



SETTING UP A LOW VISION PROGRAMME

AUTHOR (S)

Hasan Minto: Brien Holden Vision Institute, Pakistan

PEER REVIEWER (S)

Jill Keefe: Centre for Eye Research Australia (CERA), Melbourne, Australia

INTRODUCTION

This chapter includes a review of:

- Essential elements of a low vision programme
- What constitutes a low vision programme
- What are the different levels of a low vision programme
- How to evaluate a low vision programme

ESSENTIAL ELEMENTS OF A LOW VISION PROGRAMME

In a country with a developed low vision service, a team of professionals carries out low vision assessment.

A social worker does the initial interview and history, functional assessment is done by a low vision therapist, optometric assessment by an optometrist and follow-up visits to the client is again done by the social worker.

The low vision clinics in these countries are usually very well equipped and the aids are provided to patients on long term loans, free of cost or are covered by medical insurance.

Unfortunately, this is not the case in most developing countries that have either poorly developed low vision services or no services at all. Most of the clients come from a lower socio-economic group and cannot afford expensive devices. Two major impediments encountered in developing a low vision service are paucity of trained people and limited availability of low vision devices. However, the issue of the availability of LVDs has been greatly addressed by the establishment of the Low Vision Resource Centre (LVRC) in Hong Kong that is a source of high quality, low cost LVDs and other essential items to provide low vision care. Further information can be accessed at <http://www.hksb.org.hk/en/>.

Under these circumstances, it is necessary to develop a low vision service that can fit into the existing health and social welfare infrastructure of the country.

ESSENTIAL ELEMENTS OF A LOW VISION PROGRAMME (CONT.)

OBJECTIVES OF A LOW VISION PROGRAMME	<ul style="list-style-type: none"> • To formulate strategies and an action plan to develop appropriate, affordable, high quality and sustainable low vision services for individuals with low vision • To improve the availability of appropriate, affordable low vision devices • To train a suitable cadre of practitioners • To improve awareness of the need for and benefits of low vision services amongst the public as well as eye care professionals
STRATEGIES IN THE DEVELOPMENT OF A LOW VISION PROGRAMME	<p>Low vision devices</p> <p>One of the main constraints in provision of low vision services is the high cost and limited availability of low vision devices. To address this issue, LVRC has been established at the Hong Kong Society for the Blind under the auspices of Vision2020. This centre procures high quality affordable devices and assessment tests from various sources and supplies these to programmes across the world. Since its inception in 2003, over 120,000 low vision devices and assessment tests have been shipped to over 76 countries to programmes in public and non-profit sectors. There has been dramatic reduction in the cost of devices. For example, an aspheric stand magnifier costs US\$3 and a 6X Keplerian telescope costs US\$13. Research has been conducted to help develop affordable low vision devices and vision assessment materials which are now being used globally. Research work on the development of a new system for assessment of vision in infants is more challenging but has been initiated and field-testing of a second prototype is in process.</p> <p>Human resource development</p> <p>There is a need to identify and train a cadre of eye care workers to provide low vision services. Possibilities include ophthalmologists, optometrists, mid-level professionals and existing special education teachers. Whoever is trained in low vision work will need to have a particular interest in this specialty.</p> <p>In the short term, ophthalmic paramedics could be trained to provide very simple devices in remote rural communities. Training of low vision professionals may need to be provided by visiting experts until the expertise and experience is sufficient within these countries to take on this development role.</p> <p>Advocacy</p> <p>Once low vision services are in place, there will be a need to create awareness in the public, and improve awareness of the needs of individuals with low vision amongst ophthalmologists and teachers of visually impaired children. Generally, there already exists a cadre of community health workers in developing countries who could assist to identify persons with visual handicap and refer them to appropriate centres. This would entail inclusion of low vision in their primary eye care training. For a sustainable development of low vision services, there is a need to create awareness amongst officials of health and special education/social welfare departments.</p>



ESSENTIAL ELEMENTS OF A LOW VISION PROGRAMME (CONT.)

STRATEGIES IN THE DEVELOPMENT OF A LOW VISION PROGRAMME (CONT.)	<p>Development of models of low vision services delivery</p> <p>The national programme for prevention of blindness needs to identify tertiary resource centres that would be involved with human resource development and provision of speciality services, low vision being one of them. There is a need to develop Expert Centres (EC) of low vision as per need of the country, ideally within established eye departments.</p> <p>The functions of the EC would be to:</p> <ul style="list-style-type: none"> • Produce low cost, simple low vision devices • Obtain or produce more sophisticated low cost, low vision devices • Train technicians in the manufacture of these devices • Train practitioners in assessing, prescribing, dispensing and maintaining simple low vision devices, as well as more complex devices • Manage the complete range of needs of people with low vision, including those with more complex needs • Improve awareness through health education and continuing medical education • Evaluate models of services delivery to determine its appropriateness to that country • Audit service provision • The EC would train personnel and supply low vision devices to satellite clinics run in smaller eye units.
RECOMMENDATION FOR PLAN OF ACTION	<p>Short term (1- 2 years)</p> <ul style="list-style-type: none"> • Establish an EC, and identify further eye units that can become ECs during the first years • Train practitioners to work in the EC, which may require input from external experts in short term • Produce low cost, simple low vision devices at the nominated centres using locally available materials. This will entail establishing optical workshop and training technicians • Obtain sophisticated devices as required, from inexpensive sources of supply <p>Medium term (2- 5 years)</p> <ul style="list-style-type: none"> • Consolidate and develop the ECs • Start to develop the satellite outreach clinics, which will prescribe from a range of simple magnifiers • Improve awareness among health professionals and teachers in special education of the needs of people with low vision and how these can be met • Improve awareness among the general public <p>Long Term (5+ years)</p> <ul style="list-style-type: none"> • Undertake epidemiological research to assess the need for low vision services • Undertake operational research to evaluate the model of low vision service delivery • Produce low cost, sophisticated devices

**ESSENTIAL ELEMENTS OF A LOW VISION PROGRAMME (CONT.)****ESSENTIAL ELEMENTS
FOR STARTING A LOW
VISION SERVICE**

1. Persons interested in low vision e.g. optometrists, ophthalmologists, special education teachers and nurses
2. Clinic space for low vision practice e.g. in a hospital or clinic, government or private or NGO run
3. A referral base of patients
4. An optical laboratory with optical technicians to support the production of high power plugs and minus lenses
5. Opticians who are familiar with optical principles of magnifiers and telescopes and can fit low vision devices
6. Semi-skilled/skilled technicians (e.g. lathe operators) who can cut moulds for the low vision devices
7. Basic assessment equipment and materials like ophthalmoscope, retinoscope, trial set, vision box, Lea tests and screeners, visual field perimeter, trial box of low vision devices (these could be imported or locally made)
8. Awareness amongst eye care professionals and the general public
9. Availability of inclusive education / schools for children with low vision and rehabilitation services for adults, infants and children

Most specialties in ophthalmology are costly to develop and require specially trained people and sophisticated equipment. Low vision as a specialty is one area that can easily be initiated in any ophthalmic or optometric set-up with a minimum of investment and training. Most of the devices used for assessment can be produced locally using indigenously available materials and appropriate technology. The use of simple magnifiers can help children pursue education in normal stream schools and improve the quality of vision in visually impaired adults.

Each country can identify its own relevant existing human resources and train them in a short period of time to provide low vision care in a hospital or clinic setting. Standard manuals on production of inexpensive low vision devices can be utilized to make these devices. As experience is gained, and with some input from expatriates, a cost effective and sustainable low vision service can be developed. It would be preferable to plan the development of any such service so that it is capable of fitting in the ongoing national health and social welfare programs. This will not only ensure its sustainability and cost containment but also its early acceptability and implementation.

PRIMARY LEVEL LOW VISION CARE

Low vision services should be integrated into the eye and health care, education and rehabilitation systems within a country. Table 1-1 provides an outline of the integration of low vision services into primary or community-based care.

Table 1-1: Activities, personnel involved and the resources required to establish primary level low vision services

ACTIVITIES	PERSONNEL	RESOURCES
Awareness Screening Referral Basic rehabilitation	PHC / PEC CBR Teachers	Appropriate visual acuity tests (with pinhole) Samples and instructions for non-optical devices WHO Low Vision Kit

(PHC: Primary health care; PEC: Primary Eye Care; CBR: Community-Based Rehabilitation)

In eye care at the primary level, it is the health or eye care worker who is involved in low vision care. The role in case finding or screening to identify people with low vision is the same procedure as screening for people with cataract or refractive error. The additional knowledge needed is of the needs of people with low vision and referral networks. Appropriate low cost resources and a curriculum for training courses are available.

TEACHERS	<p>A classroom teacher in a regular community school, with on-the-job training, can provide the basic needs for a student with low vision. Ideally these teachers receive support from the secondary level, an itinerant teacher with training in low vision who provides specialised support to all - the classroom teacher, the student, their parents and the community. Resources and training for community-based teachers need to be provided from a tertiary level resource centre.</p> <p>Teachers also play an important role in eye health education for the prevention of vision loss. In all countries, knowledge that most eye diseases can be prevented or vision restored for most people with vision loss, should be basic information to be included in health education. Health promotion to prevent vision loss and blindness in children is particularly important in areas where vision loss is associated with poor nutrition (Vitamin A deficiency), hygiene (trachoma), immunisation (especially for measles) and where rates of trauma are high.</p>
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PRIMARY LEVEL LOW VISION CARE (CONT.)

COMMUNITY-BASED REHABILITATION	<p>This has a parallel with teachers, where existing community-based workers can be trained to appropriately meet the needs of many people with low vision. In addition to the roles of screening (case finding and referral), health promotion is the provision of basic rehabilitation. Many people with low vision can participate in their chosen activities with relatively simple modifications to their environment and provision of non-optical devices. With an understanding of low vision, its impact and 'problem-solving' skills, simple but effective changes can be made to enhance participation in chosen activities.</p> <p>An important area of work is the identification of children and infants with impaired vision. Early intervention is an important role of community-based rehabilitation workers. Assessment of functional vision can be conducted using the comparison of visual functioning with milestones of normal visual development. Support is provided to parents and the community to stimulate vision and general development of the child.</p> <p>Low vision is a part of the spectrum of vision impairment and thus low vision services should not be separate from services to people who are blind. Essentially the same people and existing organisations will provide care. Similarly in the provision of eye care, low vision is part of that care, utilising the same personnel (with training in low vision) and often using the same facilities. What is needed to ensure low vision care for all who need it, are trained personnel to assess needs and provide specialised skill training for people with low vision and the special equipment and materials.</p>
TRAINING COMMUNITY-BASED WORKERS	<p>Training of primary or community level workers is mainly to detect people with low vision, refer them for diagnosis, treatment and low vision assessment and care, and to provide basic rehabilitation. An understanding of low vision and the specific needs of people with low vision are necessary in any training course. This understanding should include knowledge of the elements of vision:</p> <ul style="list-style-type: none"> • Distance and near vision (size and distance of objects) • Visual field • Contrast • Illumination <p>Another important aspect is the need to create awareness through health promotion about low vision as part of the national program for prevention of vision loss and reducing its impact. The other topics are:</p> <ul style="list-style-type: none"> • Vision testing for screening • Nature and implications of low vision • Basic rehabilitation techniques <p>The emphasis will vary depending on the roles of the workers involved and their previous training.</p>
PRIMARY EYE / HEALTH CARE WORKERS	<p>The need for training is that they can carry out case-finding and make referrals. They also need knowledge of the services at secondary and tertiary levels so that they can follow up recommendations for care.</p> <p>The minimum topics for training in low vision are:</p> <ol style="list-style-type: none"> 1. Vision screening 2. Referral pathways 3. Health promotion 4. Basic rehabilitation <p>This training can be conducted in a minimum of one day but up to 2 days.</p>

TERTIARY LOW VISION CLINIC

<p>ROLES AND FUNCTIONS OF A TERTIARY LOW VISION CLINIC</p>	<p>The tertiary low vision clinic's role and functions are as a service centre, training centre, exchange centre, model centre, low vision services promotion centre and in the planning of future development of low vision services.</p> <p>Functions</p> <ol style="list-style-type: none"> 1. Service centre – To provide direct clinical services, including diagnosis, refraction, assessment of residual vision, and prescription and dispensing of low vision devices etc. Also, to refer patients for medical management, rehabilitative training and psychosocial support when necessary. 2. Training centre – To provide training to improve knowledge and skills of existing local and overseas professionals serving the low vision patients, as well as personnel for new low vision services. 3. Exchange centre – To achieve service improvement through exchange of information, knowledge and skills with other centres to establish better referral system. To learn improved vision assessment methods, be informed of more cost-effective mode of human and other resources utilization, to obtain information about new equipment and low cost quality low vision devices etc. 4. Model centre – The service structure developed and skills used by the centre would be unique for the country and area that the centre serves. It can act as a model for places of similar culture and social organization. 5. Low vision service promotion centre – To increase public awareness and to promote equal opportunity and better quality of life for the visually impaired through interactions and cooperation with service providers and associations of the visually impaired in referrals, joint promotional activities, studies on the visually impaired persons' needs etc. The activities can increase the accessibility of low vision services to the visually impaired, promote public awareness and social harmony as well as influence policy beneficial to the visually impaired. 6. Plan the future development of low vision services – The mentioned roles and functions clearly indicate that the clinic plays a vital role in the future development of low vision services in its country and should be involved in the service development planning: where should low vision services be extended to in the next stage and its scale of operation; when the new services should start and what kind of personnel should be trained to meet the new service needs; whether the mode of operation should be more medical or rehabilitative oriented etc.
<p>RESOURCES REQUIRED IN A TERTIARY CLINIC</p>	<p>Human resources</p> <p>Services in a low vision clinic can be provided by a team of clinical and rehabilitation professionals. These could include ophthalmologist and optometrist, low vision therapist, counsellor, social worker, orientation and mobility instructor, occupational therapist, administrator, special education teachers. However, it is not essential to have all of them available in the same setting and a cross-referral needs to be established to maximise the effectiveness of the service.</p> <ol style="list-style-type: none"> 1. Ophthalmologist and Optometrist <ul style="list-style-type: none"> Examine patients and identify those with treatable eye diseases and refer them for medical management when necessary Assess visual functions and prescribe low vision devices and vision training to improve visual ability Refer patients with rehabilitation, social and other needs to the appropriate professionals for assistance Provide short and long term reassessment



TERTIARY LOW VISION CLINIC (CONT.)

RESOURCES
REQUIRED IN A
TERTIARY CLINIC (CONT.)**2. Social Worker/Welfare Worker/Employment Advisor**

- Assess a low vision patient's social, financial and employment needs and to provide assistance accordingly to enable the patient to resume social, occupational and family activities hindered by visual impairment. Examples are counselling and referral to patient support associations to give psychosocial support to the patient; identify vocational training opportunity and educational subsidies to improve the patient's skills and abilities for better chances of employment; arrange rehabilitation trainings in self-care, home maintenance, communication for patient whenever necessary.

3. Low vision therapist / counsellor

- Training in visual skills
- Training in the use of low vision devices
- Advice on environmental modification
- Advice on daily living skills
- Support of emotional well-being
- Liaise with families, schools, and social welfare department etc
- Evolve the cross-referral mechanism

4. Orientation and mobility instructor

- Assess mobility skills and spatial orientation of low vision patient
- Develop strategies and provides training such as mobility skills in unfamiliar environment and the use of public transport to improve the patient's mobility

5. Occupational Therapist

- To provide non-optical appliances and advices on skills, and environmental modifications to improve independence in daily living

6. Administrator

- Coordinate various services inside the Clinic to ensure good communication among different professionals and smooth delivery of quality services
- Liaise with other service organizations for the visually impaired and associations of the visually impaired to understand and to meet the clinical service needs of the visually impaired
- Develop literature on low vision for patients
- Organize publicity and advocacy for better public awareness of low vision, its prevention as well as to improve the accessibility of low vision services
- To promote collaboration with related organizations and bodies to carry out studies and researches on low vision, and to use the results for service publicity and service improvements

7. Special education teacher

- Advise on the educational requirements of a child with low vision
- Advise on the medium of education
- Liaise with families and clinical staff to review progress

The above human resource combination clearly indicates that low vision service is an integration of ophthalmic, rehabilitative and social services

TERTIARY LOW VISION CLINIC (CONT.)

PHYSICAL RESOURCES	<p>Other resources required by a tertiary low vision clinic are space and facilities for patient consultation, clinical training, library and access to electronic information, keeping the inventory of low vision devices, and dispensing low vision devices.</p> <p>It will require space to:</p> <ol style="list-style-type: none"> 1. Provide low vision consultation (ophthalmic examination, vision assessment, optical and non-optical low vision devices prescription, referral arrangement etc.) to low vision patients. 2. Dispense low vision devices 3. Train patients in the use of LV devices and maintain an inventory 4. Keep literature about low vision care and provide access to electronic information of low vision services to enable the clinic to keep up with advancement in low vision services and to find new ideas for service improvement to suit the local needs 5. Carry out studies to identify the needs of low vision patients and to plan service provisions accordingly; conduct researches to improve skills and service quality. 6. Exchange low vision knowledge and skills with experts to improve the centre's services and to plan its future development 7. Provide training to local low vision service providers such as optometrists, ophthalmologists, occupational therapists, and rehabilitation workers etc, to improve service quality
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Recommended standard lists for low vision equipment, tests and devices at tertiary, secondary and primary levels, in addition to existing basic equipment in such a clinic

Table 1-2: *Ophthalmic equipment required for low vision care at tertiary, secondary and primary levels*

OPHTHALMIC EQUIPMENT	TERTIARY LEVEL LOW VISION CLINIC	SECONDARY LEVEL LOW VISION CLINIC	PRIMARY LEVEL LOW VISION CLINIC
Streak Retinoscope	✓	✓	
Direct Ophthalmoscope	✓	✓	
Lensmeter (Focimeter)	✓		
Trial lens set (full aperture)	✓	✓	
Universal trial frames (2)	✓	✓	
Paediatric trial frames (2 pairs of different sizes)	✓	✓	
Trial lens holder	✓		
Halberg clip	✓		
Long handle occluder with pinholes	✓	✓	
Cross cylinders (± 0.5 , ± 1)	✓		
Pen torch with measuring tape	✓	✓	✓

**TERTIARY LOW VISION CLINIC (CONT.)****Table 1-3:** Vision assessment equipment required for low vision care at tertiary, secondary and primary levels

VISION ASSESSMENT EQUIPMENT	TERTIARY LEVEL LOW VISION CLINIC	SECONDARY LEVEL LOW VISION CLINIC	PRIMARY LEVEL LOW VISION CLINIC
Light box for Visual Acuity test	✓		
Distant LogMAR test charts – letter, number, tumbling Es, Landolt Cs (one of each type)	✓	✓	
Near vision tests (same as distant but calibrated for 40 cm). Reading Acuity test (Continuous text in English and local language)	✓	✓	
Symbol paediatric tests for matching and pointing (with and without crowding)	✓	✓	
Preferential looking system	✓		
Contrast sensitivity test charts	✓	Contrast sensitivity test – LEA screener	
PV-16 Colour Vision Test (double set)	✓		
'Amsler' grids	✓		
Hand disc perimeter	✓		
Tangent screen	✓		
WHO Low vision Kit	✓	✓	

TERTIARY LOW VISION CLINIC (CONT.)

Table 1-4: Low Vision Devices required for low vision care at tertiary, secondary and primary levels

LOW VISION DEVICES	TERTIARY LEVEL LOW VISION CLINIC	SECONDARY LEVEL LOW VISION CLINIC	PRIMARY LEVEL LOW VISION CLINIC
Optical Low Vision Devices			
Spectacle magnifiers (half eyes)	6D to 12D in 2D steps with base in prisms 10-40D in 4D steps as half eye, total 9 pieces 10-40D in 4D steps as full aperture R+L, total 18 pcs	6D to 12 D in 2D steps 16D to 20D in 4D steps total 6 pieces	
Foldable and hand-held magnifiers with and without built-in light source	5D to 42D, total 15 pieces	5D to 17D, total 5 pieces	5D to 14D total 4 pieces
Stand magnifiers <i>Priority 4x and 5x</i>	with and without built-in light source, from 13.5D to 56D, total 9 pieces	with no built-in light source, from 13.5D to 40D, total 6 pieces	Four stand magnifiers from 13.5D to 40D
Dome and bar magnifiers	total 4 pieces	total 2 pieces	
Hand-held monocular telescopes	2.5X, 3X, 4X, 6X, 8X and 10X with micro-lens for 8X and 10X telescopes, total 5 pieces	4X to 8X with micro-lens for 8X telescopes, total 4 pieces	Two telescopes, 4x and 6x
Filters	of 5 different shades with UV protection and luminous transmission of 40%, 18%, 10%, 2% and 1%	of 4 different shades with UV protection and luminous transmission of 40%, 18%, 10% and 2%	
CCTV Devices			
Colour Television (20 inches)	✓		
Black and white hand-held CCTV magnifier	✓		
Full colour hand-held CCTV magnifier	✓		
Computer Devices			
Computer with laser printer and scanner	✓		
Computer software with text enlargement and voice output	✓		

TRAINING

COMMUNITY BASED REHABILITATION (CBR)	<p>Many CBR workers will work with people with all disabilities. They require the special knowledge and skills to work with people with impaired vision, and particularly low vision. Their training would include all the same topics as for primary eye care workers but with emphasis on assessment of functional vision and rehabilitation techniques</p> <p>Whilst they will not normally prescribe low vision devices, they need training in the knowledge of what devices are for and how they should be used. The knowledge of the concepts of vision should be applied to obtaining or making non-optical low vision devices.</p> <p>Whilst much of the rehabilitation will be with older people, topics on early intervention for infants and pre-school children are critical in CBR.</p>
TEACHERS	<p>The aims of training for teachers in local/mainstream schools is so that they can detect children with impaired vision and include the students with low vision in all aspects of school life. Teachers can also be taught vision screening if others do not conduct it regularly. They need to be able to test vision or conduct a functional assessment to determine if a student has normal or impaired vision, and for those with impaired vision, to assess if the student has low vision or is blind. Knowledge of referral pathways is also essential.</p> <p>For effective inclusion in school and community activities an understanding (and assessment) of appropriate learning medium using the five categories of functional vision is essential. Teachers need to be trained in assessment of functional vision to make decisions about the most appropriate medium for each student (Table 1-5)</p>

Table 1-5: Assessment of functional vision should use a variety of objects and materials and not just print

FUNCTIONAL VISION	LEARNING MEDIUM
Normal vision	As for normally sighted children
Low vision: Mild – moderate	Regular print without low vision devices
Low vision: Severe	Regular print with low vision devices or large print
Low vision: Profound	Braille; use of vision for mobility, activities of daily living etc.
Blind	Braille and other non-visual media

EYE HEALTH PROFESSIONALS	<p>The categories of health personnel involved in the provision of eye care at different levels vary from country to country. They include optometrists, orthoptists, ophthalmic and dispensing opticians, and others involved in certain elements of eye care, in particular refraction and low vision services.</p>
OBJECTIVES	<ul style="list-style-type: none"> • Expand the training opportunities (both quantitatively and qualitatively) for mid-level eye care workers • Standardize the existing training • Adopt a uniform and standardized curriculum • Offer a progressive career structure

TRAINING (CONT.)

EXPECTED OUTCOMES	<ul style="list-style-type: none"> • Increase coverage and uptake of high quality essential eye care services and thus ensure quality and equity. • Produce multi-purpose mid-level eye care personnel (MLECP) who can provide primary eye care and low vision services at community level, and assist the ophthalmologists and other eye care professionals at secondary or tertiary levels in rendering services effectively. • Meet the needs of refractive services of the communities through an additional training in refraction with a special module for dispensing and low vision services. • Meet the needs of the tertiary eye care institutions by imparting training to some of these MLECP in advance visual function skills, including low vision assessments, ophthalmic technology skills, and public eye health care management skills to work as ophthalmic technologists.
CONSTRAINTS AND DIFFICULTIES	<ul style="list-style-type: none"> • Inadequate manpower available for service delivery • Quality of training is not of desirable standards • Lack of standardized curricula and master trainers • Resource centres for training do not have sufficient materials and equipment • Insufficient exposure to practical work
STRATEGIES	<p>To achieve the objectives, the following two strategies i.e. short and long term are recommended.</p> <p>Short Term: provide low vision human resources by training and equipping existing personnel</p> <ul style="list-style-type: none"> • Extension of low vision modules in the existing training programmes • Training workshops for existing cadres • Curriculum standardization workshops & external faculty where needed • Equipment for the training institute • Training of national focal persons in low vision & training of trainers • Up-skilling of master trainer by exposing them to latest advances in the field of low vision through attendance of training programmes, conferences etc • Provision of necessary books, journals and manuals on the subject • Extension of training module • Advocacy at the relevant levels • Resource mobilization • Faculty support to conduct the module • Up-gradation of teaching and training aids
RESOURCES REQUIRED	<ul style="list-style-type: none"> • To conduct different workshops • To equip the training centre • Human resources as master trainers • Institutional support to house the program • Training material • Logistic support <p>To deliver low vision services a huge gap exists between the need and what is available human resource. The priority should be to train the maximum number of personal and equipping them with essential knowledge in the shortest time. This can be achieved by integrating the low vision training modules into the existing training programmes for different cadres and by providing in-service training to existing staff. The training should be appropriate and conform to the needs of the countries and programmes.</p>

EVALUATION OF A LOW VISION PROGRAMME

Evaluation of a low vision programme is useful because it provides an opportunity to take a step back and view the whole programme holistically. It helps in measuring progress and seeing if objectives have been met; it allows one to determine what has been achieved; it improves monitoring and management; it identifies strengths and weaknesses; it determines the effectiveness and impact of the programme; it provides information on the efficiency or cost benefit of the programme; it makes available information for revised plans and is a good opportunity and mechanism for sharing experience.

The main steps in evaluation are:

1. Deciding when and how to evaluate
2. Selecting the objectives and method to be used
3. Carrying out the evaluation
4. Looking at the results
5. Using the results to improve the programme

RESOURCE MOBILIZATION FOR LOW VISION PROGRAMMES

Resource mobilization is an expression that is commonly used in development terminology. It simply means enhancing or augmenting the means of support. In programme terms, this enhancement of means of support may be financial, human, technical or in kind.

Resource mobilization is a critical element in low vision programme development and is vitally important because:

1. Programmes and projects cost money
2. They are usually in addition to on-going government eye care, educational and rehabilitation activities
3. Even long term horizontal programmes and interventions have vertical components and these need extra resources
4. Pilot programmes are often required to effect a change in policy

Mobilization of financial and other resources can be 'resourced' from:

- National government, private funds or donations
- Governmental agencies
- Inter-governmental agencies
- Non-governmental organizations
- Other forms of funding – multilateral and bilateral aid, INGO support

RESOURCE MOBILIZATION FOR LOW VISION PROGRAMMES (CONT.)

<p>NATIONAL RESOURCES</p>	<p>In the planning stage of a low vision programme, it is vital to identify governmental and non-governmental resources. In addition, it is essential to undertake an assessment of current needs and document an inventory of existing activities. This is usually followed up by a carefully prepared plan of action. A firm national commitment can be very helpful in mobilizing external resources and assistance.</p> <p>Other strategies to harness the potential of national resources includes the need to increase public awareness of blindness and low vision, generate support from influential 'opinion makers' or celebrities, use of professional societies, print, television and other media (mass media), and recognition and contribution of NGOs and motivating them into increasing their support.</p>
<p>INTERNATIONAL COOPERATION</p>	<p>A variety of options exist for mobilizing support from the international agencies. The WHO Prevention of Blindness and Deafness programme can offer assistance to national programmes. International non-governmental organizations can provide support to various components of a national programme. Multilateral and bilateral aid is very useful in transfer of financial resources and creates a sense of responsibility. Technical Cooperation among Developing Countries (TCDC) is another mechanism for resource mobilization, particularly for training of human resources and organization of low vision programmes.</p>
<p>ROLE OF GOVERNMENT</p>	<p>The role of governments in the context of resource mobilization can be summarized as below:</p> <ol style="list-style-type: none"> 1. Policy and institutional framework for disabled persons 2. Adoption and facilitation of a national programme 3. Running schools with inclusive education (or schools for visually impaired children where such a policy does not exist), and vocational training centres for the disabled 4. Creating a fund for disabled persons 5. Providing grant and aid to disabled persons 6. Running Trainer of Trainers programmes 7. Supporting university departments of education and special education
<p>ROLE OF NGO</p>	<p>The role of NGOs can be considered as that involving:</p> <ol style="list-style-type: none"> 1. Support to training programmes – human resource development 2. Capacity building of existing institutions 3. Filling in gaps in programmes 4. Assistance in strengthening of government run components of the programme 5. Advocacy 6. Technical assistance, supplies and equipment 7. Support to organizational development and strengthening of management structures at national, provincial and district levels

Resource mobilization is often equated with finances. However, a very important and oftentimes vital element of a programme is the human capital. Initially, financial resources are required to roll out a programme (e.g. a low vision programme), but as a critical mass of trained persons is reached, the programme growth becomes less dependent on finances and its expansion and sustainability are to a large extent driven by the human resources developed.

Resource mobilization is one of the key components of a project cycle from planning, to monitoring and evaluation. Opportunities to resource a low vision programme can be sought from various donor agencies (and oftentimes significant funding can also be found in-country) through networking and presentation of a well conceived plan on low vision as an integrated part of a larger national plan e.g. a national plan for prevention of blindness/comprehensive eye care. Designing of a budget, which is segmented into different 'fundable' components, also helps to attract donors that may wish to support a component or a set of components in a programme.