GENERAL SURGERY				
NO	**INDICATOR**	**DIMENSION**	**STANDARD**	**SECONDARY DATA REPORTING FREQUENCY**
1a	Percentage of patients with waiting time of ≤ 60 minutes to see the doctor at the General Surgery Outpatient Clinic **(Two or more registration areas involved)**	Timeliness	≥ 80%	Monthly
1b	Percentage of patients with waiting time of ≤ 90 minutes to see the doctor at the General Surgery Outpatient Clinic **(Only one registration area involved)**	Timeliness	≥ 90%	Monthly
2	Percentage of patients with postponement of surgery for urgent cases	Customer centeredness	NA	3 Monthly
3	Percentage of Peri-operative Mortality Review (POMR) cases reported using vPOMR form	Efficiency	≥ 90%	3 Monthly
4	Incidence rate of colonic perforation following colonoscopy	Safety	≤ 0.5%	3 Monthly

*For indicator 1, each department to report either 1a **OR** 1b, and not both. (Refer technical specification)

Indicator 1

*Either indicator 1a **OR** 1b is to be reported, based on how many registration counters are involved.

- **Two or more registration areas are involved:** If registration of patient is first done at hospital's main outpatient / ACC complex registration counter with payment collection, following which the patient needs to re-register at the respective clinical department counter - Refer **Indicator 1a**.
- **Only one registration area is involved:** If registration of patient with payment collection is either done **ONLY** at clinical department counter **OR** it is done **ONLY** at hospital's main outpatient / ACC complex registration counter with no further re-registration required at the clinical department counter - Refer **Indicator 1b**.

Discipline	:	General Surgery
Indicator 1a	:	**Percentage of patients with waiting time of ≤ 60 minutes to see the doctor at the General Surgery Outpatient Clinic (Two or more registration areas involved)**
Dimension of Quality	:	Timeliness
Rationale	:	1. MOH aims for waiting time to see the doctor at outpatient services, to be less than 90 minutes, in line with patient-centred services. Waiting time is time patient first registers in the hospital till the time patient is seen by doctor. (Reference: Director-General of Health Malaysia Circular No. 6/2004) 2. The waiting time is based on patient's experience from the time the patient first registers at the first counter in the hospital till seen by doctor. In view of many counters being involved in some hospitals/ departments, some clinical departments have opted for monitoring of registration from department counter, as any process prior to that appears out of the clinical department's control. Thus, due to involvement of 2 or more counters within the hospital, for monitoring of clinical services KPI, the target of waiting time is for less than 60 minutes within the department. This is applicable only if patient is being registered at another counter within the same hospital (e.g. at hospital's main outpatient/ ACC complex registration counter) prior to the clinical department counter. 3. For hospitals to eliminate or reduce waiting time, it is important to balance between the demand for appointments and the supply of appointments. One needs to identify opportunities for improvement by strengthening the policy of outpatient services in hospital, apply Queuing Theory and having contingency plans.
Definition of Terms	:	**Two or more registration areas involved**: If registration of patient is first done at hospital's main outpatient/ ACC complex registration counter with payment collection, following which the patient needs to re-register at the respective clinical department counter: **Waiting time**: Time of registration counter at department counter or time of appointment given to patient (whichever is later) till the time the patient is first seen by the doctor, which is beginning of a consultation.
Criteria	:	**Inclusion**: 1. All outpatients of General Surgery Outpatient Clinic. **Exclusion**: 1. Patients who come without an appointment ("walk-in" patients). 2. Patients that need to do procedures on the same day before seeing the

		doctors (e.g. blood taking or imaging). **Sampling**: Using an average of total patients seen in a month, 30% of the patients in each month need to be sampled for this indicator. For example, in a case of 22 clinic days per month, 7 clinic days in a month need to be selected for data collection. Hospital/ department to ensure randomised sampling of data by ensuring each clinic day of the week is included to ensure proper representation of data.
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of sampled patients with waiting time of ≤ 60 minutes to see the doctor at the General Surgery Outpatient Clinic
Denominator	:	Total sample of patients seen by the doctor at the General Surgery Outpatient Clinic
Formula	:	Numerator x 100 % Denominator
Standard	:	≥ 80%
Data Collection & Verification	:	1. **Where**: Data will be collected in the General Surgery Outpatient Clinic. 2. **Who**: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. 3. **How to collect**: Data is suggested to be collected from patient's case notes/ appointment record book/ time slips. 4. **How frequent**: Monthly data collection within department. Validated summarised secondary data to be sent monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. 5. **Who should verify**:

	Prepared by	Validated by
Primary Data	Officer/ Paramedic/ Nurse in-charge	Supervisor of the person who prepared the data
Secondary Data	Officer/ Paramedic/ Nurse in-charge	Head of Department/ Specialist in-charge

		PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	

Discipline	**:**	**General Surgery**
Indicator 1b	:	**Percentage of patients with waiting time of ≤ 90 minutes to see the doctor at the General Surgery Outpatient Clinic (Only one registration area involved)**
Dimension of Quality	:	Timeliness
Rationale	:	1. MOH aims for waiting time to see the doctor at outpatient services, to be less than 90 minutes, in line with patient-centred services. Waiting time is time patient first registers in the hospital till the time patient is seen by doctor. (Reference: Director-General of Health Malaysia Circular No. 6/2004) 2. The waiting time is based on patient's experience from the time the patient

		first registers at the first counter in the hospital till seen by doctor. In view of many counters being involved in some hospitals/ departments, some clinical departments have opted for monitoring of registration from department counter, as any process prior to that appears out of the clinical department's control. Thus, due to involvement of 2 or more counters within the hospital, for monitoring of clinical services KPI, the target of waiting time is for less than 60 minutes within the department. This is applicable only if patient is being registered at another counter within the same hospital (e.g. at hospital's main outpatient/ ACC complex registration counter) prior to the clinical department counter. 3. For hospitals to eliminate or reduce waiting time, it is important to balance between the demand for appointments and the supply of appointments. One needs to identify opportunities for improvement by strengthening the policy of outpatient services in hospital, apply Queuing Theory and having contingency plans.
Definition of Terms	:	<u>If registration of patient with payment collection is done ONLY AT CLINICAL DEPARTMENT COUNTER:</u> **Waiting time**: Time of registration counter at department counter or time of appointment given to patient (whichever is later) till the time the patient is first seen by the doctor, which is beginning of a consultation. <u>If the registration is done ONLY AT HOSPITAL'S MAIN OUTPATIENT/ ACC COMPLEX REGISTRATION COUNTER, with no re-registration at the clinical department counter:</u> **Waiting time**: Time of registration counter at hospital's main outpatient/ ACC complex registration counter or time of appointment given to patient (whichever is later) till the time the patient is first seen by the doctor, which is beginning of a consultation.
Criteria	:	**Inclusion**: 1. All outpatients of the General Surgery Outpatient Clinic. **Exclusion**: 1. Patients who come without an appointment ("walk-in" patients). 2. Patients that need to do procedures on the same day before seeing the doctors (e.g. blood taking or imaging). **Sampling**: Using an average of total patients seen in a month, 30% of the patients in each month need to be sampled for this indicator. For example, in a case of 22 clinic days per month, 7 clinic days in a month need to be selected for data collection. Hospital/ department to ensure randomised sampling of data by ensuring each clinic day of the week is included to ensure proper representation of data.
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of sampled patients with waiting time of ≤ 90 minutes to see the doctor at General Surgery Outpatient Clinic
Denominator	:	Total sample of patients seen by the doctor at the General Surgery Outpatient Clinic
Formula	:	<u>Numerator</u> x 100 %

		Denominator
Standard	:	≥ 90%
Data Collection & Verification	:	1. **Where**: Data will be collected in the General Surgery Outpatient Clinic. 2. **Who**: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. 3. **How to collect**: Data is suggested to be collected from patient's case notes/ appointment record book/ waiting time slip. 4. **How frequent**: Monthly data collection within department. Validated summarised secondary data to be sent monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. 5. **Who should verify**: <table><tr><td></td><td>Prepared by</td><td>Validated by</td></tr><tr><td>Primary Data</td><td>Officer/ Paramedic/ Nurse in-charge</td><td>Supervisor of the person who prepared the data</td></tr><tr><td>Secondary Data</td><td>Officer/ Paramedic/ Nurse in-charge</td><td>Head of Department/ Specialist in-charge</td></tr></table> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	

Discipline	**:**	**General Surgery**
Indicator 2	:	**Percentage of patients with postponement of surgery for urgent cases**
Dimension of Quality	:	Customer centeredness
Rationale	:	1. Appendicectomy and soft tissue infections are cases commonly postponed in some hospitals. Postponement of cases scheduled for surgery will require re-fasting and this leads to discomfort for patients especially if they are diabetics. 2. Postponement infers the accessibility of Operation Theatre (OT) within a hospital. 3. The objective of monitoring this indicator is to identify opportunity for improvement within the facilities with regards to accessibility of OT.
Definition of Terms	:	**Urgent Cases**: These are cases that need to be done within 24 hours from the time cases are posted. Reference: Garis Panduan POMR. Prioritisation of cases for emergency and elective surgery. 2018. **Waiting time**: Time from when a patient is posted till time start of surgery. **Postponed cases**: Number of patients that have been scheduled for urgent surgery but postponed (allowed orally and re-fasted) and rescheduled to be done on the following day.
Criteria	:	**Inclusion:** 1. All patients undergoing urgent surgery for appendicectomy, incision & drainage (I&D) and saucerization. **Exclusion:**

		1. Other emergency surgeries. 2. All elective surgeries.
Type of indicator	:	Rate-based output indicator
Numerator	:	Number of patients with postponement of surgery for urgent cases
Denominator	:	Total number of patients posted for urgent surgery
Formula	:	Numerator x 100% Denominator
Standard	:	NA (To study the current trend & identify opportunity for improvement)
Data Collection & Verification	:	1. **Where**: Data will be collected in the OT. 2. **Who**: Data will be collected by OT Sister. 3. **How to collect**: Data is suggested to be collected from OT record book for postponed cases. 4. **How frequent**: Monthly data collection within department. Validated summarised secondary data to be sent 3 monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. 5. **Who should verify**: [ ] Prepared by / Validated by Primary Data: Officer/ Paramedic/ Nurse in-charge / Supervisor of the person who prepared the data Secondary Data: Officer/ Paramedic/ Nurse in-charge / Head of Department/ Specialist in-charge PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	

	Prepared by	Validated by
Primary Data	Officer/ Paramedic/ Nurse in-charge	Supervisor of the person who prepared the data
Secondary Data	Officer/ Paramedic/ Nurse in-charge	Head of Department/ Specialist in-charge

Discipline	:	**General Surgery**
Indicator 3	:	**Percentage of Peri-operative Mortality Review (POMR) cases reported using vPOMR form**
Dimension of Quality	:	Efficiency
Rationale	:	1. POMR has become an international indicator under the Global Surgery 2030 by Lancet and Worldbank which is supported by WHO. 2. It is a form of clinical audit and proven to be an important tool used to improve outcome in the clinical parctice, particularly in Surgery. Hence, improving surgical quality of care as a whole. It is also has become one of the important criteria for surgeon in MOH Surgery Policy 2018. Reference: • Guideline Implementation of Perioperative Mortality Review (POMR) in Ministry of Health (MOH), 2018 • Garis Panduan Pengisian Borang VPOMR, KKM, 2018.
Definition of Terms	:	**Perioperative Mortality**: Any death occurring within the total length of hospital stay within the same admission of a surgical performed under general or regional anesthesia including death in operation theatre before induction of anesthesia.
Criteria	:	**Inclusion**

		1. As per definition above. **Exclusion** 1. Surgery performed elsewhere/ during previous admission but patient was admitted and died during the present admission without surgical intervention. 2. Diagnostic and/ or therapeutic procedures carried out by physician and other non-surgeons. 3. Radiological procedures performed solely by the Radiologist without a surgeon's involvement. 4. Endoscopy (e.g. OGDS/ Colonoscopy/ ERCP) performed under sedation or/ and LA. 5. Surgery performed outside OT complex (e.g. procedure room).
Type of indicator	:	Rate-based output indicator
Numerator	:	Number of POMR cases reported using vPOMR form
Denominator	:	Total number of POMR death base on QAPOM2-2018
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 90%
Data Collection & Verification	:	1. **Where**: Data will be collected from POMR coordinator. 2. **Who**: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. 3. **How to collect**: Data is suggested to be collected from POMR report. 4. **How frequent**: 3 monthly data collection within department. Validated summarised secondary data to be sent 3 monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. 5. **Who should verify**: (see table below) PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	

	Prepared by	Validated by
Primary Data	Officer/ Paramedic/ Nurse in-charge	Supervisor of the person who prepared the data
Secondary Data	Officer/ Paramedic/ Nurse in-charge	Head of Department/ Specialist in-charge

Discipline	**:**	**General Surgery**
Indicator 4	:	**Incidence rate of colonic perforation following colonoscopy**
Dimension of Quality	:	Safety
Rationale	:	1. Colonoscopy is a common procedure done for diagnostic or therapeutic purposes. 2. Complication rate following colonoscopy indicates safety of this procedure.
Definition of Terms	:	NA
Criteria	:	**Inclusion:** 1. All colonoscopy performed inclusive of both therapeutic and diagnostic

		colonoscopy. **Exclusion:** NA
Type of indicator	:	Rate-based outcome indicator
Numerator	:	Number of colonic perforations following colonoscopy
Denominator	:	Total number of colonoscopies performed
Formula	:	Numerator x 100% Denominator
Standard	:	$\leq$ 0.5%
Data Collection & Verification	:	1. **Where**: Data will be collected in the Scope Room and ward that cater for the above condition. 2. **Who**: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. 3. **How to collect**: Data is suggested to be collected from patient's case notes/ procedure book. 4. **How frequent**: Monthly data collection within department. Validated summarised secondary data to be sent 3 monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. 5. **Who should verify**: [ ] Prepared by / Validated by Primary Data: Officer/ Paramedic/ Nurse in-charge / Supervisor of the person who prepared the data Secondary Data: Officer/ Paramedic/ Nurse in-charge / Head of Department/ Specialist in-charge PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	*This indicator is also being monitored as an Outcome Based Budgeting (OBB) indicator.

Who should verify:

	Prepared by	Validated by
Primary Data	Officer/ Paramedic/ Nurse in-charge	Supervisor of the person who prepared the data
Secondary Data	Officer/ Paramedic/ Nurse in-charge	Head of Department/ Specialist in-charge

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