Protocol of a Day Care Centre:

A brief insight into the concept of Day Care, its setting up and effective functioning.

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Forward

In this millennium, Day care surgery is the need of the hour. Our country has a large population; most of them look for affordable surgical care. There is an ever increasing shortage of hospital beds.

Most of us knowingly or unknowingly do day surgery or out patient surgery. In its day to day use, this system of Day care surgery has not been exploited to its fullest capacity as yet. It has not been recognised as a separate speciality as in the western world.

I feel that the whole purpose or writing this protocol for Day Surgery is to make our fellow colleagues aware, help them use it in their day to day practice, thus pass its benefit to the patient, health service providers and ultimately, the country.

I congratulate Dr. Naresh Row, who has propagated this movement of Day Care surgery in India. This is his brain child. He is dedicating himself this health care delivery system for the benefit of our country's patient population.
Every journey starts with a single step, in the last two years; he has made a century of members. Creditable hard work.

Anybody who wants to put up a day care centre will be able to use these guidelines, which we have formulated. I am sure this monogram will generate interest in patient care.

I wish him all the good wishes for the success of his mission.

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"A journey of a thousand miles begins with a single step"
- Anon

Authors note:

I am often asked by my colleagues as to how to go about putting together a Day centre. Most of them would like to know the practical aspect of it. The basic structure in relation to the construction would vary with the availability of space and funds, which an architect would be in a better position to plan and execute for you.
This brief 'booklet' as I would like to call it, though comprehensive, will help to simplify the setting up and running of the centre.
Every aspect of our life is now accompanied with a disclaimer or a mention that it is 'subjected to market risk, please read the offer document carefully', etc. Therefore, this presentation is based on personal experience, illustrated in brief.
Our situation is unique, we need guidelines and recommendations related to our country and mind set of our patients.
Keeping this in mind, I have put forward this small effort, in the form of a 'Booklet'.
This work is dedicated to the memory of Late Dr. P.K Jhawer, who was always encouraged us to perform surgeries under regional anaesthesia, giving rise to Ambulatory surgery; and Late Dr. G. S. Amberdekar, who taught us the blocks and was always willing to bear with us during our learning phase.
I would like to thank the contributors, who have helped me in complying and correcting certain aspects of this Booklet.
Dr. Begani, who was gracious enough to take time out from his busy schedule and agreed to write the forward, must be commended for his efforts in completion of these protocols. He has setup Abhishek Day Care Institute & Medical Research Centre, which is a dedicated centre for Day surgery.
A more detailed description, specialty and chapter wise, will follow soon.

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"Obstacles are those frightful things you see when you take your eyes off the goal"
- Anon.

Protocol of a Day Care Centre:

I. Introduction:

During the past decade the need to contain costs with minimum determent to therapy has been recognized as an international problem in health services. Day care is an example of a service, well proven, which only flourishes, when trouble is taken to apply it properly.

In the present century, with the better understanding of the healing process, increase in surgical skills, availability of better anaesthetic drugs, and the want to do something new, which is beneficial to the patient and you; has led to the development of Day care surgery or Ambulatory surgeries into an art in itself.

Definition:
Discharge of the patient on the same day of surgery or procedure, is day care surgery.
The admission of selected patients to hospital for a planned surgical procedure, returning home on the same day, requiring full operating theatre facility, would sufficiently define day care. The surgery can be done under general, regional or local anaesthesia, in which, a period of postoperative recovery and / or observation is utilized before the patient is discharged home later the same day. A true Day Care case is discharged by evening, but, in selected situation, can include hospitalisation for up to 23 hours.

Nomenclature:
Day Case, Day Care, Day Surgery, Major / Minor Ambulatory Surgery, 23-hours surgery, OPD procedures, these are several names, and thus, several definition proposed, debated and revised over several years. The proponents and opponents, including a fair amount of sceptics, are usually associated with any change from norm. With increasing understanding of modern medicine, utilizing and exploiting it to the maximum benefit, is necessary for delivering excellent patient care.

History:
Day Care or Ambulatory surgery is as old as medicine it self. Ancient instruments and evidence of Sushrut`s work have been recorded long before modern medicine took birth. Over the centuries, the most respected healer, The Surgeon, has refined his specialty into an art form. The establishment of hospitals and ambulatory units; and popularised by Ashoka the Great; have been well documented.
The largest series of 7392 surgeries from the Royal Hospital for Sick Children, Glasgow, UK, was published in 1909, which were performed as day care, where Nicoll found that recovery was faster in children who were allowed to recoup at home.
The first modern day unit was established in 1969, in Phoenix, Arizona, USA. This 'Surgicenter' was the prototype of a 'free standing' unit, on which are based centres all over the USA.

II. Procedures in Day care:

A brief compilation of the list of surgeries possible as Day Case:

A) **General Surgery**:

1. Breast lump excision.
2. Hernias:
   - Inguinal.
   - Femoral.
   - Umbilical.
   - Inscisional
3. Hydrocele.
4. Varicocele.
5. Vasectomy.
6. Haemorrhoidectomy (Open / Stapler).
7. Fistula-in-ano.
8. Fissure-in-ano.
9. Pilonidal sinus excision and closure.
10. Abscess drainage.
11. Diagnostic laparoscopy.
12. Varicose vein ligation.
13. Appendicectomy.
14. Gynaecomastia Excision.
15. Circumcision.
16. Lymph node biopsy.
17. Toes nail excision.
18. Biopsy:
    - Muscle biopsy.
    - Skin biopsy.
    - Nerve biopsy.
19. Lipoma excision.
20. Sebaceous cyst excision.
21. Warts excision.
22. Corn excision.
23. Auroplasty.
24. Piles:
    - Sclerotherapy.
    - Cryosurgery.
    - Infra red coagulation.
    - Crypts/papilloma ex.
25. Ganglion excision
26. Hypospadiasis correction (adult)
27. Ascites/pleural tapping.
28. CLW
29. FNAC
30. Endoscopies.

B) **Ophthalmology**:

1. Extraocular surgeries of lids; eg, cyst excision.
2. Plastic repairs of orbits.
3. Plastic repairs of lachrymal system.
4. Excision of Pterygium.
5. Exision of Epibulbar tumors.
6. Correction of Squint.
7. LASIK.
8. Other laser surgeries.
9. Cataracts.
10. Glaucoma.
11. Keratoplasties.
12. Vitrectomies.
13. Retinal detachment.

C) **ENT**:

1. Myringotomy.
2. Grommet insertion.
3. Tympanoplasty.
4. Mastoidectomy.
5. Stapedectomy.
6. Endoscopic Dacryocystorhinostomy (DCR).
7. Tonsillectomy.
8. Adenoidectomy.
9. Oral biopsies.
10. Laryngoscopy.
11. Microlaryngoscopy.
12. Endoscopic excision of small lesions.
13. Foreign body removal.
14. Septoplasty.
15. Septorihnoplasty.
16. Cald-Wel-Luc.
17. Antral puncture.

D) **Gynecology and Obstetrics**:

1. Dilatation and curettage.
2. Cervical biopsy.
3. Diagnostic Hysteroscopy.
4. Diagnostic Laparoscopy.
5. Therapeutic Laparoscopy which includes:
   a) Tubal cannulation,
   b) Ovarian drilling,
   c) Myomectomies for small fibroids,
   d) Endometriosis ablation,
   e) Simple Oophorectomies,
   f) Tubooplasty, fimbrioplasty,
6. Therapeutic Hysteroscopy:
   a) Septum resection.
   b) Polypectomies.
   c) Submucous myomectomies.
   d) Endometrial resection.
   e) Endometrial ablation.
7. MTPs.
8. Menstrual regulation.
9. Chorionic Villous Sampling.
10. Amniocentesis.
11. Embryo reductions.
12. External Cephalic Version.
13. Laparoscopic tubal ligation.
14. IVF.
15. Intra-Cytoplasmic Sperm Injection.
16. Percutaneous Epididymal Sperm Aspiration.
17. Testicular Sperm Aspiration.
18. Fertiloscopy.
19. Transvaginal Hydro-Laparoscopy.

E) **Paediatric surgery**:

1. Umbilical hernia repair.
2. Umbilical polypectomy.
3. Cauterisation of umbilical granulomas.
4. Excision of umbilical sinuses.
5. Inguinal herniotomy.
6. Orchidopexy.
7. Circumcision.
8. Meatotomy.

9. Preputial separation.
10. Distal hypospadias repair.
11. Cystoscopy.
12. Pilonidal sinus.
13. Rectal biopsy.
14. Anal dilation.
15. Rectal polypectomy.
16. Sigmoidoscopy.
17. Colostomy revision.
18. Laparoscopy / Procedures.
19. Torticollis correction
20. Excision of Thyroglossal cysts
21. Cervical lymph node biopsy
22. Bronchoscopy & proceedures
23. Esophago/Gastroscopy & procedures
24. Frenulectomy- tongue
25. Gynaecomastia excision
26. Excision of BCG Adenitis
27. Excision of Skin lesions
28. Excision of subcutaneous swellings, cysts, etc.
29. Removal of stitch granulomas
30. Suture removals
31. Excision or injection of haemangiomas
32. Muscle biopsy
33. Nerve biopsy
34. Hickman's Catheter insertion

F) **Urology**:

1. Cystoscopy.
2. Cystolithotomy.
3. Cystoscopic tumour ablation.
4. Suprapubic cystostomy.
5. Circumsicion.
6. Hydrocele excision.
7. Varicocele excision.
8. Orchidopexy.
9. Urethral dilation.
10. Ureteroscopy (Diagnostic).
11. Vaso-vasal anastamosis.
12. Renal Biopsy.
13. Prostate Biopsy.
14. Ureteric Biopsy.
15. Testicular biopsy.
16. Bladder biopsy.
17. Retrograde Pyelography
18. Lithotripsy
19. Double J ureteric stenting.
20. Holmium Uretheric Stricture Incision.
21. Holmium Bladder Neck Incision.
22. Holmium Laser Enucleation of Prostate for small Prostatic Glands.
23. Tension free Vaginal Tape (TVT) for stress urinary incontinence in female.
24. Laparoscopic / Retro-peritoneoscopic procedures:
    a) Varicocelectomy.
    b) Renal biopsy.
    c) Ureterolithotomy.
    d) Renal cortical cyst decortications.

G) **Orthopaedics**:

1. Non Surgical Day Care Cases:
   a) Closed reduction and immobilization (with or without G.A.), of fractures and dislocations (Supracondylar Humerus).
   b) Manipulation of: knee, shoulder, cervical or lumber spine, Congenital Talipus Equino Varus (CTEV).
2. Surgical Day Care Cases:
   a) Minimally Invasive:
   i. Local Hydrocortisone injection.
   ii. Joint aspiration.
   iii. Needle biopsy.
   iv. Skeletal traction.
   b) Endoscopic procedures:
   i. Diskectomy.
   ii. Arthroscopy: Diagnostic / Therapeutic.
   iii. Epidural injection.
   c) Open procedure:
   i. Trauma: -Fracture fixation (radus-Ulna).
   -External fixator application.
   -Implant removal.
   ii. Infective: -Incision and drainage.
   -Wound wash.
   iii. Open Biopsy: Infection, tumour.
   iv. Excision biopsy: Bursa, ganglion, lipoma.
   v. Contracture release: Polio, Cerebral palsy.
   vi. Soft tissue release: Carpel tunnel syndrome, Trigger finger, Tenosinovitis, Transfer of ulnar nerve.

H) **Cardio Thoracic and Vascular Surgery**:

1. Varicose veins:
   a) Sclerosing injections.
   b) Radio-frequency ablation.
   c) Laser sclerosant therapy.
   d) Endoscopic stripping.
   e) Trendelenburgh's operation.
2. Arterial and venous thrombo-embolism:
   a) Thrombolysis.
   b) Thrombo-embolectomy.
3. Arterio-venous Malformations:
   a) Endovascular sclerosis.
   b) Endovascular coiling.
   c) Surgical excision.
4. Vascular Access procedures for Haemo-dialysis:

a) Insertion of double lumen venous cannulae.
b) Construction of Arterio-venous fistulae surgically.
c) Construcion of arteio-venous PTFE grafts surgically.
d) Insertion of arterio-venous shunts.

5. Arterial surgery:
   a) Lumbar Sympathectomy.
   b) Femoro-popliteal and distil bypass grafts.
   c) Cross over subclavian , subclavian-axillary and forearm bypass grafts.
   d) Surgery of Cervical Rib and Thoracic outlet Compression Syndrome.
   e) Carotid artery endartrectomy and Carotid Artery Bypass Grafting.
   f) Endovascular Stenting.
6. Thoracic Surgery:
   a) Thoracoscopy.
   b) Insertion of Inter Costal drainage for Pneumothorax or Haemothorax.
   c) Lung Biopsy for undiagnosed Pulmonary Pathology.
   d) Mediastinal Lymph Node Biopsies.
   e) Cervical Sympathectomy.

7. Cardiac Surgery:
   a) Ligation of Patent Ductus Arteriosus.
   b) Blalock Taussig Shunts for symptomatic relief of cyanotic infants.
   c) Pulmonary artery banding in infants with severe Pulmonary Hypertension.
   d) Endovascular pulmonary and Aortic valve balloon Dilatations.
   e) Device closures of Atrial Septal Defects.
   f) Endovascular Balloon dilatation of Coarctations.
   g) Atrial Septostomy and balloon Mitral Valvotomys.
   h) Endocardial mapping and Arrythmia ablation.

I) **Neurosurgery**:

1. Stereotactic radiosurgery.
2. Endovascular treatment by coils.
3. Peripheral nerve surgery.
4. Microdisectomy, endoscopic disc surgery or percutenous disectomy.

J) **Onco-surgery**:

1. Skin Biopsies and Wide Excision of Skin Lesions for:
   - Basal Cell Carcinoma.
   - Squamous Cell Ca.
   - Melanoma.
2. Excision of soft tissue lesions in the extremities (Small-Localised): e.g., Sarcomas.
3. Direct Laryngoscopy and Biopsy.
4. Lymph Node Biopsy (Neck, Axilla, Groin) for metastatic diseases and lymphomas, etc.
5. Excision of small Buccal mucosal lesions.
6. Pleural fluid tapping.
7. Ascitic tapping.
8. Prostatic Biopsy.

9. Rectal Biopsy.
10. Sigmoido-Colonoscopy and biopsy / Excision of pre-malignant lesions (Snaring of Polyps).
11. Limited excisions with / without skin grafting.
12. Thyroidectomy.
13. Para-thydroidectomy.
14. Radical Neck Dissection.
15. Tongue lesions, requiring wide excision / partial glossectomy.
16. Breast malignancy / lumpectomy with axillary node sampling / dissection.

17. Thoraco-scopic procedures: biopsies (pleural, mediastinal and lung), wedge excisions.
18. Wedge excision of lung masses.
19. Inter-costal drainage and pleurodesis.
20. Portacath insertion.
21. Mediastinoscopy and biopsies.
22. Sub-Mandibular salivary gland tumour excision.
23. Retroperitoneal / liver or other mass biopsy: laparoscopically or via mini-laparotomy incision.
24. Feeding Jejunostomy.
25. Orchidectomy: High / Bilateral.
26. Penile (Partial) Amputation / Circumcision.
27. TUR biopsy / Excision of bladder tumours.

K) **Interventional Pain Management**.
L) **Chemotherapy**.
M) **Day Care Haematology**.

<u>Note</u>: Most of the surgical specialities, more so Cardio Thoracic and Vascular Surgery, Neurosurgery and Orthopaedics are probabilities, possible in the hands of expert surgeons, attuned and dedicated to Day surgery. The surgeries listed here are being performed in select centres abroad, specializing in Ambulatory surgery.

III. Advantages & Disadvantages of Day Care:

Disadvantages:

- Poor patient acceptance.
- Do not follow per-op. instructions.
- Inadequate facility at home for post-op. Care.
- Lack of responsible person to take care at home.
- No facility for post-op. emergencies / complications at or near home.
- Uncomfortable position during surgery, as patient is conscious.
- Failure of block.

Advantages:

- Reduced hospital stay.
- Early resumption of day-to-day activity.
- Cost effective.
- Reduces anxiety of `surgery`.
- Recovery in familiar surroundings.
- Reduces hospital-acquired infection.
- Risks and side effects of G.A. are reduced.
- Faster post-op. Recovery.
- In cases where G.A. is contraindicated.
- Less need for post-op. Starvation.
- Reduces the patient over load in the hospital.
- Reduces `wait list` for surgery.

IV. Complications:

1. General:
    - Reaction to local anaesthesia.
    - Giddiness, syncope, bradycardia.
    - Nausea, vomiting.
    - Retention of urine.
    - Severe pain at home.
    - Bleeding, haemorrhage, haematoma.

2. Specific to specialty.

V. Medical Protocol:

1. Criteria's for Patient selection:

- Age: more than 6 months old.
- Medically fit and stable patients {ASA I, II, III (well controlled)}.
- Well motivated and psychologically / mentally stable.
- Toilet, transport, telephone and responsible relation at home.
- Body mass index > 35.

2. Patient preparation:

- Examination & diagnosis.
- Investigations (Haemogram, Bl. Sugar, HIV, HBsAg, Urine, Stool, X-ray Chest, ECG; USG, Liver & Kidney function-if indicated).
- Medical fitness (Physician/ Cardiologist/ Diabetologist/ Anaesthesiologist).
- Overnight fasting.
- Bowel preparation (Laxatives, enemas)
- Advise regarding pre-op. Medications (Inj.Tetanus Toxid, Anti Hypertensive, to stop Aspirin at least 2 days before surgery).
- The use of alparazolam or any anxiolytic / mild sedative, on the previous night, helps in reducing the anxiety of the patient.

3. Anesthesia used:

a. **Local anesthesia:**

- 2% Lignocaine HCl, with or without adrenaline.
- 0.5% Bupivacaine.
- Mixed in equal quantity.
- Injected through a 26G or 27G no. Needle.
- On table sensitivity test is done in all cases.

b. **Blocks regularly used:**

- Pudendal.
- Ring.
- Field.
- Inguinal.
- Scrotal / Cord.
- Costal.

c. **General anaesthesia (Short G.A.):** Halothane and Nitrous Oxide, full doses of Ketamine, propofal, pentothal, scoline.

d. **Short acting drugs and I.V. sedation**: Midazolam, Small Doses of Ketamine.

4. Criteria for discharge:

- The patient is fully conscious.
- Haemodynamically stable.
- No giddiness on standing.
- Able to walk without support.
- Tolerating orally without vomiting.
- No or minimal pain.
- Passed urine.
- Responsible person is present to take the patient home.
- No surgical complications.

5. On discharge:

- Written instructions.
- Verbal instructions.
- Contact no.s of all our team, including the operating surgeons, in case of any questions and complications.
- Instruction on how to look for complications and its management: train the patient, relatives, staff and Family physician.

6. Contraindication for Day Care Surgery:

- Medically unfit for discharge on the same day.
- Mental retardation / psychologically unstable.
- Highly infectious disease.
- Upper respiratory tract infection.
- Premature or less than 6 month old babies.
- Requiring extensive post-op. monitoring.
- Long distance from home.
- Shock / trauma.
- High fever.

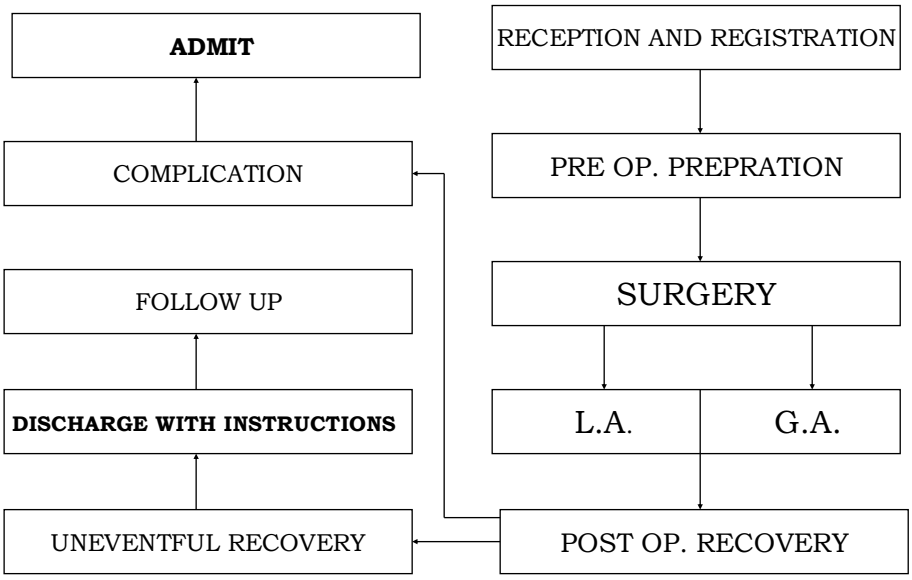
VI. Setting up and planning a Day Care:

While recommending standards for setting up of an Ideal Day care centre, care has been taken to allow the bare minimum requirements. Variations are encountered depending on your speciality, city of practice, type of patients you would be catering to, and resources available.

We should keep in mind:

1. To deliver a state of the art medical treatment to a group of patients who desire day care surgery, keep up with the latest and modern innovations in your field.
2. How many patients from your daily operating list would be able to utilise the day are facilities? This includes patient selection and education.
3. How will you generate more patients to opt for ambulatory surgery? Here again, increasing the awareness of Ambulatory surgery among the medical and patient population at large. This can be achieved by circulating patient information pamphlets, holding talks and workshops for the medical professionals, specially the family physicians or general practitioners.
4. Feasibility study of your area, to find out the presence of an existing centre of the same speciality, type of patient population you would cater too. That is, educated patients, who are not living very far from your centre, would agree to Day care option.

Flow of your set-up:



"Patient's Convenience", should be the motto of a Day Care Surgery centre.

Requirements of a Day Care Surgery centre are summarised as:

1. Parking.
2. Reception / waiting.
3. Registration / Admission / Consent.
4. Room / Changing / Pre-op. preparation.
5. Operation Theatre.
6. Recovery room.

7. Toilets.
8. Discharge procedure.
9. Pantry.
10. Storage facility.

Parking:
Preferably, close to the reception area, or easily assessable.

Reception:
Spacious and comfortable; remember: "First impression is the best impression".
This is the area where the patient and their relatives would be waiting before, during and after the procedures. Formalities of administration should be minimum, because the patient is fasting and has come for surgery to you, should be least troubled.

Registration:
Admission formalities in the form of Registration, deposit, Consent form to be done keeping in mind the 'Single Window' method, everything goes smoothly. Patient is given a single file with his receipt of deposit, consent form; admission papers, etc., from where he / she proceeds to the next stage.

Waiting room:
For the relatives, if you do not have separate room for each patient. It should be spacious and comfortable.

Changing / Pre-op. room / Pre-operation preparation room:
Here, the patient will be changing into OT cloths, shaving of the operation site, administration of enema, pre-medication, checking of BP, Blood sugar in diabetics; sometimes the patient is drowsy due to the anxiolytic administered the previous night, would like to sleep if there are cases scheduled ahead of him; this can be arranged in the patient's recovery room, if it is adequately private.

Operation Theater Complex:
1) Changing room for the doctors.
2) Surgeon's room.
3) Operation Theatre.
4) Recovery area.

1) Changing room: an area of 6 ft X 5 ft attached to the surgeons room and / or toilet would be adequate. Here, OT cloths and lockers should be provided for the doctors.
2) Surgeons / doctors room of adequate size, for example: 10 ft. X 10 ft. with comfortable chairs / sofa is to be provided.
3) OT: size: 12 ft. X 14 ft, is the standard size required for movement, laparoscopic equipment, etc. It should consist of (Table 2):
    - OT table, preferable a Gynaecological table.
    - Boyel's anaesthetic machine.
    - Cardioscope.
    - Pulse Oximeter.
    - BP apparatus / stethoscope.
    - Electro-Cautery.
    - Over head operating light.

- Head Light with light source.
- Defibrillator.
- Glucometer.
- Wash basin.
- AC.

4) Recovery area is to be provided, space permitting, immediately adjoining to the OT. Where, the patient is kept for observation for a few minutes before being shifted to the room.

Surgery: A fully equipped, well-lit and spacious operating theatre is mandatory. Your OT should be able to handle any unforeseen emergencies that can arise during the surgery. Therefore, ample floor space should be provided for movement. Complete monitoring of the patient from the anaesthetic point of view, a fully functioning Anaesthetic machine, even if you operate under local anaesthesia; Pulse Oximeter with or without Capnograph; Cardioscope; BP apparatus; emergency drug trolley; Suction machine and Electrocautry, as per your speciality. In short, even though you are planning on a small centre, your OT should have enough equipment to handle any major calamity.

Recovery Rooms:

Consider two types of rooms. 10 beds would be a minimum viable proposition.
Single room: 6.1/2 ft. X 5.1/2 ft, including an bed of 6ft.X 2.1/2ft., side stool, and stool for a relative to sit. AC is optional.
Sharing room: can be Double (8ft X 8ft) or Triple sharing room (14ft X 14ft).
Usually, the pre-operation preparation room, or patients individual room double as recover room. A single ward with partition for privacy, will also, suffice.
Care should be taken to see that the provision of the recovery area is not far from the operation theatre complex, as to facilitate periodic check on the patient's recovery by the anaesthetist and the operation team of doctors.

Table I summarizes the recommended sizes of the rooms.

Nurse's station: close to the recovery rooms with easy accesses.

Toilets:

Attached toilets are ideal, but in a Day Care set up, this are not mandatory as the patient will be discharged by the evening.
A set of 2 to 3 toilets for the 10 beds, would be adequate, close to the recovery rooms.
Remember: one of the criteria's of discharge is to make sure that the patient has passed urine.
An important consideration, often overlooked in the planning of a hospital in our country. A fully conscious patient will be able to walk to a toilet rather than use a bedpan, but to negotiate steps, or corridors to reach one, will be asking too much.

Discharge procedure:

Post-op. instructions have to be given to the patient, which can be done in the recovery room by the concerned doctor / assistant / nurse.
Settling of bills should also be possible as smoothly as admission.

Pantry:
For the provision of Tea / Coffee for the patient and the staff. Including a refrigerator / water cooler. Facilities for heating of food, not cooking, should be kept in mind. Increases your points in a patient friendly set up.

Storage:
1) Medicines: inside the OT complex.
2) Outside: for recovery rooms, to be provided, along with emergency trolley/medicines, near the nurse's station.
3) Storage of linen / etc.

Consulting rooms: More professional if you could discuss pre and post operative instructions in the seclusion of your consulting rooms.

Duty Room: Or a work station would be very handy for your staff that would be doing the paper work for the discharge of the patient, explaining any questions and giving instructions.

Other requirements:
Autoclaving and storage facilities of surgical equipment, sterilizer, washing and drying area have to be planned while designing a centre.
Parking space for the visitors, availability of lifts in your building, easy access to public transport.
Drying of linen and instruments and preparation of drums can be provided in an are adjoining the autoclave machine, washing machine can be provided in a separate bathroom.

Separate entrance to your centre, if it is housed as part of an institution or hospital, would definitely increase the convenience to the patient, allowing him to be separate from the hustle and bustle of indoor patients. Thus, giving a feeling of 'in and out' of surgery.

Provision for admitting the patient overnight, if the need arises, should be explained to the patient in advance, so that he is prepared for such an eventuality.

Post operative follow up by a visit or a phone call from your team should be included as part of the surgical care, to reassure the patient and check on complications. This should be repeated in the morning after procedure or the patient can be called over, the next day as part of follow-up.
Involvement of the patient's family physician or the referring doctor considerably eases the strain on your schedule. He should be taught to look for complication and report to you on the progress of the patient.

Most of the points have been discussed in the above narration, some points of added advantage and disadvantages are:

Day Care Inns / Hotel:
For the convenience of the patients coming from long distances and who do not want to travel back on the same day, there is a 'Hotel', attached or near, to the centre, which can be utilised for spending the night and coming for follow up the next morning, before leaving for home. Thus, saving a trip for follow up, as well as, still making use of the day care facility.

Management:
Seniority should not dictate staffing: knowledge, experience, and interest in ambulatory care should. Most of the established centres abroad, are managed by anaesthetists and Nursing staff, who are trained in day care management, they know the importance of scheduling the OT list, looking for and managing the post-operative complications; discharging the patient with complete instructions. Follow up of patients can also be managed by the nursing and paramedical staff, who can be trained, specially for this purpose, and have been found to be of a great value in the already established centres abroad.

Thus, leaving the surgeon relatively free to concentrate on his work.

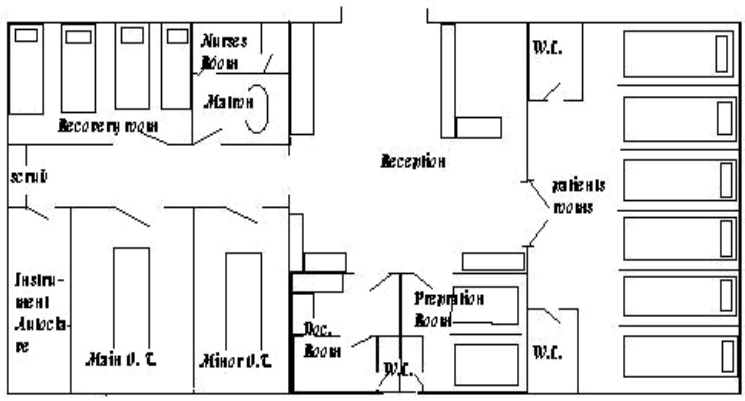
International standards for a hospital recommend 100 sq. feet of space per bed. But, as a day care centre, especially 'Free standing' centres in metropolitan cities have a great restriction of space. Therefore, some reduction in the size of rooms / bed in the form of recovery room beds or trolleys can be considered.
An approximate minimum recommendation has been listed in the following tables.

Area wise recommendations:

S.No.	Name	Area (in feet)
1	Changing room	6 X 5
2	Surgeons / doctors room	10 X 10
3	Operation Theater	12 X 14
4	Single room	6.1/2 X 5.1/2
5	Double sharing room	8 X 8
6	Triple sharing room	14 X 14

Remember:
Registration with your local municipal corporation is a must for all hospitals, nursing homes and clinics. There is no separate category as yet for Day Care centre; therefore, fulfilment of the required bed strength is mandatory. For example: In Mumbai, 10 beds are the minimum requirement for registration, whereas, in smaller cities 15 beds are needed.

Sample plan of a Day Centre



VII. Working of the centre:

The operation theatre should be ready for surgeries by 8:30 am everyday.
This would mean that the patients would start coming in at 8:00 am at the latest. The Receptionist should receive the patient and put them through the formalities of admission, as quickly as possible. They should look for:

1. Check for the OT booking and the concerned doctor's admission note or prescription, indicating the type of surgery, date & time. Make the admission paper, take the deposit as applicable, allot the bed / room number, take consent for surgery / procedure, issue a receipt, make a file and guide the patient to his / her room. Inform the ward sister, the concerned doctors.
2. The ward sister cross-checks the admission file and the pre-operation instructions, a check list can be used to follow the basic requirements for pre-operation instructions. This would include the check if the patient if fasting, Blood pressure, pulse, FP blood sugar (if indicated), shaving the operation site, administration of enema or medications as instructed by the operating surgeon. Patient should be made to change into OT cloths, and all valuables and metal objects on the patient's person should be removed and handed over to the accompanying attendant. From here, the ward sister informs the theatre staff, who will call for the patient when required.
3. In the operation theatre, re-checking of the pre-requisites of surgery is once again gone through, the nature of the procedure, the type of anaesthesia and the effect of the immediate post-operative period should be explained to the patient. This should be explained by the doctor on duty or the anaesthetist or the senior nurse, in as simple language (lay terms) as possible and all the questions answered. This is followed by the informed consent (this can be taken at the time of the registration). Before taking to the OT, the patient should be sent to the toilet and a use of wheel chair / trolley can be made if the patient is sedated or apprehensive to walk.
4. Once in the OT, the staff should take care that there is minimum of noise in the theatre and pleasant music should be played at a low volume as it wards off the effect of the alien feeling of the theatre. Here again, the procedure should be explained if possible, every step of the preparation explained, e.g., taking of a IV line, should precede with the explanation that the patient will feel the prick of the needle. The presence of a female nurse is mandatory if the patient is a female. The fixing of the cardioscope, placement of the cautry pad, exposing of the operating site. In short, care should be taken to maintain the modesty and dignity of the patient at all time. Reconfirmation on the side and site of surgery should be done with the patient, as a safe guard.
5. After the procedure, depending on the type of surgery / procedure and type of anaesthesia, patient may be sent to the recovery room or direct to the room allotted to the patient. Post-procedure notes and anaesthetic notes should be completed and signed.
6. Periodic check of BP, pulse and level of consciousness, administration of IV fluids and / or drugs should be done by the ward sister, and noted in her chart.
7. Completion of the discharge papers, instructions regarding medication, precautions, complications and their management should be given as per the Criteria's of Discharge. Written and verbal instruction with all the contact numbers possible should be given to the patient and the attendant. The referring physician should be informed regarding the post-operation care of the patient so that there are no lacunae in the patients care and recovery.

8. Settling of bills and refund or receiving payment should be done smoothly, this can be handled at the same counter at registration / admission, as by the time the patient is ready to leave, it would be late afternoon and the registration counter will be relatively free.
9. Remember: All the paper work at every level should be complete with meticulous maintenance or records / notes taken down carefully, as this would be required for future reference as well as, safeguard against legal action. Also, it is mandatory for insurance companies, that, attested copies of all the papers should be submitted to pass a claim.
10. All the accounting and paperwork should be completed before the centre is closed for the day, which is at 8:30 pm. This would be in preparation of the next new day.

Instruction for OT staff:

1. The operation theatre is expected to work from 8:30 am to 3:30 pm every day, except Sunday and prescribed holidays.
2. The operation theatre list should be put up in the late afternoon so as to allow the staff to prepare for the following days cases.
3. OT staff, like the rest of the staff, will arrive at 8:00 am and prepare.
4. Separate OT cloths and slippers are mandatory in the theatre complex.
5. Air-conditioning in the theatre is to be started in the morning, well in advance of the surgery so as to cool the theatre and remove the fumes of the Formalin vapours.
6. OT table cloth should be fresh and changed after every case.
7. While posting the list of cases, care should be taken to allow clean cases first, followed by septic/infected cases. eg., Eye surgery should take precedence over Piles surgery.
8. Washing / drying of the instruments and linen should be done in the prescribed area, followed by autoclaving. Drums must be prepared keeping in mind the type of case; preferably, each case will use a separate drum.
9. Cleaning of the theatre after every case with antiseptic solution is mandatory; fumigation with formalin should be done every day.
10. After the days procedures are all over, the OT staff should complete the cleaning and maintenance work in preparation for the next day. All the stocks in the OT should be checked and replaced, in anticipation of the following days cases.
11. Periodic maintenance of the equipment on a monthly / yearly basis is recommended. Stock taking of the drugs and material should be performed monthly and annually.

VIII. Working Performa:

1. Admission paper: *(To be filled at the reception / Admission counter)*

Admission paper

Bed no.:_____ Indoor no. _____ Class: A / B

Name in Full: _____

Sex: _____ Age:_____ Occupation: _____ Caste: _____

Address in full: _____

_____

Tel. no.: _____

Name & Address of Relative / Friend / Person attending the patient:

_____

_____ Tel.: no.: _____

Admitted on: _____ at _____ a.m. / p.m.;

Discharged on: _____ at _____ a.m. / p.m.

Diagnosis:_____

Operation / Procedure: _____

Anaesthesia: LA/GA/SA.

Signature:

Patient / Guardian / Relative (Relation to patient:).

2. Informed consent: ***(To be filled at the reception / Admission counter :)***

INFORMED CONSENT

"I hereby agree and consent to the performance of such operation as may be found necessary to be performed upon myself and also to the administration of any anaesthesia for the purpose of such operations. I shall not hold the doctors & hospital responsible in whatever manner, for any consequences that may arise out of and in the course of such operation and / or administration.

The doctor has fully explained to me the nature and the anaesthesia needed for the purpose of the operations he / she will perform and has answered my questions about my condition and the procedure to my satisfaction. The doctor has also explained the risks and consequences involved in the procedure and anaesthesia and I understand those risks and am willing to undergo the procedure under the required anaesthesia. I also understand that during the course of the surgery/procedure/anaesthesia, for my safety and benefit, I may require additional or extended procedure, which may not be fore seen earlier. This I consent to by my own free act and will.

Signature on this form indicates (1) That I have read and understood the information provided in this form. (2) That the operation or procedure set forth above has been adequately explained to me by my physician. (3) That I have had a chance to ask questions. (4) That I have received all of the information I desire concerning the operation or procedure and the anaesthesia. (5) That I authorise and consent to the performance of the operation or procedure under the required anaesthesia."

Signature of Patient Date:

Signature of Guardian/Relative: (Relation to Patient:)

Witness:

3. Nursing Daily Record: *(For pre-op. & Post op.)*

Nursing Daily Record

Name: _____ Age: _____ Sex: _____ Dt.: _____

Bed no.: _____ Indoor no.: _____ Procedure: _____

Hours:	*Temp.:*	*Pulse:*	*Resp.:*	*B.P.:*	*Notes:*
08:00 am	**:**				
10:00 am	**:**				
12:00 noon	**:**				
02:00 pm	**:**				
04:00 pm	**:**				
06:00 pm	**:**				
08:00 pm	**:**				
10:00 pm	**:**				
12:00 midnight:					
02:00 am	**:**				
04:00 am	**:**				
06:00 am	**:**				
08:00 am	**:**				
10:00 am	**:**				

Signature:

Date:

Name of the Nurse:

***Note:** This is simplified form; any standard Nursing record form can be used.*

4. Pre-procedural instructions: ***(For patients at the time of consulting & booking for surgery)***

PRE-PROCEDURAL INSTRUCTIONS

You are about to undergo a procedure, there is certain amount of apprehension, which is understandable. To make your surgery more comfortable, we are giving you some simple instructions, which are easy to follow.
Please go through them and follow them carefully, if you have more queries or are not able to understand them, please feel free to ask us, we will be happy to help you.

1. Though the procedure will be done under Local Anaesthesia, you should be 'Nil by mouth' for at least 6 hours or more, before the procedure, which means, you should not eat or drink anything, including water. We may need to give you injection for sleep.
2. Take the medications prescribed to you as per instruction, before the procedure.
3. You may need to shave the operative area, if there is excessive hair around it, please ask for instructions, if not given.
4. Have a bath before the surgery, unless advised not to.
5. Have a good night's sleep; ask for sleeping pill if you think that you will not be able to sleep.
6. Please inform regarding the medications which you are already on, say, for blood pressure, diabetes etc. **DO NOT FORGET** to take your B.P. & Heart medicines before surgery, with one sip of water. Any known allergies to medicine or others also should be informed.
7. **Do Not** take your medicine for diabetes on the morning of surgery, as you are fasting, unless otherwise specified.
8. If you are taking any anti-platelet / Blood thinning medicines, such as, Asprin, Disprin, Ecosprin etc., you have to stop them at least three to seven days in advance of your surgery.
9. You will need to take Injection T.T. before the surgery, if you have not taken it in the past 6 months.
10. Please bring our consulting paper and all the investigation reports with you.
11. A responsible person should accompany you, who can understand the instructions given after the procedure and will take you home.
12. Please be in touch with your family Physician or GP for any medical help, or call us on our contact numbers.

Wish you all the best, and a speedy recovery.

5. Post procedural instructions: *(For Patients at the time of discharge)*

POST PROCEDURAL INSTRUCTIONS:

YOU HAVE JUST UNDERGONE A PROCEDURE, IT IS A NEW EXPERIENCE FOR YOU AND THE PEOPLE ATTENDING YOU, BUT THERE IS NOTHING TO GET ALARMED, WE HAVE COMPILED A FEW INSTRUCTIONS WHICH ARE AIMED AT MAKING YOUR RECOVERY COMFORTABLE, YOU WILL FIND THEM HELPFUL AND EASY TO FOLLOW.

1) YOU MAY FEEL A LITTLE DIZZY OR GROGGY, THIS IS NORMAL AS YOU MAY HAVE BEEN GIVEN A SEDATIVE IN THE FORM OF INJECTION, TABLET OR SYRUP.
   DO NOT DRIVE, DO NOT DO ANY WORK THAT NEEDS CONCENTRATION OR FINE CO -ORDINATION FOR AT LEAST 24 HOURS.

2) PAIN:-YOU MAY EXPERIANCE A LITTLE DISCOMFORT OR PAIN AT THE SITE OF PROCEDURE. THIS IS EXPECTED. PLEASE TAKE THE ANALGESIC WHICH HAS BEEN PRESCRIBED TO YOU, AS INSTRUCTED, OR USE A HOT WATER BOTTLE, HOT FOMENTATION, OR SEITZ BATH. NORMALLY, BY THE END OF ONE HOUR, THE PAIN SHOULD REDUCE, IF IT STILL PERSISTS, YOU MAY NEED INJECTABLE PAIN KILLERS, CONTACT YOUR FAMILY PHYSICIAN OR CONTACT ANY ONE OF THE NO.S PROVIDED TO YOU, IF POSSIBLE, ONE OF OUR TEAM OF DOCTORS WILL ATTEND TO YOU.

3) DRESSING:-YOU WILL HAVE A DRESSING OVER THE OPERATION SITE, WHICH NORMALLY IS TAKEN OFF AFTER TWO DAYS, BUT IT CAN BE TAKEN OFF EARLIER: IF INSTRUCTED BY US, IF IT GETS WET WHILE HAVING A BATH OR IF IT IS SOAKED WITH DISCHARGE OR BLOOD.

4) MEDICATIONS:-ALL MEDICATIONS ARE TO BE TAKEN AFTER FOOD UNLESS SPECIFIED OTHERWISE.

5) DIET: - YOU CAN EAT EVERYTHING, EXCEPT OILY AND SPICY FOOD. EAT PLENTY OF SALADS, GREENS VEGETABLES AND FRUITS, UNLESS SPECIFIED OTHERWISE.
   CHEW YOUR FOOD PROPERLY AND COMPLETELY.

6) BATH:-YOU CAN HAVE A SPONGE BATH AS LONG AS THE DRESSING IS THERE, NORMAL BATH CAN BE TAKEN ONCE THE DRESSING IS OFF.

7) EXERCISE:-WALKING, CLIMBING STAIRS ONE AT A TIME, SITTING ON THE FLOOR, SQUATTING AND DOING LIGHT WORK AT HOME IS EXPECTABLE, AVOID STRENUOUS WORK, WEIGHT LIFTING OR RUNNING.

8) INSTRUCTIONS GIVEN TO YOU HAS TO BE FOLLOWED CAREFULLY, IF IN DOUBT, DO NOT HESITATE IN CALLING US. WE WILL TRY TO SOLVE YOUR PROBLEMS AS BEST AS WE CAN.

9) FOLLOW UP REGULARLY.

6. Discharge paper: ***(To be handed over to the patient)***

DISCHARGE SUMMARY

Name of patient :

Age : Sex: Indoor no.:

Name of Doctor :

Name of Ref. Dr. :

Diagnosis :

Operation / Procedure :

Date of Admission : Time:

Date of Discharge : Time:

Treatment advised :

Follow up :

Operation summery :

Date :

Anaesthesia :

Operative notes :

Treatment given :

History in brief :

Investigations :

Signature :

CONSULTING SURGEONS: ***(For example)*** **CONTACT NUMBERS**:

Dr.T.Naresh Row, M.S., Ph.D., XXXXXXXXXX

ANAESTHETIST:

R.M.O.:

Dr.Sangeeta Sharma XXXXXXXXXX
Dr.Sameer Trivedi. XXXXXXXXXX

7. Pre-op. check list:*(In a file)*

Pre-procedure Check list:

Name: **Age:** **Sex:** **Bed no.:** **IP no.:**

S.no.:	*Admission counter:*	*Yes:*	*No:*	*N/A:*	*Additional information:*	*Sign:*
1.	**Admission paper with copy:**					
2.	**Nursing daily record with copy:**					
3.	**Consent form duly signed:**					
4.	**Pre-procedure instructions:**					
5.	**Post-procedural instructions:**					
5.	**Doctors admission notes:**					
6.	**Doctors pre-op. orders:**					
7.	**Investigations:**					
8.	**Receipt of Deposit:**					
9.	**Discharge paper with copy:**					
10.	**Intra & Post-pro. Check list:**					
11.	**Doctors & OT informed:**					
12.	**Check list attached:**					

Ward Nurse:

1.	**Doctors pre-op. orders:**					
2.	**Is patient fasting:**					
3.	**Pre-op. medication:**					
4.	**Anti coagulant:**					
5.	**Prophylactic antibiotic given:**					
6.	**History of allergy:**					
7.	**Preparation of surgery site:**					
8.	**Enema given:**					
9.	**OT dress:**					
10.	**Jewellery: Removed/ Covered:**					
11.	**Contact lens removed:**					
12.	**Under garments removed:**					
13.	**Dentures removed:**					
14.	**Any specific precautions:**					
15.	**Associated medical problems:**					
16.	**Doctor & OT informed:**					

B.P.: **Pulse:** **Temp.:** **Resp.:** **RMO informed:**

Signature of Nurse completing the check list: **Dt.:**

Beware: There may be another patient with the same or similar name in the hospital.

8. Intra operative check list: *(To be filled by OT nurse)*

Intra-Operation:

Date: Pt.'s name:

Procedure: OPD / One Day

Anaesthesia: General / Spinal / Epidural / Local / Sedation.

Fasting : Yes/No/Water only
Dentures : Yes/No
Jewellery : Yes/No
Allergies/Sensitivity: Yes/No Specify: _____

Time into OT : _____ Time out of OT: _____

IV Cannulae : Yes/No Site : _____
BP cuff : Yes/No
IV infusion : Yes/No
Pulse oximeter: Yes/No
Cardioscope : Yes/No
Cautery Plate: Yes/No Site : _____

Position : Supine/Prone/Lithotomy/Jack knife/Right lateral/Left lateral/other:_____

Skin preparation: _____ Skin closure: _____ Skin dressing: _____

Count : Swab: Yes/No Instrument : Yes/No

Surgeon : _____ Asst. Surgeon: _____

Anaesthetist : _____ Nurse: _____

Bed/Trolley sides elevated/Strapped; Pressure area checked: Yes/No; Cautery site checked: Yes/No

List of materials used. (To be sent for billing).

Nurse's name: _____ Signature: _____

9. Check list for Immediate Post-operation Care: ***(To be filled by ward sister)***

Post-Procedure:

Pts. Name: **Time of return:**

Procedure: **Anaesthesia:**

S. No.:	*Assessment:*	*Checked:*	*Remarks:*
1.	**Record Nursing Daily Record & copy:**		
2.	**Operation notes:**		
3.	**Post-op. order:**		
4.	**Level of wakefulness:**		
5.	**Vomiting recorded:**		
6.	**Wound/Dressing recorded:**		
7.	**Drains/Drainage recorded:**		
8.	**Has patient passed urine:**		
9.	**Liquid/Diet given:**		
10.	**Post-procedural instruction given:**		
11.	**Discharge card filled:**		
12.	**Discharge criteria's to be followed:**		
13.	**Anaesthetist informed before discharge:**		
14.	**Doctor informed and patient visited:**		
15.	**File completed and given to patient:**		

Signature:

Nurse's name: **Dt.:**

10. Anaesthetist Record: To be filled by the anaesthetist during and after surgery/procedure. Any standard format can be used.

Patient's valuables with you should now be returned to the patient or the relative present.
After the patient has changed into his/her own cloths, escort the patient out, in a wheel chair if needed, to the exit. In the mean while, the attendant should complete the billing formalities.

Remember: The pain and stress of surgery, the patient and relatives may forget, but, a discourteous member of the staff will not be forgotten.
We are a service oriented Health care provider; therefore, service with a smile should be our motto.

11. Finally:

In the patients file:

1. **Discharge paper.**
2. **Post-procedural instructions.**
3. **Receipt with Final bill.**
4. **Copy of admission paper.**
5. **Copy of Nurse's Daily record.**
6. **Pre-procedural instruction.**
7. **Doctor's instruction/Consulting note.**
8. **Investigations.**
9. **Receipt of Histopathology report, if any.**
10. **Information booklet/Leaflet, in any.**

For our records:

1. **Admission papers.**
2. **Nurse's Daily record.**
3. **Copy of Discharge summery.**
4. **Pre-op. check list.**
5. **Intra-op. check list.**
6. **Post-op. check list.**
7. **Anaesthetist record.**
8. **Doctor's admission note.**
9. **Consent form.**
10. **List of material used.**

12. Medical Insurance / Mediclaim instructions: ***(For all the staff members)***

1. Patient's first consulting paper should match the discharge summary, such as, diagnosis, presenting complaints, treatment, medicines, date and time.
2. Investigations which have been done should correspond with the investigation asked by the doctor concerned.
3. Past history like hypertension, D.M., other old ailments, with their durations, to be mentioned with exact duration and approximate dates if possible. Correct name, age, etc. also to be checked.
4. All receipts of medication, treatment, visits, etc., should match with the first consulting paper, follow-up and discharge paper, along with the contents, that is, the name of medicine.
5. Admission paper should have the same diagnosis and treatment as in the discharge summary; both should mention the registration no. of the nursing home and the doctor, along with the patient's indoor number. Your Centre should be registered with the Local authorities as a Nursing Home, by fulfilling the necessary criteria's laid down by them.
6. Follow-up papers should be completed.
7. A Medical certificate, indicating the nature of surgery, anaesthesia, and mention "Due to technological advances, hospitalisation is required for less than 24 hrs." or you need to show at least one day admission, therefore, the discharge summary, admission paper, your record in the admission or consent register should be the same.
8. Temperature, BP, Pulse, Treatment prescribed, etc., should be mentioned in the nursing paper and should be complete.
9. Xerox copies of the admission paper and nursing chart; have to be given to the patient. Copy of consulting paper, discharge summery and any other fitness or other medical certificate given, should be kept with us for record.
10. Copies can be saved in the computer or on paper, in a file.

Remember: at the slightest difference in the papers, rejection of the claim will ensue.

Further reading:

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10. www.iaas-meds.org (official website of: International Association for Ambulatory Surgery)