



# Learning for Professional Practice

## Maintaining evidence-based practice

### Abstract

As part of the Institute of Medical Illustrators' (IMI) scheme for continuing professional development, worksheets will be published at regular intervals in this Journal. These are designed to provide the members of IMI with a structured CPD activity that offers one way to earn credits. It is recognized that this worksheet requires some time spent undertaking the exercises. The answers to the questions, along with any notes and reflections you make or other publications you find, should be kept in your CPD portfolio.

This learning activity looks at Evidence-Based Practice (EBP). Most fields of healthcare have a requirement for practitioners to ensure that they maintain and update their skills and knowledge. Healthcare professions, including medical illustrators, are required to demonstrate evidence-based practice through their continuing professional development (CPD) schemes.

Previous activities have actively encouraged you to use this way of working; for example, those on diabetic retinopathy screening,<sup>1</sup> accessible web design,<sup>2</sup> and patient information design<sup>3</sup>. This worksheet looks at how you can widen your evidence-based practice from the topics we may choose to those that directly impact on your personal or department's working practices.

### What Is Evidence- Based Practice

There are a number of online resources that look at Evidence-based Medicine; Duke Hill Medical Center Library<sup>4</sup>, Belsey and Snell<sup>5</sup>, and the Centre for Evidence-based Medicine<sup>6</sup> all have a range of resources, including presentations, that can be downloaded. For a more scientific and theoretical approach, read Marks' paper on Perspectives on Evidence-based Practice<sup>7</sup>. This is not recommended as a starting point, but for later investigation of the principles behind EBP.

It is also useful to look at case studies that examine how medicine has changed. One such study is the Wellcome Trust's Witness Seminars 'Changing medical practice – The strange case of the prenatal steroids'. Why did it take twenty years for a treatment that saved premature babies' lives to be widely adopted?<sup>8</sup>

### Task 1. How could evidence-based practice help you?

After reading a range of resources about evidence-based medicine and practice, reflect on how EBP could help in your current role. For example, is there a new consultant with a different outlook on surgical techniques? Has a new piece of equipment been bought that includes photography but you are not sure how it can be used? Are you creating a new department and need to look at best practice for designing it? Do you just want to be able to take better clinical photographs, or produce more informative patient leaflets?

### Where to find the evidence

Finding the published evidence is one thing, and for medical illustrators, the Journal of Visual

Communication in Medicine (formerly the Journal of Audiovisual Media in Medicine) is published on behalf of IMI. There are other relevant journals specifically related to medical illustration such as the Journal of Biocommunication and the Journal of Ophthalmic Photography.

These journals should be read regularly in order to keep up to date with current trends. However, many papers of specific interest to medical illustrators are also published in medical and surgical journals, both of the general and specialist type. It is therefore a good idea to undertake a regular, say monthly, search of the journals using Pubmed Medline:

([www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed](http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed)) together with any journals related to a medical speciality you are involved in e.g. British Journal of Dermatology. Other useful resources are given in Table 1.

Cochrane Collaboration	<a href="http://www.cochrane.org">www.cochrane.org</a>
Cochrane Library	<a href="http://thecochranelibrary.com">http://thecochranelibrary.com</a>
National Institute for Clinical Evidence (NICE)	<a href="http://www.nice.org.uk/">www.nice.org.uk/</a>
The National Research Register	<a href="http://www.nrr.nhs.uk">www.nrr.nhs.uk</a>
Research Findings electronic Register (ReFeRe)	<a href="http://www.info.doh.gov.uk/doh/refr_web.nsf/Home?Open">www.info.doh.gov.uk/doh/refr_web.nsf/Home?Open</a>
EBP resource Royal College of Surgeons of England	<a href="http://www.rcseng.ac.uk/library/healthinformatics/evidence.html">www.rcseng.ac.uk/library/healthinformatics/evidence.html</a>
Form Centre for Evidence-based Medicine	<a href="http://www.cebm.net">www.cebm.net</a>

Table 1. Resources for healthcare evidence.

## Task 2. Try using medline to find evidence

If you haven't used Medline, or if you feel you may not be getting the best out of your searches, then visit your library for training or support. This should be recorded in your portfolio as this too is evidence for your continuing professional development.

Read 'How to read a paper: The Medline database' by Greenhalgh.<sup>9</sup>

Set up your own search criteria that you will be able to use each month to simplify your searches. See earlier papers in this journal for more support.<sup>10</sup>

## Making sense of the evidence

Once you have located a publication that relates to your work, how do you know that it is of any real value? For example, just because a refereed journal has published a paper reporting a clinical trial using a photo- graphic protocol does not mean that the protocol is valid. This is especially likely if someone lacking a professional photographer's knowledge devised the protocol. You need to undertake a critical appraisal of publications before accepting their findings. You can obtain information on the critical appraisal process from most texts on healthcare research. A series of articles by Greenhalgh in the British Medical Journal (BMJ) are particularly useful.<sup>11</sup>

## Task 3. Critical appraisal of a paper

Choose a short paper relevant to your work from your earlier search on Medline or from other journals and undertake a critical appraisal. Add the paper and your appraisal to your CPD Portfolio.

### Range of evidence you can use

You gain new knowledge and skills by attending workshops, meetings, and seminars. Keep an eye

open for such opportunities. Some will be organized by your professional bodies, others by your employer or other professional groups.

#### Task 4. Professional meetings

You can use the knowledge and skills gained to modify and/or update your practice. Use reflective writing of your experience as evidence in your portfolio together with the meeting programme and attendance certificate.

#### Where does the evidence come from?

As a practitioner, the evidence for best practice comes from medical illustrators engaged in the profession. You should consider how your practice can be developed but also consider reviewing your practice in the light of research, and if it is good practice, disseminating that through meetings, conference presentation or publication in this or other journals. Examples from this journal include Barry CJ et al<sup>12</sup>, Frickey<sup>13</sup> and Wright and Tsirikos.<sup>14</sup>

Evidence-based practice is not about justifying what you do but examining your practice in the light of best practice guidelines, and further developing your own practice a stage further. This could also involve looking at the National Photography Guidelines developed by IMI,<sup>15</sup> or getting involved in developing or updating a guideline.

#### Task 5. Disseminating good practice

Collect together information, evidence from research and your practice to create a presentation for a regional meeting, conference or write a paper for this journal. All the material you collect for this plus any feedback from colleagues should go into your portfolio as evidence for your continuing professional development.

#### References

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