VOLUME 30 • NUMBER 97 • 2017

Community Eye Health Journal

Health care professionals– using multiple sources of information.
INDIA
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(C) RAJKUMAR, ARAVIND EYE CARE SYSTEM

Continuing professional development (CPD)

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Why should we continue to learn?

The World is changing and medical practice with it. Society expects healthcare workers not only to have knowledge and skills but to be competent, professional and up to date through life-long learning.

Formal under-graduate and post-graduate education prepares us with the basic "potential" to implement health care. Actual medical practice and responsibilities place demands on the individual to maintain a relevant level of knowledge, skills, attitudes and even behaviour, to improve standards of practice and patient care. The tensions that arise at a personal level are knowing what to learn, where to find it and how to record and measure it against peer groups or local standards.

CME and CPD

Continuing Medical Education (CME) and Continuing Professional Development (CPD) are traditionally thought of as the methods by which medical providers maintain knowledge and skills that are up to date with the latest medical advances. In the past, CME events mostly consisted of meetings and printed material. It was not particularly individualised to specific needs and there were no requirements as to how much or what type

Continues overleaf

About this issue

Being a health professional is not easy. Initial optimism is tempered by the reality of everyday practice. You intend to 'do no harm' but you forget a lot of what you have learnt. You try and keep up to date but there are time pressures and the rest of life to contend with. You may work in a remote area where there are no colleagues to talk to and little access to information.

But help is at hand. In this edition of the journal the rationale for Continuing Professional Development (CPD) is explained. There are articles on how to manage your own learning and illustrative case studies from practising eye care professionals. There are new ways of undergoing self-directed learning which are stimulating and fun, and there is information on where to find good resources.

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of content was needed. There were also few rules regarding industry's (e.g. equipment and consumable manufacturers) participation in CME events.

Recently, increased emphasis has been placed on additional attributes thought essential to the provision of good health care, including professionalism and communication skills. In addition, societal expectations, proliferation of new technology and differences in individuals' needs have challenged the concept of CME. These factors have led to a new term "Continuing Professional Development" (CPD). CPD encompasses all of CME plus other aspects of being an effective medical care provider such as their professionalism, ethics and communication skills.

Effective CPD

Effective CPD is a complex and multi-dimensional concept that directs a person to improve their practice, clinically and professionally within the dynamics of the local setting.

Therefore, CPD should be systematic, with formal programmes developed for all members of the health care teams. It should be comprehensive and include all competencies of the medical profession (medical expertise, collaboration, communication, leadership, advocacy, scholarship and professionalism). Ideally CPD programmes should be accredited and regulated by an outside review body to assure quality and unbiased education. Indeed, many countries now have organisations that assess and accredit CPD to assure high quality. In addition, effective CPD should:

- be individually relevant, addressing learning gaps
- produce change in the participant's practice
- have no commercial bias
- be required.

All of these concepts and advice on how to produce good CPD are described in detail in the International Council of Ophthalmology (ICO) Guide to Effective CME-CPD E-book (available as a free download at **www.icoph.org/downloads/ICOGuidetoEffectiveCPDCME.pdf**).

CPD is essential for several reasons

- New treatments and concepts abound. Without CPD the eye care worker is woefully unprepared to practise appropriately.

Community Eye Health Journal
VOLUME 30 • NUMBER 97 • 2017

International Centre for Eye Health

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Nurses undergoing CPD together. Aravind Eye Care System.
INDIA

- The world is continually shrinking as mobility of patients and physicians expands. Health care workers may be caring for patients from regions with unfamiliar diseases and diseases previously confined to a geographic region are now spreading to other parts of the world.
- Electronic medical records are making patient outcomes more transparent. This will drive health care workers to self-improvement through effective CPD.

All of these factors are increasing the demand for CPD. This demand produces revenue-generating opportunity for CPD providers (e.g. ophthalmic societies) to fund their non-CPD activities and achieve their goals.

Why CPD matters

CPD should matter to everyone involved in health care, including practitioners, managers, leaders of professional bodies, and members of ministries of health. New knowledge and required skills are exponentially increasing. On a personal note, the majority of ophthalmic procedures done today were not taught when I was in training and CPD is the mechanism by which I learn how to perform these skills.

Universal health coverage and Sustainable Development Goals

Universal health coverage through increased availability, accessibility, quality of care and service provision can only be achieved through appropriately trained and equipped health personnel. In 2015 the United Nations General Assembly adopted 17 Sustainable Development Goals with the intent to end poverty, protect the planet and ensure prosperity for all. One of the challenges to achieving this is the lack of accessible health care around the world.

This is certainly true for eye health. Most countries don't have a sufficient number of ophthalmologists, optometrists and allied ophthalmic personnel.

Compounding the problem, skilled eye health care workers are often concentrated in large cities, leaving much of the country with poor access to eye care. In addition, skilled eye care workers may be unable to provide services within their scope of practice. For instance, although ophthalmologists provide surgical eye care, in some countries as few as 15% perform surgery.

Solutions to eye care access include the creation of more eye care workers, improved efficiency through eye care team training and expanding/improving abilities of current eye care workers. Quality of clinical and surgical care within a health system is dependent on practitioners engaging with established standards of practice, implementing governance and managing budgets, as part of their routine range of activities.

All of these solutions and activities require effective CPD.

Conclusion

Thus, CPD is evolving and is crucial for the eye care worker's continuing competence. During training the principle of life-long learning must be emphasised. CPD allows staff to be confident in their skills and facilitates the efficiency, effectiveness and quality of the eye care team. It helps assure the best outcomes for the maximum number of patients and improve access to high quality eye care globally. The availability of effective CPD is improving but the demand and its increasingly mandatory nature will necessitate ever-expanding opportunities for quality CPD.

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Published by the International Centre for Eye Health, London School of Hygiene & Tropical Medicine.

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ISSN 0953-6833

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How the RCOphth CPD system works

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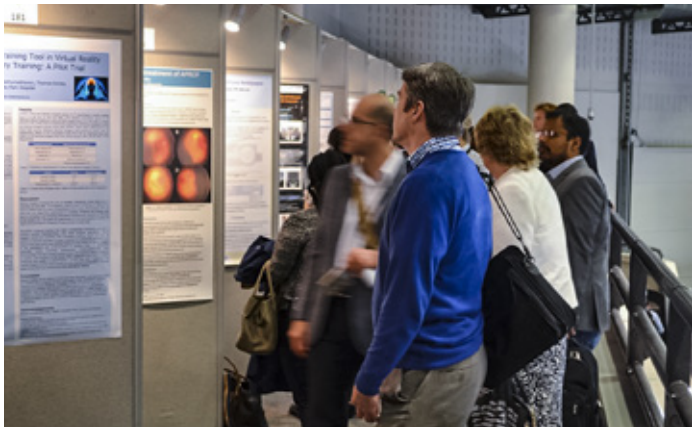
The RCOphth CPD system is tried and tested and is now on-line and available to members and non-members. Credits are accumulated over a five-year cycle and the record of educational activity is tied to appraisal and revalidation.



RCOphth

CPD. Viewing posters at the RCOphth Congress. UNITED KINGDOM

The Royal College of Ophthalmologists (RCOphth) started its CPD programme in 1996 and is open to all fellows, members and non-members (non-members are charged an annual fee). The programme is designed for those working in the National Health Service (NHS) as well as those working outside of it. CPD is an online system.

The programme follows a five year cycle of CPD activity in which 250 credits need to be accumulated. Participants are expected to accumulate 50 credits per year. The system allows doctors to record their educational activity which they are then able to present at their appraisal and revalidation. It supports them in specific changes in practice and career development. Points given by the College are based on one point equating to one hour of educational activity.

The College has a mechanism for approving meetings, symposia, conferences etc. for allocation of CPD points. An application is completed and sent to the College for approval. The College holds a list of approved activities that are reviewed every five years in the UK, Ireland and overseas. Any new regular meeting will need to have run successfully for three years or three occasions before being considered for inclusion on the approved list. Meetings accredited by other Colleges for CPD purposes are all recognised by the College.

CPD categories

Categories assist people to classify CPD and to ensure that a balance of activities is undertaken. There are four categories (see Table 1).

Category A: Clinical and Academic: Internal (10 points)
Category B: Clinical and Academic: External (20 points)
Category C: Clinical and Academic: Self directed (5 points)
Category D: Professional & Managerial (5 points)

How to record CPD

Participants should record CPD points on a continuous basis and plan what they wish to attend in advance as far as possible. What actually happens is that this is often left to the last minute when preparing for appraisals. All this can be recorded on the online system on a regular basis. CPD records are an excellent way to demonstrate that knowledge and skills are up to date.

It is the responsibility of participants to ensure that they undertake a range of CPDs that reflects the local and national needs of their practice and their own learning needs.

Keeping a diary

This does not need to be a complex process and for many years the College used a paper version before it switched to an online system (see Figure 1). This can be as easy as having an ordinary paper diary and writing down your events and points on the days that you attend them. Again this can be prepared in advance and help with the planning of your educational needs. Providing a self-made diary which can be photocopied and made into a booklet and carried round for easy access is also a cost-effective option.

Table 1 Examples of educational activities that may qualify for CPD

A. Clinical and Academic: Internal	B. Clinical and Academic: External	C. Clinical and Academic: Self-directed	D. Professional and Managerial
Participating in local teaching programmes	Participating in regional/national and international seminars/workshops	Completing journal self-assessment questions	Attending a course on how to train e.g. training the trainers
Participating in department audit meetings	Attending conferences e.g. Annual Congress	Reviewing a paper for a journal	Attending a meeting on how to use a new piece of software e.g. PowerPoint or other computer related activity
Participating in local seminars and meetings	Making new presentations at conferences	Reading journals and text books or completing an e-learning activity	Attending a course on interview techniques/ equality and diversity training etc.
Participating in journal clubs/x-ray/ pathology meetings etc.	Undertaking a research project that results in a publication	Undertaking visits to other units	
Participating in online training e.g. webinars, courses		Writing examination questions and examining	

Figure 1. Diary

Name of Event: _____

Venue: _____

Date from: _____ Date to: _____

Approved for CPD points (Total): _____

Q 1	What have I learnt from this event?	Points/category
A 1		
Q 2	How will I apply the knowledge or skills gained?	
A 2		
	Total Points	

Reflective practice

Reflection will help a doctor assess whether their learning is adding value to the care of their patients and improving the services in which they work; they should record any impact (or expected future impact) on their performance or practice. Reflection should also occur as soon as possible following the event as this will make it more meaningful.

Reflection drives change in performance and is the key to effective CPD. The General Medical Council's *'Good medical practice'* (**www.gmc-uk.org/Good_medical_practice__English_1215.pdf_51527435.pdf**) requires you to reflect regularly on your standards of medical practice. Reflection must be integral to your own development plan, appraisal and job planning discussions.

You must reflect on all aspects of your professional work. This should be informed by discussion with others and by specific evidence, such as data from audit, complaints and compliments, significant events, information about service improvements, results of workplace-based assessments and feedback from patients and colleagues.

Where an activity has not been formally approved for CPD, it is the responsibility of the participant to record the activity and document the learning achieved. Learning may reinforce existing good practice as well as provide new knowledge.

How you record your reflective practice is important and examples are given below to demonstrate this.

Example 1

Individual X attends a full day symposium on glaucoma. The symposium was approved for a total of six CPD points.

A **leading specialist** in the field of glaucoma with a purely glaucoma practice.

Q	What have I learnt (new knowledge/information) from this event?	Points allocated	Category
A.	There was little new at this seminar for me in terms of knowledge. I did hear about a new technique for tying releasable sutures which I will try myself	1	Clinical and Academic External (B)

i.e. only one point out of a possible six allocated as little new knowledge/skills gained.

Example 2

Individual X attends a full day symposium on glaucoma. The symposium was approved for a total of six CPD points.

A **general ophthalmologist** with no glaucoma subspecialty interest.

Q	What have I learnt (new knowledge/information) from this event?	Points allocated	Category
A.	I learnt all about the new drugs available for the treatment of glaucoma and the mechanisms of action. I also learnt about drugs in first line and second line, and which combinations are most effective.	6	Clinical and Academic External (B)

i.e. sufficient new knowledge/skill gained to allocate the maximum number of points.

Example 3

An **ophthalmologist** attends a time management course that was approved for two CPD points.

Q	What have I learnt (new knowledge/information) from this event?	Points allocated	Category
A.	I learnt how to prioritise my correspondence, delegate responsibilities and manage my paperwork more efficiently	2	Professional and Managerial (D)

Example 4

A **consultant ophthalmologist** reads a review article on endophthalmitis following cataract surgery for two hours.

Q.	What have I learnt (new knowledge/information) from this?	Points allocated	Category
A.	Nothing new but my current knowledge was refreshed and consolidated. I will treat these suspected cases with much more urgency.	2	Clinical and Academic: Self Directed (C)
Reference	Bacterial Endophthalmitis – Evidence Based Update Ophthalmology 2002; 109: 13-23		
Critique	An excellent review article		

Note: Maximum number of points allocated for reading journals is only five per year, which must be referenced and critiqued.

Keeping my professional development continuous

Wanjiku Mathenge
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Keeping up professionally means knowing what is current and then selecting what is applicable to your work. This requires a personal commitment to recognise the need, find the time and seek resources. The process is lifelong and can become part of your routine.

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Performing Vitreoretinal surgery under supervision. RWANDA

When I graduated as an ophthalmologist in Africa I really felt I had achieved my goal!; but the reality of working in the field was very different. With each patient, my knowledge and skills were challenged, I found that surprisingly, many patients knew much more than I thought they did.

Decisions I made as a young ophthalmologist have helped me keep up with my own learning and development

1. **Formal learning – obtaining CME points.** I decided that once every two years I would save up and attend one major international conference such as the IAPB, WOC or MEACO. I not only attend, I participate by presenting papers or chairing sessions. I receive external sponsorship about 40% of the time. In addition I attend and present at every local annual congress of the College of Ophthalmology of Eastern, Central and Southern Africa (COECSA).
2. **Informal learning – routine reading with no pressure.** I subscribe to ophthalmology journals and newsletters – especially the free online ones. I subscribe to online CPD sites, webinars, and e-CPD sites and download articles that I need to read. I find that when the next patient is sitting in front of me somehow my head will automatically sift through the good and bad articles that I have read, and help me reach a sensible decision.
3. **I keep a network of mentors which has proved invaluable.** I have been inviting these mentors to come and teach me surgery or research in my own set-up with my staff. This helps me and my team to keep up to date with new techniques even after they leave.

Even in a small town like Nakuru patients asked me questions such as "You say you cannot help me here, is there anywhere in the world I can get the help I need? I 'Googled' and found..." I soon realised that to answer them honestly I needed to know a great deal more. The intensity and the competitiveness of ophthalmology surprised me too. I was "here" and I needed to be "there". Being "there" meant staying on top of the game as far as all the pathology, conditions and treatments that I needed to know. The trouble is – "there" is constantly shifting with the advent of new techniques and equipment.

Besides clinical skills there were growing demands relating to management, communications and technology. First recognise your needs and then the path to learning and acquiring the skills can be through a formal or an informal process.

I have found it very useful to be an active member of my local ophthalmology society where I can participate in CPD activities. In Rwanda, my own institute is a registered CPD provider. When CPD became mandatory I found it easier to become more structured in my approach and avoid a last minute scramble for points in order to maintain registration with the Medical Council.

Mandatory CPD is often seen as a "stick", but it provides thematic guidance and structure that is often harder to organise on your own.

I keep a folder on my laptop called CPD in which I drop all the activities as I do them so that when it comes to submitting to the council, my records are all in one place.

Conclusion

It is necessary to take ownership and responsibility for your own learning, have formal and informal processes in place and dedicate regular time for reading and keeping professional development continuous.

How to figure out what CPD/CME you need

Milka Mafwiri
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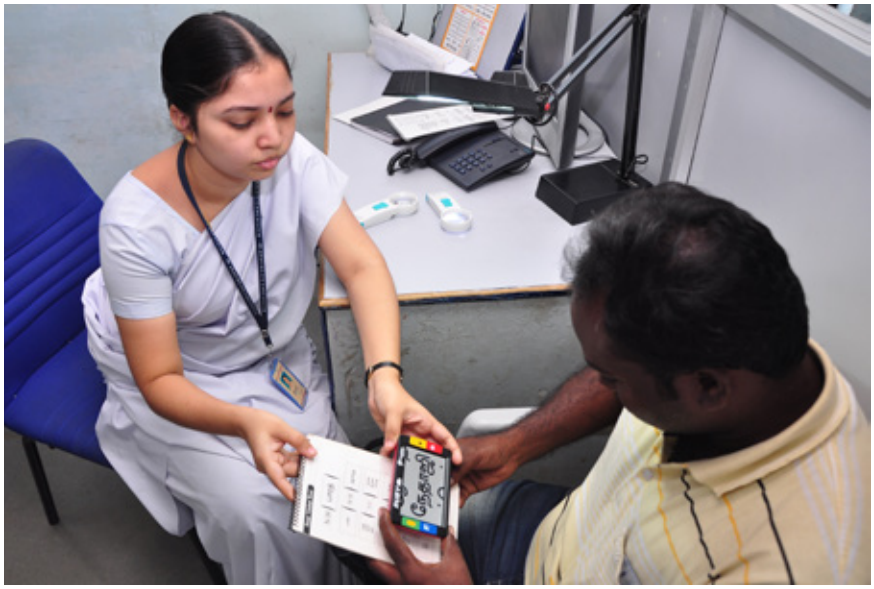
Do you feel totally in control of every situation? We need to be honest about the gaps in our knowledge or skills, keep motivated and find solutions to the challenges.



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How much do you know about low-vision and low-vision aids? INDIA

Identifying the need

Clinicians are usually very busy with their clinical practice and may not have thought about their needs relating to CME and CPD. However, effective CPD requires prior preparation. Every clinician may experience a feeling of unease or lack of confidence when faced with a difficult situation. The underlying cause may be a lack of knowledge or skill, which if remedied would enhance the outcome for the patient and the job satisfaction for the clinician.

Identifying the need requires being honest with oneself and realising that everyone, whether junior or senior members of staff, has the potential and an obligation to maintain standards of practice and patient care (see article on page 13 for various reasons for keeping up to date).

Different types of CPD activities may be chosen according to the identified needs. The following table is an example of how a clinician can identify what CPD activity may be relevant for them.

Continues overleaf

Table 1 Identifying relevant CPD activities

Knowledge gap	Skills updating	Acquisition of competency	Performance demonstration
Failed treatment of a certain condition. Need to find out if there has been a change in the treatment of the condition and factors associated with recurrence e.g. squamous cell carcinoma of the conjunctiva.	**Noting lack of skill in using certain equipment.** Need to understand or refresh techniques e.g. applanation tonometry, indirect ophthalmoscopy, use of ophthalmic (BIO) lenses.	**Lack of confidence in treatment** of certain conditions. Practice required.	How to teach others on the subject of interest. Sharing and dissemination to peers through publication.
Inability to diagnose a clinical condition by matching the symptoms and signs. Need to work out the differential diagnosis by accessing information.	**Noting deficiency in performance** of a surgical procedure: e.g. cataract surgery (small incision or phacoemulsification).		
Inadequate up-to-date information on certain conditions common in your area. Need clinical guidance. e.g. classification and treatment of diabetic retinopathy or retinoblastoma.	**Noting inability to perform or interpret a procedure after acquiring a new diagnostic machine** e.g. A scan biometer, Optical Coherence Tomography (OCT), iCare tonometer, visual field machine.	**Lack of confidence in performance** of certain steps in a surgical procedure. Practice required.	How to share what you are doing with others. Listening, learning and sharing your knowledge with others to improve your performance.
Inadequate knowledge about a common condition in your area that was not learnt during basic training e.g. low vision and low visual aids.	**Learning a new surgical skill** after getting new equipment e.g. learning to perform phacoemulsification with a new machine.		

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Do you feel competent treating a patient with diabetic retinopathy? INDIA

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Make time to read the *Community Eye Health Journal*. INDIA

Motivation

It is necessary to be motivated to attend CME/CPD training. Motivating factors broadly fall into 'carrot' and 'stick' categories. It is best to be motivated by positive factors (carrots) that lead to fulfilment, increased self-esteem and good outcomes for your patients rather than feel that CPD is an unnecessary chore that has to be done to avoid a penalty (stick).

Some motivating factors are:

- A desire for delivery of high quality care and the best possible outcome for patients
- Recognition by patients and peers of the excellence of your work
- A desire to avoid 'critical incidents' or 'near misses' that are bad for patients and undermine confidence
- The need to satisfy requirements for registration and maintaining a licence to practise

Challenges

Busy clinicians face a number of challenges for attending CME/CPD. However keeping up to date is so important that every effort must be made to overcome the challenges and find solutions (see Table 2).

Table 2 Matching solutions to challenges

Challenges	Solutions
• Identifying the need.	• If things go wrong – keep a record to reflect on and identify gaps that can be filled by CPD. • Ask colleagues how they keep up to date. • Use appraisal with line managers, for advice on choosing relevant CPD activities.
• Inadequate time: Most of the time clinicians are busy in their clinics from morning to evening especially in low resource settings.	• Remember that keeping up to date is as important as seeing patients in the clinic or the operating theatre. • Think about time management or take a course on time management. • Set aside dedicated time to read (for example the *Community Eye Health Journal*). • Keep a CPD diary and refer to it!
• Because of their busy schedule they sometimes fail to get permission to attend external CPD/CME as they need to work. e.g. attending conferences.	• Get organised. Plan ahead. • Apply for study leave or funding in advance. • Keep a diary.
• Not knowing where to get CPM/CME especially for low resource settings.	• Discuss with colleagues how they manage. • Look for online courses. Many can be downloaded and used offline.
• Lack of travel expenses to attend external CME/CPD - provision of CPDs at a central area within the country where many clinicians can attend.	• Identify the most useful meetings, courses or events and opportunities for CPD and lobby your manager. • CPD websites (e.g. COECSA).

How to 'do' CPD with your team (from the organisation's perspective)

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CPD is not only the individual's responsibility but that of the organisation too. A planned programme, well designed and interactive, with an assessment element, will help avoid the pitfalls and motivate and encourage the team.

DHIVYA RAMASAMY

Using 'role play' to teach patient communication. INDIA

How and where to start

Organisations appreciate the value of Continuing Professional Development. However, most organisations tend to be too "busy" to ensure that it happens systematically. It is often helpful for organisations to have CPD sessions planned and scheduled – say, during a given month every year. This offers regularity and helps the team to anticipate and prepare for it.

When organisations prepare for their CPD sessions, topics should be chosen with a purpose. Often, when arbitrary themes for CPD are selected – it runs the risk of being uninteresting or irrelevant to the team. CPD can be a powerful stepping stone towards organisational improvement and selection of topics can be identified through an ongoing process of continuous improvement or emerge from a systematic analysis of patient safety incident reports, patient satisfaction reports, and other information collected on an ongoing basis.

Topics can also be selected based on new technology, methods or products that are being introduced into the organisation. Reassessment of individual skills can help to identify gaps that could be addressed through retraining. Make sure that the topic you choose is in alignment with your overall institutional goals.

As CPD sessions are being planned, it is good to pin down responsibilities for different aspects of the process:

- training needs analysis
- communication
- participation
- training delivery and follow-up

It is often useful to include a representative of the audience as a CPD committee member to ensure relevance. This helps to build champions not only for the training, but for the resulting improvement process itself.

Essentials

Ideally all CPD should be developed using good training design principles. Learning objectives should be laid down and clearly accounted for by defining the overall outcomes expected. It is essential to have a clear and focussed goal for the CPD session.

CPD sessions should avoid using old-fashioned didactic lecture format and be designed to be more engaging and interactive. The CPD audience comes with good baseline knowledge and rich experience from the field work. They can be used as a resource in the classroom by facilitating learning from each other. Performance data and real stories from within the organisation are a great resource to make the learning relevant. They also serve to emphasise the problem and highlight the opportunity to improve.

It is important to ensure that the training session includes an assessment element: e.g. a quiz or short test to gauge learning and reinforce the lesson. There are a wide array of interactive group techniques , including role playing and small group demonstrations that can reveal the extent to which learners have learned. This assures that the CPD is accountable and is grounded upon expected outcomes.

Common pitfalls

Lack of institutional "buy-in": CPD activities can be ineffective, especially when they are deployed as a standalone event without a champion among the organisation's leadership. The audience must be able to perceive the CPD activity (and the overall improvement process) as a priority for the organisation and directed towards improving patient care.

Have the right people involved: Leaders must ensure that CPD sessions are seen as an important investment. Plan that the right staff are sent to the CPD. Where only a headcount is expected, often the most junior staff are sent to the training when they alone cannot influence the improvement process.

Training alone cannot solve everything: Sometimes, the best planned CPD cannot bring out the desired improvement. It is important to determine if training can create the solution or if policies, procedures, and other systems-related factors require changing.

Addressing barriers to learning

Select appropriate teaching methods: Often, small changes to the training design can help improve learning. If you are teaching a practical skill or process, it helps to keep the session practical: give a demonstration, create an

Continues overleaf

opportunity for participants to practise the skill in class and learn from each other's mistakes. Similarly, role plays and videos can help to engage the audience for "soft" themes such as patient-centred care and communication.

Maintain relevance for the audience: Trainers or faculty must have enough experience and competence on the topic and be given sufficient time to prepare for the session. It is also important for the trainers to be aware of the "level" of the learners – a pre-test often helps to do this. It also helps the audience open up to what is going to be taught. If the faculty is from outside the organisation, it helps to "orient" them to the organisation. This will help the faculty to adjust the style and language appropriate for the audience.

State expectation from the onset: Is the CPD structured to help the audience translate what is taught in their own workplace? It is important to explicitly bring out how the training programme connects to the work of each staff member and what they are expected to change or do after the CPD.

How to encourage and motivate the team over the long term

As CPD activities are usually meant to be a part of a change or continuous improvement process, it is important to maintain the motivation of the learner, beyond the session itself. Recognition – a badge or certificate announcing that they have completed the training – can help create a sense of achievement.

It is important to have a follow-up action plan beyond the training session to ensure that the improvement process is set in motion. This follow-up action will have to be adequately resourced and reinforced regularly by leaders. Posters and flowcharts can serve as reinforcements of CPD lessons.

In the long run, it is the measurement of outcomes and the communication of progress that is important to keep the team motivated and engaged in the overall improvement process.

The improvement opportunity: enhance staff-patient communication

Evidence used: Patient satisfaction surveys, patient interviews, focus group discussions with patient and their families, suggestion books.

Improvement plan: Improve patient communication by creating awareness for importance of good patient communication and train doctors and allied health personnel on best practices for effective communication.

CPD on Patient Communication: A half-day workshop focused on patient communication using videos of patient interviews and patient stories to sensitise staff about patient perspectives. A qualified counsellor was invited as faculty and given patient stories to "orient" her to the problem. The audience were engaged in the learning process using stories and role-plays. Clear guidelines were laid out for patient communication.

Outcome measures: Percentage of "Excellent" ratings on overall satisfaction.

EYEXCEL– Expanding the Eye Care Workforce through Excellence in Training
July 11–14, 2017, Madurai, India

This four-day course helps eye care institutions to develop or improve their training programmes for allied ophthalmic personnel. Teams take a comprehensive look at training: training design, training administration, sharing available training resources, using technology in training, and making the training sustainable. Thus far teams from more than 100 eye hospitals have participated in Eyexcel.

Visit **www.aurovikas.co.in/WebCourseProfile.aspx?tmpcoursecode=C000000425** for more details and to register for the course.

Co-sponsored by Aravind, Seva Foundation and the International Council of Ophthalmology.

Case study 1

Lila Puri *Ophthalmologist, Nepal*

I took the Global Blindness course (**http://iceh.lshtm.ac.uk/oer/**) while practising as an ophthalmologist in a high volume community eye hospital in Nepal.

Our programme was already delivering many of the public health activities covered by the course but I still found it very useful for refreshing my knowledge on both the principles of public health for eye care and its application. The course was a great opportunity to hear from world experts in public health eye care – I felt as if I was in the class physically!

We were also able to share our experiences, ideas and strategies. For a short six-week course, the content was very comprehensive. I had new insights into planning and prioritising for sustainable, equitable and accessible services. This was very helpful for me as I have a decision-making position in my organisation.

Another great outcome of this course was that it motivated me to go on to formal study and apply to LSHTM where I am now studying for the Masters in Public Health Eye Care. My studies here have shown me even more how useful the Global Blindness course is as a resource for all eye care cadres.

Case study 2

Shalinder Sabherwal *Ophthalmologist, India*

I studied the Global Blindness free online course (**http://iceh.lshtm.ac.uk/oer/**) while practising as an ophthalmologist in Delhi. I appreciated the flexible format which meant I could work and study at the same time. It was my first opportunity to learn about eye care planning and management. I was able to engage with global experts which helped deepen my understanding of the key issues.

Learning together with other eye care professionals from different countries, cadres and local settings exposed me to many new experiences and ideas. The Global Blindness course inspired me to think about how our free rural outreach cataract programme could address some of the patient barriers we were seeing. Around 25% of the people who were offered surgery did not arrive at the hospital afterwards. From a survey with patients we identified that patients were afraid of a poor quality surgical outcome and we were carrying out surgeries during harvest which meant there was a lack of people to escort them to hospital.

We addressed these barriers through counselling patients and their relatives about surgical quality and we re-scheduled the timing of surgeries. Taking the Global Blindness course helped me reflect on and improve our eye care outreach programme.

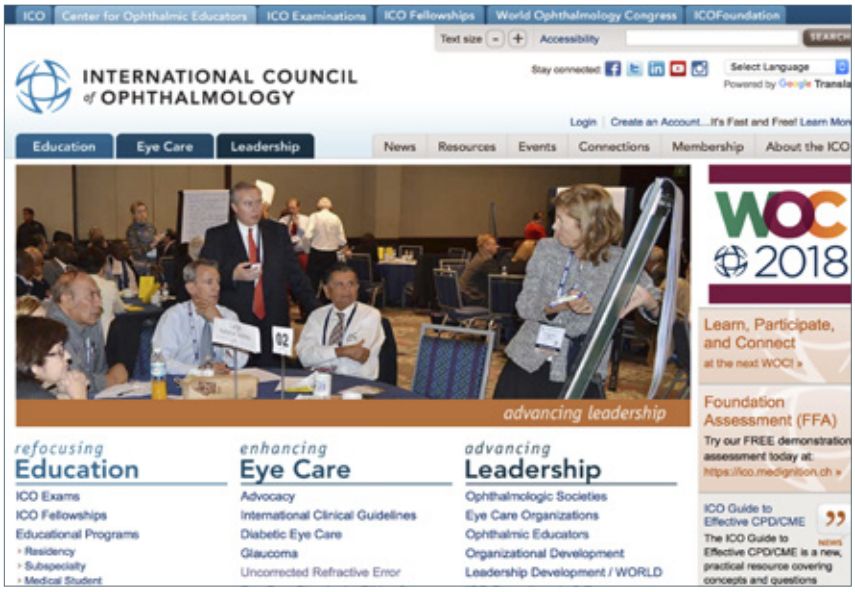
What do you need to know to set up CPD as a professional body?

Helena P Filipe
Ophthalmology service, Department of surgery, Hospital of the armed forces/ PL-EMGFA unit of Ophthalmology, Hospital SAMS Lisbon Street Sergeant José Paulo dos Santos, Lisbon, Portugal.

Karl Golnik
International Council of Ophthalmology Director for Education. Professor & Chairman, Department of Ophthalmology, University of Cincinnati & the Cincinnati Eye Institute, Ohio, USA.

Daksha Patel
E-learning Director, International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London, UK.

Setting up an effective CPD system as a professional body is a complex task that involves advocating the importance to health care professionals, communication with the regulators, setting and maintaining standards and monitoring the process.



ICO website (screen grab) – an established resource for CPD.

"We need assessment tools. We need support. We need faculty development. And I think we also need some patience. This is going to take a little bit of time."
J. Mark Walton, MD, FRCSC; assistant dean of Postgraduate Medical Education at McMaster University

Continuing Professional Development (CPD) incorporates Continuing Medical Education (CME) as one modality and embraces other relevant wide-ranging educative means and competencies required to practise high quality medicine.

Society has a longstanding social contract with the medical profession. Life-long learning is the scaffold of safe and up-to-date practice which incorporates healthcare workforce accountability. CPD is a cyclic, continuous, self-directed, practice-based learning process, tailored to personal learning needs and matching learning to practice.

Several factors need to be considered when determining the need for regulation of CPD:

- **Content:** What is new and required within the specific health system?
- **Relevance:** Does it meet societal expectations? Does it align with inter-professional and multidisciplinary working skills? Maintaining a collaborative relationship with industry without jeopardising unbiased continuing education.
- **Availability and access:** Who are the professionals that must access the materials and how best to engage with them – online, classroom, handbooks?
- **Recognition of learning:** Certification/ recertification/ formal/ informal.

CPD Stakeholders

Healthcare professionals, societies and colleges, regulators, educators, policy makers and healthcare authorities, patients and public are all CPD stakeholders. Meaningful coordination amongst them is fundamental to create an integrated and effective CPD system that meets the needs of the profession, patients and public. Open communication facilitates the identification of gaps in healthcare delivery, hence guiding societies to tailor CPD activities accordingly.

Practically – how does it work?

Societies and Colleges as medical professional bodies were identified as having the main responsibility to set-up the CPD planning committee. This group should ideally include administrators, healthcare professionals, researchers, educationalists and experts in content. There should be individuals with healthcare expertise who are competent in leadership, collaboration, professionalism, communication, scholarship and advocacy.

They must be able to represent the members, ensure that educational content and instructional design match practical needs and make the CPD system more effective and accepted overall.

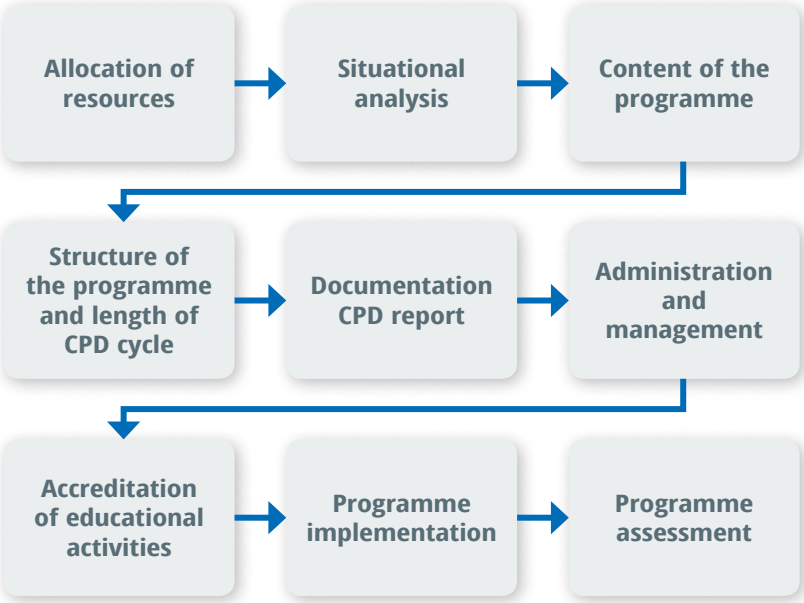
The CPD committee are required to manage a range of tasks that include those shown on Figure 1 over the page.

Setting and maintaining standards

Despite the worldwide diversity of approaching CPD, there is mutual agreement around a set of desirable and implementable global standards. This should stimulate the creation of CPD systems with a minimum requirement that are relevant to each region.

Continues overleaf

Figure 1 Nine-step plan to set up a CPD programme



Considering the CPD integrated and holistic view, the International Council of Ophthalmology (ICO) created the "ICO Guide for Effective CPD/CME" a practical guide to the relevant core concepts and basic questions of CPD/CME bearing in mind the perspectives of participants, educators, regulators and providers[1].

An effective CPD system (using the acronym SCAR) should encompass professional development as:

- **Systematic** by following a personal development plan based on the cyclic learning process involving reflection, planning, learning and assessing.
- **Comprehensive** by embracing competencies beyond medical expertise such as collaboration, scholarship, advocacy, leadership, communication and professionalism skills.
- **Accredited** structure through multifaceted learning interventions conducted in accordance with adult learning principles aiming for a change in practice.
- **Regulated** through demonstration of personal CPD progression.

ICO

2015 Eyexcel Course in Madurai. INDIA

Structuring CPD – a nine-step process (Figure 1)

The ICO has proposed a comprehensive approach to design a structured CPD system.

A) Allocation of resources optimises the assignment of personnel and assets to meet requirements.

B) Situational analysis allows understanding of current practices and the identification of gaps.

C) Content of the programme should:

- be **relevant**, based on a needs assessment and continuously updated to meet the public needs.
- **flexible** to facilitate self-directed and practice based learning, allowing learning outside medical expertise, consider social or web-based or informal learning, and include inter-professional education.
- be **delivered** through appropriate multimodal formats, adapted to personal learning styles and supported by faculty development to use the best educational strategies.

D) The structure of the programme should take into account the length of the CPD cycle and its relationship to appraisal and licensure.

E) Facilitate translation of new learning into practice by providing opportunities to disseminate and reinforce it. Documentation to demonstrate individual progression is an essential component of an effective CPD system.

F) Administration and management should ensure a clear communication to the members about the programme structure, educational activities and important dates eventually using the society or college website as a cost-effective means. Individual notifications will help to ensure cycle completion, award the completion certificate or propose a remediation plan.

G) Accredited educational activities should aim for a change in practice and the committee should provide accreditation guidelines. Commercial sponsorship should be regulated and biased education avoided (Figure 2).

H) Programme implementation should emphasise that the best healthcare outcomes are tied to the concept that CPD is a professional requirement accomplished through lifelong learning and not an outward imposition.

I) Programme assessment should include three components:

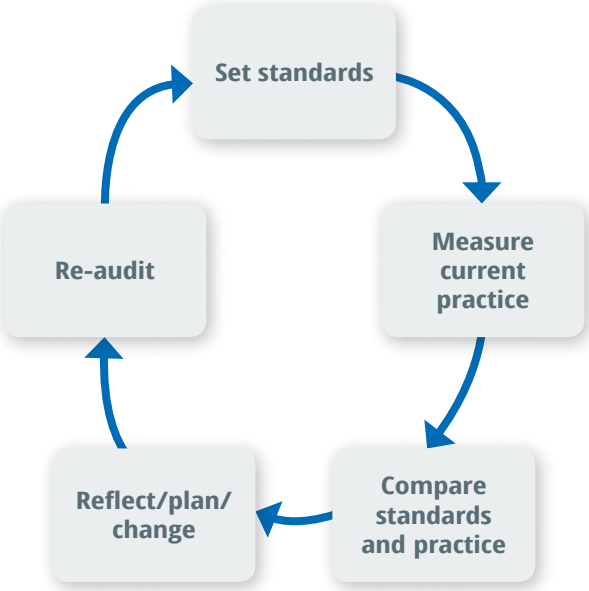
1 system monitoring and self-regulation
2 educational activities assessment
3 professional regulation.

Recording and assessing CPD

A robust CPD framework should include an assessment component. The system should ensure continuous monitoring and self-regulation.

All outcome levels of educational activities should be assessed: participation, satisfaction, learning (*knows, knows how, shows how*) performance (*does*) patient and community health. Educational activities should align: gap analysis – needs assessment – learning objectives – content/ delivery format – assessment. Professional regulation resides in a clear demonstration of life long learning translated into practice. Either hard copy or online, portfolios are excellent assessment and learning

Figure 2 Clinical audits are effective assessment and learning tools comprising five cyclic steps



tools, that emphasise the reflective component of an effective CPD system. They should mirror the activities undertaken, why they were pursued and how they helped to enhance practice. Societies and colleges should create and provide an effective system based on the portfolio to record the ongoing personal development plan.

Regulation should be informed by the profession and viewed as the means to effectively demonstrate professional progression and accountability. CPD systems are moving towards the demonstration of a mandatory set of requirements, either based on credit units awarded by the time spent on educational activities or on peer review based on documentation. In either one the inherent professional obligation to society should remain as a primary imperative.

Conclusion

CPD should be a local effort, depending on local disease patterns and health system requirements. Of all medical education stages, CPD is the least formally structured and can be the most complex to create and assess given the diversity of curricula, educators, regional healthcare needs, professional aspirations, complexity of working environment and multiple stakeholders.

CPD is a primary obligation to the patients and the public. The paradigm has been shifting to place the healthcare team in the centre of CPD good practice. Professional bodies should maintain and reinforce their core role in providing CPD guidelines, standards, and benchmarks creating systems to effectively record and share information and documents among members. Professional bodies should involve all stakeholders engaged in meeting the public healthcare needs and build a CPD system that is efficient, transparent, credible, accountable, affordable, easy to manage and administer, driven within the profession, and flexible to the community health care needs. The educational programme should be exempt from industry influence and cover multimodal practice-based activities aiming for practice change.

Managing CPD systems should ideally include the audit and portfolio as components and be regularly self-assessed for improvement. To build this holistic view of CPD, the CPD planning committee members should themselves develop competencies of leadership, professionalism, communication skills, advocacy, scholarship, and collaboration.

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1 ICO Guide to Effective CPD/CME. Filipe HP, Mack H G., Mayorga E P, Golnik K C (Ed). Available from **www.icoph.org/ICO-CPD-CME.html**

Reasons for keeping up to date

Some of these scenarios may strike a chord with readers. Undertaking CPD to fill in the knowledge gaps may ensure a happier experience both for the patient and eye care practitioner.

Clinical knowledge

- Do you lack confidence when faced with patients with certain conditions?
- Can you distinguish between optic atrophy and advanced glaucoma?
- Have you ever missed new vessels when examining the fundus of a patient with diabetes?
- Do you know what to do when faced with a patient who has just gone blind?
- Can you competently carry out a visual field assessment before ordering a CT or MRI scan?
- Can you interpret a B-scan?
- Can you read an OCT?
- Can you calibrate an applanation tonometer?
- Have you ever administered the wrong dose of a drug to a patient?
- Are you up to date with drug interactions?

ANITA SHAH

Time management is important when the clinic is very busy. INDIA

- If you witness a new procedure, do you write down/draw what you have seen?
- Are you able to resuscitate a patient who has collapsed in the clinic?

Procedural skills

- Do you feel under-prepared when starting a particular surgical procedure?
- Are you familiar with all the settings on all the equipment that you use?
- Do you know what to do if your patient loses vitreous during cataract surgery?
- Do you know how to make up the correct concentrations of intravitreal antibiotics?
- Have you ever pitted the IOL when doing a YAG laser?
- Can you tell a patient your cataract surgical outcomes?

Personal development

- Do you want to be an effective leader?
- Do you want to be able to effect change?
- Do you aspire to be as good as one of your colleagues?
- Are you willing to learn from others in the team?
- Do you want to be on time for your clinic?

If things go wrong

- If things have gone wrong – do you know who to talk to?
- Do you discuss 'failures' or disappointments with your colleagues?
- Do you know how to deal with an official complaint concerning your management?
- Do you know how to report a 'clinical incident' or 'near miss'?

Nick Astbury, Clinical Senior Lecturer, ICEH

HEAD START – an innovative training approach for life-long learning

An innovative global training approach called HEAD START is bridging the gap between theory and live surgery, building skills for new trainees as well as providing continuing professional development for experienced surgeons.

Demissie Tadesse
MD, CBM Regional Eye Health Adviser, Addis Ababa, Ethiopia.

Isabella Montgomery
International Coalition for Trachoma Control, UK.

Girija Sankar
Assistant Director of Programs & Communications, International Trachoma Initiative Task Force for Global Health, Decatur, GA 30030 USA.

Repeated infection with *chlamydia trachomatis* leads to inturned eyelashes and painful trichiasis which has a profoundly negative impact on quality of life. It can be corrected by eyelid surgery but, if left untreated, can lead to irreversible low-vision and blindness.

Twenty years ago, Demissie Tadesse was a young doctor who had completed his ophthalmic training in Italy but did not have the opportunity to practise his surgical skills for trichiasis. He remembers the early days of working back in his home country of Ethiopia. Looking back, he can see how a practical step between the theory he learnt in the classroom and his first surgery on a human eyelid would have eased the transition from theory to live surgery.

A comprehensive training approach, HEAD START, aims to bridge this gap. The innovative method, which is a result of wide collaboration between many partners, includes a surgical mannequin on which surgeons can practise their surgical skills. It helps new trainee surgeons to build their skills and confidence before performing surgery on their first patients as well as providing useful refresher training and regular professional development for experienced surgeons. The comprehensive training approach covers all aspects of preferred practices on addressing trichiasis developed by the International Coalition for Trachoma Control (ICTC).

With the scale-up in programming to trachoma elimination by 2020, much attention has focused on increasing the quantity of surgeries performed and the training of surgeons. Since Demissie became involved with HEAD START three years ago, it has become a widely-adopted training approach. All major funding initiatives supporting national trachoma programmes now use this ICTC recommended and WHO endorsed approach for newly-trained and experienced surgeons. To maintain high-quality training standards, all training is undertaken by certified national master trainers directly, rather than through the previously widely used (but now discouraged) cascade approach. The WHO now recommends mannequin-based training for trichiasis surgery as part of new and refresher trichiasis surgery training programmes.

Now a certified global trainer, Demissie is playing a key role in disseminating the training and developing surgical skills with people of different backgrounds from all over the world, from Pakistan to Mozambique. In just a few years, he has seen how the approach is contributing to improving people's lives, "By following proper standards and certification, the HEAD START approach is putting global standards in the limelight. As a result, the impact will be very different because the focus of the training is on good quality outcomes, which will address the challenge of trichiasis recurrence that we have seen in the past."

EMILY GOWER

Surgeons undertaking training on the HEAD START mannequin.

Demissie has seen first-hand how practising on a mannequin allows surgeons to improve their work by allowing them to assess their technique. Both trainees and experienced surgeons have been able to improve their technique including angle of incision and suture placement, as all the steps can be revisited by removing the eyelid cartridge from the mannequin. Even experienced surgeons have been surprised by the improvements they were able to achieve. A recent trainee from Niger reflected, "The mannequin permits one to have surgical skills before applying them on humans; it's a good initiative for perfection."

Emily Gower, epidemiologist and trachoma expert who has played a key role in developing the approach, remembers the expressions on people faces when the cartridges were taken out in the very first training session that took place in Tanzania, "You could see the wheels turning in the surgeons' heads and that they were thinking 'I could do a better job by making these changes'."

Going forward, a Seeing is Believing project in Ethiopia will support the maintenance of skills through remote monitoring of surgeons during the rainy seasons when fewer surgeries are performed. Over five months, the surgeons will undertake two surgeries a week on the mannequin and send the cartridges to a central office for review and monitoring. The innovative approach has also germinated thinking in other areas. USAID's Morbidity Management and Disability Prevention (MMDP) Project, inspired by HEAD START, is developing a similar mannequin training approach for lymphatic filariasis hydrocele surgical training.

The HEAD START approach is improving quality outcomes across the global trachoma elimination programme. Through its training of trainers and now also augmented by remote learning, it is truly providing a tool for continuing professional development and lifelong learning.

Find out more
You can find out more about HEAD START in Future Learn's free *Eliminating trachoma* online course which aims to inform and support the personnel implementing and managing trachoma programmes at a district and community level. Visit **www.futurelearn.com/courses/** eliminating-trachoma to sign up. See all ICTC preferred practices relating to trichiasis on the coalition's website: **www.trachomacoalition.org/resources**

Accessing good health information and resources

Sally Parsley
E-communications manager, International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London, UK.

Health workers need to be able to access health information and resources to update and apply their knowledge and skills and continue their professional development.

(C) RAJKUMAR, ARAVIND EYE CARE SYSTEM

Learning online. INDIA

Making health information available and usable to all is a complex process not yet adequately addressed (see Figure 1). It has to be appropriate, high quality, timely, easy to understand, relevant for the location it will be used in, and provided in an appropriate format. For example, you cannot learn a new surgical skill by reading about it, a much better method is to take a course or watch a video, preferably one suited for the local need.

Where do you find these resources and opportunities? Information, communications technologies (ICTs) such as the internet are a promising mechanism to help address the health workforce information needs. Health workers need access to ICTs but they also need strong information and computer skills to search, select and make use of the available information and resources.[1]

Availability of high-quality, up-to-date and locally relevant materials is limited in many settings and there is a lack of investment and organisational support for developing information and computer skills and the infrastructure needed to access printed and digital information.

In every setting, major health stakeholders need to continue to develop and implement knowledge management strategies to enable health workers to use the evidence-based information and knowledge available to them.[2,3]

The following infographic aims to guide eye health clinicians, educators, managers and leaders on:

- **A** Identifying the information need
- **B** Developing a search strategy
- **C** Carrying out an effective online search
- **D** Finding sources of good eye health information and resources on the internet

Continues overleaf

Figure 1 Which health information challenges do you face? How do you overcome them?

Lack of training opportunities	Lack of organisational support for learning	Lack of locally available printed materials	I don't feel the need to update my knowledge or skills	High cost of training
High cost of internet access	No access to internet	Poor quality internet access	Lack of time, too busy	Lack of skills or knowledge to search online
Available resources are difficult to understand/ poor quality	Isolation: I have few colleagues to talk to	No locally accessible/ equipped library	Lack of knowledge about how to find quality of resources	Lack of locally relevant resources

References

1 D'Adamo, M., Fabic, M. S., & Ohkubo, S. (2012). Meeting the Health Information Needs of Health Workers: What Have We Learned? *Journal of Health Communication*, 17(sup2), 23–29. **https://doi.org/10.1080/10810730.2012.666626**

2 Bhaumik, S., Pakenham-Walsh, N., Chatterjee, P., & Biswas, T. (2013). Governments are legally obliged to ensure adequate access to health information. The Lancet Global Health, 1(3), e129–e130. **https://doi.org/10.1016S2214-109X(13)70043-3**

3 Andualem M, Kebede G, Kumie A. Information needs and seeking behaviour among health professionals working at public hospital and health centres in Bahir Dar, Ethiopia. *BMC Health Services Research*. 2013;13:534. doi:10.1186/1472-6963-13-534.

A Identifying the information need

Identify the reasons why you need this information

Address a knowledge gap	Update skills	Acquire competency	Demonstrate performance	Other?
For example...				
To improve a national policy or guideline	To improve a local programme plan or team performance	To improve training	To improve clinical and quality of care	Educate patients and community

Who is the information for? What health worker role?

Leader | Manager/ administrator | Clinician | Educator | Allied health personnel | Community health worker | Patients and community | Other?

Different health worker roles need different types of information

Identify the types of information you need

Policy document | Clinical or technical guideline | Peer reviewed scientific data | Training course | Educational materials | Updates and news | Other? e.g. webinar, conference

Identify the LEVEL of information required or likely to be available

International or regional | National | District | Community | Patient

Summarise the INFORMATION NEED

Reason for information need: .....

Health worker role (who information is for): .....

Types of information needed: .....

Level of information: .....

B Developing a search strategy

What methods can you use to address your identified information need?

Which means are available and appropriate for finding high-quality, relevant and usable information?

Face-to-face methods

- Ask mentors & seniors
- Take a course or training
- Subscribe to paper journals
- Go to a library
- Attend a journal club with peers
- Attend conferences
- Buy books

Strengths
Locally available resources
Network with local colleagues and experts

Weaknesses
Difficult to assess quality of oral information
Printed materials may not be updated often
Need to keep track of physical notes
Cost of training, conferences, printed materials

Digital and internet methods

- Subscribe to online journals
- Alerts and feeds via email, apps, social media, aggregators*
- Take online course
- Join online community
- Take part in webinars
- Search the internet
- Browse and search apps, websites, databases

Strengths
Large quantity of high quality, evidence-based information and resources available
Global networking opportunities

Weaknesses
Need good internet access
Need skills to find and assess quality
Information and resources are not always free/low cost
May not be relevant for local context

** **Apps** are any type of computer programme, often they refer to programmes downloaded onto smartphones. **Social media** are websites and apps that enable people share ideas and content. E.g. Facebook, WhatsApp. **Aggregators** are software or applications that collect regularly published online content – such as newspapers and podcasts – in one location for easy viewing. e.g. Feedly*

Think about how you will manage your information and resources

Keep a CPD diary or notes (handwritten or using an app e.g. Evernote) | Add resources to a reference library e.g. Mendeley | Keep copies of course credits and certificates | Use an app to save links to online resources e.g. Diigo | Archive resources (in print, on computer or in the cloud**) | Use digital alerts & feeds to stay up to date | Keep copies of database searches (e.g. in your PubMed account)

***The **cloud** is a type of internet-based computing which provides shared processing and storage on demand to computers and other devices*

C Carrying out an effective online search

1 Extract the **keywords and phrases** from your identified information need (see section A).
2 Identify which **search engine** to use. Internet search engines (such as Google) will return wide results but with variable quality.
3 Enter your keywords and phrases into the engine.
4 **Select and evaluate results which seem relevant.** Review the summary or abstract and exclude irrelevant or low quality resources. Ask yourself:
- Who published this resource? Does the publisher have a good reputation? Has it been peer-reviewed for quality?
- When was it published? Is it up to date?
- Is the information suitable for use in your setting?
- Is the resource 'Open'? Can it be downloaded and shared for free? Or do you need to pay?
- Is the technical production good? Can you, or anybody, access and use it easily?

5 **Review the relevant resources** in detail. E.g. read the whole article. If necessary, make notes of the most relevant information from each source. For complex information needs, integrate your notes into a matrix to help you track your ideas and relate back to your topic.
6 **Manage your notes and information** you have found (see section B).

D Good sources of free and low cost eye care information and resources on the internet

What have we missed out? Send suggestions to editor@cehjournal.org or to CEHJ Twitter or Facebook and we will review and share them in later issues.

National and local sources
Eye care bodies in your country may provide useful health information and CPD opportunities. For example:
- Bhutan Medical and Health Council **www.bmhc.gov.bt**
- Ophthalmological Society of Nigeria **https://osnig.org**
- India national programme for control of blindness **http://npcb.nic.in**

There may be professional interest groups you can join – face-to-face or by email or social media e.g. Facebook or WhatsApp

Global data, policy and guidelines
- World Health Organization Prevention of blindness **www.who.int/blindness/en**
  Key international policies, data and guidelines
- IAPB Vision Atlas **http://atlas.iapb.org**
  Country level maps and data on avoidable blindness and sight loss. From the International Agency for the Prevention of Blindness
- Trachoma Atlas **www.trachomaatlas.org**
  Online global atlas of the distribution and prevalence of trachoma.

Free online courses
- International Centre for Eye Health courses **http://iceh.lshtm.ac.uk/oer**
  Public health courses on Global Blindness: Planning and Managing Eye Care Services, Ophthalmic Epidemiology, Eliminating Trachoma and Diabetic Retinopathy (coming soon)
- Cybersight courses **https://cybersight.org/online-learning**
  A number of introductory clinical courses. Provided by ORBIS
- Aurosiksha **www.aurosiksha.org**
  Short courses on eye care management from Aravind Eye Care System

Scientific databases
- Medline/PubMed **www.pubmed.gov**
  PubMedCentral **www.ncbi.nlm.nih.gov/pmc**
  An index of the world's biomedical literature from the National Library of Medicine, USA. PubMedCentral indexes Open Access literature
- Cochrane Eyes and Vision Reviews **http://eyes.cochrane.org/links-our-reviews** – systematic reviews of the current scientific evidence on interventions to treat or prevent eye diseases or visual impairment.

Regional journals with free access
- Indian Journal of Ophthalmology **www.ijo.in**
- Journal of Ophthalmology of Eastern, Central and Southern Africa **www.coecsa.org/ojs-2.4.2/index.php/JOECSA/index**
- Middle East African Journal of Ophthalmology **www.meajo.org**

International and regional training and CPD providers
- Aravind Eye Care System Education and Training **www.aurovikas.co.in**
  Clinical and non-clinical training for all levels
- College of Ophthalmology of Eastern Central and Southern Africa **www.coecsa.org**
- International Council of Ophthalmology (ICO) **www.icoph.org**
  Foundation, standard and advanced level exams
- Joint Commission on Allied Health Personnel in Ophthalmology: Global Center for Online Ophthalmic Continuing Education **http://eyecarece.jcahpo.org**
- Training institutions for eye health professionals in Africa. The IAPB Africa database. **http://www.iapbafrica.co.za/resource/resourceitem/808/1**

Educational materials: Libraries and databases
- Cybersight Library **cybersight.org/portfolio**
  Clinical quizzes, video lectures and textbooks
- Eye Rounds **eyerounds.org**
  Case reports, photographs, tutorials. From the University of Iowa.
- IAPB Africa Resources **www.iapbafrica.co.za/resource/index/1**
- ICO resources **www.icoph.org/resources.html**
  ICO resources for educators **http://educators.icoph.org**
  Hundreds of useful links for ophthalmologists and educators
- VISION2020 e-resource **v2020eresource.org**
  Resources on eye care management. From Aravind Eye Care System.

Image and video repositories
Eyerounds Atlas **www.eyerounds.org**
Community Eye Health Flickr Photostream
www.flickr.com/photos/communityeyehealth

Eye care apps
There are a number of free and low cost apps in ophthalmic education. Search for them on your app store. (See 2015 article from the AAO for ideas: "Top Ophthalmology Resident Apps" **http://bit.ly/2flciBV)**

The HINARI – Access to Research Initiative provides not-for-profit institutions in low- and middle-income countries with free or very low cost access to biomedical and social science journals. **www.who.int/hinari/en/**

Massive Open Online Courses (MOOCs) are free to take with some optional fees e.g. for accreditation. MOOCs bring hundreds or even thousands of people together to learn about a subject. 6850 MOOCs were available by the end of 2016 from providers such as Coursera and EdX (USA), FutureLearn (UK), XuetangX (China), Miríada X (Ibero-Americas), Edraak (Arabic) and Swayam (India). The Global Blindness course (see page 10) is run as a FutureLearn MOOC once or twice a year. Register your interest at **www.futurelearn.com/courses/global-blindness**
Class Central currently maintains one of the most up-to-date lists of MOOCs. **www.class-central.com**

Open Educational Resources (OERs) are learning materials free to anyone to access, reuse, adapt and share with others without having to seek permission from the original publisher. OERs are also called OpenCourseWare. A number of regional and health related OER repositories have been published: For example: OER Africa **www.oerafrica.org** or MIT and John Hopkins Public Health OpenCourseWare sites – **ocw.mit.edu/index.htm** and **ocw.jhsph.edu**

Test your knowledge and understanding

This page is designed to help you to test your own understanding of the concepts covered in this issue, and to reflect on what you have learnt.

ARAVIND

Communication skills are an important component of CPD. INDIA

We hope that you will also discuss the questions with your colleagues and other members of the eye care team, perhaps in a journal club. To complete the activities online – and get instant feedback – please visit **www.cehjournal.org**

Tick ALL that are TRUE

Question 1
Continuing Professional Development:

- ☐ **a.** Is more relevant for doctors than nurses
- ☐ **b.** Should only be necessary after a clinical incident
- ☐ **c.** Should be driven by patients
- ☐ **d.** Must always be followed by an assessment
- ☐ **e.** Applies only to registered eye care practitioners

Question 2
We should continue to learn:

- ☐ **a.** In order to remain on the register
- ☐ **b.** To ensure the best outcomes for our patients
- ☐ **c.** To avoid litigation
- ☐ **d.** To address the gaps in our knowledge
- ☐ **e.** To maximise our income

Question 3
The following are relevant ways of maintaining CPD:

- ☐ **a.** Discussing a difficult case with a colleague
- ☐ **b.** Attending a journal club
- ☐ **c.** Going to a product promotional meeting
- ☐ **d.** Participating in a routine ward round
- ☐ **e.** Attending equality and diversity training

Question 4
Which of the following are untrue about CPD:

- ☐ **a.** Institutional buy-in is not necessary for a CPD programme
- ☐ **b.** Leadership training only applies to senior staff
- ☐ **c.** It is best to plan CPD at least 5 years in advance
- ☐ **d.** Effective CPD requires learning from a more senior person
- ☐ **e.** Communication skills are most relevant for HR personnel

ANSWERS

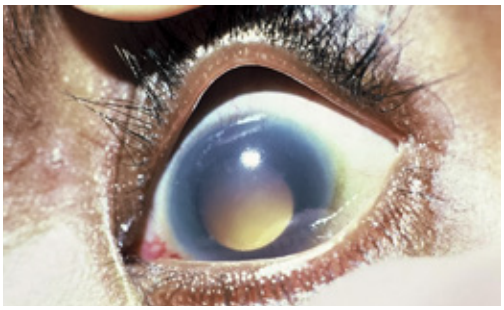
1. All are false. CPD is relevant for everyone. It should not be a knee-jerk reaction to an 'incident'. CPD should be driven within the profession but encouraged by patients. An assessment is not always necessary but reflection on the learning is helpful. CPD applies to all the eye health care team.

2. b) and d) are correct. Motivation for CPD should be related to improving knowledge and outcomes rather than just remaining on the register, avoiding litigation or making money.

3. All are relevant but not all may be recognised for gaining CPD 'points', for example attending a product promotion or attending a routine ward round.

4. All are false. The institution should always be involved and supportive of the CPD programme. Leadership training is relevant for all members of the team. Planning CPD too far ahead is a mistake as circumstances may change. We can all learn from each other, whether more senior or junior. Communication skills are vital for everybody – not just the human resource department!

Picture quiz



ICEH

A 2-year-old boy is brought by his mother because of a "white shadow" in his eye. The mother says that she first noticed it 4 weeks ago. There is no history of significant eye problems in either parent or in the two other siblings. The eyelids and orbits appear normal. The right eye is normal. The left eye has a white yellow reflex in the pupil. There is no obvious squint.

Tick ALL that are TRUE

Question 1 Which of the following should be considered in the diagnosis?

- ☐ **a.** Infantile cataract
- ☐ **b.** Persistent primary hyperplastic vitreous
- ☐ **c.** Retinopathy of prematurity
- ☐ **d.** Coat's disease
- ☐ **e.** Retinoblastoma

Question 2 Which of the following examinations/investigations are essential in determining the diagnosis?

- ☐ **a.** Electro-retinography
- ☐ **b.** Examination of both eyes under anaesthetic (EUA)
- ☐ **c.** Ultrasonography
- ☐ **d.** X-ray of the orbit
- ☐ **e.** Fluorescein angiography

Question 3 If the diagnosis is retinoblastoma, which of the following may be appropriate?

- ☐ **a.** Removal of the eye
- ☐ **b.** Radiotherapy
- ☐ **c.** Chemotherapy
- ☐ **d.** Counselling the parents about future children
- ☐ **e.** Conservative management and review in 3 months

ANSWERS

1. All may be correct. The child has leucocoria (white pupil). This is a serious condition requiring urgent diagnosis and management. It may be due to any of the causes listed, as well as others; Coats disease is a unilateral retinal exudative disease.

2. The correct answers are (b) and (c). An EUA (dilated examination of both eyes) will allow careful examination of the posterior segments, and at the same time an ultrasound can be performed which may show the origin of the lesion.

3. Answer (e) is FALSE, the rest are true. Retinoblastoma is a life threatening condition that requires urgent treatment. Treatment may consist of surgery and /or radiotherapy and / or chemotherapy. Retinoblastoma may be hereditary although there is no history in this case. The parents do need to be counselled by someone with appropriate expertise.

World Sight Day

This year, the call to action we encourage you to use is "Make Vision Count". In 2010, just over 28% of the world's population were affected by Myopia (short-sightedness). This is predicted to rise to 34% by 2020 and nearly 50% by 2050. In 2014, approximately 422 million people – or 8.5% of adults worldwide – were living with diabetes, compared to 108 million in 1980. Low- and middle-income countries account for approximately 75% of the global diabetes burden. Approximately one in three people living with diabetes have some degree of Diabetic Retinopathy (DR) and one in 10 will develop a vision-threatening form of the disease.

This World Sight Day, let's get the numbers out, so we know where we stand. Do write to **communications@iapb.org** if you want to receive World Sight Day promotional material like posters, balloons and ribbons.

You can download print quality logos for World Sight Day, here: **www.iapb.org/wsd17/promotional-material**

Courses

MSc Public Health for Eye Care, London School of Hygiene & Tropical Medicine 10 fully funded scholarships available for Commonwealth Country Nationals. Course aims to provide eye health professionals with the public health knowledge and skills required to reduce blindness and visual disability in their setting. For more information visit: **www.lshtm.ac.uk/study/masters/mscphec.html** or email **romulo.fabunan@lshtm.ac.uk**

Online International Eye Bank Qualification course – Now accepting applications for the September intake of the Graduate Certificate and shorter Specialist Certificate. Apply and enquire via: **http://commercial.unimelb.edu.au/custom-education/courses/eyebankinggc**

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British Council for Prevention of Blindness Grant Programme

BCPB British Council for Prevention of Blindness

Closing date: 6 October 2017

The British Council for Prevention of Blindness supports research into the prevention of blindness in low and low-middle income countries throughout the world.

Grants are offered for research projects that further the goals of 'VISION 2020: The Right to Sight', in the following categories:

- Fellowships leading to the award of PhD or MD – up to £190,000 over 2 or 3 years
- Research grants – up to £60,000
- Research Mentorship Awards – up to £15,000
- Grants are only awarded to UK Universities and Hospitals.

BCPB is proud to be celebrating 40 years of blindness prevention

For more details, full terms & conditions and application forms please see **www.bcpb.org** or contact Diana Bramson, Charity Manager, BCPB, 4 Bloomsbury Square, London WC1A 2RP. Telephone: 020 7404 7114 Email: **info@bcpb.org**

BCPB is a registered charity – number 270941

Next issue

PRIYA MORJARIA

The next issue of the *Community Eye Health Journal* will be on the theme: **School eye health**

Key community eye health messages

Managing your own information and resources is an important element of keeping up to date

(C) RAJKUMAR, ARAVIND EYE CARE SYSTEM

- Keep a paper diary or use an app
- Compile your own library of useful articles or web links
- Write down useful advice or tips from others
- Use digital alerts to stay up to date
- Keep all those CPD certificates!

Continuing to learn is good for our patients and eye health professionals. CPD:

ARAVIND EYECARE SYSTEM

- Produces positive change in the participant's practice
- Instils confidence and self-esteem
- Facilitates the efficiency, effectiveness and quality of the eye care team
- Assures the best outcomes for the maximum number of patients
- Improves access to high quality eye care globally

Professional organisations have a responsibility to support and implement CPD by being aware that:

DHIVYA RAMASAMY

- CPD is a priority and directly leads to improved patient care
- All the relevant staff should be involved in CPD activities
- Learning outcomes should be defined at the start
- Barriers to learning must be overcome e.g. introducing practical demonstrations or role play
- Good communication with staff should be a priority