

The Health Referral System In Kerala

1. Introduction

In Kerala referral system has been recommended by the pai committee and been introduced in operation since the year 1984. But the effectiveness of this has always been criticised.

Definition of a health referral system

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.*** On another level, referral includes referral from the community to the highest level and back, that is, a two-way referral system or feedback system. (See figure) In practice, 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 that requires coordination and information exchange between the referring facility (usually at the primary care level) and the first referral hospital.

2. Context

The process of implementation of referral systems must be seen against the background in Kerala of relatively high health status indicators, uneven achievements across districts and between districts, less differences between urban and rural areas and between the rich and the poor. The triple burden of morbidity exists in the presence of low mortality. In addition, malnutrition, iron deficiency anaemia and maternal and neonatal mortality are all causes for concern. Cardiovascular and chronic diseases, cancer, accidents have become the main causes of adult mortality whereas infectious and parasitic diseases are the main causes of concern among children.

It would be difficult to examine referrals without looking at it as taking place within a decentralized health service system. Now the Kerala Government have transferred the delegating powers to LSGs. The main feature of the delegation is the significant transfer of operational authority and responsibility to District, Taluk and Grama Panchayats. In an era of decentralization it is important to know whether systems are functioning as well as they ought to be, given the new range of responsibilities handed down to LSGs and corresponding health administration and the authority they have to make changes.

4. Rationale for implementing referral system

International organizations and health experts have an interest in advising governments to focus and invest in health care and effective health systems. The presence or absence of referral systems and the degree to which they are effective are among the indicators of access to care as well as **quality**. Ensuring access in appropriate manner is the concern of **equity** health care delivery. In general, 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. Ideally, if an appropriate level of care is made available when it is needed (taking geographical factors, time, affordability and emergency services into consideration); referral systems can be more effective. In short the whole system should work in synergy and harmony towards the single motto of achieving all attainable goals. These attainable goals and means of achievability should be **acceptable** to patients and people also. It should be remembered that implementation of referral systems also 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. When we consider implementation of referral system we have to get the perspectives of four stakeholders in that process of patient management.

- Patients
- Referring doctors
- Receiving doctors
- Administration

The main purpose of introduction of referral system is to improve **efficiency** of service delivery. This will improve streamlined patient flow, avoid patient waiting time, overcrowding in the OP and labs or 'crowding in phenomena', avoid floor

patients and ensure better house-keeping etc. The introduction of referral is 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. There is more efficient use of resources at the referred end because those, which can be attended at peripheral hospitals, are certainly seen and managed at that level. So the services at peripheral hospitals are expected to be completely utilized.

5. Requirements for an effective referral system: The most important requirement is that everything should be explicit. There should not be any communication gaps.

1. There should be agreed referral policies, protocols and administrative guidelines in support of the referral system put in place between levels of care. These guidelines should be appropriately endorsed by authority, and also acceptable to the stakeholders.
2. Appropriateness.(Competence of persons) Health professionals should be skilled in knowing 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).
3. There should be standard case management (treatment protocols and guidelines).
4. There should be clearly delineated levels of care and an accompanying mix of appropriate skills for each level of care. Roles and functions should be clearly delineated
5. It must take into consideration the patient's ability to pay.
6. It 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.
7. It gives consideration to logistical issues such as transport. Referrals should be made to the nearest appropriate and affordable health facility which should as far as possible be free in cases of emergency.
8. Its facilities should be equipped to receive referrals. In the case of maternal and neonatal care this includes facilities capable of providing basic

emergency obstetric care (BEOC) and comprehensive emergency obstetric care (CEOC). The WHO standard is a minimum of 1 basic facility per 125,000 population as a minimum. For CEOC the figure is 1 per 500,000 population. This makes planned referral to the appropriate facility essential.

9. Health professionals (in particular teams) should be available to provide care in hospitals once referrals are made.
10. The referral system must be introduced in phased manner first at the basic departments Otolaryngology, Surgery, Paediatrics, Internal Medicine and obstetrics and gynaecology as well as basic ancillary services such as X-Ray and laboratory services. The initial phase or transit phase may have problems and this should be anticipated in advance.
11. Feedback/follow-up on referrals received by hospitals. This could be as simple as a standard feedback form. Uniform template for letters, phone call facilities/email/fax should be provided There should be back-referral as well as 'in between communications' wherever needed especially to the primary care level after discharge
12. The system should be able to monitor, supervise and evaluate the quality of care, adherence to referral practices and support mechanisms.
- 13 Strengthening the peripheral institutions is of utmost importance.

In order for referral systems to function effectively the lower levels must be operated by appropriately skilled personnel who have the necessary equipment and an adequate drug supply. This ensures that there is delivery of the range of services required and unnecessary referral avoided. Self-referral to higher levels or skipping of one step overburdens secondary and tertiary care facilities where unit costs are higher underutilizes health centres and other primary care facilities and increases out-of-pocket payments to the majority of general fee-paying patients.

6. The referral Process

6 a. Model of referral system

It is common for most countries to have three different levels of care. A primary health care level consisting of School health service/Anganwadi/MiniPHC/PHC, or health centres or some equivalent. This level is meant to deal with health problems of most of the population. At the primary care level certain drugs are available and

are administered by a mixture of either health assistants, nursing staff (which may or may not include midwives) (Remember the medicine kits available at Anganwadi/ with health worker). There should be a range of laboratory tests that match the level of care provision.(Example: simple tests like urine albumin)

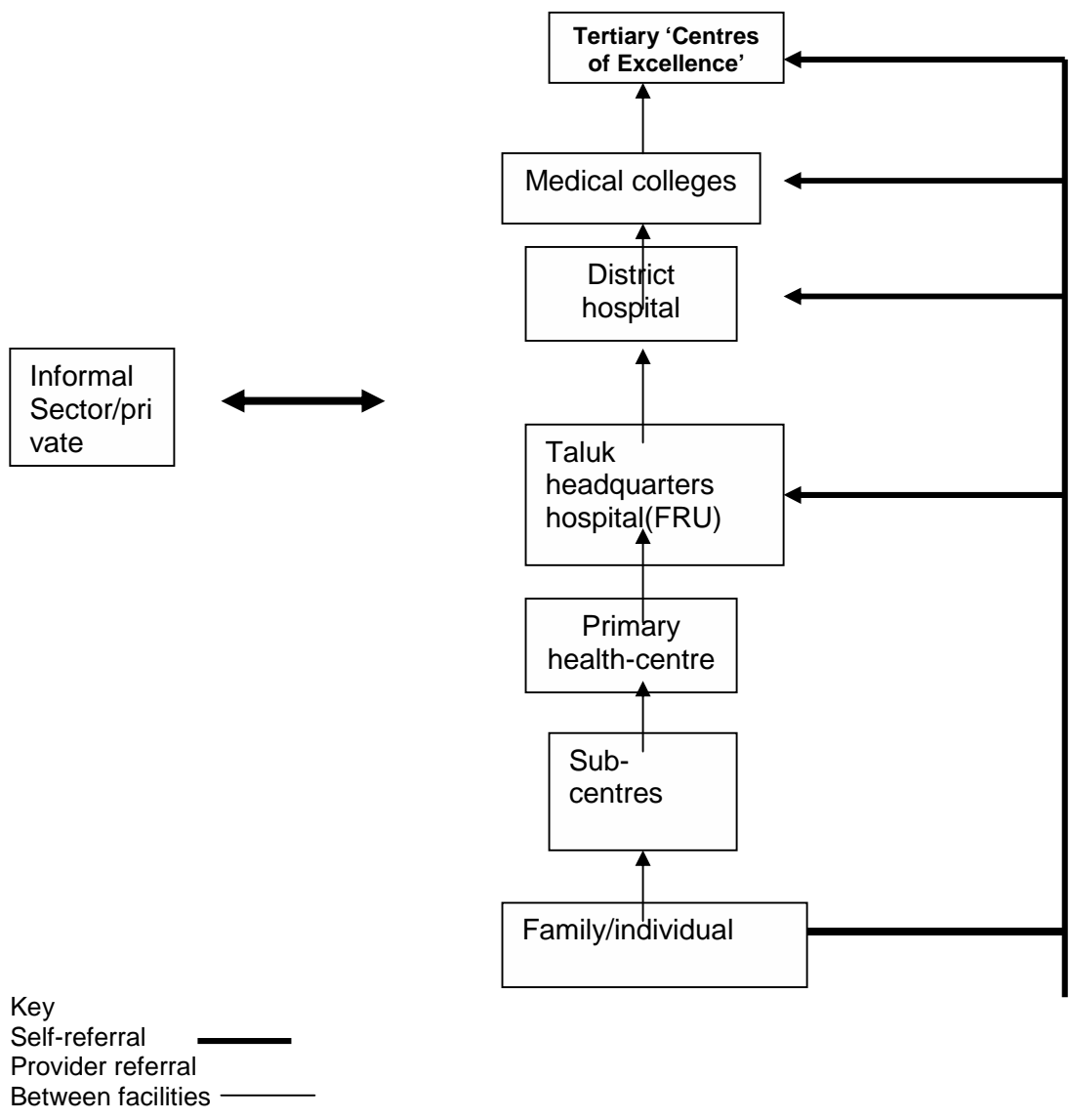
Referral to the next level should occur:

- When the patient needs expert advice; (Whether to undergo surgery: example: goitre)
- 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: Laparoscopy)
- When a patient requires a technical intervention that is not within the capacity of the health centre; Example: surgery
- When a patient needs in-patient care. (Example ICU treatment)
- 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

The 'gate keeping' function at the primary care level which can be performed by health centres or by general practitioners in some systems (e.g. the UK) is particularly important since it filters treatments to the higher more expensive levels.

This saves unnecessary cost.

Figure: The Referral pathway in Kerala



6.b. Administrative and clinical arrangements and anticipated problems

The state level should have responsibility for evaluating the operation of referral systems; referral was introduced in the state since long but adherence was poor. The specific role of administration consists of coordination and facilitation e.g. obtaining the services of specialists from elsewhere to work in the province if needed, or, providing funds for buying equipment and supplies for hospitals and funding training for vertical programmes still financed from the GOI.

At the district level, which does have the responsibility of planning primary health care services, the concern should be with referrals and lack of funding for operational activities for example: arranging for ambulance. This is coupled with the lack of manpower to undertake their range of responsibilities since decentralization.

In Kerala we have sufficient specialists in some specialities. The availability of other technical staff can be still problem (Blood bank technician, Theatre technician, speech therapist, Psychologist etc) uncertainty about how referral guidelines should be established and what indicators should be used to determine how the process is working should be resolved .

6.c Patterns of Referrals

Referrals are expected to take place from first stratum to the second and third stratum with a corresponding decrease in the quantity of referrals going to the higher levels.

The pattern of referral for national program can be as it is envisaged in the available guidelines.

6.d Procedures for referring patients.

The most common type of referral now is self-referral. In the absence of general guidelines, patients can enter the system at any level as long as they are able to pay. Based on 'guestimates' given by health professionals, 50% or more of referrals at the hospital level are self-referrals. Some times this guidance to seek which specific institution is helped by agents or other intermediary sources also.

Discussion with specialists reveals that no serious judgements are made by health professionals regarding the appropriateness or inappropriateness of self- referrals. When questioned about the appropriateness of self-referrals hospital doctors did not base their judgements on evidence on the severity of illness, but on the basis that the patient felt he/she "would receive better treatment" if seen by a specialist, regardless of the nature of their complaint. This opinion was voiced despite the admission that, (with the exception of self-referrals for emergencies) referrals that came from other health facilities tended to be for illnesses of a more serious nature when compared with those of persons who self-referred. Sometimes there is considerable underestimation of severity of illness

6.e Infrequent two-way provider referrals (Back-referral)

Two-way referral is not a common practice, although it does occur. It is not possible for health centre doctors to know how many patient referrals were taken up because there is no established system of sending information back to the health centre. Some doctors express the desire to know if their provisional diagnosis was correct. Any type of feedback was through the patient returned to the health centre for a subsequent visit. The onus is therefore on the patient and not the health

professional to provide information. In rare instances the doctor makes phone calls to communicate or give letters to the referring doctors.

Referrals between the private and public sector

Usually referral from public hospitals is within that system and from private to private only. Exceptions occur for diseases with national programs.

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

7. The support activities

- The revision of the basic concept of referral efforts and management of referral health service programmes to support hospital autonomy and decentralization(Example: Planning meeting like this on today)
- Development and consolidation of a quality assurance programme and rational treatment in hospitals in the form of treatment protocols ;
- Increased coverage of services to poor people through development and application of subsidization appropriately targeted;(RSBY &Insurance may help)
- 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 (social audit)

Transport

The implementation of effective and comprehensive health programmes in a district is dependent on the availability of adequate transport. This is particularly vital in rural areas to provide:

- Mobile health services to people living in rural and remote areas, without access to a fixed clinic.
- Transporting patients to a referral facility (e.g. from clinic to hospital, or from district hospital to regional hospital).
- Community-outreach services such as community nurse visits, DOTS programmes, and Palliative care visits etc.
- Supervision and support visits from district health offices to health centres and from health center staff to villages in remote areas.

Not all health centres may have an ambulance, which meant that patients had to bear the cost of transport themselves for routine treatment as well as for emergencies. Even if ambulance is present driver may not be available, or the POL may not be or everything may be with panchayat. The resources from untied funds of NRHM or HDS can be used.

9.3 Recording and reporting

Hospitals should accurately record illnesses published in the top 10 reasons for inpatient and outpatient morbidity according to ICD 9 or 10 classifications. This makes it somewhat difficult to use these figures as one indication of the appropriateness of referrals to hospital. Diagnostic uncertainties can occur as well as non-familiarity of ICD 10. Insufficient supervision of medical records staff so that inaccurate records are not corrected.

9.4 Referral documents

The referral documents from the health centre should have minimum amount of information for general patients referred to hospital. Referral forms commonly record the following: name; age; occupation; address; and temporary or provisional diagnosis.

General additional recommendations for strengthening of referral systems

Although a number of suggestions will be given to establish or strengthen referral systems it is recognized that unless and until there is an effective **third party purchasing arrangement (health insurance)** that covers more of the population than at present health professionals will have little or no incentive to change their current 'for profit' practices with regard to appropriate and more equitable referral practices.

The **whole system should be an integrated network**: Suggestions of ways to improve referral systems must look not only at hospitals as end referral points. It is also important to embrace the concept that referral systems should be two-way process. The case for a generic approach is that there are many patients whose condition falls outside the scope of specific programmes, but who nevertheless need diagnostic and treatment resources, which are not available at the facility at which they first present. Disease specific or program specific approach also can be thought. While health facilities are classified into a hierarchy which broadly corresponds to the administrative divisions of a region(Catchments area not clearly defined), with higher tier facilities concentrated at the urban centre and lower tier facilities scattered at the periphery of each division, the geography of the country forces the need for some referrals that do not conform to the district. Despite the geographical constraints, this does not mean that a generic approach should not be aimed for in conjunction with the strengthening of referrals in specific programmes. Current training and monitoring activities in quality assurance by state health offices can incorporate a component on referral systems between primary, secondary and tertiary levels.

Referrals between facilities

Some of the measures that could therefore be taken are as follows:

- Assuring that drugs and equipment are available at the primary care level in adequate quantities at the health centres, sub health centres and

integrated health posts so that patients can feel more confident that they will receive appropriate treatment at the primary care level.

- The provision of laboratory facilities in proportion to the needs of the community. There needs to be some assessment by the district health office of which system is best, depending on their local situation and available funding.
- The availability of appropriate equipment at all levels. Even with the best training, nurses and doctors are unable to perform their duties without the appropriate equipment.
- In more remote areas, greater consideration must be given to the upgrading of facilities at the primary health care level since some communities may be more than 12 or more hours away from secondary health care services.
- Informing patients about what services are available at each level in their own districts should be part of the training of cadres. **(Citizens charter)**

Referrals for poor patients (Special problems anticipated)

1. Identification of poor is a problem. The issue of transparency of the persons identified as poor is a sensitive one. In order to encourage transparency, the names of persons eligible to receive a support can be displayed in health centre documents).
2. Monitoring of service utilization by poor patients by the HDS committee should be undertaken to ensure that patients are receiving services as intended and are being appropriately referred.
3. Patients should have a channel to have their complaints heard, if they feel they did not receive adequate care or appropriate referral by instituting a complaints procedure

The steps for implementation of referral system

- Categorizing of services that are provided by health facilities at all levels primary, secondary and tertiary (village, district, Taluk, Urban health

centre and teaching/specialized) taking into consideration what is practiced.

- Examining the referral services between hospitals and their linkages with other hospitals both horizontally and vertically.
- Enlisting diagnostic conditions for considerations of referral(Example:DRG)
- Defining alternate arrangements like Local OP
- Introducing other process like strengthening peripheral facilities
- Better documentation of services
- Better patient tracking and monitoring system like computerization
- Reviewing the current patient flow and critically assessing the strengths and weaknesses of the system including anticipated threats.
- Introducing patient management protocols and clinical audit
- Adherence to national program guidelines

Activities planned before implementation of referral

Activity 1

Determine which clinical conditions should be referred (Please plan this list today)

Designate a small group of primary care physicians and referral specialists i.e. health centre doctors and private practitioners and specialists from class. One cannot be prescriptive about the number of doctors and specialists since that would depend largely on the number of districts being covered and the willingness of doctors to give of their time. They must be willing to see themselves as part of the same overall system of care. The group should work together to draft a set of guidelines that outlines the clinical conditions best managed on the primary care side and the clinical conditions best referred. Each group will draw this boundary at different places along the continuum depending on multiple factors, including local practice habits, scope of care and facilities available at each level, previous patterns of referral and local availability of various referral specialists.

There could also be agreement on priority diseases for referral based on the health profile of the district/sub-districts.

Identify priority diseases that may need urgent referral, the General Practitioners and the specialists can consider the symptom profile of patients presenting from 3 perspectives: with the relevant disease type (i.e. the 'hospital perspective'); the prevalence of these symptoms amongst patients attending General Practitioners (the primary care perspective); and, in the population as a whole (the community perspective). Based on these assessments the Group can make preliminary recommendations on criteria for urgent referrals.

Activity 2

Determine what information should be included on the referral forms from primary care to enable the hospital doctor to have as complete a picture as possible of the type of illness being referred. The 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 certain essential information should be completed for all referrals, including those made in emergency situations. They cover:

Referral to

Consultant/receiving practitioner and/or specialty clinic;

- Hospital and hospital address

Patient details

- Surname, forename
- Patient's address
- Date of birth

Referring practitioner details

- Name of referring doctor

- Address of referring doctor

Clinical information

- History of presenting complaint/examination findings/investigations results
- Reasons for referral (including expectation of referral outcome)
- Past medical history (if available)
- Current and recent medication
- Clinical warnings (e.g. allergies, blood borne, viruses)
- Additional relevant information

Other information

Signature of referring doctor and date

Additional 'desirable' information, which can be omitted for emergency referrals but completed in other circumstances if possible includes:

- If ambulance transport is required
- Urgency of referral (with a reason if other than routine)

Patient details

- Gender
- Title
- Telephone number

Referring practitioner

- Telephone number
- Fax number
- Postal pin-code

Clinical information

- Smoking status
- Alcohol consumption
- Additional relevant information such as information not included in other parts of the letter. Examples may include clinical or social information specific to the patient being referred; any disabilities; information that may

be relevant to the hospital which the patient may be reluctant to reveal; or details of the patient's understanding of their condition.

Activity 3: Develop referral guidelines (These are basically activities of standard management protocols: example when to refer etc)

A group of health centre, doctors, specialists and district health officers should draw up a set of referral guidelines. These guidelines should include current information on how each condition should be managed, including the appropriate use of laboratory and radiological tests, the elements and sequence of tests and medication, and expectations around trials of treatment prior to referral. They can be indexed either by clinical condition, diagnosis or symptoms. Guidelines must also include the requirement for feedback to health centre doctors. This is an important educational tool in the absence of any clinical supervision of health centre doctors. This should be published as a workbook and can be a part of treatment protocols. There are already guidelines available for example malaria. The referral hospital to which the various types of diseases should be referred should be clearly stated. This will differ according to the facilities and specialists available within the particular district/province. Exceptions can be made as at present for referral to a higher facility in a neighbouring province because the facilities are available there and it is less costly to travel there. The protocol deviations should be justified.

Agreement would need to be reached with the district hospital about its role as the first referral hospital. Its responsibilities can be set out as follows:

- Directing of self-referred patients to the nearest primary health care facility;
- Only attending to outpatients who are either referred from the primary care network or private health professionals practicing in the community;
- Seeing emergency cases;
- Following-up outpatients that need to come to hospital because the facilities are not available in the health centre;

There should be some indication of the time period within which patients should be seen. The National Institute of Clinical Excellence,¹ (NICE) UK recommends inclusion the following timings as part of the guidance on referral advice:

- the patient is seen immediately;
- the patient is seen urgently;
- the patient is seen soon;
- the patient has a routine appointment; and,
- the patient is seen within an appropriate time depending on his or her clinical circumstances.

In the UK, the multidisciplinary teams that agreed on the working definitions to fit each of the above categories agreed on a maximum waiting time of 2 weeks for urgent referrals.

Activity 4: Develop a referral process(Describe the structure and process)

This should include an estimated time within which the patient sees the specialist, a record of which specialist is to be seen and full information given about treatment given to date by the health centre doctor. Two-way referral must also be a requirement, especially for chronic conditions such as diabetes and hypertension that can be appropriately managed at the health centre level. This can be as basic as a feedback form, which is attached to the patient referral to be sent back to the health centre once the specialist has seen the patient. The specialist can indicate what follow-up action needs to be taken by the health centre doctor to manage the patient's illness.

Activity 5: Develop an audit process

The initial team of primary and secondary care doctors can develop a set of measures in order to be able to ascertain whether the referral process is working as intended. There can be frequent review of the process and formal Audits can

¹ Referral Advice

be undertaken annually and different specialties chosen on different occasions.

These can cover:

1. physician compliance with referrals;
2. referral made in accordance with referral agreement;
3. time taken to see the specialist;
4. feedback received by the referring doctor;
5. percentage of referrals with the complete information provided on patient diagnosis, treatment and tests';
6. patient satisfaction survey

Activity 6) An institutional coordination Committee can be established with the authority to co-opt the clinicians and officers most suitable to develop different areas necessary for strengthening the referral system. The committee should be legitimized by suitable Government orders. The Terms of reference of committee will be to monitor the activities and ensure effective implementation, better coordination of institutions under the Directorate of health services and Directorate of medical education

Guiding principles of referral system functioning

A) Direct patient services

- i. The referral system 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.
- ii. Services to be given to the patient shall depend on the facilities, capabilities and human resources of the health facility.
- iii. It is the responsibility of the health facility to provide the best care, in terms of quality within the limits of their resources.
- iv. Patients should receive guidance from health care professionals in the proper use of available resources, especially for those persons classified as poor or vulnerable.
- v. Referral guidelines should be in written form and available to all health service staff at the different levels.

B) Administrative policies

- i. All employees of health centres and hospitals should be given orientation and training in the operationalization of a comprehensive referral system.
- ii. Clear written health referral policies and guidelines should be available at all levels of health facilities.
- iii. Tasks at any level of the health centre or hospital shall be written and training given to ensure understanding.
- iv. A two-way referral system should be instituted.
- v. A two-way referral form should accompany the patient being referred to the next level of care. Vital information should be filled out completely and in duplicate.
- vi. 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.
- vii. Essential drugs and medicines shall be available at any given time at all levels of health facilities.
- viii. A separate logbook shall be maintained for monitoring and evaluating referral records of all patients.
- ix. Each level of health care unit shall have a list of essential equipment it is responsible for.
- x. Monitoring and evaluation. Undertake periodic referral audits. Referral audits can be conducted as part of quality assurance activities at the provincial level. Groups of referrals can be audited for: 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.

(Document prepared as background note for the planning meeting on 16-9-2011 at CERTC, medical college Thiruvananthapuram. Document prepared by CERTC. certctvm@gmail.com. Fax 0471-2448825, phone 04712528418, Queries to be addressed to Director CERTC)

