



UROLOGY				
NO	INDICATOR	DIMENSION	STANDARD	SECONDARY DATA REPORTING FREQUENCY
1a	Percentage of patients with waiting time of \leq 60 minutes to see the doctor at the Urology Outpatient Clinic (Two or more registration areas involved)	Timeliness	\geq 80%	Monthly
1b	Percentage of patients with waiting time of \leq 90 minutes to see the doctor at the Urology Outpatient Clinic (Only one registration area involved)	Timeliness	\geq 90%	Monthly
2	Percentage of ureters that were stone free following ureterorenoscopy (URS) lithotripsy	Effectiveness	\geq 90%	3 Monthly
3	Percentage of safe percutaneous nephrolithotripsy (PCNL)	Safety	\geq 80%	6 Monthly
4	Percentage of safe transurethral resection of the prostate (TURP)	Safety	\geq 90%	6 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	: Urology
Indicator 1a	: Percentage of patients with waiting time of ≤ 60 minutes to see the doctor at the Urology Outpatient Clinic (Two or more registration areas involved)
Dimension of Quality	: Timeliness
Rationale	: <ol style="list-style-type: none"> 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 <u>patient first registers in the hospital</u> 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	: <p><u>Two or more registration areas involved:</u> If registration of patient is first done at <u>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.</u></p> <p>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.</p>
Criteria	: <p>Inclusion:</p> <ol style="list-style-type: none"> 1. All outpatients of Urology Outpatient Clinic. <p>Exclusion:</p> <ol style="list-style-type: none"> 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).



		<p>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.</p>									
Type of indicator	:	Rate-based process indicator									
Numerator	:	Number of sampled patients with waiting time of ≤ 60 minutes to see the doctor at the Urology Outpatient Clinic									
Denominator	:	Total sample of patients seen by the doctor at the Urology Outpatient Clinic									
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$									
Standard	:	$\geq 80\%$									
Data Collection & Verification	:	<ol style="list-style-type: none"> Where: Data will be collected in the Urology Outpatient Clinic. Who: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. How to collect: Data is suggested to be collected from patient's case notes/ appointment record book/ waiting time slip. 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. Who should verify: <table border="1" data-bbox="604 1041 1399 1213"> <thead> <tr> <th></th> <th>Prepared by</th> <th>Validated by</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p>		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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Remarks	:										

Discipline	:	Urology
Indicator 1b	:	Percentage of patients with waiting time of ≤ 90 minutes to see the doctor at the Urology Outpatient Clinic (Only one registration area involved)
Dimension of Quality	:	Timeliness
Rationale	:	<ol style="list-style-type: none"> 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 <u>patient first registers in the hospital</u> till the time patient is seen by doctor. (Reference: Director-General of Health Malaysia Circular No. 6/2004) 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,



		<p>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.</p> <p>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.</p>
Definition of Terms	:	<p><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.</p> <p><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.</p>
Criteria	:	<p>Inclusion:</p> <ol style="list-style-type: none"> All outpatients of the Urology Outpatient Clinic. <p>Exclusion:</p> <ol style="list-style-type: none"> Patients who come without an appointment ("walk-in" patients). Patients that need to do procedures on the same day before seeing the doctors (e.g. blood taking or imaging). <p>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.</p>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of sampled patients with waiting time of ≤ 90 minutes to see the doctor at Urology Outpatient Clinic
Denominator	:	Total sample of patients seen by the doctor at the Urology Outpatient Clinic
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 90%
Data Collection & Verification	:	<ol style="list-style-type: none"> Where: Data will be collected in the Urology Outpatient Clinic. Who: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. How to collect: Data is suggested to be collected from patient's case notes/



		<p>appointment record book/ waiting time slip.</p> <p>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.</p> <p>5. Who should verify:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 30%;">Prepared by</th> <th style="width: 30%;">Validated by</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p>		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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Remarks	:										

Discipline	:	Urology
Indicator 2	:	Percentage of ureters that were stone free following ureterorenoscopy (URS) lithotripsy
Dimension of Quality	:	Effectiveness
Rationale	:	<ol style="list-style-type: none"> 1. Endo-urological or minimally invasive urological procedures from the bulk of present day urological practice. 2. Ureterorenoscopy (URS) with ureteric stone lithotripsy is the commonest endourological procedure performed. 3. As Urolithiasis forms 60-70% of urological practice in Malaysia, the stone clearance rate after the performance of this procedure is an accurate reflection of clinical effectiveness of Urology care.
Definition of Terms	:	<p>Ureteric stone: Any stone in the proximal, middle or distal ureter.</p> <p>Lithotripsy: Fragmentation of stone using intracorporeal device of either Holmium Laser or Swiss Lithoclast. The number used in this indicator is based on <u>number of ureters</u> underwent URS lithotripsy done and not the number of patients.</p> <p>Stone free: Complete absence of any visible stone fragments along the ureter or in the ipsilateral kidney (retropulsed stone fragments) as seen in the immediate post op KUB X-ray.</p>
Criteria	:	<p>Inclusion:</p> <ol style="list-style-type: none"> 1. All radiopaque ureteric stone regardless of stone size and location. Radiopaque means the stone can be seen on plain KUB X-ray (90% of all stones are radiopaque). 2. More than 1 stone in the ureter and bilateral ureteric stones are included if decision was made before the operation to treat them at the same setting. <p>Exclusion:</p> <ol style="list-style-type: none"> 1. All radiolucent stone (unable to visualize on a plain KUB X-ray). 2. Cancellation of procedure due to anaesthesia reasons, intraoperative instability due to underlying medical conditions or patients developing urosepsis.



Type of indicator	:	Rate-based outcome indicator									
Numerator	:	Number of ureters that were stone free following URS lithotripsy for ureteric stone									
Denominator	:	Total number of ureters underwent URS lithotripsy for ureteric stone									
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$									
Standard	:	≥ 90%									
Data Collection & Verification	:	<ol style="list-style-type: none"> Where: Data will be collected in the Urology Ward/ OT or wards that cater for the above condition. Who: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. How to collect: Data is suggested to be collected from patient's case notes/ OT list/ OT record book/ procedure book. 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. Who should verify: <table border="1" data-bbox="581 814 1409 982"> <thead> <tr> <th></th> <th>Prepared by</th> <th>Validated by</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p> 		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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Remarks	:	*This indicator is also being monitored as an Outcome Based Budgeting (OBB) indicator.									

Discipline	:	Urology
Indicator 3	:	Percentage of safe percutaneous nephrolithotripsy (PCNL)
Dimension of Quality	:	Safety
Rationale	:	<ol style="list-style-type: none"> Endo-urological or minimally invasive urological procedures form the bulk of present day urological practice. Percutaneous nephrolithotripsy (PCNL) is the major urological procedure performed for the treatment of large or complex renal stones. As Urolithiasis forms 60% - 70% of urological practice in Malaysia, the safe performance of this procedure is an accurate reflection of the quality of care in Urology.
Definition of Terms	:	<p>Safe percutaneous nephrolithotripsy (PCNL): Absence of either one or more of the following complications:</p> <ul style="list-style-type: none"> Septicaemia. Bleeding requiring transfusion of more than 2 units of blood intraoperatively. Injury to adjacent organ (e.g. lung, bowel). Wound infection. Unplanned admission to ICU.



Criteria	: Inclusion: 1. All renal stones regardless of size and location. Full staghorn calculi are also included. Exclusion: 1. Significant co-morbidities (ASA III). 2. History of urosepsis within 1 month.									
Type of indicator	: Rate-based outcome indicator									
Numerator	: Number of safe PCNL cases performed									
Denominator	: Total number of PCNL performed									
Formula	: $\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$									
Standard	: $\geq 80\%$									
Data Collection & Verification	: <ol style="list-style-type: none"> Where: Data will be collected in the Urology Ward/ OT or wards that cater for the above condition. Who: Data will be collected by Officer/ Paramedic/ Nurse in-charge of the department/ unit. How to collect: Data is suggested to be collected from patient's case notes/ OT list/ OT record book/ PCNL record book. How frequent: Monthly data collection within department. Validated summarised secondary data to be sent 6 monthly to Quality Unit of the respective hospital for monitoring. PVF to be sent 6 monthly to Quality Unit of hospital. Who should verify: <table border="1" data-bbox="581 1045 1419 1220"> <thead> <tr> <th></th> <th>Prepared by</th> <th>Validated by</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p>		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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Remarks	: *This indicator is also being monitored as an Outcome Based Budgeting (OBB) indicator.									

Discipline	: Urology
Indicator 4	: Percentage of safe transurethral resection of the prostate (TURP)
Dimension of Quality	: Safety
Rationale	: <ol style="list-style-type: none"> Transurethral resection of the prostate (TURP) is the gold standard surgical treatment for Benign Prostatic Hyperplasia (BPH). BPH is predominantly treated by medication and surgery is reserved for severe symptomatic BPH, failure of medical management and in situations where there are complications of BPH such as urinary retention. The safe manner in which TURP is performed is a reflection of the standard of Urological training. It also indicates appropriate case selection and supervision.
Definition of Terms	: Safe transurethral resection of the prostate (TURP): Absence of either one or more of the following complications:



		<ul style="list-style-type: none"> • Post op length of stay greater than 5 days. • Bleeding requiring blood transfusion. • Return to OT during the same admission. • Perforation of the bladder. • TUR syndrome. • Septicaemia. • Unplanned admission to ICU. 									
Criteria	:	<p>Inclusion:</p> <ol style="list-style-type: none"> 1. All TURP performed on ASA I and II patients. <p>Exclusion:</p> <ol style="list-style-type: none"> 1. Significant co-morbidities (ASA III). 2. Patients on anticoagulants/ antiplatelets who had bleeding following TURP that required blood transfusion. 3. Patients who developed the above listed complications because of their comorbidity and not due to TURP. 									
Type of indicator	:	Rate-based outcome indicator									
Numerator	:	Number of safe TURP cases performed									
Denominator	:	Total number of TURP performed									
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$									
Standard	:	≥ 90%									
Data Collection & Verification	:	<ol style="list-style-type: none"> 1. Where: Data will be collected in the Urology Ward/ OT or wards 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/ OT list/ OT record book/ TURP record book. 4. How frequent: Monthly data collection within department. Validated summarised secondary data to be sent 6 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 border="1" data-bbox="581 1360 1377 1535"> <thead> <tr> <th></th> <th>Prepared by</th> <th>Validated by</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p> 		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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