Putting patients at the centre of eye care

Managing a successful eye clinic can be very challenging. We may have many questions:

- How can we make the most efficient use of our staff and resources?
- Is it possible to provide a better service without increasing our costs?
- Can we increase the number of patients we serve?
- Are our patients satisfied with what we offer?

The last question is probably the most important one we can ask ourselves. Satisfied patients talk to others in the community, promote our clinic to others, and encourage those who are fearful to come for treatment.

Higher patient numbers can provide us with additional income and is evidence that we are delivering much-needed services. All of this will help to ensure our success.

Keeping patients in mind can also help us to improve. If we want to provide a better and more efficient service, while keeping costs low, it can be very confusing to know where to start. There is so much to think about: costs, facilities, equipment, planning, record-keeping, and so on. But if we focus on how to improve patients’ experiences and how to make them more satisfied, we will be well on our way. Even a tiny change – ensuring the toilets in the waiting area are clean and tidy, for example – could affect how patients feel and what they say to others.

Staff also benefit if the clinic puts patients at the centre of what they do. Treating staff with respect, and rewarding them for providing patient-centred care, creates a positive and caring environment for everyone, including patients!

In this issue, we will show you how to find out what patients really think about your clinic, how to better organise your services with your patients in mind, and how to reach beyond the clinic to encourage more patients to come forward. We have also included several case studies illustrating how patient-centred eye care services can have a better impact on the whole community.

We hope that this issue will give you the inspiration and tools you need to make a difference where you work.
Understanding what patients think about eye care – and our services

All health services must be acceptable to attract patients. If patients and their families do not like the services, or the way in which they are offered, they will not use them! Without patients, our eye service will struggle, and we will not meet our VISSION2020 goals.

If, like the people at Kilimanjaro Christian Medical Centre in Tanzania (see panel below), we suspect that people are not coming to us for eye services, we must try to find out why: what do they think of us and our services?

There are two main groups to consider. One group is the community as a whole. These are the potential patients, their families, and local leaders in the catchment area of the hospital or clinic. The views of the community – about eye care in general and our services in particular – will affect the overall demand for services.

The other group is those patients who have visited the eye clinic. Patients will give feedback about their experiences to their friends, neighbours, and family, and this will affect how willing others are to come forward. Finding out how these patients felt about their visit to the eye centre will help us to understand much about the community’s attitude to the eye clinic. In addition, these patients can also provide helpful feedback and suggestions about how we can provide a better and friendlier service.

Understanding the community

The best way to find out about the beliefs and practices in the local community is to visit them and talk to them. One useful way of doing so is to conduct a knowledge, attitude, and practice (KAP) survey.

KAP surveys are designed to find out what different people know about a topic, how they feel about it, and how they behave (their practice). For example, you could find out the following about cataract in older people:

• What do different groups of people in the community know about cataract?
• Do they know it is possible for someone who is blind from cataract to see again after a simple operation?
• Do they know that there is an eye clinic nearby?

Patients can provide helpful feedback about how we can provide a better and friendlier service

CASE STUDY: KILIMANJARO CHRISTIAN MEDICAL CENTRE, TANZANIA

A need for change at Kilimanjaro Christian Medical Centre (KCMC) in Tanzania

A few years ago, the eye department at Kilimanjaro Christian Medical Centre (KCMC) decided to improve their cataract service. The team in charge of the improvement project discovered that, of those people blind from cataract living fewer than 50 kilometres away, only 6% were coming for cataract surgery! The team asked an ophthalmology resident to go into the community and talk to groups of pastors and village leaders.

Most of the groups the resident spoke to said the same thing: people were afraid of KCMC and patients felt that they were not treated kindly.

This helped to provide the motivation to bring about considerable change at KCMC. This change involved many people and much hard work. In this issue, we have used extracts from this report to illustrate many important areas of learning.

A full report is available online from Kilimanjaro Centre for Community Ophthalmology International: www.kcco.net/Karibunibook.pdf (360kb). With many thanks to the authors of the report: Susan Lewallen, Anthony Hall, John Barrows, Raheem Rahmathullah, Victoria Sheffield, Mark Swai, and John Shao.
outcome? Do they see it as a friendly place to go?

• What do people do about cataract? What are their practices? Would the family support an older person to come for surgery? Do people tend to wait until both eyes are blind before they come for surgery? Would they come to your eye clinic, or would they prefer to travel further and go elsewhere?

In this example, the KAP survey would involve talking to a range of different people, such as older people themselves, the family members who look after them, and community leaders. You would also record basic information such as gender, age, location, etc. You can then analyse the data collected to discover what key messages must be communicated to different groups in order to encourage more people to come to your eye unit.

If you are marketing your services, KAP surveys can be expanded to review local ability and willingness to pay for specific services. They can also help you assess people’s understanding and use of new national health insurance schemes or new charges for in-patient services, for example.

KAP studies must be carefully designed to ensure they are as useful as possible, so it is advisable to get outside help from a local university or a non-governmental organisation with relevant experience. The World Health Organization (WHO) has much experience in designing and using KAP surveys (see “Further reading”, page 35).

Understanding our patients

Day to day, it is important to know how satisfied patients are with our services and to provide a means for them to give us feedback. This can be helpful to staff as a reminder of the need to provide a good service, and managers can use this feedback as a means to motivate and encourage staff. Examples are using a complaints box (only helpful for literate patients) or giving each patient a pebble when they leave which they can put into one of two boxes: one with a ‘happy’ face and one with a ‘sad’ face.

An exit survey is another relatively quick and easy way to get feedback from patients as they leave the clinic. An exit survey is a series of questions that patients answer either verbally or on paper. Depending on the time and resources you have available, you can choose to get feedback from every patient or a randomly selected group of patients (every fifth patient, for example).

Patient shadowing

Patient shadowing is an approach that may help us understand how patients experience their journey through our eye care service.

It involves asking someone (such as an administrator or researcher) to follow a single patient, for example someone who needs cataract surgery, throughout their visit to the clinic.

Patient shadowing can help us to understand patients’ physical journey through the eye service: how long each stage takes, what the waiting times are, how far they must travel within the clinic, and how easy it is for them to find their way around. This is particularly useful if we are hoping to improve patient flow (see page 31); for example, by reducing unnecessary trips or waiting times.

The person doing the shadowing can also look at the clinic or hospital environment: is it tidy, hygienic, and comfortable? Is it safe for people with visual impairment?

Finally, and most importantly, patient shadowing is an opportunity to record the patient’s perceptions about the service. What is important to them? By talking to the patient, the person doing the shadowing may find out that being treated in an unfriendly way may affect the patient much more than having to wait a long time before they are seen. This will tell us where to focus our efforts to improve our eye service.

Have you tried it?

We would be interested to hear from you if you have tried patient shadowing. What did you learn and what were you able to change or improve as a result?

Further reading

• ‘Patient perspectives’ by the NHS Institute for Innovation has a detailed section on patient shadowing.

• ‘Patient shadowing’ is one of the tools on New Zealand’s ‘Health service co-design’ website.
  www.healthcodesign.org.nz/03_explore_a.html
Exit surveys must be easy and quick to complete and be conducted in the local language. It is important to test the questions on a few patients first to make sure you are getting useful feedback. Use volunteers, administrators, or students who rotate through your clinic to conduct the interviews. Patients will be reluctant to say anything negative to clinic staff in case it affects the care they receive in future. Take care to reassure patients that their feedback is anonymous; you may want to ask the staff conducting the survey to wear ordinary clothes or uniforms that are different from those worn by clinic staff.

Use closed-ended questions where possible: these are questions for which patients have to select a response, such as ‘yes’, ‘no’, ‘sometimes’, ‘agree’, ‘disagree’, and so on. These are easier and quicker to analyse than open-ended questions, which invite patients to answer in their own words. Using closed-ended questions is especially useful if you wish to compare responses over time.

There is a lot of experience and helpful information available from the family planning and reproductive health sector about conducting exit interviews. For example, researchers looking at family planning clinics in Latin America found that clinics were able to make helpful changes if they were sensitive to complaints, and willing to work on issues raised by just 5% of patients (see ‘Further reading’ on page 35).

To gain a more in-depth understanding of patients’ experiences, you can also conduct individual semi-structured interviews or hold patient focus group discussions. These can also help you to understand the community you serve.

Semi-structured interviews are conducted with individuals and involve working through a list of basic questions, with the option of asking for more detail or further clarification from the person being interviewed.

Focus groups are similar to semi-structured interviews. A group of people who share a common characteristic (for example, people who were referred for cataract operations by the outreach programme) are chosen to take part in a discussion about a specific topic, for example how they were treated by the staff in the waiting area. A facilitator will have a list of questions to work through and will encourage the group to discuss and debate the key issues. Focus groups discussions can form the basis of further follow up and engagement with patients and the community.

For us to really understand patients’ experiences, they must feel comfortable about providing both positive and negative comments.

Again, using someone from outside the eye service to ask the questions will help people feel at ease. Some ideas for questions are:

1. What is the best thing about your experience at our hospital/clinic today?
2. What is the worst thing about your experience here today?
3. If you could change anything about today, what would it be?

You could ask similar questions about different aspects of the service, such as the facilities, payments/costs, the way staff treated them, how well staff explained to them what was going to happen, whether all their questions were answered clearly, their physical comfort and care (including pain management), and so on.

Getting help

To get a more in-depth understanding of the community’s beliefs and views about eye care and services, and your patients’ experiences, you may want to seek outside assistance.

All methods have advantages and costs, and all require careful thought and planning. It may be advisable to ask for advice from a local university or from non-governmental organisations with experience of assisting the health sector with this work. World Health Organization offices and staff members can also offer support, including advice about what skills and expertise are available from other organisations.

**CASE STUDY: KILIMANJARO CHRISTIAN MEDICAL CENTRE, TANZANIA**

Making changes – and managing change

At the eye department in Kilimanjaro Christian Medical Centre (KCMC), information about patients’ views of the service was used to convince staff that there had to be a change in the way they took care of patients. Changes were required in how they delivered services at KCMC and in how they conducted outreach.

To create these changes, it was necessary to get the support of both leadership and staff.

Rewaving the patient pathways (patient flow – see page 31) led to changes in the length of lists in theatre and the use of key nursing staff. The team also introduced a new computerised records system. All this allowed medical, nursing, and administrative staff to clarify their roles and understand how their ways of working affected their patients.

These changes also led to improved job satisfaction from the staff themselves. According to the report, “it was heartening to see staff respond to having more concerned follow-up from supervisors, recognition and praise, the chance to use new skills in a better-organised and less frustrating environment, and the sense of camaraderie that develops when people work towards a common goal.”

This is possible thanks to good leadership and good management support.

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In addition to keeping an eye on the quality of our clinical services, making small changes in how we deliver services can have a big impact on how patients feel about their experience – which will in turn motivate them and others to come for the eye care they need. Here are a few things you may be able to try.

**Look after your staff**

Patients want us to listen to them. They want to be treated with dignity and respect. If staff are well trained and confident in what they do, they will be less stressed, more relaxed, and will find it easier to listen and talk to patients. Staff who feel valued and respected by their managers are also more likely to treat their patients with respect. In addition, consider giving staff specific training in how to be welcoming, caring, and supportive. Give recognition to staff members who do this well!

**Be informed about other services**

Find out what other health and support services are available in your area, for example low vision, rehabilitation, inclusive education, as well as clinics such as diabetes, neglected tropical diseases, neonatal units, and so on. Visit them and invite them to visit your service. Ask for leaflets or posters of their services, and ensure you know what their opening times and days are so patients do not have wasted journeys.

**Get involved**

Find out what other organisations or groups work with potential users of your eye service. For example, an organisation providing services to pensioners or other older people, a school for the blind, white cane training events, or the national society for the blind (where it exists). Think about how you can support their activities and share information with them.

**Set specific times for clinics**

These should be displayed both inside and outside the building, for example using posters or signboards. Give printed information about clinic times and dates to other health and related staff in your area, for example, primary health care workers, mother and child workers, birth attendants, pharmacists, and optometrists. Then the community and patients will know when they should come for non-emergency treatment and how long a wait to expect. This can help you to manage your patients’ visits and eliminate wasted journeys.

**Plan around your patients**

Think about your patients. Do they know where to go? Are there long waiting times? Are the receptionists friendly, and do they explain to patients what to expect? Every now and then, take some time to put yourself in your patients’ shoes (see ‘Time to reflect’, opposite page). If you were a patient in your clinic, how would you feel? What would make you feel better?

**Explain costs clearly**

All costs for services should be clearly given in advance – whether verbally, on paper, or using posters and signboards. Include all services covered by insurance schemes or other waivers. Patients then know what to expect and can make informed decisions. This will also make it difficult for anybody to ask patients to pay more than the authorised amount.

**Learn from others**

Ask for assistance and find ways of sharing skills and experiences with your colleagues, for example ophthalmic nurses or ophthalmic clinical officers at other clinics or hospital in your area. If you don’t ask, you will not know how you may be able to help each other. Visit other clinics or hospitals to see how they put patients at the centre of what they do.

**A focus on quality**

The World Health Organization’s standards for surgery1 and other outcomes should be the benchmark used in all eye care teams. This will inspire confidence in patients and their families. Successful outcomes are the best advertisement for your services in particular and eye care services in general.

Reference

Encouraging people to seek out eye care services involves raising awareness about eye care in general, raising awareness about the existence and benefits of a particular eye clinic or hospital, and being clear about the costs involved. People in the community may be unaware of the existence of eye care services; they may also think that they do not need the services, or that they will not be able to afford the treatments. People may fear eye surgery; they may also believe that some eye disorders cannot be prevented or cured.

There are many established ways of addressing misconceptions and lack of information in the community. Increasing people’s awareness about eye care is necessary, but not enough: we also want them to come to our eye centre, hospital, or clinic to get the eye care they need.

If we want to successfully change people’s behaviour, we must understand who we are trying to reach (see page 22):
- What do they already know?
- What opinions do they hold about eye care and related issues, such as eye care for older people or women?
- What motivates them? What is important to them?
- Who has influence with this community?

This information can help us to design a programme of information, education, and communication (IEC) activities aimed at convincing people to change their own health behaviour and make use of the health services we offer. When these activities take the form of advertising campaigns, this is known as ‘social marketing’.

Being successful at IEC or social marketing does not always require a lot of money. It does, however, require careful thought and planning. Here are a few ideas and suggestions for all your communication activities.

1 Posters and promotional materials. If you want to create posters, make sure they are appropriate for the community you want to reach and that the language and pictures communicate the right messages. Think: who are you trying to reach? What motivates them? Who do they respect?

It is always advisable to test the posters first by showing them to people from the community you are trying to reach. Ask them what they think the posters mean, and try to determine whether they feel more motivated to change their behaviour after seeing the posters. Think about where people are most likely to see the posters – for example at bus stops, near shops, or in community centres.

Ask for help from others who have done similar work, for example people working on HIV/AIDS or TB campaigns.

2 Interpersonal communication. You could teach community leaders or other respected community members about eye care, where to go for help, and how much this will cost. They can share the new information with others. Patients who have received good eye care are also very important as they can convince many others to come for treatment. Consider inviting them to talk about their experiences at community gatherings.

3 Newspapers, magazines, radio, and television. Journalists are often looking for new ideas or community initiatives to support, and will be happy to tell their readers, listeners, or viewers about the importance of eye care. For example, you can tell them that many older people in the community are going blind from cataract, and that a simple and affordable operation could restore their sight. Radio serials (soap operas) have been used successfully in many parts of the world to communicate health care information to
listeners. The writers and producers of these series are often looking for ideas for stories and may be able to include eye care messages. A story about what happened when someone could see again for the first time after a cataract operation might make an exciting and dramatic episode!

4 Community outreach programmes. Outreach programmes such as eye screening and community-based rehabilitation can be very helpful. You will raise awareness about your eye programme simply by being present in the community, and you will also have an opportunity to meet and work with local organisations such as religious groups, local charities or non-governmental organisations. These groups often have good access to community members who may be willing to help with your social marketing campaigns. They can also help to provide infrastructure and other logistical support for your outreach activities.

5 Targeting key groups. Promote eye care in general and your services in particular to key groups. For example, if you wanted to encourage older adults to come to you for cataract surgery, you could try to reach pensioner groups, old age homes, and so on (see panel, right). You could visit them to tell them about your services. If possible, invite former patients to talk about their positive experiences.

Make contact with other health care workers; they may help you educate community members and assist with case finding. For example, you could give cataract information leaflets to physicians or nurses who work with older people.

Other barriers
Listen to what the community says about the obstacles they face coming to the clinic: transport, safety, cost, etc. Do what you can to help and explain where they can go for additional support.

Cost is an important issue. Many people are afraid that they will not be able to afford eye care services. Include all the costs clearly in any promotional materials.

Include fee waivers, for example for low-income groups. Specify where your services are covered by national or local health insurance schemes, or any private schemes that are administered through your hospital or provider.

At the clinic itself, make sure patients can see what the different costs are, such as the registration fee, outpatient fees, and cataract surgery fees.

Getting patients into the eye care system: as easy as ABCD!

A Awareness creation. Increase the community’s understanding of eye care and when they should seek help. Ensure they know about your eye service and how to access it. There should be a clear referral pathway.

B Best service. Offer quality services. Encourage staff to do their best. Patients who have had positive experiences will encourage others to come.

C Cost. Ensure that patients understand all the costs involved, also the indirect costs such as travel expenses.

D Distance. Make sure the services are as close to the community as possible. Be in the community!

FROM THE FIELD

Reaching out to older people in the community

Nguyen Thi Hien lives and works in the Que Phong community, which is located in Quang Nam province in Viet Nam. She has provided care to the members of her local community for more than thirty years, ten of those years as a Village Health Worker. Although Ms Hein was a passionate and skilled volunteer she had never received any training in Primary Eye Care.

In 2006, Ms Hien was invited to take part in a primary eye care training course. Alongside other village health workers, she learnt about blindness prevention and how to provide basic eye care services to the local community, including diagnosis and treatment of simple eye problems and how to refer patients for cataract and other eye operations.

After the course, Ms Hien felt inspired to raise awareness about blindness prevention. She began working with existing ‘elder clubs’ in her community to educate the elderly members of the community about cataract surgery. The first time she visited the clubs, the members knew very little about cataract and blindness prevention. To begin with, they were doubtful about what Ms Hein was saying. After much persistence, several patients agreed to travel with her to the district hospital for cataract surgery.

The operations were a big success and word quickly spread through the elder clubs of the availability and quality of the cataract surgery. More patients became interested in surgery and Ms Hein provided them with advice and support. Ms Hein invited the growing number of patients who had received cataract surgery to talk to the elder clubs, sharing their experience with other members and explaining how cataract surgery had changed their lives.

Ms Hien is now the head of Gia Cat Tay village, and continues to raise awareness about eye care services and to refer many patients to the district hospital for surgery.

Ms Hien (left) with one of the older women she has supported to undergo cataract surgery. VIET NAM
**Experiences in rural Kenya: Addressing lack of knowledge**

**Helen Roberts**
Coordinator, Kwale District Eye Care, PO Box 901-42, Mombasa, Kenya.

Building an eye centre in an area where you know there is great need for eye services is not enough. We began our work in Kwale district eighteen years ago after a feasibility study estimated that there were ten thousand people who were blind, thirty thousand with low vision, and about the same number with significant eye disease in the district. We knew that none of them were accessing eye care, but on our first day we saw only one eye patient!

We wanted to know why no-one was coming, so we went into the community to find out. We spoke to chiefs, attended local meetings, visited dispensaries, and went from door to door to ask if anyone knew someone who was blind. When we found a person who was blind, we asked them why they had not come.

Here are some of the answers we received:

- “People may not be able to get to your eye centre.”
- “They have no idea that you can help them.”
- “They do not understand what you are doing and therefore they are afraid.”

We realised that we had to create better awareness of who we were and what we were doing. We had to talk to people about eye health and tell them that treatment and correction of eye problems were possible. We had to show people what we were doing and what we were trying to achieve.

To do this, we trained traditional healers, women’s groups, village leaders, teachers, prostitutes, whichever groups we knew about it and were coming forward. Here are some of the answers we received:

- “People may not be able to get to your eye centre.”
- “They have no idea that you can help them.”
- “They do not understand what you are doing and therefore they are afraid.”

Then, as the programme expanded, we recruited workers specifically for this role who were based in the community. They had to be respected members of society, literate, and able to get around. We provided a five-day training course at the eye centre, teaching them the basics about eye care and, more importantly, how to get groups of people together in the community and explain everything to them. This included information on how to get to us, how much it cost, and so on. The community workers would then find people with eye problems and arrange for our screening team to assess them in a local school or clinic. They also provided basic advice and brought those with more serious eye disease to the eye centre.

We also invited existing rural health workers, traditional birth attendants, traditional healers, and village leaders for a similar five-day workshop, one day of which would be conducted at the eye centre. Many people wanted to see for themselves that we were acting in an ethical and honest way and not, for example, removing eyes and selling them.

We wanted to make sure that we were educating our fellow health workers in other facilities about eye care and about our specific services. In a poor rural area such as Kwale, there are many people doing many things in health. So we set up a stakeholders’ forum, now under the guidance of the ministry of health, so we could all find out about each other’s activities in the field and be able to refer our patients to the right services. This may sound easy, but the work is ongoing, involving long meetings and lots of talking! Excitingly, the government of Kenya is establishing community health extension workers and community health workers in our district. We are trying to encourage these workers to come to us for primary eye care training, and we also encourage them to refer patients to us.

We ask our patients for feedback on an ongoing basis. When they requested a safe means of getting from the main road to the eye centre, we purchased a tuk-tuk (see picture) to provide a free shuttle service. Patients also asked where they could have their blood pressure checked or get help with diabetes control, so we gave a general doctor space to set up a clinic. This brings more people to the eye clinic and also helps our existing patients.

We found that the answer to lack of knowledge was to talk to all those interested and create awareness. We are still learning, but these are the most important first lessons from our project.

**Experiences in a capital city: How we market our services**

**Boateng Wiafe MD MSc.**
(Community Eye Health) Regional Director for Africa, Operation Eyesight Universal

Lusaka Eye Hospital, in the capital city of Zambia, was established in 2001. We had to work hard to ensure that people knew about it and were coming forward for the eye care they needed. Here are the lessons we learnt.

- **We defined our target customers.** We serve mostly the west end of the city, so that is where we focus our promotion and education efforts.
- **Every now and then, we are invited to speak on the radio and television about an eye condition.** When we speak on the radio, we never ask patients to come to our eye hospital. The most important thing is that they seek eye care, so we advise them to go to their nearest eye clinic. Even so, many more patients usually come to us after each broadcast.
- **We have a website and this also helps people to find out about our services.**
- **We regularly have outreach services targeted at all sections of the community.** We visit institutions like the police, prisons, factories and other places of work, schools, churches, mosques, and market places. During these visits, we conduct health education and awareness creation, and screen and manage or refer those with eye conditions. We visit each community four times a year.
- **Our experience shows that the majority of the patients we see were encouraged to come by people who have been to us before. This would not happen if the quality of service we offered were below standard.**
- **From time to time, we conduct a survey to find out about patient satisfaction. This has helped us to get better every year.**
- **We ask our patients if they know anyone in their neighbourhood who has an eye problem. We ask them to invite these people to come along with them to our hospital. For example, we ask patients diagnosed with glaucoma to bring their relatives for free screening.**
Welcoming patients into our eye service

Jonathan Pons
Ophthalmologist and Programme Director, Good Shepherd Hospital Eye Care Project, PO Box 218, Siteki, Swaziland.
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Going to the eye clinic?
Before our patients even leave home for the clinic or hospital, they are already anxious. They may have many questions, such as: “How much will the transport cost? Will I find someone reliable to look after my children? How early will I have to leave to get to there on time? What will they say? What will they do?”

All too often, patients’ fears are realised when they arrive at the hospital: staff are impatient because they are in the wrong queue, and they might even be shouted at or humiliated. Add to this being tired and hungry, sitting on an uncomfortable chair, and being unable to leave it for fear of losing a place in the line. Not to mention worrying about the cost, the long return trip back home, and the children. “Oh, for a kind face and someone who really cares!”

Well, we do really care, but so often other worthwhile goals such as efficiency, reducing costs, and ensuring good clinical outcomes take greater priority. In the complexity of managing a busy waiting area, improving the patient experience may well be neglected!

In this article we hope to show you how to make a patient’s entry into the eye clinic as comfortable and positive an experience as possible.

Reception
The first person our patients talk to – usually the person at the reception or registration desk – sets the tone for their visit.

It is advisable to choose someone for this role who is patient, friendly, and kind; they must also have good communication skills and a thorough knowledge of the hospital system. They should be able to deal calmly with patients and family members who are angry or upset.

In this article we hope to show you how to make a patient’s entry into the eye clinic as comfortable and positive an experience as possible.

At Good Shepherd Eye Hospital, the clinic process is explained to everyone in the waiting room at the same time. SWAZILAND

Making drinking water available shows kindness and consideration for patients.

Triage
Walk-in patients, especially those with pain or a visible eye injury, should be quickly assessed by a highly experienced nurse so they can be moved to the front of the queue or directed to the correct waiting area. This process is known as ‘triage’. Some eye clinics have a separate reception area for emergency patients.

Explain to other waiting patients that emergency patients always receive priority, otherwise they may worry that they have been forgotten.

The physical environment
The waiting areas, and the corridors leading up to them, should be well lit and clearly signposted.

Paint high-visibility lines on walls and stairs; this will help patients with low vision to find their way around the building.

Pathways should be designed so they are appropriate for people in wheelchairs or people who are blind. Provide rubbish bins and tidy these areas at least once a day to ensure people will not stumble over furniture, toys, or rubbish.

It is a good idea to wipe down surfaces in the waiting area with a mild soap solution to reduce the possibility of cross-infection between patients.

Regularly maintain the chairs and seating in the waiting room. Are they comfortable and safe? Provide back support if possible, or place benches against a wall.

Educational opportunities
An eye clinic is a good place to provide eye care information or education. Posters and brochures explaining common conditions, how they can be...
Prevented, and how they are managed at your clinic can be very helpful. An educational or promotional audiotape or DVD with the same information is even more appropriate in a clinic serving people with visual impairment.

**Sanitation**
Inspect the toilets and hand washing areas regularly. Dirty sanitation facilities are not only unhealthy, but can affect the reputation of an eye clinic! Ensure there is always toilet paper or water, depending on local preference. Provide hand soap and paper towels for drying hands.

The toilets are also a good place to add information posters about eye care and to remind patients and the people accompanying them about the importance of hand washing.

**Managing queues**
There is no single answer to how best to organise queues in your clinic. Each culture has its own waiting temperament and social conventions. In many cultures, the approach to waiting is “first come, first served.” This is usually more important than social status or even the severity of the present condition (except for emergencies). In some cultures, the very young or very old are afforded special privileges and allowed to go to the front of the queue.

However, whatever the local conventions, one of the worst things about waiting is when you have no idea how long you will have to wait. This can make you feel trapped! Do what you can to keep people informed of the approximate waiting time and reassure them that the system is fair and that everyone will be seen. For example, you could give patients a numbered card when they arrive, with an approximate time when they will be seen. This allows them the freedom to use the toilet or find refreshments without losing their place in the queue.

It may save time and effort if patients are taken to the correct waiting areas by a clinic helper. This will be especially important for specialist clinics and review or post-operative services.

Reassure patients who are waiting and give them updates on how long it will take for them to be seen. A waiting room can be a tense and lonely place for an anxious patient, and if nothing seems to be going on, patients may feel they have been forgotten.

Explain what patients can expect inside the examination room. The examination room is where the patient’s expectations and levels of anxiety will be most intense.

The clinic is an intimidating environment for patients, especially children and those who are blind. Clinicians, and the health care workers who assist them, can help by giving patients and their relatives as much verbal and physical reassurance as possible.

**Using volunteers**
Our eye services are generally short of human resources.

Health care workers are usually busy at their work stations and have little opportunity to help in the waiting room. So the minor needs of waiting patients are easily neglected. If there is no accompanying relative, who will help the elderly to their feet, lead patients who are blind, or clean up a mess?

Some hospitals encourage and make use of volunteers. Volunteers could come from a service organisation, a church, or a local charity. Their efforts can include running a tuck shop, fundraising, or organising support groups and eye care awareness days.

Many volunteers or their relatives have been affected by visual impairment and have benefitted from the hospital services – they are sometimes motivated to improve the conditions in the hospital as a result of their own experiences.

**Make the most of opportunities**
Private practice or VIP waiting rooms serve those who would like to pay for fast-track and premium services. This has the advantage of reducing the number of people in the general waiting room and earning an income to support patients who are unable to pay. The “fee-for-service” concept has helped many eye units gain financial independence.

However, it is highly advised that a VIP waiting room be housed in a different building, to avoid offending those who may have to wait long hours. If this is not possible, consider constructing a separate entrance into the main eye clinic for the “fast-track patients.”

**TIPS:**
* “In our clinic, we have TV entertainment, a drinks machine, and also a moving print message board saying what the delay time is, etc.”
* “We have a whiteboard which has the names of the clinic staff, together with their title and role.”
* “To prevent misunderstandings, we have a notice in casualty saying that urgent patients may need to be seen out of sequence”
* “We allow a community lady to sell vetkoek (fried sweet bread) to our patients.”
* “We have two types of patients coming every day: new patients and patients coming for review. We give patients numbered cards to put them in order as they arrive, and we use different colours for the different types. Patients coming for review get red number cards so that they can easily identified and seen faster. This decongests the system since they will not need to go through all the services. Of course emergencies are identified at the reception and handled accordingly.”

With many thanks to Faustin Dennis Ngounou and staff members at Good Shepherd Eye Hospital for their contributions of practical tips and ideas.

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**The case for a walk-in clinic**
At Good Shepherd Eye Hospital, we have abandoned appointment clinics in favour of walk-in clinics. This benefits both ourselves and our patients.

**Patient reasons:**
1. “First-come, first-served” is considered fair
2. No need to make arrangements
3. May combine with visit to other hospital clinics
4. Assured of access in case of emergency
5. Own decision to attend clinic may change after observing a full or empty clinic.

**Eye clinic reasons:**
1. Human resources saved as no clerk needed to take appointments
2. Complex lists and organisation avoided
3. Patient delays or cancellations do not affect the eye service
4. The competitive nature amongst patients ensures an early start to the clinic.

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Improving patient flow through an eye clinic

Organising Eye Services

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Improving the flow of patients through our eye programme is about making their journey easier while making the best use of our own time and resources in the eye clinic. It involves eliminating unnecessary steps and processes, giving us more time to focus on our patients and on providing a good – and friendly – service. Eye care administrators and managers benefit too: better patient flow reduces waste and makes more efficient use of theatre time and human resources, which in turn reduces costs, attracts more patients, and improves cost recovery.

Thinking about what our patients value can help us to optimise patient flow. Generally speaking, patients value everything that provides them with a good outcome: appropriate referral, a correct diagnosis, the right information and advice, the right treatment, and appropriate follow-up and aftercare. They do not value things that seem unnecessary to them, for example: waiting longer than seems reasonable, having to provide the same information more than once, or travelling to the hospital more than once when two visits can be safely combined.

It is therefore very helpful to look at our eye service as a whole from time to time, particularly if we have received negative feedback from our patients. We must examine everything we do: from the moment of first contact with our patients to the time they are finally discharged after a successful follow-up examination.

The good news is that, by thinking about our patients and how to provide them with a good experience in our clinic, we will be able to make changes that benefit the clinic as well. See Table 1 for some examples.

The patient journey

It helps to consider the patient’s visit to the eye clinic as a journey. Here are some examples of the different ‘stations’ along a patient journey through an eye clinic:

- Registration
- Retrieval of medical records
- Visual acuity testing
- Slit lamp examination
- Consultation
- Treatment
- Fee collection

If we want to consider how a patient is referred to our clinic, particularly if our clinic forms part of a VISION 2020 district programme or a government district health care system, we can include steps such as ‘outreach’, ‘primary health care referral’ and so on in the list above.

Understanding existing patient flow

Many patients will travel through our eye clinics and it is our responsibility to see that patient flow is well managed. Before making any improvements, start by assessing (or auditing) the existing patient flow in the eye clinic. This can be done by one person, but it is often better to invite representatives from both clinical and support staff to help. Everyone’s input is valuable.

Regular evaluation of patient flow will allow us to identify problems and make helpful changes. The suggestions that follow overleaf should help you to start thinking about patient flow and identify areas for improvement.

The focus should be on what patients value: does the way the clinic function help us to give patients the best service we can?

- List the different ‘stations’ on a typical patient’s journey through your clinic.
- How long do they have to wait before they can be seen?

Table 1. How improving patient flow can benefit patients and the eye programme: a few examples

<table>
<thead>
<tr>
<th>What patients want</th>
<th>What the eye unit wants</th>
<th>How improving patient flow could meet the needs of patients and the eye hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less waiting time</td>
<td>Efficient use of staff time</td>
<td>If some staff are waiting for patients, find areas where patients are waiting for staff and move the staff to that part of the process.</td>
</tr>
<tr>
<td>Lower prices for eye care</td>
<td>Reduced waste</td>
<td>Eliminate any unnecessary procedures or diagnostic tests, provided they do not affect the quality of clinical care</td>
</tr>
<tr>
<td>Good quality care</td>
<td>Sharing of scarce resources, e.g. slit lamps or theatre time</td>
<td>Prepare patients for examination or theatre in a separate area so that the time spent at the slit lamp or in theatre is kept to a minimum.</td>
</tr>
<tr>
<td>Lower travel costs, less time away from home</td>
<td>Reduce patients who do not attend for operations or who do not come for pre-operative examinations</td>
<td>Where possible, do pre-operative examinations on the same day as the operation.</td>
</tr>
<tr>
<td>Respect and care</td>
<td>Co-operative patients, enough time to provide proper care, a good reputation</td>
<td>Provide information at the start of the patient’s journey about what is likely to happen, how long it might take, and how much it is likely to cost. This puts patients at ease, so staff can focus on what is important.</td>
</tr>
</tbody>
</table>

Continues overleaf ➤
moving through each station? You could assign a staff member or volunteer to visit waiting areas and monitor the waiting times. What do patients think? You could conduct exit interviews with patients or consider assigning a staff member or volunteer to do patient shadowing (see page 23).

• Look at the patients’ physical journey through the clinic. On a detailed plan of the clinic, trace the paths they have to walk between each of the stations. Are there any unnecessary back-and-forth movements? Do patients know where to go? Do staff often have to stop what they are doing and help direct patients?

• Trace the paths different staff members have to take as they carry out their various daily tasks. Include support staff as well, such as administrators, porters, stock room staff, etc. Ask staff: is there anything that could be changed to make their work easier?

• Look at the use of equipment. Is there enough equipment? Is unused equipment taking up valuable space in the passageways or consulting rooms?

• What are the times and days of the week, month, or year when the clinic is busiest?

• Look at the procedures for stores and purchasing, and at how you keep records and identify patients (see 'Further reading' on page 35). Are patients required to provide the same information more than once?

Knowing what to change

There are various approaches to analysing patient flow, with names like ‘process mapping’ and ‘value stream mapping’ (see ‘Further reading’ on page 35).

Finding and eliminating bottlenecks is another approach and is relatively straightforward. The aim is to reduce waiting times and make better use of equipment and the time of clinicians. Bottlenecks are usually easy to identify:

• They are the areas with the longest queues! For example, one often sees long queues in front of the visual acuity testing station, whereas, in another part of the clinic, the screening station is waiting for patients. In this instance, the visual acuity testing station is the bottleneck – it is the part of the clinic where patients are getting stuck.

• As an additional person at the visual acuity testing stage would speed up the flow of patients through this area and provide a steady stream of patients at the screening station. Patients will therefore have a quicker journey, and eye care workers’ time will be used more efficiently.

It is worth noting that this is a process of ongoing improvement: once one bottleneck has been dealt with, it will very soon become clear if another part of the clinic has become congested and will require attention.

How to make changes

Once we better understand patient flow in our eye clinic, and where the delays and inefficiencies are, the next step is to talk to clinical and support staff about how improvements can be made.

It is important to create an atmosphere of teamwork and collaboration, and to encourage everyone to contribute their ideas. Janitors or stock control clerks, for example, may offer valuable insights into everyday processes that can be streamlined.

Giving staff an opportunity to contribute has the added advantage of making staff members feel like part of a team; agreeing on a shared goal also makes it easier for people to work together.

Practical suggestions

Becoming better organised allows us to make better use of available clinic space and infrastructure and to make better use of staff time.

This can often avoid or delay the need for an expensive expansion programme!

Here are some practical ideas for improving patient flow.

Better systems

• Standardise procedures in the clinic. This will allow more patients to be seen in a day and make it easier to keep quality consistent.

• Use tags or stickers on charts to make them easy to identify.

• Make use of helpful technology where appropriate. For example, use computers for indexing records or use devices that will speed up intraocular pressure readings.

• Some days are busier than others (e.g., Mondays are usually busier because of weekend emergencies). Part of a solution to an overcrowded clinic may involve moving clinic activities to different days to allow a better spread of patients throughout the week.

• To reduce unnecessary back and forth movement of patients because of multiple payments to cashiers, try to offer ‘package’ prices that cover the cost.
of multiple services. Or set up a system that allows patients to pay when they leave for all the services they have used.

- Good internal communication systems (intercoms, or an intranet) between the various departments will make it easier to share information about patients and will also save time (see panel on right for an example from Madagascar).

**Better use of space**

- Arrange the different stations in the patient journey (registration, records retrieval, visual acuity testing, etc.) in a logical sequence so that patients can easily move from one to the next.
- Put related services nearby. Sometimes, something as simple as moving an optometrist into the clinic can make a big difference to patients!
- Try to avoid any back and forth movements, where patients have to cross paths with others, as this can create confusion. When a room has just one door, patients who are leaving may have to squeeze past patients who are queuing to get in. Use two doors or, if need be, open up a new doorway in an existing wall.
- Clearly signpost each station in the clinic so patients know whether they are at the right place. Paint doors different colours or number them in a large font. Drawings are particularly helpful for patients who cannot read.
- Use colour-coded lines on the floor to help direct patients to different stops along their journey.
- Locate cashiers and drug dispensaries at the outlet of the clinic in order to avoid unnecessary back and forth movements of patients; this reduces congestion.
- Have staff available to help patients who cannot find their way.
- Sometimes, using two rooms can reduce waiting times. For example, while an ophthalmologist is busy with a consultation in one room, a nurse or nurse assistant could get a patient ready at a slit lamp in the room next door.

**Better use of staff**

- Make good use of mid-level ophthalmic personnel, nurses, and nursing assistants. They are usually highly trained and can perform many tasks that will free up the time of ophthalmologists so they can focus on what only they can do.
- Make more staff available during busy times, and stagger lunch breaks so that work flow is continuous. This will reduce patients’ waiting times.
- Encouraging a culture of teamwork will help to improve patients’ experience at the clinic. Treating staff fairly and with respect will reduce the likelihood of interpersonal problems.

- Problems in how staff are managed can lead to poor team morale. Staff who are happy, and feel respected by their colleagues or managers, find it easier to be kind and friendly to patients and to contribute to clinic improvements.

**Other problems that affect patient flow**

There are some problems that affect the entire patient journey.

- Inefficient recordkeeping can cause many delays. A records retrieval rate of less than 90% should not be tolerated in an eye clinic! Periodic review of all forms and stationery is useful; check that patients do not have to provide the same information more than once, unless absolutely necessary.
- Patients and clinic staff who do not understand each other’s language is another common problem. Take steps to ensure that essential patient education materials are available in a local language, particularly instructions for medication. Where possible, ensure there are sufficient interpreters available. Ask for help from local churches or community organisations.

**An ongoing journey**

A patient’s journey does not end when she or he leaves our clinic. Good referral to other services, such as low vision or rehabilitation clinics, must form part of the service you offer.

The spacing of follow-up visits should also reflect the patient’s situation and balance the need for good clinical care with the ability of patients to travel to the clinic. Clearly indicate the date of any follow-up visits on the patient’s records, and send reminder messages by cellphone (mobile phone) if possible.

Optimising patient flow is a journey of ongoing improvement. We hope that this article has helped you take the first steps.

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**CASE STUDY: KILIMANJARO CHRISTIAN MEDICAL CENTRE (KCMC), TANZANIA**

**Improvements on the ward and in theatre**

Once the new community outreach programme started bringing in large numbers of patients, especially late in the day, the need to make ward and theatre procedures more efficient became critical. The team decided that it would be more efficient if the counsellor (a trained nurse) working in the outreach programme recorded vital signs, completed consent forms, and educated the patients right there in the field. As a result, the ward nurses had less to do at the time of admission. New forms, designed by an external ophthalmic assistant working with the eye department nurses, also saved time.

In the operating theatre (OT), improving efficiency was partly a matter of clearing unnecessary equipment and supplies from the OT so that an extra operating table could be installed. It also required many discussions with the doctors as to how the OT should be run and the importance of starting on time.

Under the leadership of the nursing co-ordinator, and motivated by positive feedback and praise from the head of the ophthalmology department, more nurses began to take pride in their accomplishments; this was a modest but important step forward in achieving better attitudes and motivation.

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In order to effectively address diabetic retinopathy (DR), people with diabetes must understand that diabetes can damage their eyes. They must know where to go for tests to determine whether they have DR. If they have DR, they must be told, and referred to someone who is able to provide treatment at an affordable cost. Those who do not have DR must be informed that they need annual follow-up and be reminded to return at the appropriate time.

This can be very difficult to achieve in practice, as patients with diabetes are usually treated in a primary health care setting or in specialist clinics, such as endocrinology clinics. The medical staff providing diabetes care may not have the knowledge or skills to inform patients about DR or to do any screening.

Although the prevalence of DR has not been established in Indonesia, the country currently has over 9 million people with diabetes. At Cipto Mangunkusomo Hospital, a national referral hospital in Indonesia, the department of ophthalmology and the department of internal medicine are working together to create an integrated DR programme.

When diabetes patients attend the endocrinology clinic (part of the department of internal medicine) they are given information on DR and offered screening tests (visual acuity and retinal photography). These tests now form an integral part of the examination protocol for all diabetes patients visiting the endocrinology clinic. New patients are offered the tests upon diagnosis, and existing patients are tested once a year. In addition, all diabetes patients are given a checklist with all the tests they need, and visual acuity and retinal photography are included on this list.

Screening and retinal photo grading services are provided free. The cost of laser treatment depends on the patient’s insurance scheme, and is free for those without health insurance.

Keeping track of patients who have been identified with diabetic retinopathy is challenging, particularly as this involves the two different departments: internal medicine and ophthalmology. As a result, a DR programme registration card was introduced. This card is given to all the patients who are screened at the internal medicine clinic. If referred to ophthalmology, the patient brings this card to the eye clinic. The ophthalmology patient number is also indicated on the card. This helps identify patients that have been screened by the DR programme and makes it possible to track patients if they need to be followed up at the eye clinic.

In July 2011, the eye clinic was moved to a new location, approximately one kilometre away from the screening room. It was anticipated that it would be difficult for patients to find the new location. Sign boards directed patients from the internal medicine department to the new eye clinic. One of the members of the team also accompanied the patients to the new centre.

Since November 2011, all patients with DR are telephoned immediately after grading, irrespective of their priority level. The high priority patients are followed up more intensely: if the patients do not return for the appointment, they are contacted again within three days of their appointment. The programme also gives the endocrinology clinic a list of patients with sight-threatening DR who have not returned for treatment. The clinic then ensures that these patients receive further education during their regular clinic visits and are encouraged to return for laser treatment. This has increased the number of returning patients.

From July 2010 to December 2011, 3,762 diabetic patients have been screened and 861 identified with DR. Of the total number of patients screened, 1,462 had other eye conditions.

The programme has also trained 67 community-based diabetes educators and 130 community health workers focusing on diabetes and eye disease. Thirty five ophthalmologists have been trained in laser surgery. Over four hundred internists, ophthalmology residents, and clinic staff have been educated about the importance of DR. The programme was also supported by radio and newspaper campaigns highlighting the importance of eye health and diabetes.

It has taken a lot of effort to ensure the two departments are able to work together successfully. The plan for an integrated DR service was first discussed with senior clinic administrators and a plan of action was then agreed upon and followed up. Multiple educational sessions were held for staff, nurses, clerks, and internists at the clinic. Even so, constant communication and awareness-building with administrative and medical departments is still necessary.

The programme receives technical assistance and external funding from Helen Keller International.
READERSHIP SURVEY REPORT

Community Eye Health Journal – promoting improvement in eye health for over 20 years

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The Community Eye Health Journal was established in 1988 and is published by the International Centre for Eye Health, based at the London School of Hygiene and Tropical Medicine. It has editions in French, Chinese, and Spanish, and there is a special edition for India. Paper copies of the journal, in all four languages, are sent to over 35,000 people in 183 countries (see map).

We would like to thank everyone who completed our recent reader survey. Here is a brief summary of the results.

Where our readers are
- A total of 1,418 responses were received (5.3% response rate). 59% were from Africa and 32% from Southeast Asia; the remaining 9% were spread across the other regions.
- Half of respondents worked in small towns, villages or rural areas; the other half worked in larger towns or capital cities.
- Two thirds of respondents worked for government, a quarter in the private sector, and the remainder worked for non-governmental organisations.
- Nearly 40% of respondents worked at primary level; 34% at secondary level, and the remainder at tertiary level.

What our readers do
- The biggest professional group represented were ophthalmic nurses (33%), followed by ophthalmologists (26%) and optometrists (12%; double the number in 2005). Non-eye care specialists made up 29% of the respondents, including nurses, doctors, administrators, pharmacists, researchers, and technicians.
- More than half of respondents had a wider range of responsibilities than those described by their profession. Around 60% reported that community development/outreach, health promotion, and patient counseling were part of their work responsibilities; 40% reported being responsible for programme planning and management. 22% for hospital administration and management, and 14% were also policy makers.

Access
- A total of 57% of respondents had internet access whenever needed, but around half cited slow speeds, high costs, and lack of know-how as reasons for preferring not to read the journal online. In another part of the survey, respondents described using the paper copy as a teaching aid when educating patients or training students.
- Nearly two thirds of respondents had access to a computer, and 79% had found the Community Eye Health Update CD ‘useful’ or ‘very useful’.

Impact
- 91% of respondents said they used the journal to teach or educate others, including patients and the community.
- 90% of respondents agreed that the journal had improved and/or supported their work.
- 80% said that something they read in the journal had led them to change their clinical practice or management of patients.
- The vast majority of respondents (89%) worked directly with patients; they had contact with an average of 60–79 patients per week.
- 80% agreed that the journal had motivated them to reach out to the community, 75% that it had changed the way they conducted health education, and 70% agreed that it had changed the way they talked to patients, stimulated them to talk to non-eye care colleagues, and motivated them to stay in eye care.
- Respondents passed on the journal to an average of ten other readers each.

We are encouraged by the positive response to the journal and appreciate the many helpful suggestions for future themes we received. With thanks to Prof Allen Foster, Prof Clare Gilbertl, Anita Shah, Sally Parsley, and George TH Ellison DSc.

FURTHER READING

Putting patients at the centre of eye care

Understanding what patients think (page 22)
- Visit www.institute.nhs.uk and type ‘patient perspectives’ in the search box
- Read more about KAP surveys in on
  www.uniteforsight.org/global-health-university-methodologies
- Family planning clinics in Latin America successfully used exit interviews to improve quality of care and patient satisfaction. www.guttmacher.org/pubs/journals/2806300.html
- Using KAPs to plan DR services: a report from LAICO. http://laico.org/v2020resource/files/KAPStudyMethodology.pdf (PDF, 410kb)

Improving patient flow (page 31)
- Community Eye Health J, Vol. 23 No. 73. Equipment for eye care
- Community Eye Health J, Vol. 23 No. 74. Ten years to VISION 2020: why information matters
- Community Eye Health J, Vol. 24 No. 76. Instruments and consumables
- Visit www.institute.nhs.uk and search for each of the following (by typing the term into the search box), in turn: ‘patient flow’, ‘bottlenecks’, ‘process mapping’, and ‘value stream mapping’. Read case studies on patient flow from the UK, including ones in eye care.
  www.carebydesign.org/files/no_delays_achiever_case_studies.pdf (PDF, 1.1MB)
- How Aravind Eye Care Systems in India improves patient flow. www.accesshf.org/publication/Article/14
Taping an eyelid closed

**Sue Stevens**  
Former Nurse Advisor, Community Eye Health Journal, International Centre for Eye Health

**Before performing any eye procedure**  
- Wash your hands (and afterwards too).  
- Position the patient comfortably with head supported.  
- Avoid anything that may distract you or the patient.  
- Ensure good lighting.  
- Always explain to the patient what you are going to do.

**Reasons for taping an eyelid closed**  
- To protect an eye with an anaesthetised cornea.  
- To avoid exposure keratitis, e.g., when normal eyelid closure cannot be achieved.  
- To aid healing of an epithelial defect.  
- To assist eyelid closure under an eye pad.

**You will need**  
- Scissors  
- Waterproof adhesive tape: 2.5 centimetres (1 inch) wide

**NOTE:** Use only lightweight tape, as others are likely to cause a reaction when used on the sensitive skin of the eyelids.

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**Tape correction for lower eyelid entropion**

**Before performing any eye procedure**  
- Wash your hands (and afterwards too).  
- Position the patient comfortably with head supported.  
- Avoid anything that may distract you or the patient.  
- Ensure good lighting.  
- Always explain to the patient what you are going to do.

**Reasons for this procedure**  
Entropion is the turning in of the edges of the eyelid (usually the lower eyelid) so that the lashes rub against the eye surface. This procedure provides temporary correction of lower lid entropion in order to:  
- relieve discomfort  
- avoid corneal abrasion caused by the inturned lashes (trichiasis).

**You will need**  
- Scissors  
- Mirror  
- Waterproof adhesive tape: 2.5 centimetres (1 inch) wide

**NOTE:** Use only lightweight tape, as others are likely to cause a reaction when used on the sensitive skin of the eyelids.

---

**Preparation**  
- Carefully explain the procedure to the patient so she or he understands what will happen. It can be very alarming to find that your eye cannot open!  
- Ensure the eyelid skin is clean and dry.  
- Ask the patient to close both eyes.

**Method**  
- Cut a piece of tape approximately 4 cm long (Figure 1).  
- Hold the tape horizontally. Apply the top half of the tape to the lower half of the eyelid (Figure 2).  
- Secure the bottom half of the tape to the skin below the lower eyelid (Figure 3).  
- Check that closure is effective by asking the patient to open both eyes (Figure 4); this should be impossible for the taped eye.  
- Reassure the patient again by reminding her or him of the aim of the procedure.

**NOTE:** The tape can become loose over time, so replace as necessary.

---

**Method**  
- Cut a piece of tape about 3 cm (approximately 1.2 inches) in length.  
- Gently evert (turn out) the lower eyelid to its former, normal position.  
- Apply one end of the tape to the skin about half a centimetre (5 mm or about 0.2 inches) below the centre of the lower eyelid.  
- Pull gently downwards on the tape, creating a horizontal fold in the skin below the eyelid (Figure 1).  
- Secure the remainder of the tape to the facial skin, maintaining the skin fold (Figure 2). This should correct the lower eyelid position.  
- Ask the patient to close, and then open, both eyes naturally. This will indicate whether the taping is effective and secure enough. It should still allow the eye to close completely.

**REMEMBER!**  
Patients will have to learn to do this themselves. Allow them to practice a few times under your supervision. Remind them how important it is to replace the tape regularly in order to maintain the benefit. Ensure the patient has a supply of tape. Remind the patient to check that the taped eye can still close completely, as they could otherwise be at risk of exposure keratitis.

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Checking and replacing fuses

Although we often think of fuses as a nuisance, they play an important safety role in preventing damage to equipment due to electrical overloading, thereby reducing the risk of electrical shock to patients and staff. You should not dismiss a blown fuse as an inconvenience. It may be a sign that a real fault has developed, giving you the chance to find and fix the problem before any serious damage occurs.

Fuses degrade with time and will eventually fail. A blown fuse does not always mean that there is something wrong with the equipment, and in this article we will show you how to replace such a fuse.

However, do not keep replacing a fuse if it blows immediately after you replace it. In these instances, call a qualified biomedical equipment technician to service the equipment.

A fuse is essentially a short piece of wire of a selected diameter and composition so that it conducts current up to a certain level, but melts or ‘fuses’ if the current rises above that level. It becomes an open circuit when it blows, interrupting the flow of current and preventing damage.

In most cases, the fuse wire is mounted inside a small glass or ceramic tube, fitted with metal end caps. The glass tube forms a physical guard for the fuse, so that when it blows the molten metal does not cause damage or injury. A glass tube allows you to see when the fuse has blown: there will be a gap in the wire or a metallic smear on the inside of the glass.

Procedure

Many electrical devices used in eye care have an externally accessible fuse near the electrical cord (Figure 1) that you can check and replace by following these steps.

1. Disconnect the device from the electrical system.
2. Remove the fuse from its holder. In some cases you may need a small screwdriver to unscrew the fuse holder cap.
3. Look at the fuse wire. If there is a visible gap in the wire or a dark or metallic smear inside the glass then the fuse is blown and needs to be replaced. If you cannot see whether the fuse is blown, follow steps 4 and 5.

If the fuse is definitely blown, go to step 6.
4. Set a multimeter (Figure 2) to the resistance or Ω (Ohms) setting.
5. Place one of the multimeter leads on one end of the fuse. Place the other lead on the other end of the fuse. If the reading is between 0 and 5 Ω (Ohms), the fuse is good. A higher reading indicates a bad or degraded fuse. A reading of OL (Over Limit) definitely means a blown fuse.
6. If the fuse is blown, replace the fuse with one that is exactly the same (see panel). Make sure to note the fuse amperage and voltage ratings, which should be marked on the fuse itself (Figure 3) or on the panel label near the fuse holder. Additionally, note the size and whether it is a slow-blow or a fast-blow type fuse. If there are no markings on the fuse itself or on the equipment you must consult the device’s operating manual.

General suggestions

- Always disconnect equipment from electrical power before removing a fuse; not doing so may result in serious injury.
- Always replace a fuse with an identical type, and never substitute a fuse with foil or another object. This could lead to electrocution and fires.
- Keep enough stock of the fuses used in your clinic or hospital. Store each type in separate containers with a label describing the fuse’s voltage and amperage, whether it is a fast-blow or slow-blow type, the size, minimum number needed (the minimum stock level), and the models of equipment that use each type of fuse.

More about fuses

You should note the following when replacing fuses to ensure an exact match.

Amperage rating (A). This indicates how much current the fuse can carry. Most eye care devices have fuses rated between 0 and 10 amperes.

Voltage rating (V). This is the maximum supply voltage that the fuse can safely carry. The most popular ratings are 125V and 250V.

Blowing type. Fast-blow fuses will blow as soon as the current reaches the fuse’s amperage rating, while slow-blow fuses are designed to tolerate a large number of startup surges and modest short-term overloads without blowing. Fast-blow fuses usually have a thin wire while slow-blow fuses usually have a thicker, coiled wire. You should never substitute a slow-blow fuse for a fast-blow fuse or vice versa.

Size and tube material. Most fuses used in medical equipment have a glass tube but you may find some with ceramic tubes. The two most common sizes of fuses are:

- American size: 3.2 cm × 0.6 cm (1¼ inches × ¼ inch),
- European size: 20 mm × 5 mm (0.8 inches × 0.2 inches).

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Eliminating trichiasis: the next steps forward

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Significant progress is being made in the fight against blinding trachoma. However, according to estimates, there are over 7.3 million people with trachomatous trichiasis (TT) in the world.¹

Trachomatous trichiasis occurs when in-turned eyelashes scrape the cornea. Not only is this incredibly painful, it also causes damage to the cornea; sufferers will become irreversibly blind unless it is corrected surgically.

Providing access to quality surgical services, based in the community, is critical if we are to reach the target of eliminating blindness due to trachoma.

Since the formation of the Global Alliance for the Elimination of Blinding Trachoma (GET2020) in 1997, there have been advances in trichiasis management on many fronts. However, surgical numbers remain quite low.

The Global Trichiasis Scientific Meeting was held in Tanzania earlier this year to consider evidence from various sources about how best to manage trichiasis. The meeting was attended by scientists, national ministry of health programme managers, and NGO personnel from ten countries affected by trachoma. Here are selected conclusions from the meeting that are particularly relevant to eye care professionals actively working in the field:

Surgical management

- It is both necessary and possible to improve trichiasis surgery. Programmes and surgeons should follow the techniques outlined in the WHO manual “Final Assessment of Trichiasis Surgeons”²
- The bilamellar tarsal rotation procedure can produce excellent results.
- Specific guidelines for managing recurrent TT are limited or lacking in most settings. Programmes are encouraged to develop locally appropriate guidelines for the management of recurrent TT.
- Evidence indicates there is no difference in the TT recurrence rates between silk and synthetic absorbable suture.

Surgical training and quality

- The WHO Final Assessment of Trichiasis Surgeons manual should be adopted by all programmes and incorporated at all levels of training.
- There is programmatic evidence that the trainees being put forward for TT surgery training are not always the most suitable candidates. Programmes should adopt and follow clear criteria for trainee selection.
- There is a need for a training of trainers manual. Where possible, training curricula should be standardised at the national level to ensure that different training activities to address some of the needs.

Surgical output and uptake

- Supportive supervision should be built into the programmes from the beginning. Surgery team leaders should be selected from amongst active TT surgeons and receive additional training and resources to ensure they are empowered to do their job.
- Surgeons should maintain a surgical register of all patients. Auditing of clinical outcomes should be part of ongoing supervision. There should be a first year audit after training, including a review of patient cards and productivity, and some review of patient outcomes and observation of surgery.

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References


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CONTINUING PROFESSIONAL DEVELOPMENT

Test your knowledge and understanding

This page is designed to test your understanding of the concepts covered in this issue and to give you an opportunity to reflect on what you have learnt. If anything has changed or improved as a result of reading this issue, tell us about it. Write to The Editor using the contact details provided on page 22. The multiple True/False questions were produced in collaboration with the International Council of Ophthalmology (ICO) and the Diagnose This Quiz is provided courtesy of the Ophthalmic News and Education (ONE®) Network of the American Academy of Ophthalmology.

1. Think about welcoming patients into our eye service and improving patient flow. Which of these statements are true, and which are false?

- a. It is helpful to locate cashiers and drug dispensaries near the entrance of the hospital.
- b. Before making changes in your eye clinic, it is important to find out what your staff think.
- c. It is unlikely that you will be able to meet the needs of patients and the clinic team at the same time – usually you will have to choose one or the other.
- d. Patients generally do not mind waiting a long time if they are able to come and go without losing their place in the queue.

2. Think about finding out what patients think and improving patients’ experience

- a. Other health services, institutions, or organisations can help us to understand what patients think about our eye services.
- b. Most patients value clinical outcomes more than they value being treated kindly.
- c. Open-ended survey questions are easy and quick to analyse.
- d. Patients responding to exit surveys are more likely to be honest if they are interviewed by someone who is not working in the eye clinic.

3. Think about taping an eyelid closed and tape correction for lower lid entropion

- a. When performing simple ophthalmic procedures, it is not always necessary to explain everything to the patient.
- b. Tape correction for lower lid entropion can reduce the risk of exposure keratitis.
- c. After taping an eyelid closed, always check that closure is effective.
- d. Tape correction of the lower lid can provide temporary relief for patients suffering from trichiasis.

4. Think about checking and replacing fuses

- a. A visible gap in the wire or a metallic smear inside the glass indicates that the fuse must be replaced.
- b. If a fuse blows immediately after you replace it, try at least twice more before calling a technician.
- c. Always disconnect a device from the electrical system (generator, battery, or mains electricity) before replacing a fuse.
- d. If a device is needed urgently, it is permissible to replace a fuse with foil or another object.

ANSWERS


Diagnose This Quiz

A 12-year-old boy fails his school vision screening test. His medical history is benign. Middle-aged relatives of both sexes for three generations reportedly have had central visual loss. His best-corrected visual acuities are 20/80 OD and 20/20 OS. The disc, vessels, and retinal periphery of both eyes appear normal, but the macula of the right eye has a fibrotic scar and the left eye shows a yellow, round, circumscribed lesion of one disc diameter that blocks fluorescence on fluorescein angiogram. The ERG is normal, but the electro-oculogram ratio (light peak/dark trough) is reduced.

What is the most likely diagnosis?

- Neuronal ceroid lipofuscinosis
- Bardet-Biedl syndrome
- Best’s vitelliform macular dystrophy
- Stargardt’s disease

ANSWER

B. true. 1. c. False.

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News
Have your say: neglected tropical diseases (NTDs)
Neglected tropical diseases is one of the themes planned for 2013. Have you had a useful or interesting experience you would like to share with other readers? Do you have any questions you would like to ask our experts? Write to: The Editor, International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London WC1E 7HT, UK. Email: editor@cehjournal.org Deadline: 15 March 2012. Word limit: 350 words or fewer. Photographs are welcome but please obtain written permission from patients.

New CD
The new Community Eye Health Update 7 CD contains past issues of the journal as well as photographs, books, software, and many other helpful eye care resources. Published in English, Chinese, French, Portuguese and Spanish, the CD is available sent free of charge to health workers in low income settings across the world. Order your copy from TALC (Teaching Aids at Low Cost): PO Box 49, St Albans, Hertfordshire, AL1 5TX, UK. Tel: +44 (0) 1727 853869. Email info@talcuk.org

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Courses
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University of Cape Town, South Africa
For information about a postgraduate diploma in community eye health (PGDip) in 2013, or a Masters in Public Health (Community Eye Health) in 2013, contact Zanele Magwa, Community Eye Health Institute, University of Cape Town, Private Bag 3, Rondebosch 7700, South Africa. Tel: +27 21 404 7735. Email: ntombizanele.magwa@uct.ac.za

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MSc in Public Health for Eye Care.
From September 2013 to September 2014 or part-time over two years. Apply before April 2013. For scholarships and details of application, write to: Registry, LSTHM, Keppel Street, London WC1E 7HT, UK. Tel: +44 207 299 4646 or visit www.lshtm.ac.uk/prospectus/masters/mscphc.html

Kilimanjaro Centre for Community Ophthalmology (KCCO), Tanzania
For information on courses, contact Genes Mng’anya, KCCO, Good Samaritan Foundation, PO Box 2254 Moshi, Tanzania. Tel: +255 27 275 3547. Email: genes@kcco.net or visit www.kcco.net

Lions SightFirst Eye Hospital, Nairobi, Kenya
Small incision cataract surgery for ophthalmologists wishing to upgrade from ECCE. Duration: 1 month. Courses run every month. Cost: US $1,000 for tuition and US $500–700 for accommodation and meals. Write to: The Training Coordinator, Lions Medical Training Centre, Lions SightFirst Eye Hospital, PO Box 66576-00800, Nairobi, Kenya, call +254 20 418 32 39, or email training@lionsloresho.org

Lions Aravind Institute of Community Ophthalmology
Instrument maintenance courses with a trainee:trainer ratio of 1:1. The last course in 2012 starts on 1 Dec 2012. Duration: Four weeks. Cost: US $400 (including tools). Visit www.aravind.org/education/coursedetails.asp or write to: Prof V Srinivasan, LAICO, 72, Kuruvikaran Salai, Gandhi Nagar, Madurai 625 020, Tamil Nadu, India. Email: v.srinivasan@aravind.org

Next issue
The next issue of the Community Eye Health Journal will be on open-angle glaucoma