A white outline of the state of Uttar Pradesh is centered on a blue background. The text of the title is overlaid on this map.

REFERRAL GUIDELINES FOR HEALTH FACILITIES IN UTTAR PRADESH

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Acronyms

BEOC	Emergency Obstetric Care
CHC	Community Health Centre
CME	Continued Medical Education
DRG	Diagnostic related groups
EMOC	Emergency Obstetric Care
GOI	Government of India
IMA	Indian Medical Association
IPHS	Indian Public Health Standards
JSSK	Janani-Shishu Suraksha Karyakram
IAP	Indian Association of Paediatrics
MTP	Medical Termination of Pregnancy
PHC	Primary Health Centre
PICU	Paediatric Intensive Care Unit
PPH	Post-partum Haemorrhage
QC	Quality Control
SAM	Sever Acute Malnutrition
SC	Sub Centre
SNCU	Sick New-born Care Unit

Summary

In health care delivery systems, referral is a set of activities undertaken by a health care provider or facility in response to its inability to provide the quality or type of intervention suitable to the need of the patient.

An effective referral guideline ensures a close relationship between all levels of the health system and helps to ensure people receive the best possible care closest to home. It also assists in making cost-effective use of hospitals and primary health care services. Support to health centres and outreach services by experienced staff from the hospital or district health office helps build capacity and enhance access to better quality care.

A high proportion of clients seen at the outpatient clinics at secondary facilities could be appropriately looked after at primary health care centres at lower overall cost to the client and the health system. A good referral guideline can help to ensure:

- Clients receive optimal care at the appropriate level and not unnecessarily costly
- Hospital facilities are used optimally and cost-effectively
- Clients who most need specialist services can access them in a timely way
- Primary health services are well utilized and their reputation is enhanced

Referral system's flows are depicted in Figure 1. The design and functioning of a referral guideline in any UP State may be influenced by:

- **health systems determinants:** capabilities of lower levels; availability of specialized personnel; training capacity; organizational arrangements; cultural issues, political issues, and traditions
- **general determinants,** such as: population size and density; terrain and distances between urban centres; pattern and burden of disease; demand for and ability to pay for referral care

This document describes the guidelines for implementing patient referrals in district health systems in Uttar Pradesh. It also brings out the disease conditions, which require referral at different level of health facilities and important referral forms and formats to be used in the referral process.

The Health Referral System Protocols in Uttar Pradesh (UP)

1. Introduction

In health care delivery systems, referral is a set of activities undertaken by a health care provider or facility in response to its inability to provide the quality or type of intervention suitable to the need of the patient. Referrals are not only between lower and higher-level facilities, but also between primary facilities as well as within hospitals. To be effective, referral should be a two-way process (figure 1) that requires coordination and information exchange between the referring facility (usually at the primary care level) and the first referral hospital.

The range of diseases that are presented to health workers can be from the most common everyday illnesses or ailments to the most complex and life-threatening. This case-mix requires a range of skills, facilities and health care professionals/workers at different hierarchical levels of care in order to best serve the needs of a given population. This is best achieved through cooperation and collaboration between different facilities at different levels to maximize resources.

Implementation of referral guidelines includes other factors that are important to delivering effective health care such as: the availability of skilled staff capable of making appropriate referrals; the degree to which health facilities, equipment and diagnostic tests facilitate or hinder care once referral has taken place; and the role different factors such as transport and other logistical factors play in the referral process as well as cultural beliefs that affect health seeking behaviour.

1.1 Purpose:

The main purpose of introduction of referral guidelines is to improve efficiency of service delivery. This will also improve streamlined patient flow, avoid patient waiting time, overcrowding in the OPD and labs, and ensure better house-keeping etc. The introduction of referral is also expected to improve the standard of patient management in terms of, more justified time spending in physician examination, better documentation, appropriate use of investigations, more patient counselling and other selected program operations and services for the patient. Since those patients, who can be attended at peripheral hospitals,

are certainly seen and managed at that level, the services at peripheral hospitals are expected to be completely utilized.

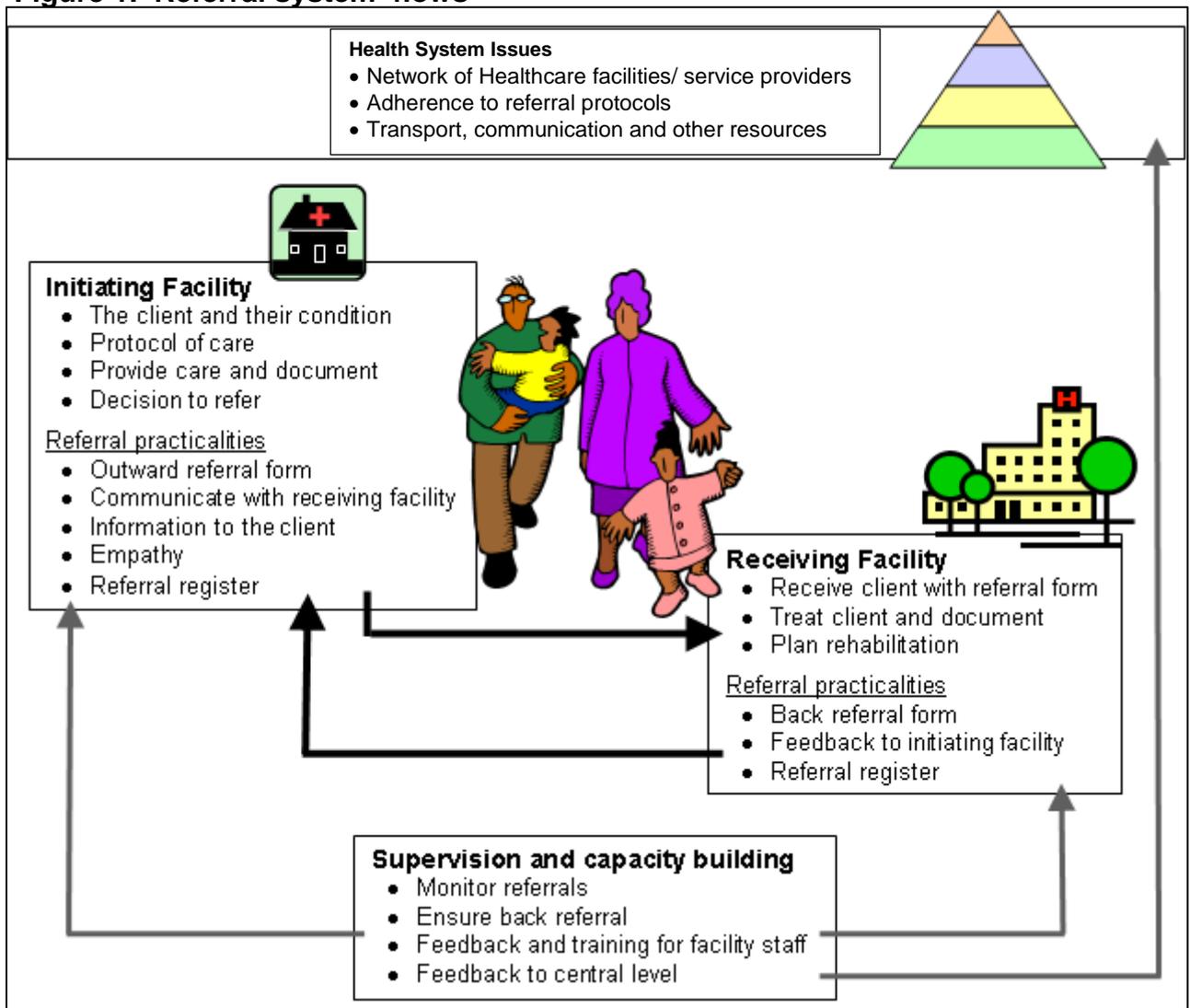
1.2 Objectives:

To provide required level of treatment facilities to the patients who require treatment that are not within the scope of services of hospital and the referral is made to other Hospital.

Scope:

Patient in the hospital who could not be managed there.

Figure 1. Referral system flows



2. Referral Levels and Facilities Available:

Uttar Pradesh has three levels of care. A primary health care level consisting of Sub Centre and Primary Health Care, or health centres or some equivalent (in case of urban areas) and hospitals consisting of Community Health Centre and District Level Hospitals. Brief about these facilities are given below:

2.1 Sub Centre (SC)

- Manned by ANM trained to provide ANC, Child care
- SC stores medicine for common ailment for child
- Maintains cold chain for vaccines

2.2 Primary Health Centre (PHC)

- Manned by Medical Officer, Pharmacist, ANM, and Laboratory Attendant (LA) for malaria staining, basic hematology, urine, ABO RH etc.
- Trained to provide MCH Including ANC, normal delivery, routine Child care and routine ailment and screening of chronic ailments
- PHC stores medicine for common ailment and vaccines

2.3 Community Health Centre (CHC)

- Manned by specialist Physician/Pediatrician, OBG, Surgeon, Radiologist, Anesthetist (FRUs), Staff Nurse, Pharmacist, O.T. Technician, Lab Technician etc.
- It generally has 30 inpatient beds with operation theatre, labour room, blood storage, routine lab and x-ray
- Most of CHCs in State upgraded as first referral unit (FRU) to provide EmOC services, routine MCH and basic trauma care

2.4 District Hospital (DH)

2.4.1 Combined District Hospital

- Manned by general specialist Physician, OBG, Pediatrician, Surgery, Orthopedic, Anesthetist, Dentist, ENT, Ophthalmologist, Radiology, Pathology
- It generally has inpatient facilities in related specialties, geriatric ward High dependency unit (HDU), PICU, SNCU (level II NICU) with operation theatre, labour room, Blood Bank, high end Laboratory, X-ray facility, Sonography, Nutrition centre and mortuary, isolation ward

- Unique Specialties: Depending on case load Some hospitals in big cities may also have Cardiology, Urology, trauma centres
- Special Facilities: Some hospitals also have ICU(level II), CT Scan, MRI, Dialysis unit, OT with C-arm, Cath Lab, 2D Echo, Physiotherapy, sampoorna clinics, Kangaroo care, ICTC, NCD clinics, Psychiatric OPD, JEs/AES

2.4.2 District Male Hospital

- Manned by general specialist Physician, Pediatrician, Surgery, Orthopedic, Anesthetist, Dentist, ENT, Ophthalmologist, Radiology, Pathology, Nurses, X-Ray Technician, Lab Technician, Pharmacist etc.
- It generally has inpatient facilities in related specialties, High dependency unit (HDU), PICU, with operation theatre, Blood Bank, high end Laboratory, X-ray facility, Sonography, Nutrition centre, geriatric ward and mortuary.
- Unique Specialties: Depending on case load Some hospitals in big cities may also have Cardiology, Urology, trauma centre, OBG (OPD only)
- Special Facilities: Some hospitals also have ICU(level II), CT Scan, MRI, Dialysis unit, OT with C-arm, Cath Lab, 2D Echo, Dietician, Physiotherapy, Psychiatric OPD, JEs/AES

2.4.3 District Female Hospital

- Manned by general specialist Pediatrician, OBG, Anesthetist, Radiologist, Nurses, Pharmacist, Lab Technician, X-Ray Technician etc.
- It generally has inpatient facilities in related specialties, High dependency unit (HDU), PICU, SNCU(level II NICU) with operation theatre, labour room, Blood Storage, high end Laboratory and Sonography
- Special Facilities: Some hospitals may also have X-ray facility, Dietician, physiotherapist, Sampoorna clinics, Kangaroo care,

3. Responsibility:

The 'On Duty' Medical Officer shall decide referral from Peripheral Hospital/Health Care Centre to higher levels including Medical College Hospital.

4. Referral Process:

Referral systems must not view hospitals as an end referral points, instead referral systems should be seen as a two-way process. This section describes steps to be followed for implementing an effective referral system.

4.1. Identify if the Patient Needs to be Referred:

This is the most critical component of the referral process. Referral of patient may be for either ambulatory care such as OPD consultation, diagnostics, and ambulatory procedures (e.g. physiotherapy etc.) or for admissions. Referral conditions (Annexure II-V) will be used in consonance with facilities available, skills sets available at the facility and prevailing standard treatment guidelines available in the State. Few general conditions for referral are:

- When a patient requires a technical intervention that is not within the capacity of the health centre; Example: surgery
- When a patient needs a specific procedure (such as a laboratory examination or X-ray) that is not available at the health centre/primary facility level; (example: C-Section)
- When the patient needs expert advice; (Whether to undergo surgery: example: goitre)
- When a patient needs in-patient care.
- For co-management or further management of the illness e.g. complications in pregnancy (This co-management can be facilitated by telemedicine facilities)
- For continuity of care: example cancer treatment
- For a second opinion
- When patients demand
- Breakdown of services due to force major

4.2. Identify if the Level of Patient Referral

Once care provider decides the case needs referral they should decide which level of care and facilities will be appropriate to the patient.

4.3. Preparing Referral Forms

Referral document is seen as a flexible means of transferring information between health professionals, especially since they can be adapted to cover simple and complex clinical cases. An additional function is their use as a tool for clinical audit.

- It is suggested that for all cases, the ‘Referral Slip’ of the patient will be prepared by the ‘On Duty’ specialist/Medical Officer/Emergency Medical Officer in the Peripheral Hospital/Healthcare Centre care provider and they will update their referral out register (*Annexure VI*).
- The doctor referring the patient should mention the following details (template given below) on the referral slip.
 - Treatment received.
 - Status of the patient.
 - Reasons for referring the patient to ‘Tertiary Care Hospital’
- The treating doctor besides, signing the referral, should mention his name, designation, registration number and mobile number under his seal.

Figure 2. Referral slip

Name of the Patient & address:	Special comments if any
Age in years:	
Sex: M/F	
Address of patient	
Date & Time of Reference	
APL/BPL if BPL No:	
Brief on Illness	
Investigations done	
Provisional diagnosis	
Treatment given	
Status of Patient	
Referred to	
Reasons for reference	
Documents accompanying referral	
Any additional information or comments	Signature Name & Designation of Doctor Date and Time:
Phone No, email (Optional)	
Name of Hospital	
Note to receiving facility: On completion of client management please fill in and detach the referral back slip below and send with patient or send by fax or mail.	

- Referral should be accompanied with sufficient documents like referral letter and supporting materials like X-ray, ECG or other similar investigation reports.
- Basic patient work up at the level of referring centre should as far as possible be completed depending on the availability of facilities for investigation as well as time. Efforts should be taken from the referring end to provide investigation results pending if any to be later collected and sent to the referred institution

through the relatives of the patient.

- Writing in any communication and correspondence should be legible and easily readable.
- The indications for referral should be guided by the discipline-wise guidelines provided with this document
- Necessary information should be passed on to the patient and relatives. This should be in the form of counselling about the need of referral and necessary supportive information and guidance. In most of the situations of conflict lack of communication or misgivings of matters to patients end up in hostile situations. Proper care must be taken to avoid such situations.
- In the case of emergency referrals the details of patient's condition including brief summary of vital signs at the time of sending the patient and medications given should be clearly written in the referral card.
- Timely referral is important in saving lives and avoiding complications. Hence once decided the patient should be sent at the earliest.
- Even if a patient is referred, all possible primary treatment and care at that referring institute level should be given to that patient.

4.4. Use of Ambulance

- In the case of emergency referral, if the patient's condition is critically dangerous warranting continuing medical support, or if there is a chance to worsen, demanding emergency resuscitation, an appropriately functional medical ambulance should be made available.
- In case, the treating doctor decides to shift the patient in an ambulance, a medical attendant/ASHA worker, well versed with the 'Resuscitation Drill', should accompany the patient along with a Patient Referral Log in the prescribed format.
- While referring the patient to tertiary care hospital in an ambulance. The Log Book of the Ambulance should also be duly signed and stamped by the Doctor 'On Duty' along with date & time of the departure of the ambulance.

4.5. Treatment at Referral Cases

- On arrival of the patient at referral Hospital, the Medical Attendant/ASHA Worker accompanying the patient will promptly hand-over the patient to the Doctor 'On Duty' at Casualty/Registration/Emergency/out-patient (as the case may be) under proper receipt indicating the date & time of handing over the patient.
- The Doctor 'On Duty' at Casualty/ Registration/ Emergency at referral hospital will also maintain a separate register of referrals, indicating therein; the particulars of the

patient, date & time of arrival, treatment given, particulars of the Periphery Hospital/healthcare Centre from where the patient has been referred and any other relevant information regarding the status and condition of the patient.

- The Doctor 'On Duty' while receiving the patient at referral Hospital, shall immediately inform the 'specialist on Duty' about the medical status of the received patient and action taken by him/her about the management of the patient in Casualty/Registration/ Emergency.
- The Concerned specialist will, thereafter, immediately take over further management of the patient and also record his/her findings about the reasonability of the decision taken by the periphery hospital/healthcare centre doctor in referring the patient to referral Hospital within shortest period of time after the patient reports in the Healthcare Establishment.
- When the referring doctor enquires about the condition of the patient (through phone or in person) a responsible staff should attend and necessary information to be furnished courteously. This communication between referring doctors and receiving end is usually through telephone and both ends should behave courteously and in the most understanding way.
- All emergency referrals to be accepted without fail and unnecessary "shunting" of patients should be avoided.
- Even if the doctors in the receiving institution feel that the patient should have been managed in a different way, no open comments should be made at the referring end which can undo the morale of either party in the presence of the patients or relatives or over phone to any persons in this regard.
- Enquiries regarding patient information to be communicated to the press or media only through the respective hospital administration.

4.6. Discharge of patient from referral Centre

- The referred patients at the Referral Hospitals will be discharged from the hospital only by or with the approval of the 'on Duty' Medical Officer or Specialist.

4.7. Back Referral

The process of referral should be integrated with the health system and should be a continuous activity for the patient. Back referral helps the referring facility to know what exactly happened to the patient at the higher centre and helps in providing follow up care from referring centre. If the patient prefers follow up care in another institution, this must be mentioned in the 'referral out' letter and the matter informed to the referred doctor through phone or email.

Back referral also helps in continuous quality improvement in the whole system of referral process. Expectations about performance at the receiving institution after back referral also should be clearly mentioned in the back referral letter especially with regard to procedures for wound care, expected day of stitch removal etc.

- Back referral should be after reasonable period of care from higher centre.
- Back referral should be with sufficient directions for provision of care.
- The back referral letter can be the same as the discharge card presently provided. There should be details about back referral especially follow up care, when to come for review, whom to be referred back to, etc.
- If the patient is discharged at request voluntarily this matter can be written in the back referral card and all follow up instructions to be given forthwith.
- If a patient is being discharged against medical advice this matter should be specifically documented and the signature of patient/guardian be taken in the case-sheet. However the patient should be told of all the consequences and counselled against this attempt.
- The contact number in case of emergency and also the possible and anticipated complications as well as the first aid in such instances should be clearly written in the back referral letter.

Figure 3. Back Referral slip

Back referral from Facility Name		Tel No.	Fax No.
Reply from (person completing form)	Name:		Date:
	Position:	Specialty:	
To Initiating Facility: (enter name and address)			
Patient Name			
Identity Number	Age:	Sex:	M F
Client address			
This client was seen by: (name and specialty)			on date:
Patient history			
Special investigations and findings			
Diagnosis			
Treatment / operation			
Medication prescribed			
Please continue with: (<i>meds, Rx, follow-up, care</i>)			
Refer back to:			on date:
Print name, sign & date	Name:	Signature:	Date:

- Back referrals are to be entered in back referral register kept in the institution.

(Annexure VII)

4.8. Monitoring of Referral

To monitor and streamline the patient referral system, following officers at various levels of healthcare institutions are nominated as ‘Nodal Officers’:

S. No.	Name of the Institution/ Type of Healthcare Facility	Nodal Officer
1.	Govt. Medical Colleges & its Association Hospitals	Dy. Medical Superintendent of concerned Hospital(s)
2.	Directorate of Health Services	Joint Director (Medical Care)
3.	Divisional Hospital /District Hospital	Medical Superintendent of the Hospital
4.	Community Health Centre	Sr. most Gynecologist (on Call)
5.	Primary Health Centre	Medical Officers on duty

- The Nodal Officers shall monitor the working of patient referral system as per the SOPs devised and suggest Changes/ modifications, if required, to bring further improvements in the system. Moreover, on receiving a Whatsapp message regarding patient referral from the referring ‘On Duty’ doctor, necessary arrangements should immediately be made in advance.
- Monthly review meetings of the nominated Nodal Officers shall be taken by the Additional Director Health Services Uttar Pradesh (for respective Divisions) at Divisional Level, regarding implementation of decisions taken and recommend appropriate corrective measures to further improvise the Patient Referral System.
- A monthly audit of all referral cases at all levels/health institutions shall be conducted and consolidated at Directorate of Medical Health and Family Welfare, Uttar Pradesh.
- Referrals audit may include following aspects: the content of referral letters/forms; the explicit or implicit problem definition and action sought in the referral letter against the diagnosis and action taken; the time between presentation of the patient and necessary intervention; and, the quantity and type of inappropriate referrals
- The consolidated Audit Report along with the findings/ gaps/ suggestions/ recommendations shall be furnished to the Administrative Department.

5. Guiding Principles of Referral Process

The most important requirement for an effective referral system is that everything should be explicit and there should not be any communication gaps. Some of the other Guiding Principles of a referral process are:

A) Direct patient services

- The referral process shall work for the benefit of both the referring institution and the facility carrying out the referral taking into consideration the best interest of the patient.
- Services to be given to the patient shall depend on the facilities, capabilities and human resources of the health facility.
- It is the responsibility of the health facility to provide the best care, in terms of quality within the limits of their resources.
- If the health care facility is capable of managing the patient's medical problem then the patient can be referred back for follow-up care.
- Patients should receive guidance from health care professionals in the proper use of available resources, especially for those persons classified as poor or vulnerable.

B) Administrative policies

- All the facilities will be provided with standard case management (treatment protocols and guidelines) prepared by Department of Medical Health and Family Welfare, Government of Uttar Pradesh.
- Duly endorsed, UP Health System's referral policy and administrative guidelines should be provided to all the stakeholders.
- All employees of health centres and hospitals will be given orientation and training in the operationalization of a comprehensive referral guideline.
- Training should include when to refer and be capable of treating patients when referred (if unable to treat, know when and to whom to refer since poor quality services is an obstacle to effective referral).
- At all stages of patient referral, system should encourage patient education and involvement, i.e. patients should be aware of what services are available at each level and what the service offers in order to be able to request appropriate referral. The introduction of citizens charter may help.

- A separate logbook shall be maintained for monitoring and evaluating referral records of all patients.

6. The Support Activities

- Ensuring that essential drugs and medicines are available at any given time at all levels of health facilities.
- Ensuring that each level of health care units, have all essential equipment for which it is responsible for.
- Ensuring effective transportation system to transporting patients to a referral facility (e.g. from clinic to hospital, or from district hospital to regional hospital).
- Ensuring mobile health services to people living in rural and remote areas, without access to a fixed clinic.
- Ensuring community-outreach services such as ANM visits, DOTS programmes, and Palliative care visits etc.
- Revision of the basic concept of referral efforts and management of referral health service programmes to support hospital autonomy and decentralization.
- Development and consolidation of a quality assurance programme and rational treatment in hospitals in the form of treatment protocols ;
- Education and training of health manpower; (CME is now done by Associations like IMA, IAP)
- Research and screening of medical technology; Preventive maintenance and QC
- Motivating the public to maintain and improve their health; and
- Monitoring and evaluation, supporting systems, personnel and documentation (including social audit)

7. References

1. Kerala State Referral Document
2. CGHS Referral Guidelines
3. WHO Referral Document
4. IPHS Guidelines for HC
5. IPHS Guidelines for PHC
6. IPHS Guidelines for CHC
7. IPHS Guidelines for District Hospitals

Annexure

Definitions:

Referring facility: The initiating facility from where the decision to refer is made

Referral receiving facility: The institution where a referred patient is received and managed.

Directory of services: The list of specialists or special procedures or investigations available in each facility. This facilitates the search for appropriate service provider.

Back referral: Back referral means referring the patient back to the lower and referred out facility for further follow up and care.

Referral card:

The letter to accompany the outward referral from the initiating facility

Referral Register: A maintaining list of all outward and inward referrals for one facility or service provider. Information includes who referred, where referred, when and why and the appropriateness of referral

Levels of care: In a three tiered health system model the three levels of care are a) primary (Primary health centres and sub- 53 centres b) secondary (Taluk headquarters hospitals, FRUs and Chas) c) tertiary (District hospitals, general hospitals and medical hospitals, regional institutes)

Appropriateness of referral: This is decided based on the preconditions

- **Timeliness** i.e. neither too early nor too late as decided by the referring physician as well as the receiving physician and depending upon the patient's clinical condition noted by them respectively.
- **Effectiveness:** Whether the objectives of referral achieved or not (a) to get expert opinion b) to get an additional skill oriented service example surgery c) to get admitted and managed at a higher level centre to get a diagnostic investigation done
- **Cost effectiveness** i.e. the benefits exceed and justify the costs

Late referrals to appropriate facilities:

Late referrals were described as due to: the holding doctors being reluctant to refer patients at risk or referring them after complications have set in, or families delaying their decision to allow women at risk or women experiencing complications in delivery to go to hospital in a timely fashion. The reluctance of families giving

permission for the patients experiencing problems is to be documented this practice was said to be much more common in areas outside cities.

Another contributory factor is late identification of women with complications. This occurs both because health centre staff are not competent or lack of appropriate diagnostic facilities or cost. Cultural practices also may affect referral process

Referral Conditions from Sub Centre:

- Provide ORS & First Aid for accidents and emergencies and refer cases beyond competency to the Primary Health Centre or nearest hospital
- All pregnant women to PHC for RPR test for syphilis
- Refer suitable cases of medical termination of pregnancy (MTP) to the approved institutions.
- Sever Acute Malnutrition (SAM) cases to the Primary Health Centre
- Suspected/severe cases of ARI referral to PHC.
- Referral to PHC for blood grouping.
- High-risk pregnancies to PHC
- Refer cases of abnormal pregnancy and cases with medical and gynaecological problems to CHC for C-Section.
- Cases other than minor ailment (fever, diarrhea, ARI, worm infestation and First Aid) refer to PHC
- Referral of persons practicing high risk behaviour in relation to HIV/AIDS and STD
- Refer cases of genital sore or urethral discharge or non-itchy rash over the body to medical officer at PHC.
- Where filarial is endemic, identification of cases of lymphoedema / elephantitis and hydrocele and their referrals to PHC/CHC for appropriate management
- Refer the suspect cases of leprosy (patients with skin patches with loss of sensation) to PHC,
- Referral of suspected symptomatic cases of TB (fever for 15 days and above with prolonged cough or spitting blood) to PHC/Microscopy test of sputum smears) to the PHC/Microscopy centre
- Refer suspected cataract cases to the PHC/CHC/district.
- Refer cases of difficult labour and new-borns with abnormalities, help them to get institutional care and provide follow up to the patients referred to or discharged from hospital.
- Suspected cases of Cancer, Diabetes, Cardiovascular, Neurological , Psychiatric disorders etc. or related complications may be referred to District or Medical Colleges for further verification and treatment

Referral Conditions from PHC

- Timely referral of identified cases of high risk and alarming signs (PPH, Eclampsia, Sepsis) during pregnancy to FRUs/ other hospitals which are beyond the capacity of Medical Officer PHC to manage.
- Appropriate and prompt referral for cases needing specialist care to CHC/District Hospital
- Identification of sick new-born and prompt referral of those requiring specialist care at CHC/District Hospital.
- Assess the growth and development of the infants and under 5 children and make timely referral.
- Referral of severe acute malnutrition cases after initiation of treatment as per NRC program guidelines
- Referral of eligible couples adopting permanent methods (Tubectomy/Vasectomy) to CHC/District Hospital.
- Counselling and appropriate referral for couples having infertility.
- Counselling and appropriate referral for safe abortion services (MTP) for those in need.
- Medical method of Abortion with linkage for timely referral to the facility approved for 2nd trimester of MTP
- The early detection of visual impairment and their referral at District Hospitals/medical camps.
- Detection of cataract cases and referral for cataract surgery District Hospitals.
- Early detection of cases of hearing impairment and deafness and referral to district /medical college.
- **Cases which can be managed at the primary care centres:**
 - Furuncle ear
 - Wax
 - Simple diffuse external otitis
 - Uncomplicated acute supportive otitis media
 - Uncomplicated chronic supportive otitis media
- **Nose related cases which can be managed at the primary care centres:**
 - Uncomplicated furuncle nose

- Acute rhinitis and rhino sinusitis
- Allergic rhinitis and vasomotor rhinitis
- Referral of suspected cancer cases with early warning signals for confirmation of the diagnosis.
- Screening of persons practicing high-risk behaviour with one rapid test to be conducted at the PHC level and development of referral linkages with the nearest ICTC at the District Hospital level for confirmation of HIV status of those found positive at one test stage in the high prevalence states.
- Oral health promotion and check-ups & appropriate referral on identification
- Risk screening of antenatal mothers with one rapid test for HIV and to establish referral linkages with CHC or District Hospital for PPTCT services.
- **Basic Services:** Diagnosis and treatment of common mental disorders such as psychosis, depression, anxiety disorders and epilepsy and referral).
- Early detection, management and referral of Diabetes Mellitus, Hypertension and other Cardiovascular diseases and Stroke through simple measures like history, measuring blood pressure, checking for blood, urine sugar and ECG.
- ‘Weekly geriatric clinic at PHC’ for providing complete health assessment of elderly persons, Medicines, Management of chronic diseases and referral services.
- **Appropriate and prompt referral of cases needing specialist care including:**
 - a. Stabilization of patient.
 - b. Appropriate support to patient during transport.
 - c. Providing transport facilities either by PHC vehicle or other available referral transport.
 - d. Drop back home for patients as mandated under Janani-Shishu Suraksha Karyakram (JSSK).
- Suspected cases of diabetes, cardiovascular, neurological , psychiatric disorders etc. or related complications may be referred to District or Medical Colleges for further verification and treatment
- **The Transport Facilities** with Assured Referral Linkages Referral Transport Facility
It is desirable that the PHC has ambulance facilities (or through 108, 104) for transport of patients for timely and assured referral to functional FRUs in case of complications during pregnancy and child birth.

- Referral services for severe and complicated malaria cases and provisioning for their transportation.
- Refer and follow up all the cases with grade-2 disability to district hospitals for assessment and management.
- Refers suspected cancer cases with early warning signals.
- Diagnosis and treatment of common mental disorders and to provide referral service.
- Early detection, treatment as far as possible and referral of Diabetes Mellitus, Hypertension, CVD and Stroke
- Refer patient needing Physiotherapy to District hospitals.

Referral Conditions from CHC

The Community Health Centres (CHCs) constitute the secondary level of health care, were designed to provide referral as well as specialist health care to the rural population.

Under the revised IPHS, CHC serves as a First Referral Unit, Block level Administrative Unit and Block level Public Health Unit. This section brings the referral conditions from CHCs to district and higher level of care.

1. Early detection of visual impairment and their referral to district hospitals.
2. Early detection of cases of hearing impairment and deafness and referral to district hospitals.
3. Basic mental health care using limited number of drugs and to provide referral service. This would result in early identification of mental cases. A short term training will be given to medical which would result in early identification and treatment of common mental illnesses in the community
4. Early detection and referral of suspected cancer cases.
5. Timely Referral of complicated cases of Diabetes Mellitus, Hypertension, IHD, CHF etc.
6. Screening of general health, assessment of Anaemia/Nutritional status, visual acuity, hearing problems, dental check-up, common skin conditions, Heart defects, physical disabilities, learning disorders, behaviour problems, etc. Basic medicines to take care of common ailments, prevalent among young school going children and referring at District / Sub-District hospitals if needed.
7. Referral of the New-borns, who may require SNCU/PICU care to District hospitals, if services not available at CHC/PHC.

Referral Conditions from District Hospitals

B.1. General Medicine Guidelines for referral from secondary level institutions to tertiary level centres for selected general medical conditions

1. **Leptospirosis:** The diagnosis is considered in any patient presenting with abrupt onset of fever, chills, conjunctival suffusion, headache and myalgia. Typically four clinical categories are defined Mild (influenza like) illness, Weil's Syndrome (Jaundice, renal failure, hemorrhage, myocarditis), Meningo encephalitis and pulmonary hemorrhage with respiratory failure.

Patients with any of the following complications should be referred to a tertiary care centre.

1. Hypotension
2. Decreased urine output
3. Deep Jaundice
4. Hemoptysis
5. Breathlessness
6. Bleeding tendency
7. Irregular pulse
8. Altered level of consciousness
9. Pre-existing chronic disease (Chronic Liver Disease, Diabetes Mellitus, Hypertension, Coronary Artery disease, Chronic Kidney Disease etc.) or existence of any other co-morbidities
10. Severe alterations in Liver function tests
 - Patients suspected of Leptospirosis should not be treated with NSAIDs.

2. **Dengue fever**

A detailed assessment should be made at the periphery and all steps for stabilization of the condition of patient to be undertaken * Red flags or Warning signs are more important than platelet count alone. Referral criteria (Red flag signs) for referring patients to tertiary care centre are

- Inability to maintain hydration status, persistent vomiting or abdominal pain

- Any bleeding tendency: Hematemesis, Hematochezia/Melena, bleeding from nose etc.
- Hypotension, Altered sensorium or toxic look.
- Significant Thrombocytopenia or rising haematocrit value.
- Abnormal behaviour or drowsiness
- Any evidence of Dengue hemorrhagic fever/ Dengue shock syndrome
- Unusual presentations- Acalculus cholecystitis, hepatitis, Hemorrhagic serositis involving pleura, peritoneum, Acute Respiratory Distress Syndrome (ARDS).
- Features of fulminant hepatic failure, Acute renal failure, myelitis, seizures, intracerebral bleeding or hepatorenal syndrome

Enteric fever

All patients with prolonged fever of more than 7 days should be evaluated for diagnosis of typhoid fever. Evaluation of blood counts and renal function tests should be done if possible. Cases should be referred to tertiary care centre when any of the following is found to be present Evidence of complications like Perforation, peritonitis, pneumonitis, Shock, severe dehydration, Gastro-intestinal bleed, Myocarditis, Glomerulonephritis, Encephalopathy Rare complications like

- Meningitis, Neuritis, Guillian Barre Syndrome
- Myocarditis, Endocarditis, Pericarditis, Pancreatitis
- Pyelonephritis, Osteomyelitis
- Patients having apathy, psychosis, coma
- Presence of unexplained tachypnea or basal crepitations
- If there is any diagnostic confusion or if no response to primary or secondary line of antibiotics

3. Malaria

According to National guidelines of Ministry of Health, all patients suffering from uncomplicated malaria should be treated in peripheral hospitals. However the following conditions can be considered for referral to higher level institutions.

- Suspected Cerebral malaria—altered sensorium, convulsions
- Persisting Hypoglycemia,
- Features of Metabolic acidosis, /Renal failure (S Creatinine>3mg/dl)

- Features of Renal/Hepatic failure, D I C, pulmonary edema/ARDS/shock
- Hemoglobinuria
- Hyperthermia
- Hyperparasitemia (>5% parasitized RBC in low endemic and >10% in hyperendemic area)
- Jaundice
- Pregnancy with severe anemia
- Severe anemia (Hb<5/mg%)

Any other significant co morbidities

If the physicians feels that he is unable to manage resistant facliporum or mixed infection.

4. Influenza including H1N1 illness

According to National Guidelines of Ministry of Health, patients with H1N1, category A & B should be treated at district hospitals. Referral is needed in all severe cases (Category C) or with respiratory failure to medical colleges. Especially look for cyanosis/chest pain/breathlessness/hypotension/Hemoptysis or any other complications like

- Primary influenza viral pneumonia
- Secondary bacterial pneumonia
- Mixed pneumonia
- Reye's syndrome, Myositis, Rhabdomyolysis, Myoglobinuria
- Myocarditis, Encephalitis
- Worsening of co-morbid condition
- with Silent chest
- Associated co-morbid conditions—CAD, metabolic abnormalities, Sepsis/Pneumonia/Arrhythmias, altered mental status
- ARDS

5. Community acquired pneumonia

Patients requiring mechanical ventilation or patients with hypotension should be urgently referred.

- Severe pneumonia(May need transfer to ICU at any time)

- Non-resolving pneumonia
- High fever, Severe dyspnoea/confusion or disorientation/marked hypoxia
- Haemodynamic instability
- Significant co- morbidities
- Hypothermia/Leukopenia/ Thrombocytopenia/Uremia
- Neutropenia
- Immunocompromized host

6. Chronic Obstructive Pulmonary Disease

All cases of uncomplicated COPD can be managed at the periphery. Referral is needed when any of the following is present

- Uncertain diagnosis or for initial evaluation
- Onset of Cor- pulmonale
- Suspected bullous lung disease
- Severe dyspnoea with increased work of breathing
- Failure to improve with treatment
- Acute respiratory failure—SPO2 less than 90%
- Resp rate >35/mt with Silent chest
- Associated co-morbid conditions—CAD, metabolic abnormalities, Sepsis/Pneumonia/Arrhythmias, altered mental status

7. Bronchial Asthma

As far as possible all asthma cases need to be managed in the periphery. Referral is needed in following situations

- Presence of Hemoptysis
- All cases of uncontrolled asthma not responding with three nebulisations or refractory asthma/status asthmaticus
- Severe persistent asthma refractory to treatment
- Near fatal/Life threatening episode • Cyanosis not improving with administration of Oxygen • Significant Co morbidities(Pulmonary hypertension, diabetes mellitus)
- All cases of acute breathlessness found to be not improving in one day time of management.

8. Diabetes Mellitus

- If the physician feels that it is to be evaluated in detail (as initial work up) and then only managed, such cases can be referred.
- Such evaluation can be done at tertiary centres, but follow up may be done at the peripheral institutions through effective back-referral.
- However all diabetes patients should be as far as possible to be managed at the level of peripheral institutions.
- In the management of diabetes, patient education is the most crucial step for success.
The following cases needs referral
- Cases of diabetes with any signs of unstable angina
- Any case of uncontrolled diabetes.
- Diabetic ketoacidosis if not showing signs of improvement.
- Hypoglycemia if not improving with medication.
- Acute complications like diabetic ketoacidosis, Hyperglycemic/ hyperosmolar state.
- Chronic complications as Diabetic retinopathy/ Nephropathy, Peripheral neuropathy/vascular or any other complications.

9. Hypertension

Diagnosis and follow up activities are possible and expected at periphery. The following Conditions need referral

- Hypertensive emergencies which need intravenous drug & monitoring
- Difficult to control hypertension: Accelerated hypertension (BP>180/110 with signs of papilloedema or retinal hemorrhage)
- All cases of other hypertensive emergencies
- Hypertension with any Complications
- If secondary hypertension /or other rare cause is suspected, look for Pheochromocytoma (Labile or postural hypotension with headache/ palpitation/pallor/ diaphoresis)/Cushing's Syndrome or other adrenal causes/Intracranial space occupying lesions/Coarctation of aorta.)

10. Coronary Artery Disease

- Any cases of persistent ischemia needs referral
- Acute coronary syndrome both ‘STEMI & Non STEMI’ to be referred.
- If there is no ICU facility available, cases can be referred.
- Cases of Congestive Heart Failure need to be referred
- Cases of Haemodynamic compromise requiring angioplasty need to be referred.
- New York Heart Association (NYHA) Class 3 & 4 may be managed at higher level institutions.
- Cases with features of Acute pulmonary oedema need to be referred
- Refer all cases after thrombolysis if Percutaneous Coronary Intervention (PCI) is indicated
- Cases of difficult arrhythmias to be referred immediately. Established & investigated cases may be managed at all levels for follow up. Stabilize the patient with the primary treatment before referring in the event of active coronary syndrome. If cardiac ICU is available with trained staff, the cases can be managed at the periphery. Availability of trained staff is an important consideration in management.

11. Cerebrovascular Accidents

- Cases of acute ischemic Stroke which are fit for thrombolysis to be referred.
- Other cases which are haemodynamically stable may be treated in the peripheral level.
- Patients with depressed level of consciousness need to be referred.
- Unexplained progressive or fluctuating symptoms need to be referred.
- Cases with papilloedema need to be referred.

12. Seizures

Diagnosed cases other than Status epileptics may be treated in the periphery. New cases to be referred after symptomatic treatment for detailed evaluation Cases of suspected CNS infections may be referred. All cases of refractory seizures may be referred.

13. Acute Kidney injury

Start measures like correction of pre renal factors, fluid challenge, diuretics etc. and if not improving then refer. Cases of Chronic Kidney Disease/ ESRD may be managed in the periphery and may be referred, if the patient is fit for renal transplant.

14. Urinary tract infections

All patients with pyelonephritis with decreased urine output or encephalopathy or CAD with LV dysfunction or Myocarditis or septic shock, may be referred to Medical College Hospital

- Uncomplicated UTI should be managed at the level of peripheral institutions.
- Bedridden patients on long term catheter should be managed by physician in a peripheral centre and may be referred if required as per clinical discretion of the physician

15. CKD/Chronic renal failure:

- In case of failure of conservative treatment can be referred for transplant.
- If physician feels that there is a need for detailed work up to find out the etiology can be also referred.
- In case of suspected Obstructive uropathy: to be referred for detailed work up
- All cases of stage IV or V CKD (Uremic symptoms and symptoms of fluid overload)
- All cases with higher levels of proteinuria (ACR 70mg/mmol or more)
- Rapidly declining GFR
- CKD with poor control of hypertension
- Suspected renal artery stenosis

16. Snake bite

According to ministry of health national guidelines, all patients with snake bites should be managed at peripheral level hospitals and be referred if needed. All patients reported with snake bite should be kept under observation not less than 24 hours. Time of bite, circumstance of bite etc should be recorded.

During observation monitoring of the patient is important. Look for evidence of systemic envenomation: neurological as well as hematological evidence. Tests of

bleeding and clotting time done every thirty minutes for the first three hours and then hourly after that. If systemic envenomation is suspected 8-10 vials of ASV is administered after test dose.

Systemic envenomation must be managed in a place where competent physician's service is available.

The patients with any of the following complications may be referred to higher centre:

- Prolonged clotting time/bleeding time(haematological),
- Respiratory difficulty or evidence of respiratory failure/ARDS,
- Extra ocular muscle involvement, Ptosis, Ophthalmoplegia (Neurological)/encephalopathy
- Evidence of early capillary leak,
- Features of impending renal failure.
- Any bleeding manifestations
- Adverse reaction to ASV administration

In the case of neurotoxic bites the primary concern is respiratory failure and this may need mechanical ventilation. While it is possible to maintain a neurotoxic victim by simply using a resuscitation bag and this should always be used as a last resort. The best means of support is mechanical ventilation operated by qualified staff.

Renal failure is a common complication of Russell's viper and pit viper bites and the common other complications being intravascular hemolysis, DIC, direct nephrotoxicity or hypotension. Renal damage can occur very early in Russell's viper bite and even when the patient is arrived the damage might have been already happened. Studies have shown that even when ASV is administered within 1-2 hours of bite it was incapable of preventing acute renal failure. The early indicators of renal failure are:

- 1) declining or no urine output although not all cases of renal failure exhibits oliguria.
- 2) Serum Creatinine >5mg/dl or rise of >1 mg/day, Blood urea more than 200mg/dl/serum, potassium >5.6mg/dl or hyperkalemia with ECG changes/ clinical evidence of uremia or metabolic acidosis.

Declining renal parameters require referral to a specialist with access to dialysis facilities. Peritoneal dialysis can be undertaken in secondary level institutions. Hemodialysis is preferred in cases of hypotension or hyperkalemia.

17. Dog Bite: The current UP State's Standard treatment protocols may be used for guidelines for referral

18. Poisoning

Timely administration of antidotes like Atropine or Pralidoxime is important to save life. All attempt to remove poison to be undertaken in the periphery before referral. Stomachs wash to be done within four hours of consumption of poison Drugs which neutralize poison can be tried. Efforts to stabilize vital signs should be made. Any samples like vomitus or empty bottle or left over tablets should be sent with the patient.

- Tertiary care is important if there is a need for ventilator support and hence such cases where mechanical ventilation is expected need to be referred.
- If patient has arrhythmia needs referral
- Haemodynamic instability is another reason for referral.

19. Alcohol withdrawal

Early alcohol withdrawal should be treated at district hospital in consultation with a psychiatrist.

However severe withdrawal should be referred to further referral centre Withdrawal cases with delirium tremens (Agitation/hallucination/delusion) or with seizures need urgent referral.

20. Acute Hepatitis/chronic hepatitis/CLD

All uncomplicated should be managed in the periphery. The following features are looked for and referred if any is present

- Increasing Bilirubin & Liver enzymes (Unexpected sudden increase in SGOT/SGPT)
- Development of Hepatic decompensation as evidenced by sudden decrease of liver size/Pedal oedema/Ascitis.

- Persistent vomiting
- Altered sensorium
- Altered sleep rhythm
- Intractable vomiting posing risk of dehydration
- Hepatitis along with dengue(Hemorrhagic cases)
- Cirrhosis liver, Portal Hypertension if Haemodynamically unstable or hematemesis.
- Pregnancy particularly third trimester

21. Chronic liver disease:

- Usually diagnosed in the periphery and referred to higher level institutions for work up. Needs detailed investigations to understand the etiology and interaction with specialist may be needed in between.
- If the treating physician feels that there is a diagnostic dilemma regarding etiology this should be referred.
- Evaluation of undiagnosed ascitis is another reason to refer to tertiary care institutions
- Patients with suspected hepatic encephalopathy/spontaneous bacterial peritonitis/upper Gastrointestinal bleed also should be referred

B.2.General Surgery

- General considerations of surgical referral: Surgical management of cases is always a team activity than an individual activity. Theatre facilities and state of art equipment is vital in management of surgical cases. Apart from the operating surgeons and anesthetists, the competence of theatre assistants, nurse and other paramedics as well as team involved in postoperative care are important considerations. Second opinion can be sought at any time for any elective cases as well as emergency cases from the referred institutions also If the surgeon is confident and facilities are available the case can be managed at peripheral centres also and in that case referral can be avoided

Elective cases to be referred to Tertiary care centres if any of the following is present

- Anesthesia risk due to co-morbid conditions
- Acute Limb ischemia
- Diagnostic dilemmas
- Lack of expertise and facilities

- Recurrent hernias/conditions which requires vascular interventions to avoid amputation (Because may need help for vascular surgery)
- Gastrointestinal malignancies
- High fistulas & complicated fistulas, Recurrent fistula(Because further recurrence rate is high)
- Chest wall tumor, Retroperitoneal tumors (Because may need plastic surgery, double layer rotation flap, defect replacement surgery etc.)
- Complicated thyroid disease (because the patient may need postoperative ventilator support)
- Malignancy thyroid
- Retrosternal goiter (Because the patient may need thoracotomy and specialized anesthetic care)
- Toxic Multi nodular goiter (because it is high risk category, Preoperative stabilization more important, post operative bleeding rate more)
- Large thyroid swelling(because it is a real challenge to surgeon, may need postoperative ventilator care)
- Parotid tumours(Because the area is high risk for facial nerve injury)
- Radical Neck dissections
- Cervical rib(Because vascular compromise is expected)
- Obstructive jaundice(In periampullary carcinoma--Whipples resection is needed; In case of CBD stone, the procedure is risky)
- Hepatic tumours
- Pancreatic tumours
- Elective Splenectomy
- Head & Neck Cancers
- Inguinal block dissection(may extent to external iliac or retro peritoneum)
- Carcinoma Penis
- A.V. Malformations(Need detailed assessment and preoperative evaluation)
- Testicular tumours
- Soft tissue sarcoma (*Major Amputation can be done in referral centres. Amputations like toe, mid tarsal, digital can be undertaken in lower level centres. In cases where the surgeon is less confident opinion can be taken from higher centres).

III. Emergency cases to be referred to Medical Colleges

- Poly trauma, Head injury
- Blunt injury abdomen
- Chest injury after tube/ Thoracostomy (if possible and indicated)
- Major burns
- Pancreatitis: Mild pancreatitis which is likely to resolve within a week with medical management may be managed at periphery. All cases of severe pancreatitis need to be referred.
- Intestinal obstruction
- Vascular injuries Cases
- **Minor cases like**
 - Hernia - uncomplicated
 - Hydrocoele/Acute scrotum
 - Hemorrhoids
 - Fistula – uncomplicated
 - Varicocele
 - Varicose vein
 - Pilonidal sinus small, large size needs plastic surgery
 - Lymph node biopsy
 - In growing toe nail
 - Ganglion, corn foot, ulcer biopsy
 - Gynecomastia
 - Amputation when plastic surgery not needed
 - Mastectomy(After discussion and decision from the Tumor board at higher centre), Benign breast lumps
 - Diabetic foot (Clearance operation to be done in periphery, Vascular compromise is usually present and elective amputation may need secondary opinion and can be referred for second opinion if necessary)
 - Fibro adenoma, Neurofibroma, Lipoma, abscess, Sebaceous Cyst should not be referred to Medical College and to be dealt at District Hospital Level

24 IV. Emergency cases/procedures which can be undertaken in Peripheral Centres

- Appendicectomy
- Repair of obstructed hernia

- Duodenal ulcer perforation
- Acute scrotum
- Suprapubic cystostomy(Open/trocar)
- Tracheostomy

B.3. Orthopedics:

Orthopedics is a fast changing specialty and concepts regarding acceptable treatment change very frequently. Hence setting proper guidelines for all orthopedic conditions is impossible unlike many medical specialties. However general guidelines are proposed for making the system more efficient and maximizing benefit for the patients.

Conditions needing Referral

A. Trauma cases.

1. Uncomplicated fractures and dislocation like fracture Tibia, Colle's fracture, Fracture Humerus, fracture patella; ankle fracture etc. can be managed in the secondary level centre.
 2. Uncomplicated fractures of neck of femur in elderly without comorbid medical conditions can be managed in secondary centre. Adequate anesthesia and theatre facility including 'C Arm' should be available in secondary centre.
- Polytrauma should be transferred to tertiary centre only after adequate haemodynamic stabilisation and splinting. One dose of broad spectrum antibiotic (cephalosporin) along with tetanus prophylaxis should be given.
 - Complicated fractures like open fracture which require urgent surgical intervention may be referred to tertiary centre.
 - Spinal injuries: Stable fractures (< 50% compression, without neurological deficits) may be managed in secondary centre. Unstable spinal fractures (> 50% compression, 2 column 26 involvement, with Neurological deficits) may be referred to higher centre. One dose of methyl prednisolone in a dose of 30mg/kg body weigh may be given as a bolus dose. Along with intravenous Pantoprazole 40 mgs. Can also be given. Then patient may be transported taking care not to produce further damage (spinal board).

- Knee problems like internal derangement requiring diagnostic and therapeutic arthroscopy may be referred, till trained personnel and equipment is made available in secondary centre.
- Hand injuries, requiring surgical procedures and reconstructive procedure/ re implantation may be referred preferably to plastic surgery department.

B. Orthopedic diseases

- Common orthopedic problems like Tennis elbow, plantar fasciitis, De Querveins disease, low back ache, neck pain, knee pain, CTS (Carpal Tunnel Syndrome) etc. can be initially assessed and treated in secondary centre. If he/she faces any therapeutic or diagnostic dilemmas, it can be referred to tertiary centre with proper documentation.
- Spinal diseases like IVDP (Intervertebral Disc Prolapse), Spondylolisthesis, Tuberculous spine, spinal canal stenosis and scoliosis which require surgical intervention may be referred.
- All cases which require joint replacement arthroplasty may be referred till adequate infrastructural facilities made available in secondary centres.
- Acute infective conditions like osteomyelitis and septic arthritis which require surgical treatment may be referred if facility is not available.
- Specific infections like bone and joint tuberculosis may be managed in secondary centre. However if it develops complications or requires surgical management may be referred.
- Rare orthopedic problems like developmental disorders, neurodevelopmental conditions, complex bone and joint deformities requiring reconstructive procedures like Limb Reconstruction System (LRS)/ Ilizarov may be referred. And those ideal for academic discussion may be also referred. Examples 1. Perthes disease 2.Cerebral palsy 3.Bone dysplasia 4.Muscular dystrophies 5.Metabolic bone diseases

Musculoskeletal tumors

Musculoskeletal tumors and tumor like condition may be referred because biopsy and definitive treatment can be done in these centres. However benign conditions like osteochondromas which can be managed in secondary centre need not be referred.

Congenital anomalies: Common anomalies like Congenital talipes equinovarus (CTEV, Clubfoot) may be treated but complications like relapse and neglected clubfoot may be referred. Developmental Dysplasia of the Hip (DDH), Pseudoarthrosis Tibia, and Spinal Dysrrhaphism, which require complicated surgical procedure, may be referred. Removal of implants as far as possible should be done in secondary centre.

Investigations: If the patients need higher investigations (Doppler, MRI, and CT) may be referred to Radio diagnosis in tertiary centre (if not available at secondary level). It may be assessed by the surgeon in the secondary centre and referred if necessary.

Back referral Special considerations for Ortho referral

- Patients should be kept only for a minimum period in tertiary centre
- Patients with uneventful postoperative period may be referred back to the nearest Govt. hospital where orthopedic surgeon is available
- The hospital should arrange ambulance facility for referral and back referral as many patients are not willing to co operate due to the high transportation cost involved.
- Suture removal to be done in the respective secondary centres.
- Change of plaster of Paris cast can be done at the secondary level institutions
- Follow up of minor operation cases can be done at the secondary level institutions

B.4. Otorhinolaryngology

Special guidelines for ENT referral

- General co-morbidities causing added risk including uncontrolled diabetes, uncontrolled hypertension, cardiac, neurological, hepatic, hematological or renal diseases complicating ENT disease, anesthetic risk for surgery, Suspicion of impending airway compromise or any life threatening complication during treatment or surgery, Polytrauma involving ENT and other areas should be first seen by appropriate specialist/general surgeon/Physician and referred.

- Diagnostic dilemma or cases non-responsive to usual lines of management for reasonable time can be referred.
- Elective cases from PHC and CHC may be referred to CHC / District hospitals where ENT specialist is available. Cases may be referred by the concerned ENT surgeon to medical college, only if indicated.
- Patients attending primary care centres after routine OP hours may be advised to attend the OP of secondary care hospital next day after symptomatic treatment, instead of referring to Medical College.
- Adequate support from higher authorities when patient lands in complications after refusing referral need to be sought in advance.
- HIV, HCV and HBsAg positive patients should be managed at secondary care centres and not shunted for this reason alone.
- Referral should not be used as a means of shunting patients. Specific guidelines are given below.
- In all medico legal cases, wound certificates should be written by the attending doctor from the referring institution. The following surgeries may be undertaken as far as possible at the secondary care centre. Depending upon availability of ENT specialist and availability of equipments
 - Tonsillectomy & Adenoidectomy
 - Septoplasty, Sub mucous resection & Functional
 - Endoscopic Sinus Surgery (FESS)
 - Mastoidectomy, Myringotomy and grommet insertion & Tympanoplasty
 - Direct laryngoscopy and Hypopharyngoscopy
- Any post-operative complication not controlled by usual means can be referred along with adequate information and other accompaniments like specimen in relevant situations.
- **Specific conditions for referral**
This list is not exhaustive or all encompassing. Discretion of the referring surgeon at primary and secondary care centres is very well solicited.

Ear

Cases which can be managed at the secondary care centres:

- Pre-auricular sinus
- Hematoma pinna
- Wax ear
- Keratosis obturans
- Pseudocyst pinna
- Complicated diffuse external otitis
- Otomycosis
- Foreign body ear in external canal
- Injury pinna including cartilage injury
- Traumatic perforation of tympanic membrane
- Perichondritis pinna
- Herpes zoster oticus
- Myringitis bullosa and granulosa
- Otitis media with effusion aero-otitis
- Chronic suppurative otitis media for Mastoidectomy and myringoplasty
- Chronic suppurative otitis media attico-antral disease
- Bell's palsy
- Otosclerosis – conservative management
- Menière's disease – conservative management
- Benign paroxysmal positional vertigo (BPPV)
- Deafness assessment and certification

Cases which are to be referred to tertiary care centres:

- External canal atresia
- Pinnaplasty
- Foreign bodies in ear – impacted or in middle ear
- Malignant otitis externa
- Intractable referred otalgia and tinnitus for detailed evaluation
- Trauma ear or temporal bone with neural and labyrinthine involvement or CSF otorrhoea
- Chronic suppurative otitis media for ossiculoplasty

- Complicated chronic suppurative otitis media suggested by fever, headache, nausea, vomiting, nerve involvement, vertigo, abscess formation, visual field defects
- Facial nerve decompression
- Otosclerosis – for surgery
- Revision mastoidectomy and revision Tympanoplasty
- Menière’s disease – for surgery
- BPPV not responding to usual management
- Sudden sensorineural hearing loss
- Tumors of external, middle, inner ear or CP angle
- Deaf for cochlear implantation
- Complicated F. body esophagus and F. Body bronchus

Cases which are to be referred to tertiary care centres:

- Congenital anomalies like choanal atresia, nasal dermoid, meningocoele, glioma
- Fracture nasal bone with telescoping into ethmoid
- Fracture upper, middle and lower third of face with airway compromise or orbital complications
- Severe epistaxis requiring post nasal packing and arterial ligations
- Major complications of sinusitis as suggested by persistent fever, headache, nausea vomiting, proptosis, dimness of vision, double vision, restriction of eyeball movement or osteomyelitis of facial bones
- Oro-antral fistula
- Rhinitis requiring detailed evaluation including allergic testing
- Granulomatous diseases and fungal infections
- CSF Rhinorrhoea with or without meningocoele or meningoencephalocoele
- Recurrent nasal polyposis requiring detailed evaluation
- Allergic fungal rhino sinusitis
- Headache not responding to usual lines of management and requiring detailed radiological and ENT evaluation
- Benign and malignant lesions of nasal cavity requiring extensive surgery or radiotherapy

Oral cavity, pharynx, larynx head and neck

Cases which are to be referred to tertiary care centres:

- All neonates, infants and toddlers with airway compromise
- Membranous tonsillitis
- Lingual tonsillitis/abscess
- Lingual thyroid
- Peritonsillar abscess with: severe trismus, parapharyngeal or retropharyngeal space involvement, impending airway compromise
- Ludwig's angina
- Retropharyngeal and parapharyngeal abscesses
- Acute epiglottitis especially in children
- All cases of acute laryngeal edema
- Corrosive poisoning
- Foreign bodies of oral cavity, oropharynx or hypopharynx with abscess formation or impending airway compromise
- Foreign bodies of oesophagus
- Foreign bodies of bronchus
- Penetrating neck injuries
- Cases requiring micro-laryngeal surgery
- Cases with trismus of spondylotic changes which necessitate fiberoptic scopes
- Laryngeal injuries with fracture of cartilages or airway compromise
- Nasopharyngeal angiofibroma
- Pharyngeal pouch
- Cases requiring oesophagoscopy
- All malignancies of oral cavity larynx and pharynx requiring surgery
- Benign or malignant tumors of the parotid
- Unilateral or bilateral vocal cord paralysis – traumatic or otherwise
- Thyroid malignancies
- Benign and malignant parotid diseases
- All malignant neck swellings including lymph nodes which require surgery
- Unknown primary for detailed investigation (All diseases of the throat are potential threat to airway; either the disease itself or the interventional surgery. This has to be

anticipated and referral made at the earliest if facilities for airway management are not available)

B.5.Obstetrics & Gynecology:

Reference guidelines special to maternity referral: Maternity (Obstetric) referrals are more complex and the decision making window is narrow. Maternity referral is based on the concerned Obstetrician's clinical judgment depending on the nature of obstetric condition and proximity to the health care facility.

There are essentially two types of references: elective (Planned referral) and emergency referrals.

As the obstetricians experience and availability of supporting specialist services differ, a lot across institutions, the individual practitioner can take decision according to the merit of individual case.

The conditions for referral are

- Patient should be preferably seen by a gynecologist before elective referral.
- Emergency referrals can be done by the duty doctor after discussion with the gynaecologist.
- Unit system with a chief and two assistants is to be followed wherever there are enough doctors.
- Round the clock availability of anaesthetists should be ensured wherever emergency obstetric care is given.
- Medico legal cases should be seen by a gynaecologist wherever available.

All district hospitals should have blood bank facilities round the clock. Basic lab investigation facility should be available round the clock.

Medico-legal cases: The medico-legal case where gynecologist is not available on duty is referred unnecessarily for examination by gynecologists. The case should be attended by on call duty gynecologist and facility for transport should be made available by the hospital administration. This can avoid unnecessary referral.

Stabilizing the patient before referral:

All possible efforts should be done for this and efforts like starting an intravenous drip, administration of drugs in the case of hemorrhage, preterm labor etc. should be undertaken along with referral.

Elective antenatal references:

Risk assessment should be done at the first visit at all centres and early referral to be ensured. Any high risk factor identified should be referred after first visit

Pregnancy with Heart Disease:

If known case of cardiac case or first detected heart lesion, first refer to a cardiologist for assessment of risk. If found to be low risk cardiac lesion (Like MVP or mild MR) then the pregnancy can be managed at secondary level. High risk cases need to be referred to tertiary care facility.

Hypertensive disorders

Mild gestational hyper tension that is if BP is controlled with one drug and no other complications can be managed at the secondary level and other cases can be referred to a tertiary centre sufficiently early.

Diabetes

GDM without complications can be managed at the secondary level, Pre gestational diabetes and complicated GDM cases should be referred to tertiary centre sufficiently early. Multiple drug allergies should be referred to a tertiary centre Thyroid disorders can be managed in consultation with a physician. Uncontrolled cases can be referred. SLE and auto immune disorders should be referred to tertiary centre. Anaemia – Severe anaemia in late pregnancy should be referred to a tertiary centre. Jaundice complicating pregnancy all cases should be referred. Fever – follow the fever protocol in all cases and refer appropriately. Seizure disorders with pregnancy can be referred Psychiatric cases after consultation with a physician or psychiatrist can be referred. All cases with anticipated anaesthesia complications like severe obesity can be referred. Underweight cases (< 40 kg) and over weight (> 90 kg) can be referred.

Obstetric complications

- All previous obstetric adverse outcomes should be referred to a tertiary care centre for evaluation.
- Hyperemesis – Majority of Hyperemesis can be managed at secondary level and non-responding cases can be referred to a tertiary centre.
- Previous caesarean where complications are anticipated like previous CS with placenta previa, anomalies, IUD and complications during previous LSCS should be referred sufficiently early.
- Mal presentation can be managed at the secondary level.
- Multiple pregnancies with any complications should be referred.
- APH cases should be referred. Placenta previa cases diagnosed after 28 weeks can be referred.
- IUGR, Growth restriction severe enough requiring neonatal care in can be referred.

Emergency Referral

- It is better not to refer ruptured ectopic, cord prolapse, failed induction and incomplete abortion if facilities for immediate intervention are available.
- Pre-term labour and PPROM can be referred to tertiary centre for neonatal care.
- PPH and third stage complications can be referred in time after first aid measures like IV crystalloids, condom tamponade, continuous bladder drainage and oxytocin drip.
- Eclampsia can be referred after giving 1st dose of Magnesium sulphate with proper documentation.
- Post-operative complications. Any acute or severe post-operative complications can be referred if the treating gynaecologist feels necessary.
- Relaparotomy should be avoided in the periphery as far as possible.
- Postnatal reference – Details of mother's treatment and investigations should be furnished in the reference card even if the mother is referred for baby sake.
- Acute abdomen in pregnancy – Any case of acute abdomen in pregnancy can be referred.

Conditions not to be referred– just because the case is having only the specified condition and otherwise no added risk.

- HbsAg, HIV

- Chicken pox
- Un complicated IUD

Gynaecology Reference

- All cases of suspected malignancy
- Any gynecological condition with significant medical or surgical co morbidities and drug allergy.
- All reference letters should contain the details of the patients with treatment given and other relevant investigation findings. GOI Guidelines has to be followed.

B.6. Pediatrics

REFERRAL PROTOCOL IN NEWBORNS, INFANTS AND CHILDREN

NEWBORNS

In newborns, whenever a cannula is put, a sample of blood should be drawn for investigations if needed.

Refer

- Preterm < 32 wks , IUGR < 1.8 kg
- Major congenital malformations e.g. TOF, choanal atresia, diaphragmatic hernia, ruptured meningo-myelocele, ectopia vesicae
- Central cyanosis
- Any bleeding manifestation in spite of Vitamin K administration
- Bulging anterior fontanelle
- Blood in stools
- Pathological abdominal distension / bilious vomiting • Initially normal, by 3-28 days, cannot suck and has stiffness/ muscle spasm
- Not gaining weight as expected

Respiratory distress or respiratory rate > 60 per minute with cyanosis / grunt / severe chest retractions/ in drawing

Think of hyaline membrane disease, surgical conditions, sepsis, pneumonia and asphyxia. Assess Downes score and if more than 3, refer with free flow oxygen.

Downes Score

Score	0	1	2
Respiratory rate	<60	60-80	>80/ apnea
Cyanosis	none	In air	In 40% oxygen
Grunt	none	Audible with steth	Audible without steth
Retraction	none	mild	severe
Air entry	good	diminished	Barely audible

Poor feeding/ poor activity

Apnea

Think of hypoglycemia, hypothermia, sepsis, intracranial bleed, anemia and apnea of prematurity. Immediate actions include stimulation of the baby, positioning the neck and suctioning mouth & nose. Bag and mask ventilation may be given if needed. 10 % D and warmth may be provided if hypoglycemic or hypothermic. If not improving with these measures, baby should be referred.

Convulsions

Failure to pass meconium in 24 hrs

Failure to pass urine in 48 hrs

Think of genitourinary malformations. Review antenatal ultrasound records (oligamnios, fetal kidneys), look for palpable bladder & kidneys, assess lactation and put intravenous fluids. Refer if any abnormality is found or no urination occurs after a challenge with intravenous fluids.

Neonatal Jaundice –

Do serum Bilirubin, Hb and blood grouping. Refer if serum Bilirubin in indefinite/exchange range, serum Bilirubin in phototherapy range but has no facility, baby is sick – poor feeding / activity, excess cry, convulsions and jaundice > 2weeks with clay colored stools.

Infants and Children

Acute short febrile illness

Control fever before your clinical examination as a child with high grade fever will appear sick. Once fever is controlled, do a clinical examination and decide whether the child is sick or not sick. Arrive at a provisional diagnosis and do investigations as required. Clinical examination includes vital signs, capillary filling time, the feel of extremities, sensorium, appearance whether toxic or not, pallor, icterus, lymphadenopathy, ear nose, throat, chest, anterior fontanelle in small children and meningeal signs in older children, abdomen and skin.

Treat but refer if not improving in case of viral fevers, measles without complications, dengue without warning signs, uncomplicated malaria, 49 ear, throat & other URI, ALRI, ADD as per algorithm, uncomplicated UTI (culture facility present) and uncomplicated skin infections. Refer in case of sick child with danger signs e.g. Shock, altered sensorium, bleeds etc, severe dengue, measles with severe complications, CNS infections (if CSF study & culture facility not available), complicated UTI, complicated malaria and ALRI, ADD as per algorithm.

Pyrexia of Unknown Origin

Defer antibiotics if not sick. Investigation includes urine & blood C&S. In enteric fever not responding to treatment or with any complications, referral should be done. Leptospirosis with complications should also be referred.

Pneumonia

Classify severity of pneumonia based on age, presence of danger signs (not able to feed, drowsiness, cyanosis, stridor in a calm child, convulsions, severe palmar pallor, severe malnutrition and severe dehydration). ALRI, very severe illness without tertiary care facility for management, ALRI, very severe illness, tertiary care facility available but not responding to treatment in 24 hrs , presence of complications (empyema, pneumothorax, pleural effusion), rapidly progressing pneumonia (staph, viral) and associated congenital heart diseases, immunodeficiency, nephrotic syndrome, malignancy and on immunosuppressive therapy should be referred. Pre referral actions

include taking a chest X-ray, administration of first dose antibiotic and free flow oxygen. The latter should be continued during transport also.

Malnutrition

Bronchial asthma

Child should be referred if there is no improvement with 3 doses of nebulization with short acting beta 2 agonists (SABA), SPO₂ after 3 doses of nebulization with SABA < 92%, on maximum dose steroids, past history of ventilatory management, ICU admission or life threatening episode and history of sibling death due to asthma.

Acute diarrhoeal disease

Classify dehydration. In severe dehydration, give 30 ml/kg of intravenous RL or NS over 30 min in an older child and over 1 hr in an infant. 70 ml/kg of the fluid should be continued over 2 ½ hrs in an older child and over in 5hrs in an infant. ORS may be given if possible. Give oxygen if in shock. In case, shock is not corrected with this management, child should be transferred with intravenous fluid and oxygen to a higher centre. Associated severe acute malnutrition and suspected sepsis are other indications for referral.

Fever with convulsions

Anemia

Refer if Hb < 7 g/ dl, in suspected hemolytic anemia/ hypoplastic anemia/ malignancy, iron deficiency anemia not responding to oral therapy and associated chronic heart/ respiratory/ hepatic/ renal disease.

Acute Nephritis

In case of urine output < 1 ml / kg / hr, hypertension with complications, rising blood urea levels, renal failure requiring peritoneal dialysis and seizures, patient should be referred. Indications for peritoneal dialysis include blood urea > 150mg/dl, serum Creatinine > 4 mg/dl, serum potassium > 6meq/l.

Acute hepatitis

Signs of hepatic failure including flap, altered sensorium, altered prothrombin time (PT) and sudden shrinkage of liver span are indications for referral.

Acute abdomen & acute scrotum

All cases should be referred to a surgeon or a higher centre

Snake bite

Presence of local reaction, systemic reaction, prolonged clotting time (CT) and abnormal vital signs are indications for referral.

Care of New-born /child during transport

- Provide warmth- covering should include scalp & extremities in new-borns
- Appropriate fluids if hypoglycemic/ dehydrated
- Oxygen if in respiratory distress or has tachypnoea / cyanosis
- Inform the higher centre beforehand over phone if possible

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