Surgical Care at the District Hospital
WHO Library Cataloguing-in-Publication Data

Surgical care at the district hospital.


Incorporates: Primary trauma care manual.


© World Health Organization 2003

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Typeset in London

Printed in Malta by Interprint Limited
Organization and management of the district hospital surgical service

1.1 THE DISTRICT HOSPITAL

You, your staff, systems and site

The hospital plays a unique role in any community:
- It is the focus of many health care services
- It can provide a significant amount of local employment
- It is a point of intersection for members of different communities
- It may be a community in its own right
- It must be involved in community public health education and political solutions to common health problems.

Organizations grow and change; hospitals are no different.

As a doctor or senior health care provider, you may be the most highly trained person in a district hospital. In this capacity, other hospital staff will expect leadership to be a part of your job.

As a leader (especially if you are newly arrived), other members of the health care team or the community may turn to you with frustrations or with hopes for solutions to problems. These tasks may not be directly related to your work on the wards or in the operating room, but they will become part of your job.

When assuming a new role or advanced leadership responsibilities, one of the challenges is to see what is familiar as if you were seeing it for the first time. It is difficult but important to avoid bringing old ideas or grudges to a new position. Use your past experiences, but also begin a new role with a broader view and an attitude unbiased by prejudgements. When you arrive in a new place or take on a new job or role at a familiar place, be alert to the physical and human resources and try to learn as much as possible about the work and culture of the place.

Familiarize yourself with the people, hospital and its resources. Try to get an overview of the organizational and communications systems that are used (not just those that are supposed to be used, but what is really happening).

Approach a new work environment or job as you would approach a patient by taking a full history and examination. Be observant and attentive to all aspects of the encounter. Asking questions is important; be a good listener.

KEY POINTS

- Leadership is a part of your job
- Apply the medical skills of evaluation and planning to your work as a manager
- Respect the knowledge and expertise of senior hospital staff
- Every institution has a history and the legacy of what has happened and why things have worked or not worked is held in the memory of the employees
- The pride people feel in their workplace and the services they offer is a valuable commodity and is the greatest resource of any health care facility.
Hear what people have to say. Try to understand what works well, where the problems lie and what the hopes of your co-workers are.

It will not be possible to understand everything at once or to fix all problems, but a full history and examination of the site provides the starting point for understanding and improvement. Any efforts to change practices or introduce new ones should include consultation with representatives of all interested parties; this is part of taking the “history” of the place and is equivalent to talking to the family members of a patient. As with patients, any management plan needs to be worked out with the people involved and carried out as a partnership.

As a health care provider, you will be entering into the lives of others who will have worked hard to create and maintain the place in which they work. Being sensitive to this will help you to fit in. The pride people feel in their workplace and the services they offer is a valuable commodity and is the greatest resource of any health care facility.

**Community partners**

The district hospital is part of a wider community of people and agencies, all of whom are working to improve the health of individuals, communities and society. Remember that these people and groups are your friends and allies. In discouraging times you can help one another and, by working together, can make things better. Find out who the other individuals and groups are and reach out and work with them – you have much to teach and learn from each other.

In addition to identifying the opinion leaders, you must be sensitive to any groups or subgroups whose voices are unlikely to be heard. You must find ways of reaching out and listening to them.

Health is a concern for all people and can provide an opportunity to bring people together across divisions. In areas of conflict, when the district hospital and other parts of the health care system are accessible to all members of society without prejudice, it can provide an example of cooperation and develop the feeling of belonging to a broader and more inclusive group which respects and meets common needs.

**1.2 LEADERSHIP, TEAM SKILLS AND MANAGEMENT**

A leader is best when people barely know he exists. Not so good when people obey and acclaim him. Worse when they despise him. Fail to honour people, they fail to honour you. But of a good leader, who talks little When his work is done, his aim fulfilled, The people will say “We did this ourselves”.

_Lao-tse_
ROLE OF THE LEADER WITHIN A HEALTH CARE TEAM

Health care providers are only a part of the health team which includes support staff, administrative staff and those at satellite locations. The team consists of a group of people who share a common health goal and common objectives, as determined by community needs. Each member contributes according to his or her competence and skills and in coordination with the others.

The health care team exists to serve the community. Even if working for a manager or other employer, you are ultimately responsible to the people you serve clinically: the community and users of your service. It is from these people and groups that you must seek direction. Observing, listening and learning, discussing and deciding, organizing, participating and informing are the foundation of the relationship between the community and the team.

The leader is not expected to make all the decisions or do all the work, but must encourage others and coordinate efforts. Final responsibility for any endeavour rests with the leader.

Responsibility is the essence of leadership.

Leaders can be given authority by the group or by an outside power, they can assume authority or earn authority and responsibility. They can be appointed, elected or chosen by a group. Leadership can be shared by two or more people or rotated within a group. In an informal situation, different members of a group may take leadership roles with respect to different issues or tasks. It is important that all members of a group share the same idea of what the leader’s role will be.

Some people adopt leadership roles with greater ease than others, but there are no born leaders. Leadership requires a set of skills that can be learned and developed over time. They include:

- Listening
- Observing
- Organizing
- Making decisions
- Communicating effectively and working well with others
- Encouraging and facilitating others
- Fostering enthusiasm and vision
- Goal setting and evaluation
- Giving and receiving feedback
- Coordinating the efforts of others
- Chairing a meeting
- Being willing to accept responsibility.
LEADERSHIP STYLES
There are many different leadership styles.

Democratic
The leader is chosen by the group and is expected to act with the wishes of the group in mind. The leader follows a course of action that represents the will of the group. Not everyone may agree, but most people mostly agree.

Autocratic
The decisions are made by the leader and the other members of the group are expected to follow. In this situation, one person makes the decisions and tells the others what to do.

Laissez-faire
The laissez-faire leader allows the members of the group unconstrained freedoms.

Anarchic
No leadership is shown and individuals or groups of people do what they want and resist efforts to organize or coordinate.

Consensus
Members of the group attempt to find a mutually agreeable solution or course of action. This is not so much a leadership style as a group style where all members agree on a course of action.

Situational
No single style of leadership will work in all situations; different situations will demand different styles of leadership. A leader who is responsive to the group and the situation is practising situational leadership.

In times of crisis, an autocratic leader can make sure that things get done quickly and efficiently. When time and situation permit, democratic and consensus based leadership can be very effective and make people feel more involved and can even increase satisfaction and morale within groups.

COMMUNICATION
An effective communicator:
- Listens
- Speaks clearly so that others will understand
- Confirms understanding and asks others to do the same
- Does not use jargon
- Asks for questions and encourages others to speak
- Is patient
- Presents information in small amounts
- Does not overwhelm others.
Think about how people communicate in your hospital:
- What works and what does not work?
- How could you do more of what works and less of what does not?

**Listening**

Listening is a culturally based activity and skill. In some situations, eye contact is appropriate and avoiding eye contact can be seen to be evasive whereas, in others, eye contact is seen as being very aggressive and diverting one's eyes is a sign of respect. No matter what the cultural norms, effective listening is active, not passive. Active listeners are attentive – they communicate interest and concern with their words and body language. Effective listeners summarize what they have heard and how they understand what has been said. This allows for clarification and early correction of misunderstandings. Everyone likes to be heard and listening is a way of showing respect and concern.

**WORKING WITH OTHERS**

A skilled leader recognizes the expertise and input of others. Different things motivate different people, but everyone likes to do work of value, to do it well and to be recognized for it.

The effective leader can help people stay motivated and interested:
- **Achievement**: help people achieve work related and personal goals
- **Recognition**: give praise when it is due
- **Responsibility**: help others take responsibility
- **Advancement**: help others train for promotion and learn new skills
- **Self-improvement**: provide opportunities for personal development
- **The work itself**: explain the value of work, make work meaningful; if possible, allow people to do work which appeals to them, or allow people to pursue special projects or ideas they may have
- **Involvement**: when people work hard for an organization or cause they are investing in it, not financially but personally and emotionally; this leads to feelings of pride and responsibility – a sense of ownership.

Just as there are ways of motivating people, recognize the factors that may discourage them and create dissatisfaction:
- Poor personal relations
- Poor leadership
- Low pay
- Unsafe or unpleasant working conditions
- Inefficient administration
- Incompetent supervision.

Remember that healthy organizations:
- Orient new members to the group and the ways the group works
- Have ways of dealing with challenges, questions, discussions and disagreements
1

- Encourage new ideas and efforts
- Are places that people want to join and to stay.

The staff may have representation from groups in society which may have a history of conflict or be actively engaged in conflict. In a situation like this, the ability to develop and maintain healthy working relationships and a work environment of respect and peace can be an important community health initiative of its own.

**Meetings**

When groups of people get together for discussion, a formal meeting structure is sometimes adopted. The goal of formalizing communication in this way is to ensure that everyone has a fair opportunity to contribute and that there is sufficient time for discussion and decisions. Having a structure can be especially important if difficult or complex issues are being dealt with. Do your homework before the meeting, anticipate questions and have answers and information available. Be prepared.

Effective meetings:
- Have clear objectives and expected outcomes: people need to know what the meeting is about
- Have an agenda or a plan of how things will proceed; this can be created by the group but, at the very least, must be agreed on by those attending the meeting
- Have a chairperson: the role of the chairperson is to run the meeting, not to voice his or her own opinions; in a difficult situation, it may be appropriate for an uninvolved person to chair the meeting
- Stick to schedule and end on time, proceeding according to the agreed agenda or plan: it can be changed, if necessary, but should not be ignored
- Are comfortable physically: the space must be neither too hot nor too cold and have enough room for all the people in attendance to participate
- Are conducted in a way that makes all participants feel welcome and comfortable: use names, encourage input and recognize the work and contribution of others
- Allow everyone the opportunity to speak: before people speak a second time, make sure everyone who wants to has had a turn to speak once.

Be clear about what you are doing and why: confirm the plan at the beginning of the meeting, allow people to express feelings and suggestions about the meeting at the end, evaluate the meeting and try to think of ways of making the next meeting better: meetings are an expression of how a group works.

**Feedback**

Feedback is most helpful if comments are constructive in nature and suggest changes in a way that is encouraging rather than threatening. Comments should be very specific and deal with a person's behaviour rather than expressing an opinion about them as a person. “All your patients get infections; you must be a bad surgeon” is hurtful and not constructive. “You have very good technical skills; perhaps if you would scrub for longer before coming to the
operating room, we could decrease our infection rates” is much more helpful. This example is also specific; it gives the other person an idea of what she or he can do to be a better surgeon.

Comments are most helpful when they occur close to the time of an event. While it is important not to speak in haste or anger, it is also important not to leave things so long that they are difficult to remember or are no longer relevant. It is important that comments are given in private in order to respect the privacy of patients and staff and allow for discussion.

Seek out feedback from people who will be honest with you and may be outside your usual circle of friends.

Feedback should be specific, timely, constructive and given in a respectful manner. A culture of communication can grow if those in positions of responsibility seek and gracefully receive feedback from others. This will help everyone feel more comfortable with the ongoing process of improvement. It is not always easy to do, but is well worth the effort.

### 1.3 ETHICS

As health care providers, we adhere to the dictates of our profession and the expectations of society. In our professional roles, we are acting not just as individuals but also as representatives of our profession.

Work within the limits of your training.

### PATIENT CONSENT

Before performing a procedure, it is important to receive consent from the patient:

- Ask permission to make an examination
- Explain what you intend to do before doing it
- Ask the patient if he or she has questions and answer them
- Check that the patient has understood
- Obtain permission to proceed
- Be mindful of the comfort and privacy of others.

With invasive and surgical procedures, it is particularly important to give a full explanation of what you are proposing, your reasons for wishing to undertake the procedure and what you hope to find or accomplish. Ensure that you use language that can be understood; draw pictures and use an interpreter, if necessary. Allow the patient and family members to ask questions and to think about what you have said. In some situations, it may be necessary to consult with a family member or community elder who may not be present; allow for this if the patient’s condition permits. If a person is too ill to give consent (for example, if they are unconscious) and their condition will not allow further delay, you should proceed, without formal consent, acting in the best interest of the patient. Record your reasoning and plan.

#### KEY POINT

- Informed consent means that the patient and the patient’s family understand what is to take place, including the potential risks and complications of both proceeding and not proceeding, and have given permission for a course of action.
Be attentive to legal, religious, cultural, linguistic and family norms and differences.

Some hospitals require patients to sign a document indicating that the surgical procedure and potential complications have been explained and that permission to proceed has been granted. This paper is then included in the patient’s record. If this is not a formal requirement in your hospital, document the conversation in which consent was given and include the names of people present at the discussion.

Informed consent means that the patient and the patient’s family understand what is to take place, including the potential risks and complications of both proceeding and not proceeding, and have given permission for a course of action. It should be a choice made free from coercion.

In our jobs as health care providers, we sometimes experience situations which demand things with which we, as individuals, may feel uncomfortable. Our duty as professionals to provide service and care can come into conflict with our personal opinions. It is important to be aware of these feelings when they occur and to understand where they are coming from. If we are asked to care for someone who is alleged to have committed a crime, it is not our responsibility to administer justice. However, it is our responsibility to provide care. This can be difficult, but it is important to recognize that:

Our job is not to judge, but to provide care to all without regard to social status or any other considerations.

By acting in this way, we will be seen to be fair and equitable by the community we serve.

DISCLOSURE

Any information gained about the patient’s condition belongs to the patient, and must be communicated. The delivery of bad news is very difficult and one can become more skilled at it over time; it is never easy. Arrange to talk to the patient in the company of family, preferably away from other patients. In some cultures, it is not common to give difficult news directly to the patient. We must be aware of the norms and customs of our patients as well as our own culture and the evolving culture of medicine. Navigating the different needs and expectations of these groups can be a challenge at times.

Be clear and direct with what you mean, and what you are saying. Do not say growth or neoplasm if what you mean, and what will be understood, is cancer. Often we try to soften the delivery of bad news by saying too much and confusing the matter, or by saying too little and leaving people with unanswered questions. Be clear, allow people to understand and feel some of the impact of the news and then to ask questions. It is often necessary to repeat the information to other members of the family, or to the same family and patient, the next day.
CARING FOR CARE GIVERS

At times, systems and individuals can be overwhelmed. When this occurs, be as kind to yourself as you would be to someone else. Tend to your own needs, whether they are physical, emotional or spiritual. Take the time you need and return refreshed. Being chronically overwhelmed can lead to “burn-out” and increases the risk of physical and mental ill health and use of destructive coping mechanisms such as drugs and alcohol.

Some factors will be beyond your control, such as a shortage of supplies, whether from a lack of resources, theft or corruption. The balance between advocating for improvement and driving yourself crazy with an unfixable problem can be difficult. Trying too hard to fix a problem can lead to frustration and eventually to cynicism; too little effort will ensure that things will never change. Be realistic about what you can accomplish as an individual and as part of an organization. You did not create the situation, but you can speak the truth about it and work for improvement.

Working in leadership and management roles means you will be dealing with your colleagues and co-workers and be faced with many of their problems. You will have to deal with absenteeism, poor job performance and the results of illness and disease. These are problems that you did not create and may not be able to fix. Be clear about your expectations and put systems for reporting, evaluation and remedy in place. This will help to make expectations clear and avoid the problem of dealing with things on a person by person basis.

Do not tie your sense of self worth or job performance to the resolution of systemic or long-standing problems. Set reasonable goals in areas that are within your control.

1.4 EDUCATION

Education is a key part of providing health care – we educate ourselves, our patients, our colleagues and the wider community. Education is the mainstay of our work and the key to positive change, whether it is health based patient education, community education or planning a community health centre. Like leadership, education is a core surgical skill.

PLANNING

Everyone in the hospital needs to have access to teaching and learning opportunities. Health care is constantly changing and developing and it is no longer possible to learn in a few short years all that will be needed over the course of a career. Medical or nursing school is just the beginning of a career-long education. Continuing medical education and professional development are important ways of investing in hospital staff and improving patient care as well as challenging and stimulating the interest of staff.

Planning, implementation and evaluation are the keys to successful educational initiatives. In addition to organizing structured in-service training on new technology, medications or treatment regimens, education can also take place alongside and during the active provision of patient care through:
Morning report
Bedside teaching to review and improve clinical skills and the care and management of specific patient groups
Formal educational rounds
Morbidity and mortality meetings
Team training in critical care.

Poor performance can be related to knowledge, skills or attitudes.

You can plan an educational programme with learning outcomes and activities to teach knowledge, skills or attitudes. In-service training should be directly related to the work people do and the care they provide; this will help people to do their job better and improve patient care as well as boosting staff morale and motivation. Educational efforts are more effective if they are clearly applicable and relevant.

It is helpful to use clinical problems as a basis for learning. Learning outcomes are a useful way of stating what you expect people to be able to do as a result of training. For example:

- Problem: there is an increasing number of postoperative wound infections
- Teaching aim: to review the factors that affect postoperative wound infections
- Learning outcome: all staff working with surgical patients will be more aware of the factors contributing to postoperative wound infection rates.

In a teaching session, you could discuss some patients who have had postoperative wound infections and review possible causes of these infections. This could involve reviewing the course of the patient's illness and care in hospital and highlighting all the opportunities for infection to be introduced. Involve the participants in developing this list of possibilities. Review procedures for each of these situations (e.g. hand washing, dressing changes, the role of antibiotics for prophylaxis and treatment and how to recognize infection early). Rather than simply giving a lecture, try to include activities and time to practise skills being reviewed. Give everyone a chance to present information and ask questions.

Learning can occur in many ways and individuals differ in the ways they learn best. For example, some people can learn by reading, while others need to hear an explanation or be shown something before they can understand it. These different ways of learning can be called learning styles:

- How do you learn best?
- How do others in your organization learn best?

It is important to provide information in a variety of ways to take into account different learning styles and different educational levels.

People can learn by watching others and benefit from seeing and discussing how others have managed a specific situation. By discussing cases and problems, everyone can learn from everyone else. Design and organize learning
experiences that involve the participants. Allow people to practise new skills under supervision, until they are able to apply them. People tend to forget what they are told, but remember what they do. Providing supportive supervision reinforces learning and enables the teacher to evaluate the effectiveness of his or her teaching.

In addition to clinical skills, staff also need to learn information that relates to specific tasks. For example, while learning how to start an intravenous infusion, it is equally important to understand the indications for an intravenous drip and to know what to do if the attempt does not work and how to manage complications.

Do not neglect your own professional education. Take part in educational activities at your hospital and in your region. Get together with colleagues and form a journal club to read and review articles published in the medical literature. If you are the sole medical officer, start an independent study programme to explore questions arising from your practice and then present your findings to other members of your staff. Spend time with visiting colleagues or make time to go to another hospital for some further instruction. Take advantage of any educational opportunity available to you; there will always be too much work to do and it will never be completed so you must make your own education a priority when opportunities present themselves. Make an educational plan and stick to it.

There are many educational programmes and initiatives which are called “distance learning”. In this way, people can use printed materials, video, audiotapes or even computer networks to learn together, even though they may be geographically separated. If programmes of this kind are available, consider making use of them yourself or offering them to others in your organization.

If you are the most senior person in the hospital, who will help you learn? You can learn a great deal from your patients, colleagues in other fields and co-workers, but it may also be necessary to find someone to act as your mentor and help you think through problems or develop new skills. This person need not necessarily be close at hand, but should be available to you when needed through the post, by telephone or in person. We all need colleagues and support. It is an important part of your job to find and maintain these connections.

**ROUNDS**

**Morning report**

Morning report is a review of the night’s activities, of admissions and a hand-over of patients to the day staff. This meeting can be used for education as well as information sharing by reviewing patient assessment and management and highlighting points about the presenting illness. It provides an opportunity for members of the health care team to share ideas and help one another. If there is sufficient time, patient cases can be presented in a more formal manner with broader discussion of medical and patient care issues.
Bedside teaching rounds

Bedside teaching rounds provide an opportunity for the people involved in the care of patients to meet with patients and discuss their illnesses and their management. This approach to teaching uses specific patients to illustrate particular illnesses, surgical procedures or interventions. Individual patients provide a starting point for a broader discussion which does not have to occur at the bedside and could continue later away from the wards. The bedside is also a good place to review clinical skills and specific physical findings.

Traditionally, these rounds have been used for the instruction of junior doctors, but they can also be used for interdisciplinary teaching involving nursing, midwifery and pharmacy staff as well as medical officers. They also give patients and their families an opportunity to ask questions of all the people involved in their care.

Any discussion of a patient on a bedside teaching round must be with the consent of the patient and should actively involve the patient.

Formal educational rounds

Unlike hand-over rounds or bedside teaching rounds, formal educational rounds are a clearly educational event and are separate from the service work of running the wards. They can be organized on a regular basis or when guests with unique experience or expertise are on site.

Morbidity and mortality meetings

Morbidity and mortality meetings are a periodic review of illness and deaths in the population served by the hospital. A systematic review of morbidity and mortality can assist practitioners in reviewing the management of cases and discussing ways of managing similar cases in the future. It is essential that discussions of this kind are used as a learning activity and not as a way of assigning blame.

Team training in critical care practice

If your hospital has a dedicated area to receive emergency patients, it can be helpful to designate time each week for staff to practise managing different scenarios. Have one person pretend to be the patient and work through all the actions and procedures that should take place when that patient arrives at the hospital. Rehearsing scenarios gives people a chance to practise their skills and working together as a team. It also provides an opportunity to identify any further training needs. As a group, decide what roles are needed and what tasks are required of each person. Once this has been decided, post this information for easy reference during a real emergency.

The Annex: Primary Trauma Care Manual provides a structured outline for a short course in primary trauma care that can be used for staff, including medical, nursing and paramedical staff.
Hospital library

Store educational and resource materials together in a central place to which staff seeking information have easy access. If the hospital has a visitor who offers teaching on a specific topic, or if people present useful information at educational rounds, designate someone to make notes and include them in the library. If possible, keep interesting X-rays and notes on unusual cases.

Designate a specific person to be responsible for the care and organization of the collection, including making a list of materials and keeping a record of items that are borrowed in order to ensure their return. Make known your interest in developing a library of learning materials to any external organizations or donor agencies with whom your hospital has contact and make specific requests and suggestions for books, journals and other resources.

1.5 RECORD KEEPING

Medical records exist for the benefit of the patient and for reference by future health care providers. If your hospital’s policy is for records to stay at the hospital rather than being kept by patients, it is essential that they are well maintained and organized for future reference. This requires well trained staff as well as secure and dedicated space.

Records are confidential and should be available only to people involved directly in the care of the patient.

Even if your hospital maintains records, each patient should receive a written note of any diagnosis or procedure performed. If a woman has had a ruptured uterus, for example, it is essential that she knows this so that she can communicate this information to health care providers in the future.

Clinical notes are an important means of communication for the team involved in a patient’s care by documenting the management plan and the care offered; they can also be used to improve patient care when reviewed as part of an audit. Notes may also be requested for insurance and medico-legal purposes.

All members of the health care team are responsible for ensuring that records are:

- Complete
- Accurate
- Legible and easily understood
- Current, written at the time of patient contact, whenever possible
- Signed, with the date, time, name and position of the person making the entry.

Once written, notes must not be changed; a subsequent entry can be made if there is a change in the patient’s condition or management.
Admission note/preoperative note
The preoperative assessment should be documented, including a full history and physical examination, as well as the management plan and patient consent.

Operating room records
Operating room records can be kept in a book or can be kept as separate notes on each procedure. Standardized forms save time and encourage staff to record all required information.

A theatre record usually includes:
- Patient identity
- Procedure performed
- Persons involved
- Complications.

By looking at records of all procedures, a hospital can evaluate occurrences such as complications and postoperative wound infections or review the type and number of procedures being performed. Such evaluation, which should be the regular duty of one member of the hospital team, permits assessment of the application of aseptic routine within the hospital and allows for future planning.

Delivery book
The delivery book should contain a chronological list of deliveries and procedures, including interventions, complications and outcomes. It may contain some of the same information that would be included in a theatre record.

The operative note
After a surgical procedure, an “operative note” must be written in the patient’s clinical notes. Include orders for postoperative care with your operative note.

Postoperative note
All patients should be assessed at least once a day, even those who are not seriously ill. Vital signs should be taken as dictated by the patient’s condition and recorded; this can be done on a standard form or graph and can also include the fluid balance record. Progress notes need not be long, but must comment on the patient’s condition and note any changes in the management plan. They should be signed by the person writing the note.

Notes can be organized in the “SOAP” format:
- **Subjective**: How the patient feels
- **Objective**: Findings on physical examination, vital signs and laboratory results
- **Assessment**: What the practitioner thinks
- **Plan**: Management plan; this may also include directives which can be written in a specific location as “orders”.

A consistent approach such as this ensures that all areas are included and that it is easy for other members of the team to find information.

See Unit 3: *The Surgical Patient* for more detailed guidance on preoperative, operative and postoperative notes.

**Discharge note**

On discharging the patient from the ward, record:
- Admitting and definitive diagnoses
- Summary of patient’s course in hospital
- Instructions about further management as an outpatient, including any medication and the length of administration and planned follow-up.

**Standard operating procedures**

Create and record standard operating procedures for the hospital. These should be followed by all staff at all times. Keep copies of these procedures in a central location as well as the place where each procedure is performed so they are available for easy reference.

**Interhospital communication**

Each patient who is transferred to another hospital should be accompanied by a letter of referral which includes:
- Patient identity
- Name and position of the practitioner making the referral
- Patient history, findings and management plan to date
- Reason for referral.

### 1.6 EVALUATION

To evaluate means to judge the value, quality or outcome of something against a predetermined standard.

At a district hospital, the act of evaluation will generate information that will enable a judgement to be made on whether the hospital is providing high standards of care and is making the best possible use of resources, including:
- Performance of staff, equipment or a particular intervention
- Clinical effectiveness of a type of treatment
- Efficiency in relation to the use of resource (cost-effectiveness).

Evaluation is part of a continuous loop of information gathering, analysis, planning, intervention and further evaluation and involves the following steps.

1. Set goals and targets.
2. Define indicators (previously stated standards, intended results or norms) that can be used to assess whether these goals and targets are being met.
3. Collect information to measure observed achievements.
4. Compare achievements with goals and targets.
5. Identify any deficiencies or failures and analyse the causes.
6. Identify, plan and implement any interventions required for improvement, such as training.
7. Re-evaluate and identify any further interventions required.

Evaluation may be as simple as asking the question “Are all babies weighed in the outpatients department?” If the answer is “No”, the next step is to ask the question “Why not?” and to use the answer to identify possible steps to resolve the problem.

Evaluation will often be more complex, however. For example, a hospital recognizes that it has very high postoperative wound infection rates. All potential sources and causes of postoperative infection are studied and, after careful review and consultation, a plan is developed and implemented. After a defined period of time, a review of postoperative wound infections is again undertaken as a measurement of observed achievement. This is then compared with both previous results and expected outcomes.

If there has been a drop in the infection rate, the team can decide whether the desired outcome has been achieved and whether the measures taken should be adopted as regular practice. By changing only one thing at a time, it is possible to determine whether any improvement is related to the intervention. If the intervention does not result in the desired change, it is important to identify why it has been unsuccessful before trying another intervention.

Chart audit

Patient charts contain important information about individuals, their illnesses and course in hospital. This is valuable information for evaluation. If records are kept after patients have been discharged, a chart audit can assist in monitoring the services provided by a hospital, diagnosing areas of concern and identifying areas for improvement, including:

- Consistency of approach
- Infection rates
- Length of patient stay
- Transfusion rates
- Complication rates.

A chart audit involves the following steps.

1. Ask a specific question, such as “What is our postoperative wound infection rate?”
2. Define the period of time for which the charts to be monitored will be selected.
3. Define the size of the sample of charts to be reviewed.
4. Develop a system for tabulating the data.
5. Make a systematic review of the charts of patients who had surgery during the defined time period.
6. Collate, analyse and interpret the results.
Once the wound infection rate has been documented, it is possible to assess whether it is acceptable. If it could be lowered, an improvement strategy can be devised and implemented. After a period of time, a second chart review can be undertaken, the change evaluated and adjustments made to practice.

Evaluation takes time and effort, but is a necessary part of a commitment to quality care.

### 1.7 DISASTER AND TRAUMA PLANNING

#### DISASTERS

A disaster is any situation that threatens to overwhelm the ability of local resources to cope, including:

- Trauma disasters, such as major road traffic accidents
- Natural disasters, such as hurricanes, earthquakes and floods
- Public health disasters, such as water contamination or the outbreak of a virulent disease
- War and civil disorder.

Each country should have a national disaster plan, but it is the responsibility of the district hospital to plan and prepare for disaster situations at the local level. Disaster planning requires consultation and discussion to develop a realistic plan, made in advance, that anticipates a time when it will be too late to plan.

Disaster planning involves the following steps.

1. Identify situations that could potentially overwhelm a district hospital.
2. Identify the staff and resources required to cope with each kind of disaster situation, including equipment, materials, drugs and blood.
3. Meet with representatives of all hospital departments and staff groups who would be involved, including medical, nursing, paramedical, laboratory and blood bank staff, ambulance attendants and support staff to discuss their role in managing a major emergency.
4. Liaise with other services and authorities, such as the Ministry of Health, local government, fire service, police, army, non-governmental organizations and aid and relief agencies.
5. Develop a disaster plan to cope with each situation and communicate this to all members of staff.

It is impossible to anticipate every situation, but a disaster plan should include:

- Designating a senior person to be team leader
- Defining the roles and responsibilities of each member of staff
- Establishing disaster management protocols
- Setting up systems for:
  - Identification of key personnel
  - Communication within the hospital
  - Calling in extra staff, if required
  - Obtaining additional supplies, if required
  - Triage
Communicating patients’ triage level and medical need
Transportation of patients to other hospitals, if possible
• Mapping evacuation priorities and designating evacuation facilities
• Identifying training needs, including disaster management and trauma triage, and training staff
• Practising the management of disaster scenarios, including handling the arrival of a large number of patients at the same time
• Establishing a system for communication with other services, authorities and agencies and the media.

In the event of a local disaster, such as a major road traffic accident involving many persons, systems will then be in place. These will help the staff on duty to deal with a sudden and dramatic increase in need for services and to summon help to deal with such a situation.

It is vital to develop a written disaster plan if your hospital does not yet have one. Inform staff about the plan and keep copies of it in busy areas of the hospital. Ensure that it is reviewed regularly and that staff practise implementing it using different scenarios so that any problems can be identified and resolved before a real disaster occurs.

Triage
Triage is a system of making a rapid assessment of each patient and assigning a priority rating on the basis of clinical need and urgency. The goal of triage is to do the greatest good for the greatest number. People who are in greatest need should therefore be treated first. It is not helpful to spend huge amounts of time and resources on individuals whose needs exceed the services available, especially if this is at the expense of other patients who could be helped with the skills and resources available locally.

TRAUMA TEAM
Just as every district hospital needs to be prepared for a situation where there are many patients with competing needs, the staff also need to be skilled at dealing with multiply injured or critically ill patients requiring the care of many people at the same time. A “trauma team” that is experienced in working together in times of stress and urgency is also an important part of the disaster plan.

Identify the different jobs to be undertaken in an emergency and ensure that all members of the team know what those roles are and are trained to perform their own role. The area in which emergency patients are received should be organized so that equipment and materials are easy to find. It is helpful to make a map showing where in the room/area people need to be stationed and the jobs that are associated with the different positions.

Team leader
A team leader should be designated to take charge in a disaster or trauma situation. Ensure that all members of the team know who the leader is.
In the event of a major disaster, the leader should oversee the implementation of the disaster plan and delegate specific tasks.

In the case of an individual trauma case, the team leader is usually responsible for the following activities:

- Perform the primary survey and coordinate the management of airway, breathing and circulation
- Ensure that a good history has been taken from the patient, family and/or bystanders
- Perform the secondary survey to assess the extent of other injuries
- Consider tetanus prophylaxis and the use of prophylactic or treatment doses of antibiotics
- Reassess the patient and the efforts of the team
- Ensure patient documentation is completed, including diagnosis, procedure, medications, allergies, last meal and events leading up to the injury
- Communicate with other areas of the hospital and staff members
- Communicate with other people and institutions outside the hospital
- Prepare the patient for transfer
- Liaise with relatives.

Information should flow to and through the leader:

- Know and use the names of the other members of the team and ensure that they have heard and understood directions
- Check back with members of the team to make sure designated tasks have been completed: for example, “How is the airway?”, “Are you having any trouble bagging?”, “Have you had to suction much?”, “Is the second IV started?”
- Ask for input from the team, but ensure that all directions come from only one person.

If only a small number of people are available, each team member will have to assume a number of roles. If there is only one person with airway management skills, for example, that person must manage the airway as well as acting as the leader. If there is more than one person with airway skills, one can be assigned to manage the airway and the other to act as the leader. It is difficult to perform emergency tasks while at the same time keeping an eye on the overall situation, so recruit as much help as you can. Practise often and communicate clearly.

In an emergency, stay calm and speak clearly.

**Members of the trauma team**

Members of the team are responsible for:

- Accepting the authority of the leader: this is not a time for consensus decision making
- Speaking to and through the team leader
- Clearly and concisely reporting back to the leader once a task is completed: for example, “IV line established in the right antecubital fossa using a 14 gauge cannula”.

If teams are involved in planning disaster and trauma management and regularly practise implementing the plan, they will be more effective and less stressed when a real event happens. Taking turns in acting out different roles within the trauma team will help each person to have a greater understanding of the roles of other team members and the demands of each role.

Trauma management is covered in depth in Unit 16: *Acute Trauma Management* and in the Annex: *Primary Trauma Care Manual.*
Surgical Care at the District Hospital