

**Ministry of Health Malaysia**  
**Protocols**  
**For**  
**Day Care Anaesthesia**



**Medical Development Division**  
**2012**

This document was developed by the Surgical and Emergency Medicine Services Unit, Medical Development Section of the Medical Development Division, Ministry of Health Malaysia and the Drafting Committee/Task Force for the Day Care Anaesthesia Services.

Published in October 2012

A catalogue record of this document is available from the library and Resource Unit of the Institute of Medical Research, Ministry of Health;

**MOH/P/PAK/237.12 (BP)**

And also available from the National Library of Malaysia;

ISBN 978-967-0399-23-2

All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means or stored in a database or retrieval system without prior written permission from the Director of Medical Development Division, Ministry of Health Malaysia.

This document is also available at [www.moh.gov.my](http://www.moh.gov.my)

## CONTENTS

Foreword	x
1. Background	1
2. Definition	1 - 2
3. Objectives	2
4. Functions	2
5. Infrastructure	3
6. Work Flow	4
7. Patient Assessment and Selection Criteria	9
8. Summary	14

### Appendices:

- Appendix 1- Pre-operative Instruction for Day Care Anaesthesia
- Appendix 2- Discharge Instructions
- Appendix 3- Discharge Criteria
- Appendix 4- Discharge Form
- Appendix 5- Discharge Checklist
- Appendix 6- Post-operative Follow-up Form

### Bibliography

### References

### Drafting Committee/Task Force Committee Members

## **Foreword**

The global economic constraints and increasing financial awareness of 1970s led to the increase in the incidence of ambulatory surgery.<sup>1</sup> Day care surgery or ambulatory surgery is growing globally and the challenge of providing anaesthesia for longer and more complex surgery in sicker and elderly patients is no longer far-reaching. To maintain the safety and good outcomes of day care surgery, high-risk patients will need to be evaluated carefully.<sup>2</sup>

Many hospitals now have an anaesthetic clinic where preoperative evaluation is being conducted. In this clinic, multidisciplinary health care providers with clinical experience in preoperative care can apply a uniform and consistent preoperative evaluation to all surgical patients.<sup>3</sup>

Patients undergoing surgery as inpatient or outpatient, move through a continuum of medical care to which physicians and surgeons contribute to ensure the best outcome possible. The anaesthetic technique that use short-acting drugs and minimize post-operative mortality and morbidity should become the focus in day surgery anaesthesia. Policies on management of post-operative pain, nausea, vomiting, voiding and discharge from hospital will maintain good outcome measures.<sup>2</sup>

The protocols developed by the special committee serve as guidance to all medical personnel providing day care surgery. Extensive search and review on the subject has been undertaken for the benefits of day surgery patients in Ministry of Health (MOH) hospitals.

Datin Dr V.Sivasakthi  
Head of Service for Anaesthesiology and Intensive Care Services  
Ministry of Health  
And  
Chair person for Drafting/Task Force Committee

## 1.0 Background

The earliest reference for day care surgery is mentioned as early as the beginning of the 20<sup>th</sup> Century by James Nicoll, a Glasgow surgeon who performed almost 9000 outpatient operations in children in 1903. Later, in 1912, Ralph Waters from Iowa, USA, described “The Down Town Anaesthesia Clinic”, where he gave anaesthesia for minor outpatient surgery.

The global economic constraints and increasing financial awareness of the 1970s led to the increase in day care surgery.<sup>1</sup> Recent advances in medical technology and pain management have allowed a huge expansion of day care surgery with a consequent reduction in the need for hospitalization. These facilities of day care surgery may be attached to the main hospital itself, office-based or free standing ambulatory care centers. The standard of anesthesia care is the same as that applicable to hospital-based surgeries, even for the most minor surgeries. There should always be a back up available for emergency care either at the same place or a nearby hospital in case an emergency admission is required. The convenience and low overhead costs continue to attract more surgeries to be conducted in a day care setting.

Historically in the Ministry of Health, prior to 1987, day care procedures and day surgeries across the various disciplines were conducted at different facility locations within a hospital ranging from operation theatres, wards, specialist clinics, emergency department etc. In 1987 the first dedicated Ambulatory Care Centre (ACC) project was in Hospital Ipoh. The benefits realization reported from this project pertaining to day care surgery was evident in reducing surgical waiting time to 2 – 10 weeks for selected elective procedures and the reduction of inpatient admissions to the surgical based departments by 28.2% .<sup>4</sup>

The day care surgery offers several advantages to patients, doctors and hospital administration including cost saving. It is expected to be 25-75% lesser in cost than that of a similar inpatient procedure. The successful conduct of anaesthesia entails careful patient selection, type of surgeries based on the facilities available, appropriate patient preparation and planning are essential. Even the extremes of age are not deterrent for day care surgery, provided proper attention is paid to discharge planning. Children are excellent candidates for day care surgery as it provides minimal separation from parents and minimal exposure to hospital environment and hospital-acquired infection.

## 2.0 Definition

Day care surgery is defined as scheduled surgical procedures provided to patients who do not require hospital stay overnight. It is a process of care by which suitable patients are managed with admission, treatment and discharge on the same day.

Day care surgery is done for diagnostic and therapeutic procedures which require local, regional, or general anaesthesia, which do not carry the risk of post-operative complications but require a period of observation in the hospital.

### **3.0 Objectives**

- 3.1 To reduce waiting time for elective surgery
- 3.2 To reduce inpatient admission
- 3.3 To make surgery convenient and comfortable for the patient
- 3.4 To reduce disruption of personal lives
- 3.5 To reduce hospital-acquired infection
- 3.6 To encourage early recovery and mobilization in a home environment with their family
- 3.7 To reduce cost of surgery

### **4.0 Functions**

- 4.1 Day care anaesthesia service shall be provided in an integrated set-up using either the existing operating theatres or a dedicated ambulatory care facility or day care unit.
- 4.2 In day care anaesthesia, patients shall be admitted, operated and discharged on the same day. The standard of care shall be the same as for inpatients.
- 4.3 Day care anaesthesia service shall be provided from 8 am to 5 pm on weekdays.
- 4.4 Day care anaesthesia shall be specialist based.
- 4.5 Patient and procedure selection criteria shall be strictly adhered to.
- 4.6 Effective preoperative preparation with clear verbal and written preoperative instructions shall be required.
- 4.7 Anaesthetic consent shall be obtained.
- 4.8 Each anaesthesiologist shall develop techniques that permit the patient to undergo the surgical procedure with minimum stress and maximum comfort, and optimize chance of early discharge.
- 4.9 Fitness for discharge shall be protocol-driven, doctor-led discharge which is fundamental to safe and effective day care surgery. There should be clear written post-operative instructions.
- 4.10 The discharge criteria shall be strictly adhered. The safety of the patient upon discharge is of utmost concern, in which the patient should be free from surgical and anaesthetic complication (such as inadequate recovery)
- 4.11 Each day care surgery unit shall have a consultant anaesthesiologist with specific interest in day care surgery and whose remit includes development of local policies, guidelines and clinical governance.
- 4.12 There shall be good quality patient information for both patient and accompanying person/family.
- 4.13 Effective audit is an essential component of quality care for any day care anaesthesia service.
- 4.14 There shall be clear documentation of anaesthetic care and recovery process

## **5.0 Infrastructure**

### **5.1 Location**

Day care anaesthesia service shall be provided in an integrated set-up using the existing operating theatres, dedicated operating theatres/unit or a free standing dedicated ambulatory care facility. The unit should have a separate entrance and exit to the main road with ample parking space.

### **5.2 Facilities**

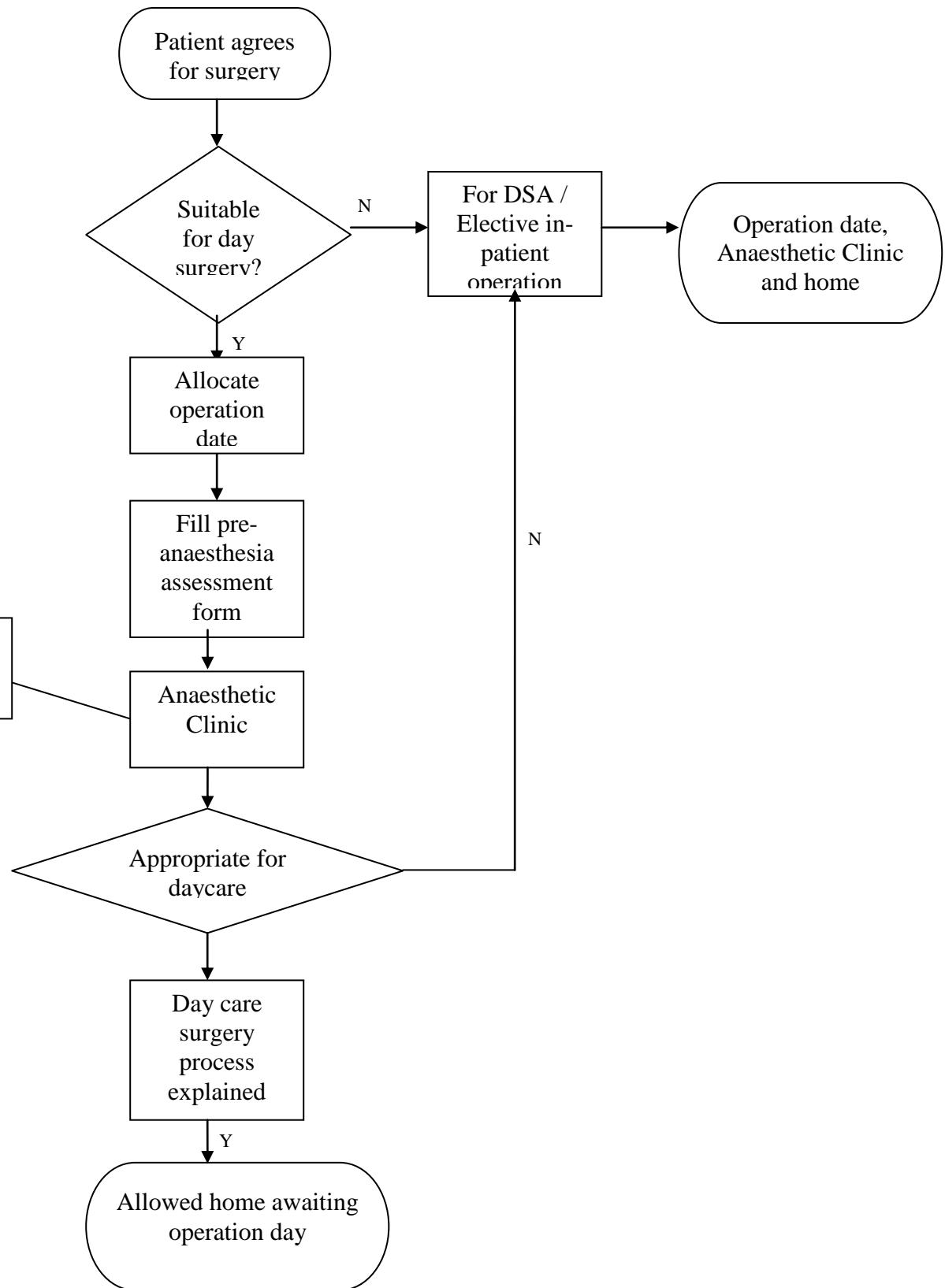
- Registration counter
- Waiting room
- Assessment room
- Changing rooms
- Procedure rooms
- Pre and post- operative wards
- Operating theatres
- Recovery room
- Pharmacy

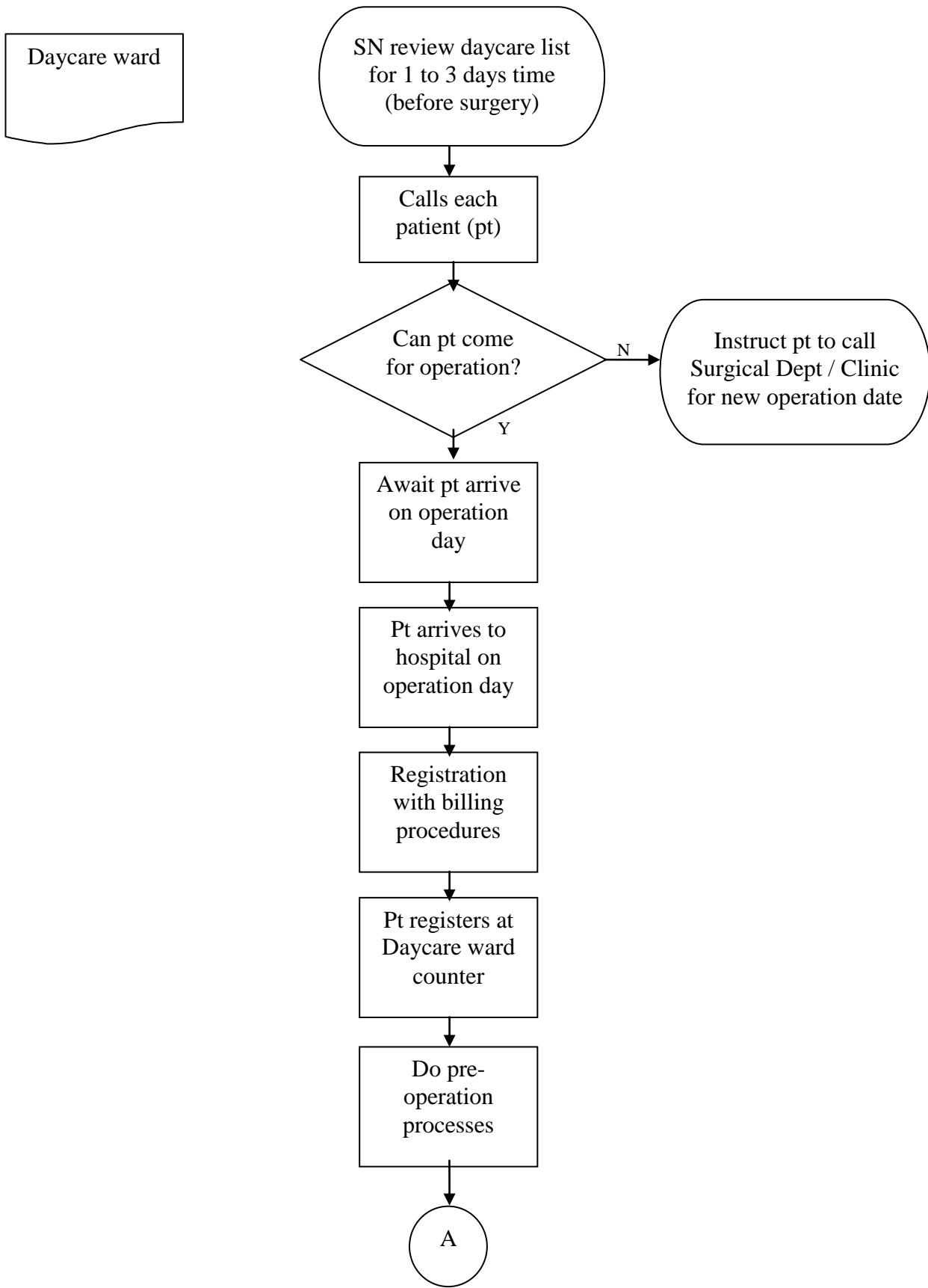
### **5.3 Staffing**

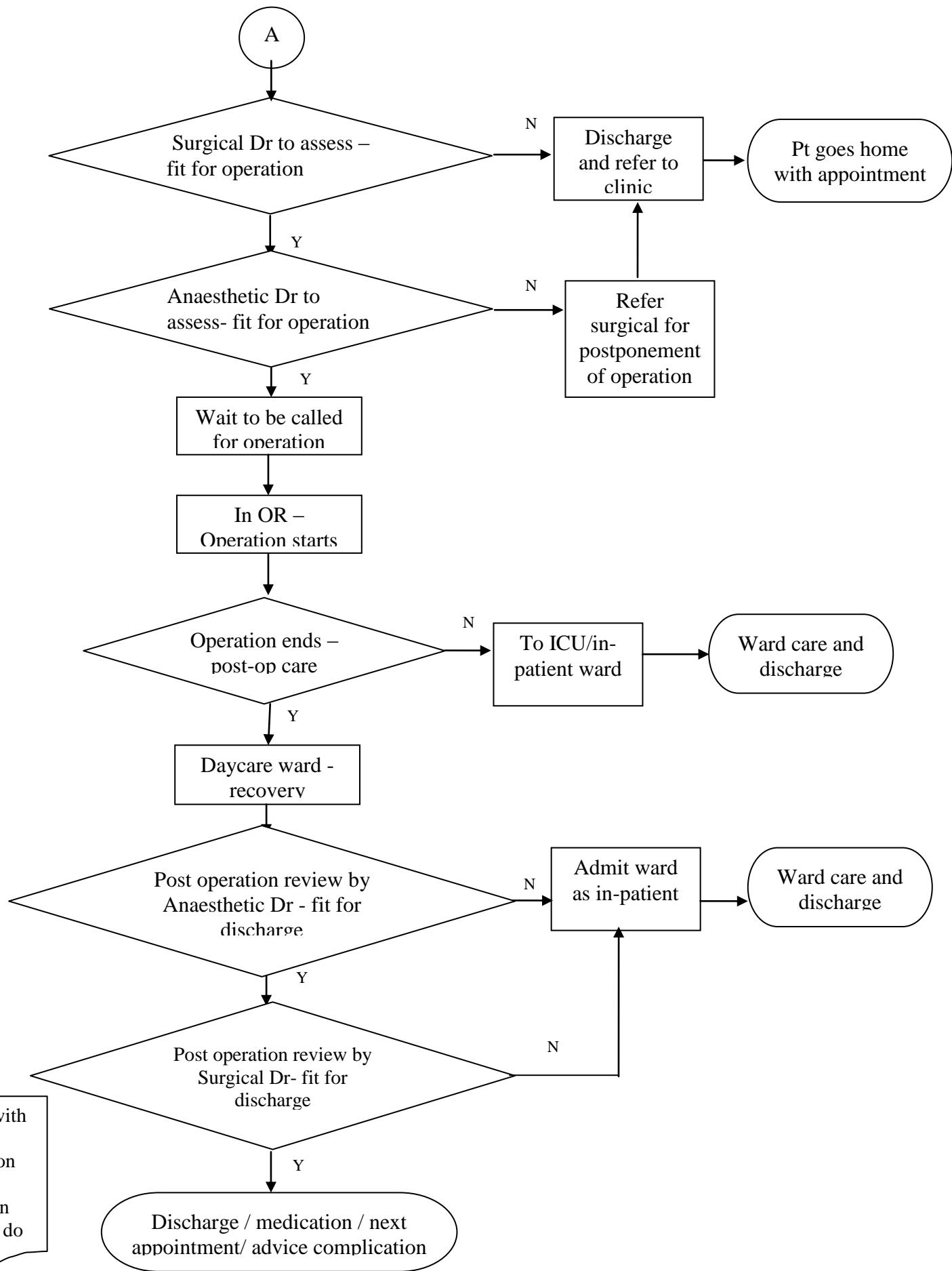
- A consultant Anaesthesiologist, with special interest in day care surgery, shall be responsible in developing protocols, policies, audit and clinical governance.
- Anaesthesiologists
- Medical Officers
- Nursing Manager/Sister
- Theatre Scrub Nurses
- General Anaesthetic (GA) nurses
- Ancillary staff
- Recovery Ward Nurses

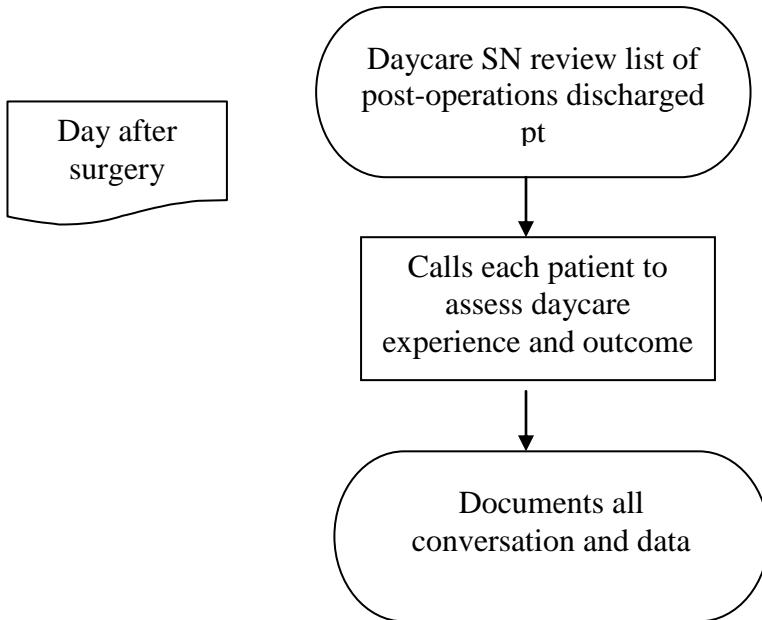
This will depend on the design of the facility, case mix, workload and ability to conform to national guidelines for patient care undergoing an anaesthetic.

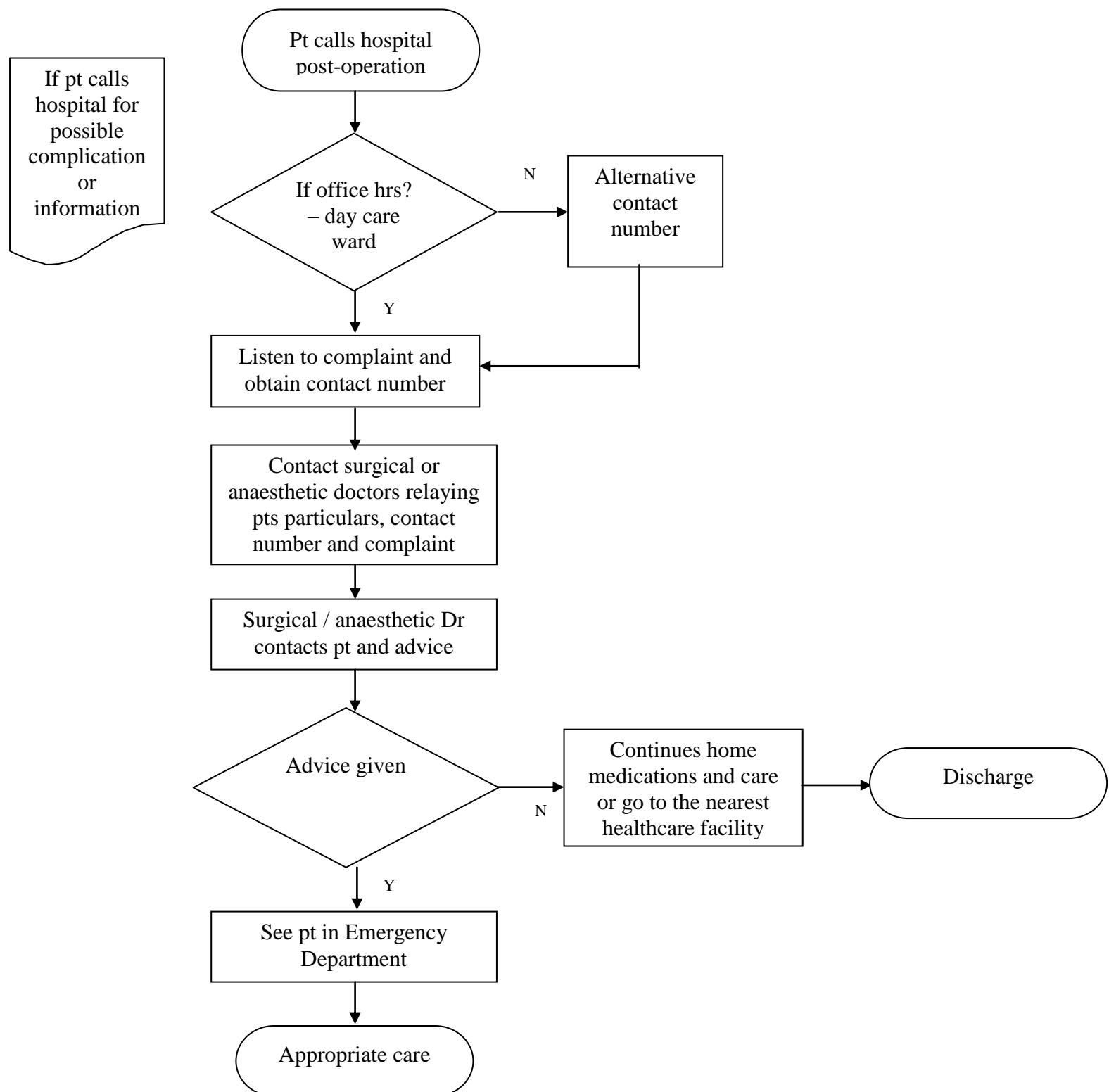
## 6.0 Day Surgery Work Flow











## **7.0 Patient Assessment and Selection Criteria**

Day Surgery is a process of care by which suitable patients are managed with admission, treatment and discharge on the same calendar day, ideally within a dedicated, ring fenced environment.

### **Preoperative Assessment**

Preoperative assessment is an essential element to ensure efficient day surgery service. Pre-assessment should preferably be carried out at least 2 weeks before the procedure date. This is to ensure adequate time to correct any abnormalities and allow the patient to be adequately informed and prepared for surgery. In addition, timely pre-assessment reduces cancellations and failure to attend.

Assessment should be based on social and medical criteria and agreed with the Anaesthesiology Department. There should be local agreement on which procedures may be performed as day surgery. The decision on whether a specific patient listed for any of these procedures is managed as a day surgery, short stay or in-patient should be made at pre-assessment.

The initial screening of patients should be carried out by the Surgical Team who first comes in contact with the patient. A Pre-anaesthesia Assessment Form should be completed by the surgeon in-charge and sent to the Anaesthetic Clinic together with the patient. Patient's medical and social history, together with appropriate clinical assessment and necessary blood investigations and radiographic investigations should be performed prior to advising patient for day surgery to ensure patient fitness for surgery and anaesthesia. Patients should be provided with information about the proposed operation and also the expectations of day surgery in order to improve the patient's experience of the day surgery.

Patients suitable for day surgery will be referred to the anaesthetic team for further assessments. An appointment should be made with the Anaesthetic Clinic (refer to Protocols for Anaesthetic Clinic) and patient should be sent for a pre-operative assessment and to determine suitability for day care surgery. Patients who are not suitable for day surgery in ACC will be communicated to the surgical team.

### **Selection Criteria and Suitable Procedures For ACC (adopted from Penang Hospital)**

When patients are referred for day surgery in ACC, it is essential to ensure that:

- ◆ the procedure is suitable
- ◆ the risk of complications (from surgery and anaesthetic) are minimised

- ◆ Admission to an in-patient bed following day surgery is prevented
- ◆ Patients are adequately supported after discharge home.

The selection criteria should be defined and collaboratively agreed by surgeons, anaesthetists and nurses involved in day surgery. The anaesthetic team should be referred to in event of any queries regarding patient's suitability for day surgery. We suggest the following criteria to be adopted.

- I) Patient Criteria**
- II) Social Criteria**
- III) Surgical Criteria and Proposed Suitable Procedures**

### **Patient Criteria**

- Health Status: Patients classified in categories ASA 1 and 2 are suitable for day surgery. Patients in category ASA 3 can be selected after consultation with the anaesthetic team provided their disease is well controlled.

**Table 1 – The American Society of Anaesthesiologists' (ASA) classification of physical status**

**Class 1:** Patient has no organic, physiological, biochemical or psychiatric disturbance. The pathological process for which surgery is to be performed is localised and does not entail a systemic disturbance. (Examples: a fit patient with an Inguinal Hernia).

**Class 2:** Mild to moderate, systemic disturbance caused either by the condition to be treated surgically or by other pathophysiological processes. (Examples: Slightly Limiting Organic Heart Disease; Mild Diabetes; Essential Hypertension; Anaemia).

**Class 3:** Severe systemic disturbance or disease from whatever cause, even if it may not be possible to define the degree of disability with finality. (Examples: Severely Limiting Organic Heart Disease; Severe Diabetes with Vascular Complications; Moderate to Severe Degrees of Pulmonary Insufficiency; Angina Pectoris; Healed Myocardial Infarction).

- Age Limits: Patient older than 75 years and children less than 6 months should not be selected.
- Physical Factors: Patients with no obvious difficult airway features and  $BMI < 35 \text{ kgm}^{-2}$ .

## **Social Criteria**

- Patients or parents must be willing to cooperate and physically and mentally able to understand, comply and cope with post-procedural instructions after receiving adequate information and an opportunity to discuss any anxieties.
- Escort: All patients selected for day surgery must have a physically and mentally capable escort, who is responsible for patient's care and able to accompany patient home and supervised their recovery at home for a minimum of 24 hours. In children, two responsible people should accompany a child home – one to drive the car and the other to care for the child.
- Transport: Suitable transport must be available to transport patient home post surgery and also to come back to the hospital in event of emergency. Travel on public transport or motorcycles following a general anaesthetic are inappropriate.
- Geography: Patients should live within 1 hour travelling distance from hospital.
- Social Support: patients must have access to telephone services readily available at all times.

## **Surgical Criteria**

- Simple surgery that should not last more than 90 minutes.
- Procedures that have minimal risk of postoperative complications e.g. haemorrhage or airway compromise.
- Procedures with minimal postoperative pain that can be controlled by simple analgesia.
- No special postoperative nursing required post surgery.
- Patient would not have prolonged immobility after the procedure.
- Rapid return of normal food and fluid intake possible after the procedure.

## **UTILIZATION OF ACC OPERATION THEATRE FOR INPATIENTS**

### Day Surgery OT

We strongly encourage the use of the day surgery list for day surgery patients. However, inpatients can be listed for operation in the ACC operation theatre under the day surgery list by the respective surgical team after discussion with the anaesthetic team.

The principle of selection of inpatients in the ACC should follow the patient's criteria and surgical criteria for day surgery where appropriate.

## **Suitable Procedures For Day Surgery In ACC (adopted from Penang Hospital)**

### **GENERAL SURGERY/UROLOGY**

Orchidopexy  
Circumcision  
Inguinal Hernia Repair  
Excision of Breast Lump  
Wide Excision of Breast Lump with Axillary Clearance  
Anal Fissure Dilatation or Excision  
Haemorrhoidectomy  
Varicose Vein Stripping or Ligation  
Ligation of Communicating Hydrocoele  
Separation of Preputial Adhesions  
Meatotomy  
Minor Repair of Hypospadias  
Hypospadias Fistula  
Removal of JJ Stents  
Gastroscopy ± Biopsy  
Oesophageal Dilatation  
Change of Tracheostomy  
Change of Gastroscopy Button  
Proctoscopy, Sigmoidoscopy ± Biopsy  
Anal Dilatation  
Manual Evacuation  
Excision of Local Skin Lesions  
Lymph Node Biopsy  
Excision of Sebaceous Cysts  
Branchial Sinus/Fistula  
Thyroglossal Cysts  
Removal of Long Lines

### **GYNAECOLOGY**

Dilatation and Curettage/Hysteroscopy  
Laparoscopy Sterilization  
Termination of Pregnancy  
Examination under Anaesthetic and Vaginoscopy  
Separation of Labial Adhesions

### **ORTHOPAEDICS**

Excision of Dupuytren's Contracture  
Carpal Tunnel Decompression  
Excision of Ganglion

Arthroscopy (all arthroscopic examinations of joints)  
Bunion Operations  
Removal of Metalware  
Manipulations  
Change of Plaster  
Release of Trigger Thumb  
Serial Casting for Scoliosis  
Partial or Complete Removal of Toenails  
Tenotomy

### **DENTAL**

Conservation  
Extractions (especially children with special needs, mental/physical handicaps)  
Excision or Biopsy of Oral Lesions  
Lingual/labial frenectomy  
Enucleation of Simple Cysts  
Removal of Direct Bone Plates and Wires

### **ENT**

Division of Tongue Tie  
Myringotomy  
Submucous Resection  
Reduction of Nasal Fracture  
Nasal Polyps  
Suction Clearance including Removal of Foreign Bodies  
Aural Polypectomy  
Change of Mastoid Dressing  
Endoscopy  
Cautery  
Dilatation of Choanae  
Antral Washouts  
Drainage of Septal Haematoma  
Tonsillectomy (some)  
Adenoidectomy (some)

### **PLASTIC AND DERMATOLOGICAL**

Incomplete Simple Syndactyly  
Excision of Accessory Auricles and Digits  
Dermoid Cysts  
Minor Revisions of Nose and Lip following Cleft Lip and Palate Surgery  
Excision and Revision of various Hamartomata  
Pulsed Dye Laser Treatment of Portwine Stain Birthmarks  
Operation for Bat Ears

## **OPHTHALMOLOGY**

Tear Duct Probing  
Excision of Chalazion and other Benign Lid Lesions  
Extraction of Cataract with/without implant  
Correction of Squint

### **8.0 Summary**

Day Surgery is a process of care by which suitable patients are managed with admission, treatment and discharge on the same calendar day, ideally within a dedicated, ring fenced environment.

Patients undergoing day care surgery move through a continuum of medical care to which physicians and surgeons contribute to ensure the best outcome possible. The anaesthetic technique that use short-acting drugs and minimize post-operative mortality and morbidity should become the focus in day surgery anaesthesia. Policies on management of post-operative pain, nausea, vomiting, voiding and discharge from hospital will maintain good outcome measures.

**Pre-op Instructions for Day Care Anaesthesia**

*(To be given to patients after assessment at Anaesthetic Clinic)*

- You should not eat any solid food after midnight.
- You can take unrestricted plain water until 2 hours before the scheduled surgery.
- Do not drink any alcohol 24 hours before your surgery.
- Take routine medications with small sips of water as directed by your surgeon or anaesthesiologist. Bring a list of these medications and the dosages with you.
- Shower with soap, shampoo your hair and brush your teeth on the morning of surgery.
- Remove all nail polish and makeup.
- You are required to remove any contact lenses, dentures or partial plates before the surgery. Remember to bring containers for these articles.
- Leave all jewellery, money, watches and other valuables at home. You cannot wear any jewellery to surgery. The hospital will not be responsible for any loss
- Wear comfortable, casual, clothing that is easy to get on and off. The hospital will provide you with gown and slippers. There will be a locker available for your clothing while you are in surgery.
- Bring your appointment card and other related documents.
- Before you come to the hospital, please make arrangements for an adult friend or relative to accompany you to and from the day of surgery.
- Persons under 18 years of age must have a parent or legal guardian with them to sign consent.

\*Failure to follow the above instructions may result in surgery being cancelled.

## **DISCHARGE INSTRUCTIONS**

(To be given to patient at discharge. Nurse to explain instructions to patient)

You should be under the care of a responsible adult for 24 hours after your discharge

For the next 24 hours:

- Do not drive any vehicle
- Do not use power tools or appliances which may cause harm or injury.
- Do not make any important decisions or sign any legal documents.
- Do not consume alcohol

Nausea and vomiting are common after general anaesthesia. If you have these take the medication provided for this. If it persists, you must call the contact numbers provided for advice.

Take your medications as instructed including those for pain relief. If pain persists, you must call the contact numbers provided for advice.

Please call the numbers provided if you have any of the following:

- Difficulty in passing urine
- Fever
- Bleeding
- Redness or infection at the site of the operation
- Any other complication that you are worried about
- Contact numbers (to be filled by individual hospital)

Office Hours: (Day Care Ward)

After Office Hours: (respective Surgical Ward)

**SURGICAL DISCHARGE INSTRUCTIONS TO BE GIVEN SEPARATELY**

**DISCHARGE CRITERIA**

*(For information of surgeon, anaesthetist and nurses) – not to be given to patient*

- The patient must be awake, alert and orientated to person, place and time.
- Vital signs must be stable.
- The patient must be able to tolerate fluids.
- Pain should be manageable with oral analgesics.
- There must be minimal nausea, vomiting and dizziness.
- There must be no or minimal bleeding.
- Upon discharge patients must be given:
  - Verbal and written instructions,
  - A discharge prescription
  - Relevant contact numbers in case of an emergency
- Patients will be informed that they will be contacted the next day by the day care staff to enquire about their well being
- Patients must be advised not to consume alcohol, drive, operate machinery, and sign legal documents etc. for at least 24 hours.
- Patients must be accompanied by a responsible adult (2 adults for paediatric cases) who will care and stay with the patient for at least 24 hours.

**DISCHARGE FORM****Modified Post Anaesthetic Discharge Scoring System (PADSS)**

(Marshall and Chung).

*(To accompany the Anaesthetic Record Form for each patient)*

		Score
<b>Vital signs</b>	<i>Vital signs must be stable and consistent with age and preoperative baseline.</i>	
	BP and pulse within 20% of preoperative baseline	2
	BP and pulse within 20-40% of preoperative baseline	1
	BP and pulse >40% from preoperative baseline	0
<b>Activity Level</b>	<i>Patient must be able to ambulate at preoperative level.</i>	
	Steady gait, no dizziness (or meets preoperative level)	2
	Requires assistance	1
	Unable to ambulate	0
<b>Nausea &amp; Vomiting</b>	<i>The patient should have minimal nausea and vomiting prior to discharge</i>	
	Minimal: successfully treated with oral medication	2
	Moderate: successfully treated with IM/IV medication	1
	Severe: continues after repeated treatment	0
<b>Pain</b>	<i>The patient should have minimal or no pain prior to discharge. The level of pain that the patient has should be acceptable to the patient. Pain should be controllable by oral analgesics. The location, type and intensity of pain should be consistent with the anticipated postoperative discomfort.</i>	
	Acceptability: Yes	2
	No	0
<b>Surgical Bleeding</b>	<i>Postoperative bleeding should be consistent with expected blood loss for the procedure</i>	
	Minimal: does not require dressing change	2
	Moderate: up to two dressing changes required	1
	Severe: more than three dressing changes required	0

TOTAL: \_\_\_\_\_

SN name: \_\_\_\_\_

Signature: \_\_\_\_\_

**Discharge checklist**  
*(Back to back with PADSS)*

	YES	NO
PADSS $\geq$ 9	<input type="checkbox"/>	<input type="checkbox"/>
Medication given	<input type="checkbox"/>	<input type="checkbox"/>
STO date given	<input type="checkbox"/>	<input type="checkbox"/>
Appointment date given	<input type="checkbox"/>	<input type="checkbox"/>
Discharge instructions given	<input type="checkbox"/>	<input type="checkbox"/>
Locker key returned	<input type="checkbox"/>	<input type="checkbox"/>
Payment made	<input type="checkbox"/>	<input type="checkbox"/>
Going home with someone responsible	<input type="checkbox"/>	<input type="checkbox"/>
Surgeon's name: _____	Signature: _____	Time: _____
Anaesthetist's name: _____	Signature: _____	Time: _____
Time discharged home: _____		
SN name: _____	Signature: _____	

**POST OPERATIVE FOLLOW UP FORM**

(To be filled by a nurse or doctor on the day of surgery, before the patient is discharged)

Anaesthetist: \_\_\_\_\_

Surgeon: \_\_\_\_\_

Operation Date: \_\_\_\_\_

**Procedure:** \_\_\_\_\_

Patient contact phone number: \_\_\_\_\_

Section 1 (Before discharge on day of surgery)

Any post-operative problems? e.g. nausea / pain

---

Discharge analgesia:

Paracetamol  Tramadol   
NSAIDs  Other  \_\_\_\_\_

Section 2 (24 hours after discharge)

(*Nurse/Doctor who calls the patient at home to ask the following questions*)

1. Have you had any problems since you were discharged? Yes  No   
If yes what was the problem?  
Pain  Nausea/vomiting

Others (specify)

---

---

2. Have you sought outside assistance since discharge? Yes  No   
If yes who did you see/contact and why?  
GP  ED  Given contact no.  Other  \_\_\_\_\_

What advice was given?

---

---

3. How would you rate your overall Day Surgery experience?

Not satisfied

Satisfied  
Very satisfied  
No comment

If **not satisfied** give reason(s)

---

---

4. Would you recommend Day Surgery to your friends / relatives?

Yes  No

Date/time of follow up: \_\_\_\_\_

Signature: \_\_\_\_\_  
Name: \_\_\_\_\_

## **Bibliography**

1. Day Care Surgery HRPB Ipoh. Protocols and Guidelines.
2. Policy of Daycare Complex, and Your Guide to Day Care Surgery in Hospital Selayang
3. Assessment and Selection Criteria for Day Surgery in Ambulatory Care Center, Hospital Pulau Pinang
4. The Current Status of Day Care Surgery. A Review. Indian J. Anaesth 2005
5. Day Case and Short Stay Surgery. The Association of Anaesthetists of Great Britain & Ireland, The British Association of Day Surgery. May 2011
6. Pekeling Ketua Pengarah Kesihatan Malaysia Bilangan 32 Tahun 2010: Polisi Penyampaian Perkhidmatan Rawatan Harian di Hospital hospital Kementerian Kesihatan Malaysia

## **References**

1. SS Harsoor, Changing concepts in anaesthesia for day care surgery, Indian Journal of Anaesthesia. Nov-Dec 2010;54(6): 485-488
2. A.Prabhu, F.Chung, Anaesthetic Strategies towards development in day care surgery, European Journal of Anaesthesiology, Nov 2001, vol 18, Issue supplement S23, page 36-42
3. Michita and Frost, Cleveland Clinic Journal of Medicine, Jan 2004, Vol 71, no 1
4. Medical Development Division Annual Report,2006

## **Drafting Committee/ Task Force Committee Members**

1. Datin Dr V.Sivasakthi, MOH Head of Service for Anaesthesiology and Intensive Care Services, HKL (Chair person)
2. Dato' Dr Jahizah Hj Hassan, MOH Head of Subspecialty Service for Cardiac Anaesthesiology and Perfusion, Hospital Pulau Pinang
3. Dr Kavita M.Bhojwani, Pain Specialist and Head of Department, Hospital Raja Permaisuri Bainun, Ipoh
4. Dr Arbayah Rais, Head of Department, Hospital Selayang
5. Dr Mary S. Cardosa, MOH Head of Subspecialty Service for Pain Medicine, Hospital Selayang
6. Dr S.Sushila, MOH Head of Subspecialty Service for Pediatric Anesthesia, Hospital Selayang
7. Dr Naim Tan, Consultant Anaesthesiologist, Hospital Putrajaya
8. Dr Haslinda Hashim, Consultant Anaesthesiologist, Hospital Selayang
9. Dr Usha Nair, Consultant Anaesthesiologist, Hospital Raja Permaisuri Bainun, Ipoh
10. Dr Nor Azlin Dahalan, Anaesthesiologist, Hospital Putrajaya
11. Dr Patimah Amin, Public Health Physician, Medical Development Division

12. Matron Soleha Abdullah, Matron In Charge of Ambulatory Care Center, Hospital Raja Permaisuri Bainun, Ipoh

Secretarial help: Sister Chee Yet Yang (for meetings) and Mazrina Azmi (flow charts), Surgical and Emergency Medicine Services Unit, Medical Development Division