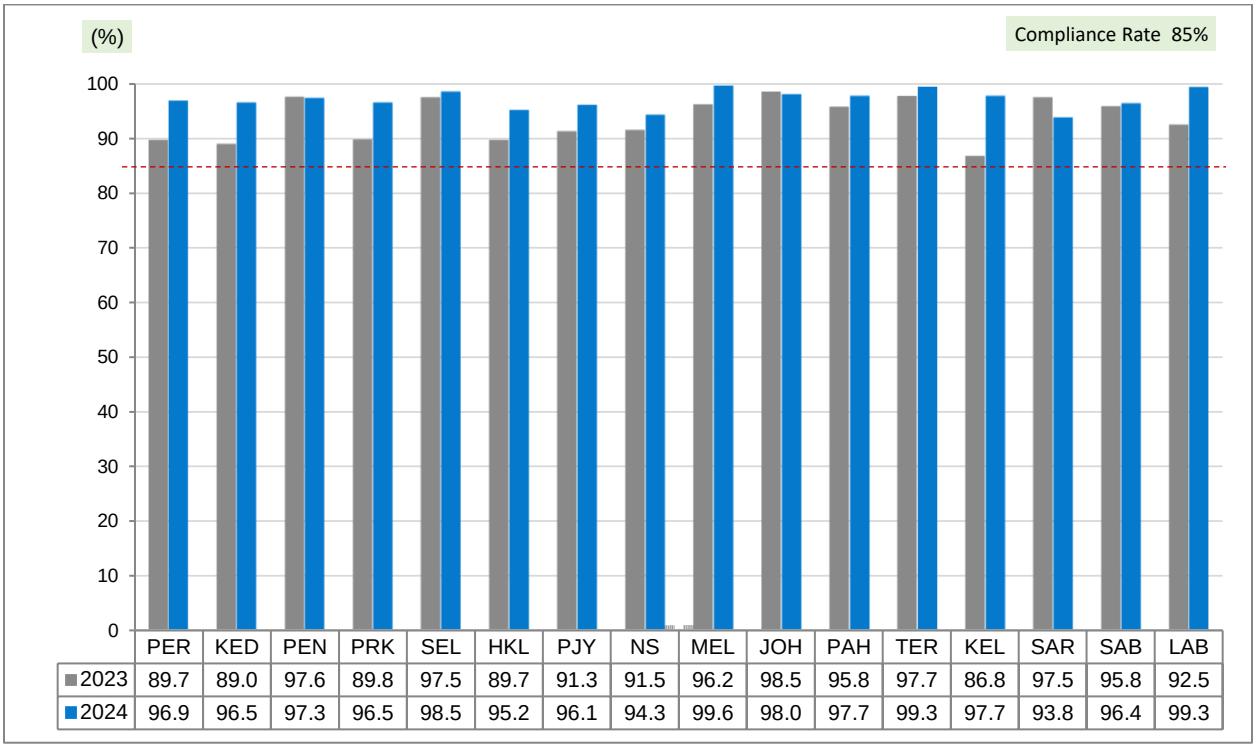
### 4.1 Triage in the Emergency & Trauma Department.




| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 99.1 | 98.0 | 97.4 | 93.9 | 97.3 | 93.8 | 95.0 | 97.0 | 98.3 | 99.1 | 93.3 | 93.9 | 90.8 | 94.6 | 93.6 | 92.6 |
| 2024 | 95.0 | 98.0 | 99.4 | 94.1 | 91.5 | 99.1 | 99.0 | 97.2 | 99.6 | 99.0 | 95.3 | 99.0 | 97.7 | 93.4 | 96.1 | 92.6 |

The comparative graph and performance for triage activities in the Emergency & Trauma Department for the years 2023 and 2024 indicate an increase in compliance rates in the states of Penang, Perak, Negeri Sembilan, Melaka, Pahang, Terengganu, Kelantan, Sabah, and the Federal Territories of Kuala Lumpur & Putrajaya. However, the states of Perlis, Kedah, Selangor, Johor, Sarawak, and the Federal Territory of Labuan have shown either a decline or no change in compliance rates compared to the previous year. Despite this, all states and federal territories have met the established compliance rate of over 85%. Nevertheless, several hospitals have recorded lower compliance rates, including Serian Hospital, Sarawak (81%), Sultanah Hajjah Kalsom Hospital, Pahang (71%), Batu Gajah Hospital, Perak (71%), and Shah Alam Hospital, Selangor (36%).

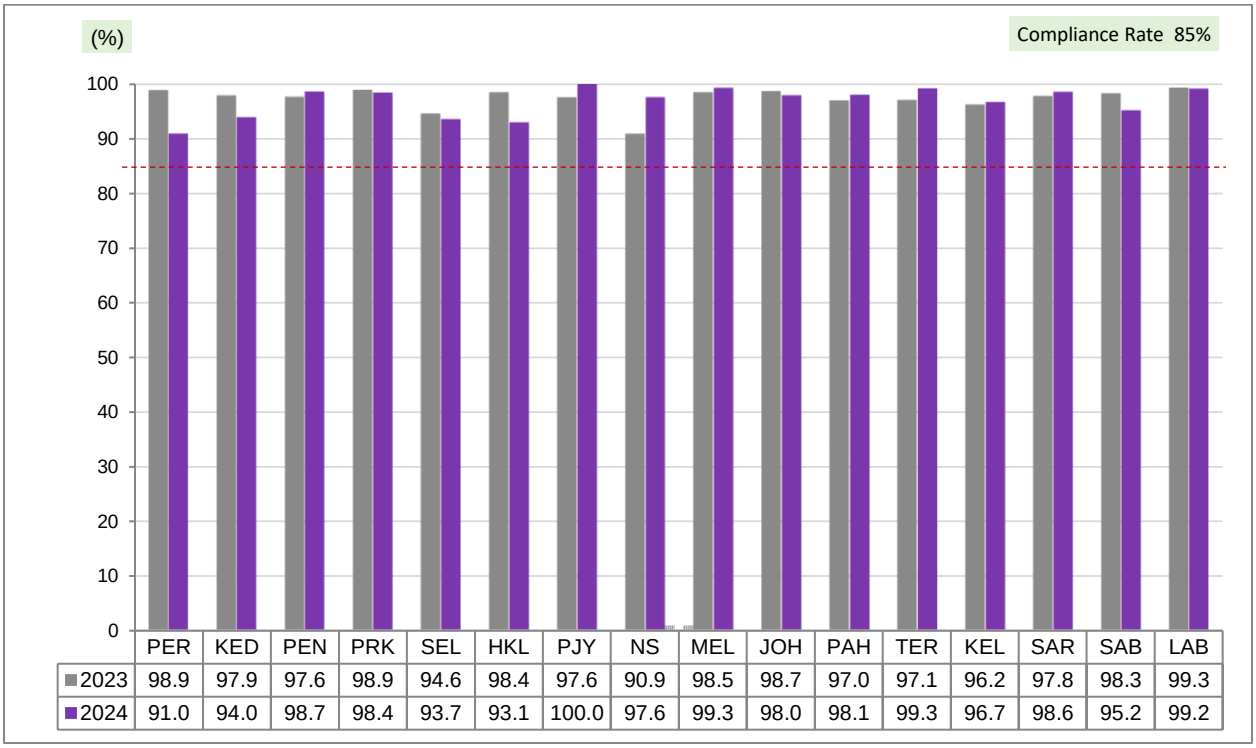
## 4.2 Asthma Care in the Emergency & Trauma Department.




| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 89.7 | 89.0 | 97.6 | 89.8 | 97.5 | 89.7 | 91.3 | 91.5 | 96.2 | 98.5 | 95.8 | 97.7 | 86.8 | 97.5 | 95.8 | 92.5 |
| 2024 | 96.9 | 96.5 | 97.3 | 96.5 | 98.5 | 95.2 | 96.1 | 94.3 | 99.6 | 98.0 | 97.7 | 99.3 | 97.7 | 93.8 | 96.4 | 99.3 |

The comparative graph and performance for asthma care activities in the Emergency & Trauma Department for the years 2023 and 2024 indicate an increase in compliance rates in the states of Perlis, Kedah, Perak, Selangor, Negeri Sembilan, Melaka, Pahang, Terengganu, Kelantan, Sabah, and the Federal Territories of Kuala Lumpur, Putrajaya & Labuan. However, the states of Penang, Johor, and Sarawak have shown a decline in compliance rates compared to the previous year. Despite this, all hospitals in the states and federal territories have met the established compliance rate, with results exceeding 85%.

## 4.3 Hemodialysis treatment via permanent vascular access in the Hemodialysis Unit.

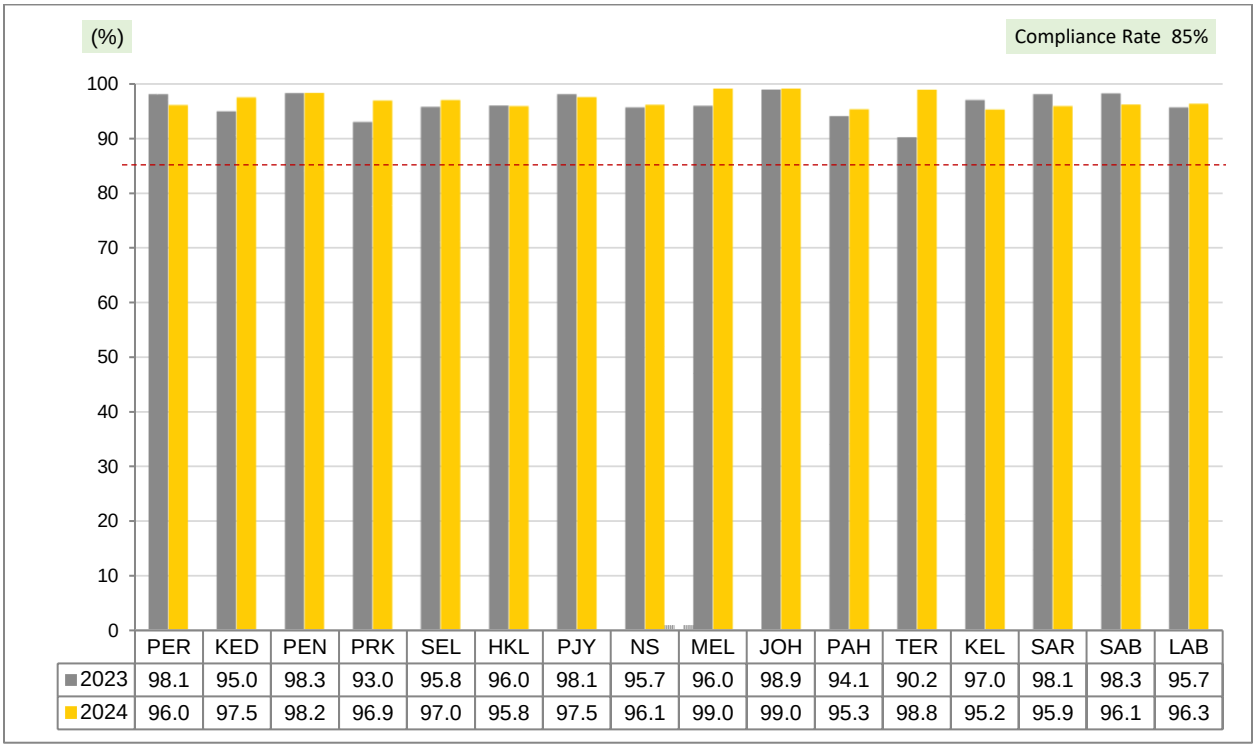



| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 98.9 | 97.9 | 97.6 | 98.9 | 94.6 | 98.4 | 97.6 | 90.9 | 98.5 | 98.7 | 97.0 | 97.1 | 96.2 | 97.8 | 98.3 | 99.3 |
| 2024 | 91.0 | 94.0 | 98.7 | 98.4 | 93.7 | 93.1 | 100.0 | 97.6 | 99.3 | 98.0 | 98.1 | 99.3 | 96.7 | 98.6 | 95.2 | 99.2 |

The comparative graph and performance for hemodialysis treatment through permanent vascular access in Hemodialysis Units for the years 2023 and 2024 indicates an increase in compliance rates in the states of Penang, Negeri Sembilan, Melaka, Pahang, Terengganu, Kelantan, Sarawak, and the Federal Territory of Putrajaya. However, the states of Perlis, Kedah, Perak, Selangor, Johor, Sabah, and the Federal Territories of Kuala Lumpur and Labuan have shown a decline in compliance rates compared to the previous year. Despite this, all hospitals in the states and federal territories have met the established compliance rate, with results exceeding 85%.

In addition to hospitals, audits were also conducted on dialysis clinics or units outside hospital settings, such as those in Pulau Pangkor, Lenggong, and Pantai Remis in the state of Perak; Bestari Jaya in the state of Selangor; and Mahligai, Chiku 3, and Kemahang in the state of Kelantan. All of these facilities have successfully met the established compliance standards.

## 4.4 Plaster of Paris (POP) application in the Orthopedic Department.

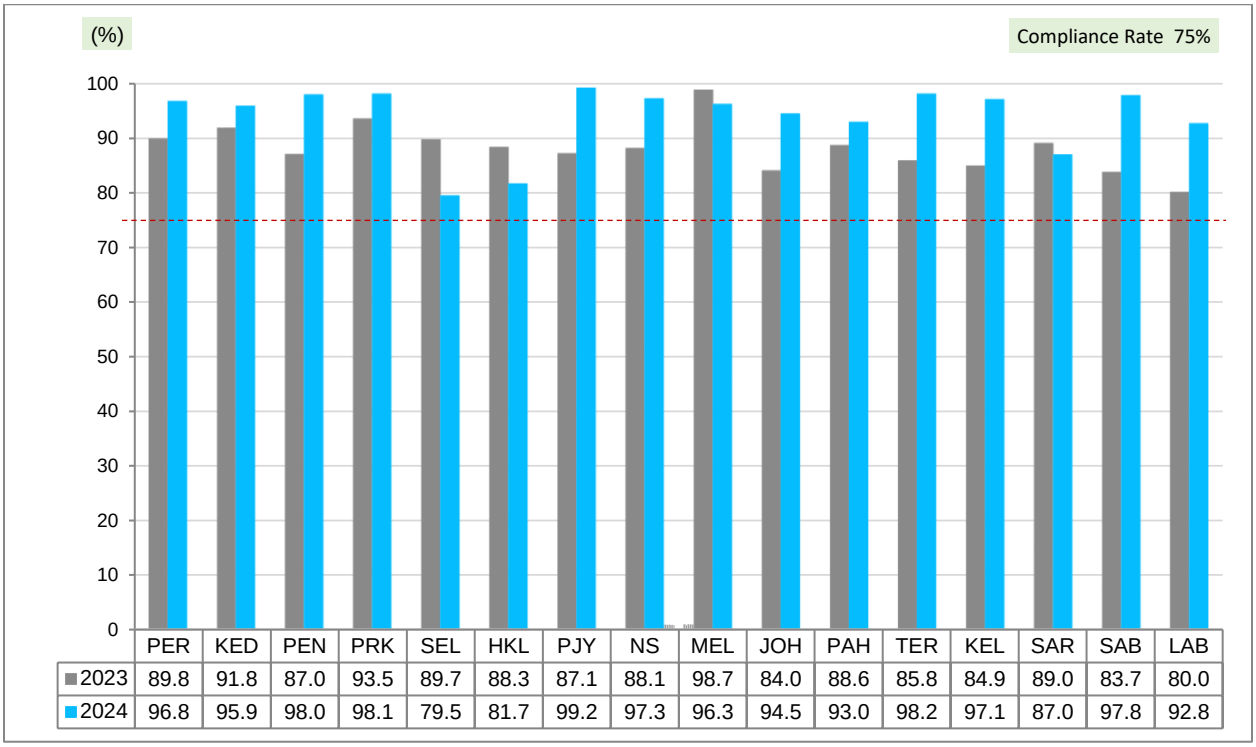



| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 98.1 | 95.0 | 98.3 | 93.0 | 95.8 | 96.0 | 98.1 | 95.7 | 96.0 | 98.9 | 94.1 | 90.2 | 97.0 | 98.1 | 98.3 | 95.7 |
| 2024 | 96.0 | 97.5 | 98.2 | 96.9 | 97.0 | 95.8 | 97.5 | 96.1 | 99.0 | 99.0 | 95.3 | 98.8 | 95.2 | 95.9 | 96.1 | 96.3 |

The comparative graph and performance for the application of Plaster of Paris (POP) in the Orthopedic Department for the years 2023 and 2024 indicate an increase in compliance rates in the states of Kedah, Perak, Selangor, Negeri Sembilan, Melaka, Johor, Pahang, Terengganu, and the Federal Territory of Labuan. However, the states of Perlis, Penang, Kelantan, Sarawak, Sabah, and the Federal Territories of Kuala Lumpur & Putrajaya have shown a decline in compliance rates compared to the previous year. Despite this, all hospitals in the states and federal territories have met the established compliance rate, with results exceeding 85%.

## 4.5 Infection control (hand hygiene and environmental) in the Emergency & Trauma Department and Hemodialysis Unit.

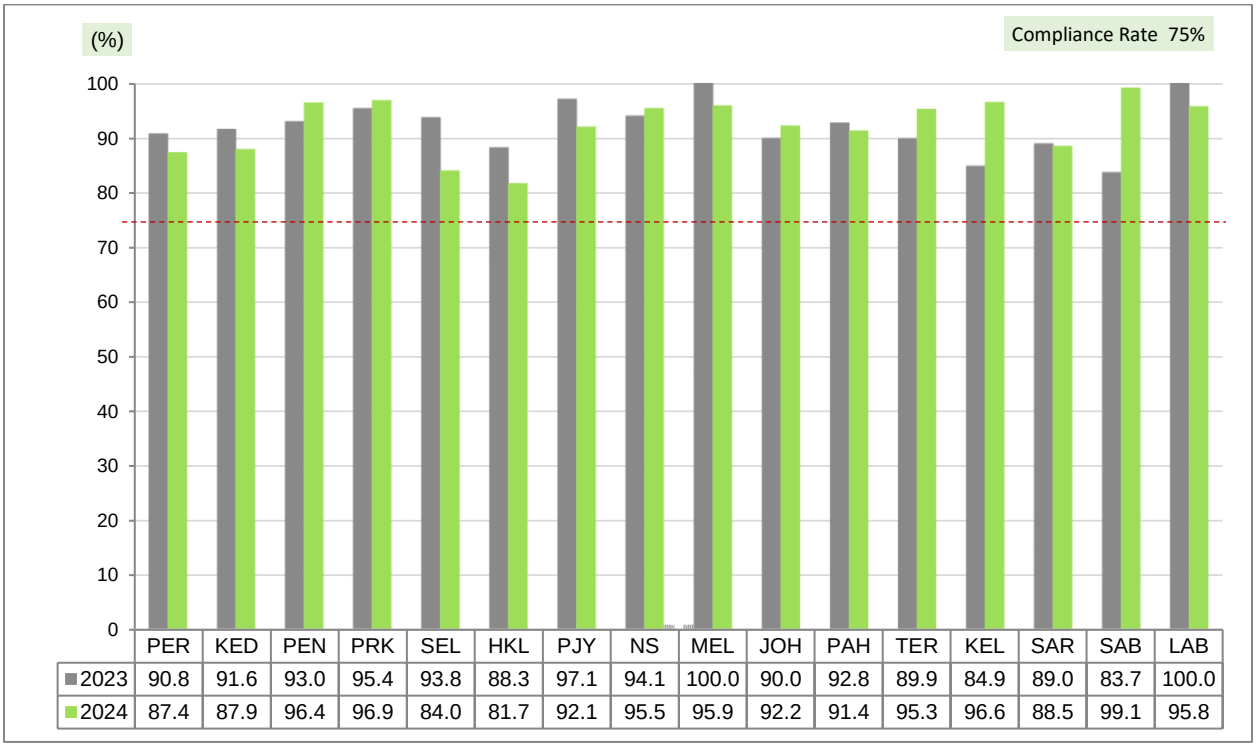
### 4.5.1 Emergency & Trauma Department.




| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 89.8 | 91.8 | 87.0 | 93.5 | 89.7 | 88.3 | 87.1 | 88.1 | 98.7 | 84.0 | 88.6 | 85.8 | 84.9 | 89.0 | 83.7 | 80.0 |
| 2024 | 96.8 | 95.9 | 98.0 | 98.1 | 79.5 | 81.7 | 99.2 | 97.3 | 96.3 | 94.5 | 93.0 | 98.2 | 97.1 | 87.0 | 97.8 | 92.8 |

The comparative graph and performance for infection control activities in the Emergency & Trauma Department for the years 2023 and 2024 indicate an increase in compliance rates in the states of Perlis, Kedah, Penang, Perak, the Federal Territory of Putrajaya, Negeri Sembilan, Johor, Pahang, Terengganu, Kelantan, Sabah, and the Federal Territory of Labuan. However, the states of Selangor, the Federal Territory of Kuala Lumpur, Melaka, and Sarawak have shown a decline compared to the previous year. Despite this, all hospitals in the states and federal territories have met the established compliance rate, with results exceeding 75%.

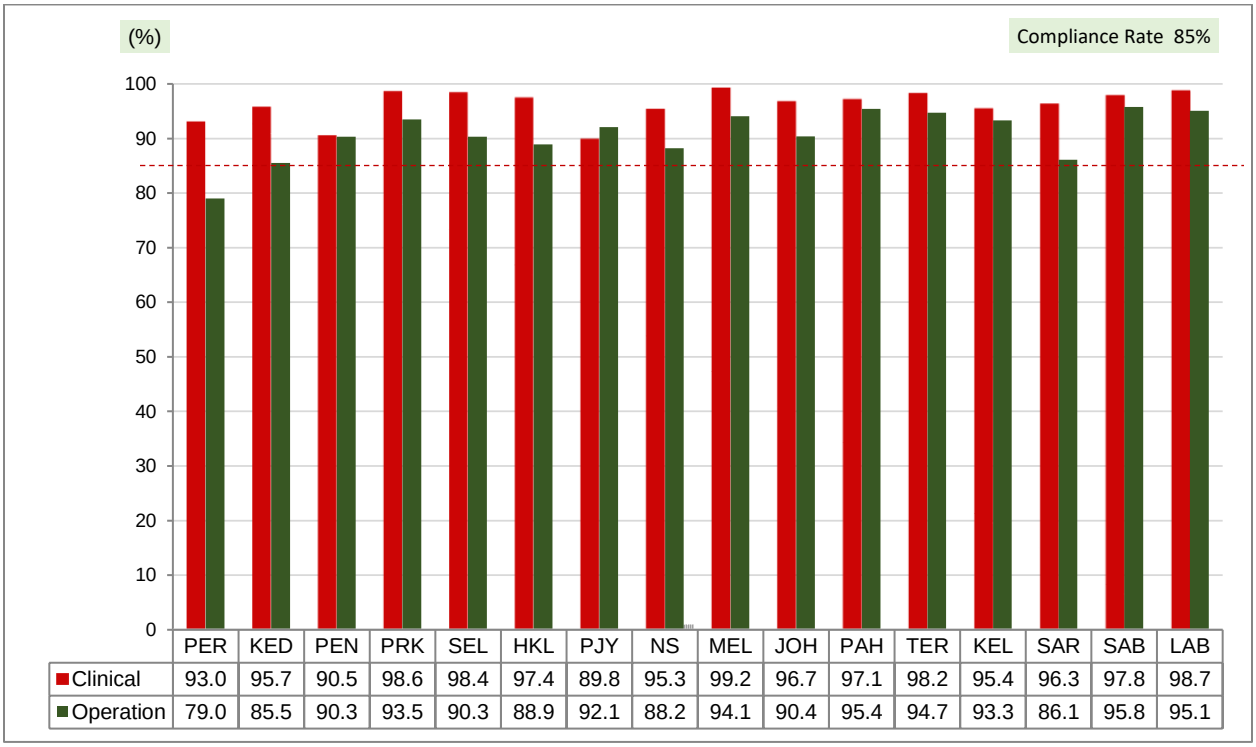
### 4.5.2 Hemodialysis Unit.




| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 90.8 | 91.6 | 93.0 | 95.4 | 93.8 | 88.3 | 97.1 | 94.1 | 100.0 | 90.0 | 92.8 | 89.9 | 84.9 | 89.0 | 83.7 | 100.0 |
| 2024 | 87.4 | 87.9 | 96.4 | 96.9 | 84.0 | 81.7 | 92.1 | 95.5 | 95.9 | 92.2 | 91.4 | 95.3 | 96.6 | 88.5 | 99.1 | 95.8 |

The comparative graph and performance for infection control activities in the Hemodialysis Unit for the years 2023 and 2024 indicate an increase in compliance rates in the states of Penang, Perak, Negeri Sembilan, Johor, Terengganu, Kelantan, and Sabah. However, the states of Perlis, Kedah, Selangor, the Federal Territories of Kuala Lumpur & Putrajaya, Melaka, Pahang, Sarawak, and the Federal Territory of Labuan have shown a decline compared to the previous year. Despite this, all hospitals in the states and federal territories have met the established compliance rate, with results exceeding 75%.

## 4.6 Pre hospital care and ambulance services (PHC).



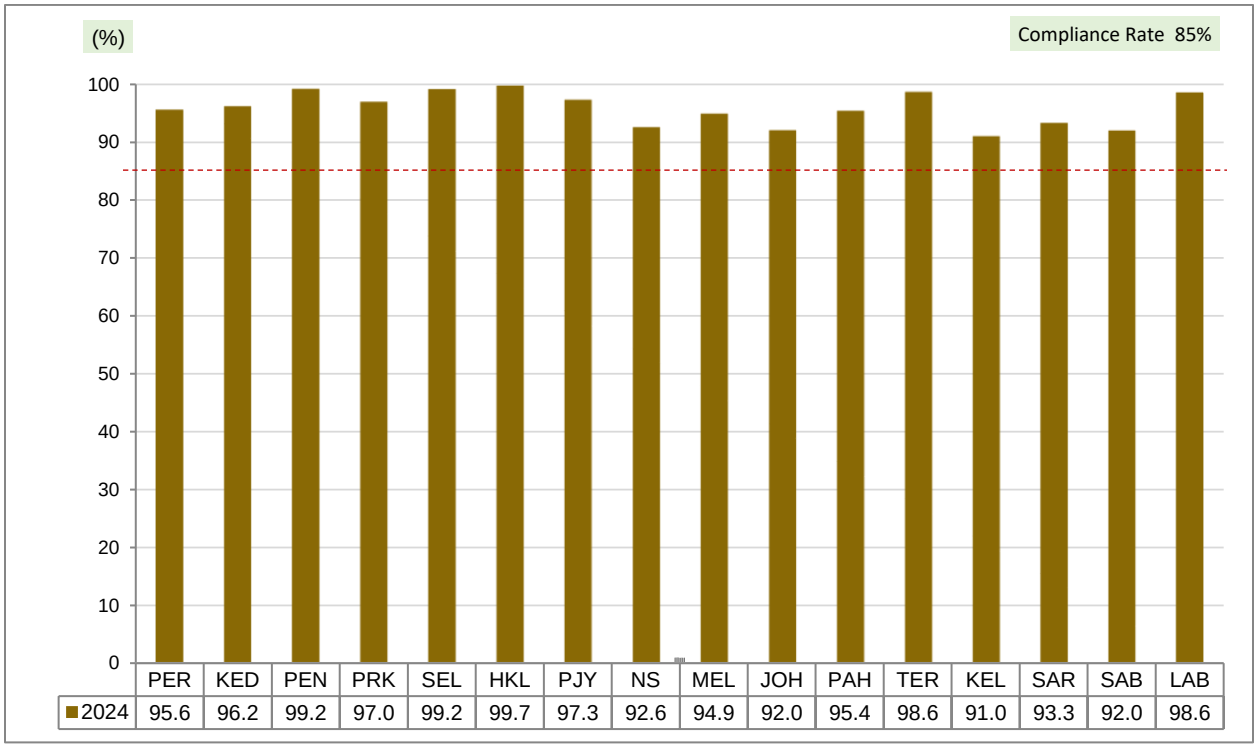

| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clinical | 93.0 | 95.7 | 90.5 | 98.6 | 98.4 | 97.4 | 89.8 | 95.3 | 99.2 | 96.7 | 97.1 | 98.2 | 95.4 | 96.3 | 97.8 | 98.7 |
| Operation | 79.0 | 85.5 | 90.3 | 93.5 | 90.3 | 88.9 | 92.1 | 88.2 | 94.1 | 90.4 | 95.4 | 94.7 | 93.3 | 86.1 | 95.8 | 95.1 |

The pre-hospital care and ambulance service activities are categorized into two (2) main areas: clinical services in pre-hospital care and ambulance service operations. The 2024 performance graph for these activities indicates a compliance rate exceeding 85% across all states and federal territories, except for Perlis (79%), where Tuanku Fauziah Hospital recorded a compliance rate below 85% in the ambulance service operations category.

Apart from Tuanku Fauziah Hospital, several other hospitals recorded low compliance rates in the ambulance service operations category, including Gua Musang Hospital (84%), Pasir Mas Hospital (83%), Changkat Melintang Hospital (83%), Tampin Hospital (83%), Serdang Hospital (82%), Sarikei Hospital (82%), Kinabatangan Hospital (82%), Rembau Hospital (81%), Sungai Bakap Hospital (79%), Kuala Kubu Bharu Hospital (79%), Bau Hospital (79%), Sik Hospital (78%), Parit Buntar Hospital (77%), Pakar Sultanah Fatimah Hospital Muar (74%), Betong Hospital (73%), Kulim Hospital (72%), Selama Hospital (72%), Cyberjaya Hospital (71%), Mukah Hospital (70%), Jitra Hospital (68%),and Kota Tinggi Hospital (66%).

Additionally, some health clinics also recorded low compliance rates, such as Serendah Health Clinic (82%), Rawang Health Clinic (80%), and Kapar Health Clinic (79%). For the clinical category of pre-hospital care services, low compliance rates were recorded at Pasir Puteh Hospital (82%) and Kuala Nerang Hospital (81%).

## 4.7 Management of deceased bodies in the Forensic Department.




| | PER | KED | PEN | PRK | SEL | HKL | PJY | NS | MEL | JOH | PAH | TER | KEL | SAR | SAB | LAB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 95.6 | 96.2 | 99.2 | 97.0 | 99.2 | 99.7 | 97.3 | 92.6 | 94.9 | 92.0 | 95.4 | 98.6 | 91.0 | 93.3 | 92.0 | 98.6 |

The 2024 performance graph for the management of deceased bodies activities in the Forensic Department shows that all states and federal territories have achieved a compliance rate exceeding 85%. However, several hospitals did not meet the established compliance rate, namely Permai Hospital (84%), Tampin Hospital (83.6%), Tenom Hospital (82.3%), Tanah Merah Hospital (80.9%), and Papar Hospital (60.2%).

## 5. Issues and opportunities for improvement in the national-level clinical audit of Assistant Medical Officers at the Ministry of Health Malaysia.

### Issues, 5.1

The triage activities at Serian Hospital (81%) indicate a low compliance rate in Component 2, **patient reception**, specifically in Item 2.2, which assesses whether non-ambulatory patients are provided with a wheelchair or placed on a trolley (50%). No wheelchairs were provided to patients. Additionally, Component 3, **patient assessment**, shows low compliance in Item 3.1, which requires a rapid visual assessment within five seconds (35%), as assessments were conducted beyond the stipulated time. In Item 3.3, ensuring appropriate immobilization and bandaging (33.3%) was not performed. Furthermore, in Component 5, **documentation**, compliance rates were low for Item 5.5, nutritional status (5%); Item 5.6, hydration (5%); Item 5.9, edema (10.5%); Item 5.10, jaundice (0%); Item 5.11, capillary refill time (80%); Item 5.18, pain assessment score (83.3%); and Item 5.19, allergies (70%), indicating incomplete execution and lack of proper documentation.

### Opportunities for Improvement, 5.1

Assistant Medical Officers assigned to the triage counter at Serian Hospital must ensure proper and accurate extrication of patients using wheelchairs and trolleys. They should also be vigilant in inpatient assessments by conducting rapid visual evaluations within the prescribed timeframe and proactively performing immobilization and bandaging procedures correctly. Supervisors should plan and implement intensive training courses on triage for all Assistant Medical Officers in the Emergency & Trauma Department.

### Issues, 5.2

The triage activities at Sultanah Hajjah Kalsom Hospital (71%) show low compliance in Component 3, **patient assessment**, particularly in Item 3.4, obtaining a brief history from critically ill patients (42.9%). Assistant Medical Officers did not inquire, record, or adequately obtain detailed medical histories from patients or their relatives. In Component 5, **documentation**, incomplete records were found at both primary and secondary triage. The following compliance rates were recorded: Item 5.1, time record (70%); Item 5.2, mode of arrival (65%); Item 5.3, chief complaint (75%); Item 5.4, brief history of current illness (15%); Item 5.5, nutritional status (0%); Item 5.6, hydration (55%); Item 5.7, pallor (57.9%); Item 5.8, cyanosis (68.8%); Item 5.9, edema (33.3%); Item 5.11, capillary refill time (25%); Item 5.12, blood pressure (75%); Item 5.17, consciousness level (70%); Item 5.18, pain assessment score (0%); and Item 5.19, allergies (10%).

**Opportunities for Improvement, 5.2**

Assistant Medical Officers at the triage counter must ensure accurate screening and proactive patient assessment. Emergency & Trauma Department supervisors at Sultanah Hajjah Kalsom Hospital should conduct comprehensive and frequent monitoring, along with direct verbal feedback to ensure procedural documentation and vital sign recording in patient charts.

**Issues, 5.3**

The triage activities at Batu Gajah Hospital (71%) highlight low compliance in Component 1, **patient reception**, particularly in Item 1.1, greeting and approaching patients (58.3%), due to a lack of proactive engagement. In Component 5, **documentation**, Assistant Medical Officers did not record information for Item 5.2, mode of arrival (0%), and Item 5.5, nutritional status (0%). Other low compliance rates include Item 5.6, hydration (15%); Item 5.7, pallor (10.5%); Item 5.8, cyanosis (10%); Item 5.9, edema (5.6%); Item 5.10, jaundice (5.3%); Item 5.11, capillary refill time (55%); Item 5.18, pain assessment score (64.7%); and Item 5.19, allergies (20%).

**Opportunities for Improvement, 5.3**

Assistant Medical Officers at Batu Gajah Hospital's triage counter should demonstrate greater dedication to ensuring accurate and proactive screening. Supervisors should plan and conduct intensive training courses on triage for all Assistant Medical Officers in the Emergency & Trauma Department.

**Issues, 5.4**

The triage activities at Shah Alam Hospital (36%) recorded 0% compliance in Component 5, **documentation**, as no physical records or forms were completed by Assistant Medical Officers. The absence of documentation was observed in all assessed items, including time records, mode of arrival, chief complaints, history of current illness, nutritional status, hydration, pallor, cyanosis, edema, jaundice, capillary refill time, blood pressure, pulse rate, respiratory rate, estimated blood oxygen levels, temperature, consciousness level, pain assessment score, and allergy records.

**Opportunities for Improvement, 5.4**

Shah Alam Hospital does not have a Secondary Triage. The Head Supervisor of the Emergency & Trauma Department has been informed to take necessary actions, including the reallocation of Assistant Medical Officers to a Secondary Triage unit.

**Issues, 5.5**

Issues related to infection control activities, specifically hand hygiene and environmental, were solely associated with digital system errors that require improvements. However, the overall compliance rate across hospitals met the required standards.

**Opportunities for Improvement, 5.5**

A comprehensive review should be conducted by the National Chief Auditor and the technical team to improve the existing database and system format.

**Issues, 5.6**

Clinical activities related to pre-hospital care services at Kuala Nerang Hospital (81%) indicate 0% compliance in Component 2, **adherence to Standard Practice Guidelines (SPG)**, as Assistant Medical Officers did not perform tasks according to standard procedures. Other low compliance rates were noted in Components 3, 6, 7, and 8, including failure to obtain medical instructions, improper patient handling, inadequate documentation, and safety concerns at both Kuala Nerang and Pasir Puteh Hospitals.

**Opportunities for Improvement, 5.6**

Assistant Medical Officers should strictly adhere to SOPs and SPGs, enhance their knowledge and skills through training, and prioritize documentation and patient safety. Supervisors must provide continuous monitoring and feedback.

**Issues, 5.7**

Ambulance service operations at Tuanku Fauziah Hospital (79%) exhibited deficiencies in vehicle and equipment management, including unverified checklists, poor ambulance cleanliness, lack of equipment maintenance, and improper communication device usage. Similar issues were observed in Kapar Health Clinic, particularly in ambulance log documentation.

**Opportunities for Improvement, 5.7**

Assistant Medical Officers and supervisors must efficiently manage ambulance services, ensuring optimal operational conditions. Supervisors must enforce proper documentation and discipline among staff.

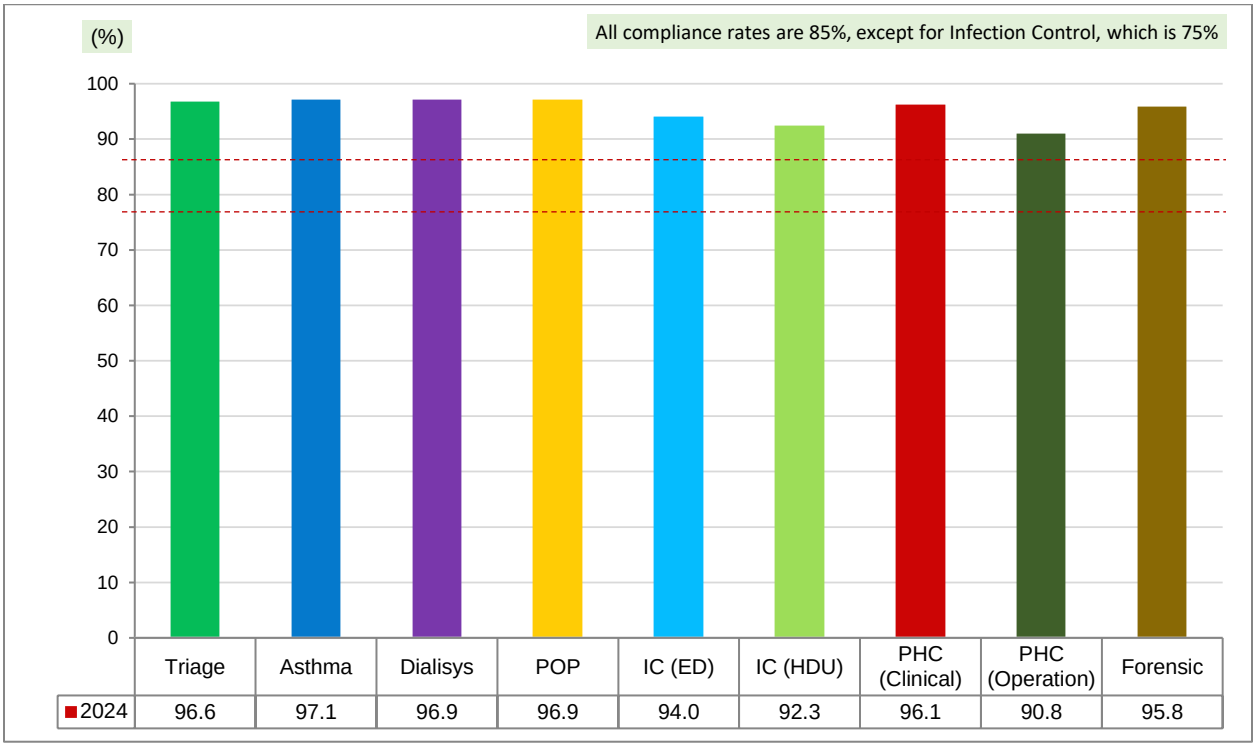
**Issues, 5.8**

Mortuary management at Papar Hospital (60.2%) revealed documentation deficiencies, including incomplete death registration records, inadequate demographic data, and missing identification labels on bodies and storage units.

**Opportunities for Improvement, 5.8**

Assistant Medical Officers and supervisors must be diligent in documentation and record-keeping. Continuous monitoring and training programs should be implemented to enhance efficiency in mortuary management.

## 6. Summary




| | Triage | Asthma | Dialisys | POP | IC (ED) | IC (HDU) | PHC (Clinical) | PHC (Operation) | Forensic |
|---|---|---|---|---|---|---|---|---|---|
| 2024 | 96.6 | 97.1 | 96.9 | 96.9 | 94.0 | 92.3 | 96.1 | 90.8 | 95.8 |

Overall, all State Health Departments and Federal Territories involved in the 2024 National Clinical Audit for Assistant Medical Officers across Malaysia have achieved the prescribed compliance rates, except for the ambulance service operations in Perlis, which recorded a compliance rate below the threshold at 79%. However, based on the graphical representation of the audit performance across various activities, the national-level compliance rate has been summarized as meeting the set benchmark, with all activities recording compliance rates exceeding 85%.

Additionally, weaknesses were identified among auditors who failed to fully understand the correct structure and methodology of the audit as required. Therefore, it is recommended that specific criteria and specialized training be implemented at both state and national levels.

Nonetheless, continuous improvements can be made at the state level through the proposed recommendations, necessitating the cooperation of all stakeholders to achieve the desired compliance rates in the future. The commitment of Assistant Medical Officers is crucial to ensuring that all procedures are adhered to and consistently practiced, rather than only being followed during audit periods.

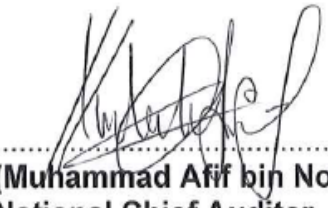
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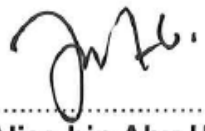
**(Asmawi bin Abdullah)**
**National Clinical Audit Secretary**
Quality & Research Unit
Assistant Medical Officer Services Section, MOH.

Reviewed by:



.....

**(Muhammad Afif bin Nordin)**
**National Chief Auditor**
Quality & Research Unit
Assistant Medical Officer Services Section, MOH.



.....

**(Alias bin Abu Hassan)**
**National Clinical Audit Coordinator**
Head of Policy & Strategic Planning Sector
Assistant Medical Officer Services Section, MOH.

Certified by:



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**(Zulhelmi bin Abdullah)**
**National Clinical Audit Advisor**
Head of Assistant Medical Officer Malaysia
Assistant Medical Officer Services Section, MOH.