

Appendices

Ap1. The focus of National and District VISION 2020 Plans

| National planning | District planning |
|---|--|
| Policy and guidelines for quality of care | Situation analysis regarding eye care in the district |
| Advocacy for VISION 2020 to government and other sectors | Establishment of targets for service delivery (e.g., cataract surgical rate and surgical load) |
| Guidelines on disease management | Activities needed to reach the targets |
| Standards for staffing, equipment, training, etc. | Personnel issues (gaps in terms of personnel and skills) to reach the targets |
| Plans for collection of information by “district” and dissemination of this information to stakeholders and others (and back to the “district”) | Determining the gaps in terms of equipment, instruments, and supplies and setting in place activities to address these gaps. |
| Links with donors for assistance with prioritization of districts and national activities | Promotion and mobilization in the communities. Health education through relevant mechanisms |
| Co-ordination of training activities to ensure that health cadre are defined according to needs of the country | Establish or strengthen co-ordination and partnership. Establish a district VISION 2020 committee to guide progress |
| Monitoring/evaluation of human resource development to identify gaps | Determine who is responsible for specific activities to be undertaken |
| Coordinating national World Sight Day | Creation of a budget to undertake planned activities |
| Co-ordination of partners and stakeholders to identify gaps in partnerships and help identify new potential partners | Determining the time frame needed to carry out the project |
| Resource mobilization | |
| Procurement strategy for consumables for the country and negotiation with Ministry of Finance | Monitoring and reporting as required by national MoH, partners, and as needed by district authorities to make necessary revisions. |
| Recommendations regarding national information, education, and communication strategies | Advocacy with district authorities to identify sources of local support for eye care activities |
| Development of broad outlines of mobilization and implementation strategies | |

P.Courtright (KCCO)

Ap2. Needs assessment

Country / region:

Size of catchment population:

Estimated prevalence of blindness:

Estimate of number blind in catchment population:

Major causes of blindness:

| Cause | % | Estimate of number affected |
|---------------|------------|-----------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 Others | | |
| TOTAL: | 100 | |

Major avoidable causes

| | | |
|---|--|--|
| 1 | | |
| 2 | | |
| 3 | | |

ICEH

Ap3. Situation analysis

| Infrastructure | |
|---|---|
| | Equipment (working?) |
| | Electricity/water |
| | Vehicle |
| | Roads (distance) |
| | Buildings |
| | Operating theatre |
| | Number of rooms (space) |
| | Number of operating tables |
| | Shared or dedicated? |
| | Number of days of surgery per week |
| | Number of days with GA (shared or dedicated?) |
| | Equipment in OT |
| | Number of cataract surgical sets (# functional) |
| | Operating microscope (functioning?) |
| | Sterilization equipment |
| | Anesthetic equipment (shared or dedicated?) |
| | Ward |
| | Number of beds (male and female) |
| | Tiered pricing |
| | Isolation ward |
| | Distance from OT |
| | Dedicated or shared toilets |
| | Average stay |
| | OPD |
| | Examining rooms |
| | Patient waiting area |
| | # VA lanes |
| | Dedicated registration |
| | Fast tracking /Appointment clinic |
| | Counselling service |
| | Equipment |
| | Slit lamp |
| | Ophthalmoscope |
| | Tonometer |
| | Refraction set |
| | Torch |
| | Yag |
| | A scan & B scan |
| | Communication & management |
| | Phone |
| | Internet access |
| | Computer |
| | |
| Human resources (number, placement, who determines placement) | |
| | Ophthalmologists |
| | Cataract surgeon |
| | Refractionists/Optometrists/Opticians |

| | |
|---|--|
| | Nurses supporting eye care services/OCO |
| | Technicians (for VA, A & B scans, etc.) |
| | Counsellor/Social worker |
| | Support staff (drivers/guards/cleaners) |
| | Manager |
| | Primary eye care workers |
| | Maintenance technicians |
| | Local eye drop production staff |
| | Low vision technician |
| Outreach services | |
| | Screening (coverage) |
| | Referral and transport of patients to hospital |
| | Surgical (number and frequency and placement) |
| | Mobilization of acceptance |
| | Resources and logistics |
| Productivity of existing eye personnel | |
| | Number of patients seen/examiners |
| | Number of cataract operations per surgeon |
| | Number of all surgeries per surgeon |
| | Number of surgeries per day |
| | Number of spectacles dispensed/ refractionist or optometrist |
| | Number of refractions per refractionist |
| | Number of locally made spectacles per technician |
| | Number of eye drops produced |
| Productivity of services | |
| | Number of days on the ward/admission |
| | Number of days/surgical cases |
| Population served | |
| | Size (population) of the catchment area - for districts and sub district |
| | Age distribution |
| | Distance – to hospital & outreach camps |
| | Level of literacy (adults) |
| | Income |
| | Religion and cultural groups |
| Use of service by the population | |
| | Cataract surgical rate (by sub-district, by sex) |
| | % of recommended cases that got surgery |
| | Quality of cataract services |
| | Complication rate |
| | Outcome (VA) |
| | Type of surgery (phaco, ECCE) |
| | Childhood cataract |
| | % of children identified with traumatic, congenital/developmental cataract |
| | % of children identified that received surgery |
| | Surgical outcome (VA) |
| | % of children needing spectacles that received them |
| | % of children needing low vision services that received them |
| | Refractive services |
| | Number of children screened |
| | % of people refracted and needing spectacles that received spectacles |

| | |
|--------------------------------------|---|
| | Number of people refracted |
| Cost and price of services | |
| | Price of surgery |
| | % of patients paid/ free |
| | Package price or not |
| | Registration price |
| | Price for follow up |
| | Indirect costs for patient |
| | Cost of surgery |
| | Cost of consumables, spectacles & eye drops |
| | How much of fees are given to the hospital and how much is available for revolving fund |
| | Bank account separate? |
| | Health insurance? |
| Supplies | |
| | Spectacles: availability (regularity) |
| | Spectacles: affordability (price) |
| | Spectacles: quality |
| | Spectacles: donation or purchased or combination |
| | Consumables (IOLs/sutures/visco): availability and regularity |
| | Consumables: Donation or purchased or combination |
| | Consumables: Quality (where obtained) |
| | Consumables: Variety (IOL powers) |
| | Other surgical supplies: who provides, how ordered |
| | Pharmacy: availability, supplies, price |
| Co-ordination and partnership | |
| | Eye care co-ordinator for district? |
| | Eye care co-ordinators for sub-districts? |
| | District VISION 2020 committee present |
| | Frequency of meetings |
| | Membership |
| | Inter-sectoral collaboration |
| | Links with local decision-making groups |
| | Donors/NGOs |
| | Type (provide cash, equipment, supplies or implementing group) |
| | Supporting training |
| | Regular contribution or sporadic |
| | Size and type of relationship (partnership and agreement) |
| | MoH contribution (financial) |
| | Monitoring and reporting systems |
| | |
| | |

P. Courtright (KCCO)

Ap4. Questionnaire on available human resources, infrastructure and equipment

(to be completed by all eye care facilities in the district)

Eye care facility: _____ District: _____ Date: _____

Human resources

| Cadre | Available in district | Training capacity in district | Place of posting |
|--|-----------------------|-------------------------------|------------------|
| Ophthalmologists (total) | | | |
| Ophthalmologists - operating | | | |
| Ophthalmologists – not operating | | | |
| | | | |
| Full time eye worker – non doctor | | | |
| Cataract surgeons | | | |
| Orthoptists | | | |
| Ophthalmic assistants | | | |
| Ophthalmic nurses | | | |
| Low vision specialist | | | |
| Other mid-level eye care personnel | | | |
| | | | |
| Refractionists / Optometrists | | | |
| | | | |
| Primary Eye Care Workers | | | |
| CDTI workers for onchocerciasis | | | |
| Primary Health Care workers | | | |
| | | | |
| Community workers | | | |
| CBR workers | | | |
| | | | |
| Allied eye health workers | | | |
| Eye care managers | | | |
| Equipment technician | | | |
| | | | |
| | | | |
| Ophthalmologists operating on cataract | | | |
| Eye care staff performing lid surgery | | | |
| Eye care staff providing refraction services | | | |
| | | | |
| | | | |
| | | | |

Maximum capacity:

Please indicate what you consider to be the maximum capacity per eye health worker per year under ideal conditions: (enough cases coming forward, sufficient support staff, sufficient facilities, equipment and supplies, but taking in consideration other tasks and responsibilities)

| | |
|---|--|
| Cataract operations per cataract surgeon per year: | |
| | |
| Trichiasis operations per lid surgeon per year: | |
| | |
| Low vision care per low vision specialist per year: | |

Infrastructure and Equipment

| Instrument | No. available | No. in good working condition | No. beyond repair |
|-----------------------------|---------------|-------------------------------|-------------------|
| Ophthalmic beds | | | |
| Operating theatre | | | |
| Operating tables | | | |
| Outpatient department | | | |
| | | | |
| Vehicle | | | |
| Spare parts | | | |
| Motorcycle | | | |
| Bicycle | | | |
| | | | |
| Slit lamp microscope | | | |
| Applanation tonometer | | | |
| Direct ophthalmoscope | | | |
| Indirect ophthalmoscope | | | |
| 20D lens | | | |
| Goniolens | | | |
| Fundus lens | | | |
| Streak retinoscope | | | |
| Binomag loupe with headband | | | |
| Hand held slit lamp | | | |
| Keratometer | | | |
| Autorefractor | | | |
| A-scan | | | |
| B-scan | | | |
| Field analyzer | | | |
| Yag laser | | | |
| Argon laser | | | |
| | | | |
| Punctum dilator | | | |
| Irrigation canula | | | |
| Lid retractors | | | |
| Schiotz tonometer | | | |
| Head loupe | | | |
| Hand held loupe | | | |
| | | | |
| Trial lens set | | | |
| Trial frames | | | |
| Test types distance | | | |
| Test types near | | | |
| Lensometer | | | |
| Torch | | | |
| Examination loupe | | | |
| Autoclave | | | |
| Sterilizing drums | | | |
| Eye pressure reducer | | | |
| Drip stand | | | |
| Operating lamp | | | |

| | | | |
|---------------------------------|----------------------|--------------------------------------|--------------------------|
| Operating microscope | | | |
| Assistant binocular microscope | | | |
| Cataract surgery sets ECCE/ICCE | | | |
| Glaucoma set | | | |
| Instrument | No. available | No. in good working condition | No. beyond repair |
| Lid surgery set | | | |
| Chalazion set | | | |
| Pterygium set | | | |
| Enucleation / evisceration set | | | |
| Cryo therapy | | | |
| Bipolar cautery | | | |
| | | | |
| Slide projector with trays | | | |
| Tripod screen | | | |
| Overhead projector | | | |
| Transparencies and pens | | | |
| Teaching slide sets | | | |
| Library books | | | |
| | | | |
| Computer and accessories | | | |
| Software | | | |
| Photocopier | | | |
| Stenciling machine | | | |
| Spares | | | |
| | | | |
| Suture materials | | | |
| PC-IOL | | | |
| AC-IOL | | | |
| Artificial eyes | | | |

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Ap5. Eye care infrastructure and human resources in relation to need

1. Infrastructure:

| | Government | Private for profit | NGO | TOTAL |
|---|------------|--------------------|-----|-------|
| Eye units where cataract surgery is or could be performed | | | | |

2. Human Resources:

| | Number in catchment population | Number / million population |
|-------------------------------------|--------------------------------|-----------------------------|
| Ophthalmologist/cataract surgeons | | |
| Optometrists/Low vision specialists | | |
| Ophthalmic nurse/assistant/techs | | |
| Eye care managers | | |
| Primary Eye Care trained staff | | |

Ap6. Charting the need and means for improvement in eye disease treatment

| Situational Analysis - Eye Health Services (complete one form for each eye health priority) | | | | | |
|---|--|-----------------------|---|---|---|
| Area - | | Eye Health Problem - | | Total population - | |
| Estimated number of persons at risk for eye health problem - | | | | | |
| Estimated number of cases - | | | | | |
| | Present situation “Where are we now?” | Adequate? Yes / No | If not, how to increase output? “Where are the bottlenecks?” | Future objective or target “Where do we want to go?” | Inputs / activities “What do we have to do?” |
| Case finding | | | | | |
| Treatment | | | | | |
| Follow-up | | | | | |
| Prevention | | | | | |

Persons at risk for **cataract** - all persons above 40; Persons at risk for **trachoma** - children aged 0-10 years and adults of 40+ in areas where trachoma is hyper-endemic;

Persons at risk for **onchocerciasis** - all ages in areas identified by REMO as Onchocerciasis affected; Persons at risk for **refractive errors** - 5-10% of all children; all people aged 40+ (presbyopia) and patients operated for cataract with (pseudo)aphakia; Persons at risk for **childhood blindness** - estimate affected children aged 0-15

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Ap7. An action plan for improving cataract services (in a fictitious example)

| | Activity | Sub-activity | Start date | Completion date | Responsible for implementation | Costs |
|-----|---|---|------------|-----------------|-------------------------------------|--------|
| 1. | Increase cataract case finding and case motivation | | | | | |
| 1.1 | | Develop training materials for local health workers and for general public | 01-01-04 | 01-06-04 | District VISION 2020 Committee | 50,000 |
| 1.2 | | Train 50 village health workers how to recognise and refer cataract (2 batches, 3 days course) | 15-06-04 | 30-06-04 | District Eye Surgeon | 15,000 |
| 1.3 | | Provide health education and leaflets how to recognise cataract to local communities | 01-08-04 | Ongoing | Ophthalmic assistants | 2,000 |
| 2. | Increase uptake of cataract surgery by bringing surgical facilities closer to patients | | | | | |
| 2.1 | | Identify possible satellite centres with OT facilities | 01-01-04 | 01-03-04 | District Eye Surgeon | |
| 2.2 | | Obtain permission to create 6 satellite centres for diagnostic and/or surgical intervention in the district | 01-03-04 | 01-05-04 | Ministry of Health & Family Welfare | |
| 2.3 | | Arrange transport for diagnostic and surgical teams | 01-05-04 | 01-09-04 | District Eye Surgeon | 10,000 |
| 2.4 | | Arrange equipment for diagnostic and surgical teams | 01-05-04 | 01-09-04 | District Eye Surgeon | 20,000 |
| 2.5 | | Make time table for regular visits to all satellite clinics | 01-07-04 | Ongoing | District VISION 2020 Committee | |

| | Activity | Sub-activity | Start date | Completion date | Responsible for implementation | Costs |
|-----|--|--|------------|-----------------|--------------------------------|------------|
| 3. | Increase surgical output by improving surgical facilities | | | | | |
| 3.1 | | Add extra tables in OT | 01-05-04 | 01-08-04 | Hospital director | 15,000 |
| 3.2 | | Buy extra cataract sets | 01-05-04 | 01-08-04 | Hospital director | 15,000 |
| 3.3 | | Train extra OT staff | 01-04-04 | 01-07-04 | Hospital director | 5,000 |
| 3.4 | | Install air conditioning in OT and provide fans in the wards | 01-06-04 | 01-09-04 | Hospital director | 11,000 |
| 3.5 | | Convince patients about safety of surgery in summer | 01-03-04 | ongoing | District VISION 2020 Committee | 3,000 |
| 3.6 | | Arrange stand-by generator | 01-05-04 | 01-08-04 | Hospital director | 14,000 |
| 4 | Improve outcome of cataract operations | | | | | |
| 4.1 | | Train maintenance and repair technician | 01-10-04 | 31-12-04 | Distr V2020 Com. | 5,000 |
| 4.2 | | Train surgical staff in outcome monitoring | 01-01-05 | 31-01-05 | Distr V2020 Com | 1,000 |
| 4.3 | | Purchase computer, printer, software for cataract outcome monitoring | 01-01-05 | 01-03-05 | Hospital director | 3,000 |
| 4.4 | | Obtain outcome monitoring software and install this on the computer | 01-01-05 | 01-03-05 | Hospital director | |
| 4.5 | | Open spectacle shop at hospital | 01-07-05 | 01-09-05 | Distr V2020 Com | 25,000 |
| 4.6 | | Sub-contract provision of spectacles at standard cheap rates | 01-09-04 | ongoing | Hospital director | 15,000 (-) |

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Ap8. Gantt Chart – A one-year time frame for district level VISION 2020 planning activities – a tracking tool to aid the monitoring process

A possible example.

| | | | | |
|--|---|-----------|-----------|-----------|
| Objective: To reduce the incidence of blindness through refractive error | | | | |
| Strategy: To screen all schoolchildren aged 10 – 15 years for refractive errors | | | | |
| Activity: To train 1 – 2 teachers per school in the use of a simple screening method to identify children who can or cannot see an ‘E’ of size 6/9 at 6 metres with each eye. Those who cannot are referred to an ophthalmic assistant for refraction | | | | |
| | Year 1 | | | |
| | Q1 | Q2 | Q3 | Q4 |
| 1 | Get support of the district education officer | | | |
| 2 | Develop a simple screening methodology that can be used with teachers | | | |
| 3 | Develop training materials | | | |
| 4 | Develop a school eye-screening kit | | | |
| 5 | Develop a monitoring and evaluation system | | | |
| 6 | Train teachers in the use of the screening method | | | |
| 7 | Organise a referral system to ophthalmic assistants | | | |
| 8 | Arrange for a regular supply of spectacles | | | |

NB

Programme planning will show the quarter of the year by which each activity is to be completed. Tracking will indicate the actual quarter by which each activity is completed.

Based on WHO/IAPB Tool Kit – Developing an Action Plan for VISION 2020