Sasipriya M Karumanchi



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At a screening camp organised by Fitsum Berhan Eye Clinic. ETHIOPIA

poor and those who struggle to come to the hospital, for whatever reason.

- **Human resources:** both the number of people required (capacity) and the skills required (competence).
- **Quality:** measuring and ensuring high quality clinical outcomes and patient satisfaction.
- **Operating efficiency:** ensuring that scarce resources are optimally used.
- **Financial viability**: pricing to ensure affordability, and putting in place revenue and cost control strategies.

What have we learned so far?

After one year of data collection and initial training, the project is in the early stages of implementation. Strategic plans at each of the hospitals are being finalised and implemented. Site visits have been made and baseline details (including organisational practices and procedures) are being documented. In July 2014 all three international partners and the five hospitals met for an initial review of developments and to share lessons.

While there are challenges specific to each of the hospitals, the following areas required attention in nearly all of the hospitals:

1. **Patient volumes.** Inadequate patient volumes mean that it is necessary to take a closer look at patient experience and develop proactive strategies for increasing patient access and demand.
2. **Patient-centred design.** Current processes and systems are biased towards serving the interests of the hospital rather than those of the patients.
3. **Human resources.** A shortage of staff members, as well as imbalances in the composition of the teams' skills and expertise, needed to be addressed.
4. **Administration.** Better systems were needed to bring about higher efficiency in day-to-day activities.
5. **Managing with evidence.** There is inadequate generation and use of evidence for making decisions. This is due to a lack of systems for obtaining needed evidence, as well as the lack of systems for routinely using evidence to guide continuous improvement of processes.

Tayo Bogunjoko



After cataract surgery at Deseret Community Vision Institute. NIGERIA

The journey over the next few years should assist the hospitals in developing innovative and sustainable strategies for reaching their goals. The process will no doubt be iterative (i.e., will be repeated), and will benefit from shared learnings.

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Editorial comment

Universal eye health (UEH) calls for:

- An increase in access to health care with the goal of providing 100% (universal) access.
- An increase in the range of services offered, with the goal of offering fully comprehensive eye care.
- Making services affordable with the goal that no-one is excluded from eye care because of cost.

Several not-for-profit organisations have significantly contributed towards UEH in India. The *Community Eye Health Journal* looks forward to learning about the outcomes of this initiative in Africa.

The uncorrected r

Kovin Naidoo, **Pirindha Govender** and **Brien Holden**

Refractive error affects people of all ages, socio-economic status and ethnic groups. The most recent statistics estimate that, worldwide, 32.4 million people are blind and 191 million people have vision impairment.[1] Vision impairment has been defined based on distance visual acuity only, and uncorrected distance refractive error (mainly myopia) is the single biggest cause of worldwide vision impairment. However, when we also consider near visual impairment, it is clear that even more people are affected. From research it was estimated that the number of people with vision impairment due to uncorrected distance refractive error was 107.8 million,[1] and the number of people affected by uncorrected near refractive error was 517 million,[2] giving a total of 624.8 million people.

Vision impairment affects the ability to function optimally, socialise and engage in activities of daily living and emotional well-being. In children, vision impairment is known to affect school learning, outdoor activity and the individual's social life or integration.[3] Uncorrected distance refractive error leading to vision impairment can reduce quality of life[4] and decrease participation in daily activities that are vision-related.[5] Uncorrected near vision also reduces an individual's educational and employment opportunities.[6] Uncorrected refractive error has broader implications for communities, countries and the global community. The potential lost productivity as a result of uncorrected distance refractive error is US $268.8 billion per year. The cost to train refractionists and maintain refractive services to deal with uncorrected refractive error (including presbyopia) is US $28 billion.[7]

Despite being one of the more easily corrected conditions resulting in vision impairment, uncorrected refractive error still remains a significant cause of vision impairment globally. A number of factors contribute to this situation: a lack of trained eye health workers to address the current refractive challenges, poor integration of refractive services into existing eye health services and a limited number of good quality training programmes.

Key strategies in addressing the problem

Human resource development

The World Health Organization's Global Action Plan for 2014 to 2019 has

efractive error challenge

identified human resources for refractive error as a priority in reducing avoidable blindness globally.[7,8] Current challenges include the uneven distribution of refraction training institutions and a lack of standardisation, which makes it difficult to maintain the quality of services. In some countries, competing eye health priorities also mean that providers sometimes neglect refractive error services.

Service delivery

In many low- and middle-income countries, it is necessary to provide refractive services at all levels of the health care system, especially at primary level, where services are provided in the community. Successful services have an integrated team approach, with a clear referral pathway and a defined scope of service at each level. For example: screening/case finding at community level, presbyopia or basic refraction services at primary or community health centre level, specialised services at secondary or district level, and pre- and post-operative refraction services at tertiary or regional level.

Social enterprise

Social enterprise (SE) solutions provide refractive error services while at the same time alleviating poverty and providing employment opportunities. SE initiatives are meant to complement existing eye care delivery systems, and can take many forms. A vision centre model charges those who can pay and uses this income to subsidise services for the poorest of the poor and is usually run by NGOs or in partnership with the public sector. A social franchise model allows entrepreneurs to be supported to make affordable frame and lens packages available in under-served areas.



Courtesy Brien Holden Institute

Uncorrected distance refractive error is the biggest single cause of vision impairment worldwide. SOUTH AFRICA

Infrastructure and supplies

Delivering comprehensive, accessible eye care to communities means that the necessary equipment and space needs to be allocated for services to be delivered and an affordable spectacle supply chain should be in place. In some cases, refractive services are provided, but an inadequate supply of spectacles makes these services irrelevant as people still have to live with uncorrected refractive error.

'Successful services have an integrated team approach'

It is evident that there is still much that should be done to alleviate the problem. By developing evidence through research initiatives (e.g. determining the regional and country-specific prevalence of uncorrected refractive error or mapping human resources), country-specific solutions can alleviate the problem in a comprehensive and coherent manner. Research data on the impact correcting refractive error has on people's education and socio-economic status will provide the information needed for successful advocacy efforts.



Courtesy Brien Holden Institute



Courtesy Brien Holden Institute

An estimated 517 million people worldwide are affected by uncorrected near refractive error, which reduces their employment opportunities. SOUTH AFRICA

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