A team approach to providing refractive error services

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Worldwide, there are over 640 million people who are vision impaired, simply because they do not have access to a simple eye examination and a pair of spectacles.1 With 43% of vision impairment being due to uncorrected refractive error,2 it is no wonder that there have been increased efforts to improve service delivery in this area. However, a recipe for successfully and predictably ‘scaling up’ (expanding) programmes to provide eye examinations and spectacles to everyone in need has thus far remained elusive.

There have been different configurations used when expanding refractive error services, some of which have seen optometrists and refractionists integrated as core members of the eye care team, and others in which they have worked outside this team. Regardless of the configuration, we believe that a team approach to refractive error care will create a collaborative and enabling environment which will ultimately benefit patients.

In a team approach (Figure 1), personnel at the community level – such as community health workers – can conduct health promotion and screening activities to encourage individuals to seek eye examinations for refractive error. It will also detect those who need to be referred. At the primary level (eye clinic), personnel such as nurses can screen and separate refractive from non-refractive patients (the pinhole is particularly useful in this respect), and provide presbyopic correction for those whose vision impairment is not caused by distance refractive error or ocular disease. At the secondary level, comprehensive refractive examinations should be provided by optometrists, ophthalmic clinical officers and other mid-level personnel trained for this purpose.

Ophthalmologists should be deployed at this level in cases where they are the primary refractive personnel in the country. At the tertiary level, pre- and post-operative refraction of patients, management of conditions such as keratoconus, and other medical-related contact lens fitting can be provided by optometrists in a co-management agreement with ophthalmologists. These personnel will also work closely with specialised clinics such as advanced low vision services or rehabilitation services.

A team approach to refractive error care ensures that eye health workers all identify themselves as part of a team. Each team member’s role must be clearly defined by the needs of the health system within which they work, while maintaining their primary professional role. Consideration must be given to the complementary nature of the job of each member and their inter-dependency in the team.1

Adopting a team approach to eye care helps to optimise staff experience, knowledge and skills. For example, as optometry is increasingly being integrated at regional and district hospitals, there is an opportunity to shift tasks like refraction, low vision, ocular disease screening, pre-operative assessment and post-operative follow-up examinations to optometrists (or to ophthalmic technicians or ophthalmic nurses, where they are available). This will free ophthalmologists to focus on surgery and the management of disease.

Some aspects of refractive services may be ‘task shifted’ to others, e.g. nurses screening for myopia, hyperopia and presbyopia. Prescribing presbyopia spectacles for individuals who have good distance vision and no obvious pathology could take place at this level, and appropriate referral protocols should be defined.

A team approach and task shifting requires the eye care system to provide the appropriate training required by different health workers so that a good quality service can be provided at all levels, and more patients can be seen.

One example of a flexible training approach is provided by the Regional School of Optometry in Malawi, set up by a partnership comprising the Brien Holden Vision Institute, SightSavers and Optometry Giving Sight. It consists of two programmes:

• a conventional four-year BSc optometry degree that trains individuals for public and private sector deployment.
• an optometric training diploma which is delivered over 3 years and allows graduates to provide refractive services and eye care in the public sector, where the need is greatest.

Graduates of the diploma programme have the opportunity to upskill and progress to the four-year degree, thereby...

Figure 1. One example of how members of a refractive error team could work together

<table>
<thead>
<tr>
<th>Public awareness and case finding</th>
<th>Vision screening</th>
<th>Diagnosis and management</th>
<th>Advanced disease management, rehabilitation and surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community health workers</td>
<td>Primary health care workers and/or ophthalmic nurses</td>
<td>Optometrists, ophthalmic clinical officers and/or ophthalmologists</td>
<td>Ophthalmologists, optometrists, orthoptists and/or vision rehabilitation specialists, etc.</td>
</tr>
</tbody>
</table>
meeting both the professional needs of the person and the needs of society.

Although each setting is different, a team approach rooted in the local human resources for eye health strategy and health policies will help to make services more sustainable. Ideally, decisions should be informed by evidence-based, context-specific research to determine feasibility and impact. One example is the ‘Giving Sight to KZN’ project supported by Standard Chartered Bank. This involved the integration of refraction error services into the district health system in KwaZulu-Natal, South Africa.2

Whatever the situation, we should not compromise on a team approach and should instead actively seek integration with other components of the health system. The very success of our efforts depends on this.

References

**Professional competition**

The public health challenges in low- and middle-income countries, where the eye care needs are greatest, demand of us a collaborative and partnership approach. Professional competition within refraction error service delivery may be positive. Appropriately trained cadres who are supported with continuing professional development are able to increase the professional standard of the services they provide. Over time, better and more professional services increase community expectation, driving a need for increasing professional competency among practitioners in a given geographic area. We cannot, however, allow the professional battles that sometimes occur in high-income countries to intrude upon our work in low- and middle-income countries, or allow the narrow interests of professionals to dominate the service delivery landscape.

The roles of different eye service providers (ophthalmologists, optometrists, ophthalmic nurses, ophthalmic clinical officers, and other allied personnel) should be defined by a collective evaluation of the needs of a particular eye health system, the distribution and availability of the different types of provider and the potential to task shift at all levels. There are enough poor people to reach in our world; it is unnecessary for us to trip over each other to serve them.

**Managing eye programmes**

The importance of management in an eye care programme should not be underestimated. It is hard to imagine how a busy ophthalmologist could attend to her or his patients, as well as doing all of the tasks needed to manage a successful eye department, eye hospital or hospital-based VISION 2020 eye programme. Some of these tasks are set out below.

- Planning and organising clinic-based and outreach activities.
- Receiving and issuing supplies, including for operating theatre, the outpatient department, and refraction error services.
- Making regular inventory reports and reorder when necessary to ensure that supplies are in stock.
- Keeping track of accounting for the hospital or overall eye care programme and producing reports, including a cost recovery report.
- Preparing and submitting reports to donors and partner organisations.
- Ensuring that the programme vehicle is maintained properly.
- Identifying and liaising with potential donors/sponsors who can support the hospital and/or VISION 2020 activities in the region.
- Managing human resource issues, including recruitment, annual leave/vacations and deployment.

It makes sense to employ a programme manager to carry out the above tasks. If there is a good manager in the team, the ophthalmologist can meet regularly with her or him to review reports and agree budgets. The ophthalmologist can dedicate the rest of her or his time to examining and treating patients.

**Finding a good manager**

There is no specific academic background needed, but it is preferable to recruit someone with some management and administrative training. It is not recommended to train and recruit clinical staff to this post. This is a full time job and there is a very limited number of trained clinical staff in low- and middle-income countries; they should not be taken away from their clinical duties. It is easier and more economical to train a non-clinical staff member as a programme manager. It is ideal if programme managers are recruited and employed by the central hospital, rather than independently (by the eye department alone). This will help managers to be accountable and will make it easier for them to work with other hospital staff members, e.g. accountants, store keepers, the hospital administrator and the matron, all of whom play an important role in the success of the eye programme or eye department.

**Training and capacity building**

After recruitment, it is important that the new manager learns as much as possible about eye care, which can be done at the eye department. The new manager needs to understand how the departmental systems work internally as well as within the wider health system.

It may be helpful to assign one clinical staff member to assist the new manager in the learning process. There are easy-to-understand reading materials available on eye health, leading causes of blindness and their management. The Community Eye Health Journal is recommended!

The manager must also learn about international and World Health Organization (WHO)-led actions such as VISION 2020 and the Global Action Plan for Universal Eye Health 2014–19. Eye care service delivery planning, leadership skills, team building, partnership building, the basics of financial and human resources management, and bridging strategies to connect hospitals and communities are all essential for the task of management. Some training is available: courses covering these subjects are run by KCCO International, LAICO/Aravind, the University of Cape Town, the London School of Hygiene and Tropical Medicine, and others (see page 40).

It should be noted that the learning and capacity building process must be ongoing. The manager needs to learn every day, even after being fully employed. It will take some time before the new manager will understand all the aspects of her or his job.

**Mentoring**

This involves someone with experience in eye care management keeping in contact with a new manager to assist and advise her or him. Mentoring is a training and capacity building process, and new managers are lucky if they can take advantage of this. Mentoring is ongoing, with more frequent contacts and communications at the beginning and fewer being needed as the manager gains the confidence and skills to work independently.

A manager can make a big difference in an eye care programme, especially one that reaches proactively into the community to provide services to those who would not come to hospital on their own. The