Evidence-based medicine on the wards: report from an evidence-based minion

I often hear people say, “Real doctors don’t have time for evidence-based medicine.” In fact, practising evidence-based medicine while you work doesn’t take much time at all—just motivation. I did it as a house officer (intern), and you don’t get much busier than that. Once you get into the right frame of mind, it is hard not to work in an evidence-based way, and it is lots of fun.

How can you get started practising evidence-based medicine?
Evidence-based medicine uses information from high-quality clinical studies to answer questions about patients in your care. For newcomers, all this evidence mumbo-jumbo can seem intimidating and can cause you to lose sight of the goal—treating patients more effectively. Fortunately, there are plenty of ways to learn all the essential information relatively painlessly. First, excellent books and articles that can help are available (1–24) as well as some evidence-based textbooks (25–27).

Second, increasing numbers of courses are being offered by institutions worldwide that teach the process of asking answerable questions about patients, finding and appraising relevant articles quickly, and synthesising data into 1-page summaries called critically
appraised topics (CATs). Courses are also available that are aimed specifically at medical students. Good examples are the Oxford and the Manchester Conferences on Critical Appraisal for Medical Students (http://cebm.jr2.ox.ac.uk/docs/cams.html). For information about other courses, see the Web sites at the U.K. Centre for Evidence-Based Medicine (http://cebm.jr2.ox.ac.uk) and McMaster University in Canada (http://hiru.mcmaster.ca/ebm/).

How can you carry out evidence-based medicine as a house officer or student?

In the beginning, don’t be too ambitious. Practice evidence-based medicine only when you are in the mood. When you see a new patient, try to ask yourself 1 question about their treatment, diagnosis, or prognosis. Choose the problems you find most interesting and go searching.

First, search the databases that have articles already selected for quality, such as Best Evidence and the Cochrane Library. I can usually find a useful article in one of those sources in a couple of minutes. Subscriptions to these databases are cheap enough for you to put them on your home computer, allowing you to do searches when you want and not when the library is open. If you need to use MEDLINE, PubMed, which is produced by the U.S. National Library of Medicine, is available on the Internet for free (http://www.nlm.nih.gov/PubMed). PubMed includes a feature designed to tackle clinical problems and uses search filters developed at McMaster University to optimize retrieval of clinically applicable studies (28).

Photocopy the articles you find while you are digesting your lunch and read them during clinical meetings when everyone else is asleep. Don’t forget to write a CAT and file it for easy reference. The U.K. Centre for Evidence-Based Medicine has produced a computer program called CATmaker that helps you create CATs and calculates such clinically useful statistics as relative risk reduction and numbers needed to treat. Try to write 1 or 2 CATs per week. It is better to have a few completed CATs than a dozen incomplete searches. Persevere: Your skills will increase quickly.

If you want to keep up-to-date with the journal literature, subscribe to “secondary review” journals like Evidence-Based Medicine or ACP Journal Club that have already screened for high-quality articles. These two journals are published bimonthly; therefore, you need only read six issues during your houseofficer year to stay on top.

Once you have found the evidence, don’t forget to apply it to your patient. Remember to incorporate your patient’s ideas as well as advice from local experts into your decision. Doing what is best for your patient may not always match the best evidence.

How can you convince your superiors to practice evidence-based medicine?

When you are the most junior member in a team, it can be hard to get your bosses to listen to the great evidence you’ve found. My advice is to be subtle. Find articles that agree with your bosses’ approach. Their response may be “Who needs evidence-based medicine to show that?” But you are bolstering their image as evidence-based clinicians, and you’ve learned something. Use mock uncertainty: “I’m not sure whether diclofenac is better than pethidine (meperidine) for ureteric colic. Can you help?” This will make your bosses feel needed and will allow you to chat about evidence-based medicine. All house officers have to make presentations: Use them as opportunities to present good studies you have found. As an added bonus, you will find talks easier to give, and your audience will be more interested. Photocopy your CATs and post them somewhere readily visible, or hand them out to your team as “an interesting article I found.” However, don’t expect miracles or sudden conversions—just work at creating a cheerful, inquisitive environment that supports the practice of evidence-based medicine. Bosses are like supertankers: They take a little time to turn, but once they’re heading in your direction, you can’t stop them.

What happens if your boss disagrees with the evidence?

Remember that evidence-based medicine doesn’t provide absolute answers; it simply gives some room for uncertainty: “I’m not sure whether diclofenac is better than pethidine (meperidine) for ureteric colic. Can you help?” This will make your bosses feel needed and will allow you to chat about evidence-based medicine. All house officers have to make presentations: Use them as opportunities to present good studies you have found. As an added bonus, you will find talks easier to give, and your audience will be more interested. Photocopy your CATs and post them somewhere readily visible, or hand them out to your team as “an interesting article I found.” However, don’t expect miracles or sudden conversions—just work at creating a cheerful, inquisitive environment that supports the practice of evidence-based medicine. Bosses are like supertankers: They take a little time to turn, but once they’re heading in your direction, you can’t stop them.

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provide a synopsis of the best evidence available on each topic. We are currently looking for additional contributors and reviewers and would welcome any offers of help.

To be an evidence-based doctor doesn’t require a superhuman effort. Whatever the amount of evidence-based medicine you practice, it is worth the trouble. It keeps you thinking, keeps you up-to-date, and keeps medicine fun.

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References
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