

EMRX and the High-speed Internet Highway

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I am standing in front of the old Capitol Cinema at the corner of Stamford and North Bridge Road. Up there on the giant facade is a large oil-painted poster of a leggy woman with a man in a tuxedo holding a weapon of some sort. The name of the movie is EMRX, and a sign below declares *AKAN DATANG / COMING SOON*.

What is this? A Thriller or Science Fiction? On closer inspection, the man is not holding a gun – it is a thumb drive!

I awake from my slumber in a pool of sweat. This movie is no dream; it is science fiction meeting fantasy. I thought to myself this might be science

fiction, but certainly not my fantasy; I just want to continue my quiet practice in my little corner of the HDB heartlands, minding my own business, thank you very much.

But what is EMRX? It is some kind of information exchange between hospitals and OPD. Does it involve the private practitioner? Well, not now, but it might. Not today, but for sure the day will come. The form that it will take is not certain at this point; there is no programme or platform that has been rolled out. Nothing will be forced down our tender herpanginous GP throats. But one thing is quite sure – it will certainly involve the internet. GPs will therefore be well advised to prepare for ready internet access in their consultation rooms.

What will be the impact to GPs; once a system that allows for access to a patient's in-hospital medical information becomes available? The advantages are immediately obvious – no more second-guessing a patient's laboratory investigations, results of scans, and prescriptions on discharge. Money is saved from not having to repeat tests done in other institutions. Past medical history, drug allergy, treatment history, and whatever happened during the patient's hospital stay may be readily available in future. It sounds too good to be true.



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But wait, before we GPs rise from our seats and put our hands in the air "Kallang Wave" style, we should be aware that having such potent information carries much responsibility as well. In particular, there are patient confidentiality issues to deal with, as the recent SMA National Medical Convention has highlighted. GPs may be asked by patients' relatives to check on the care given during admission; patients may ask GPs to go through records and explain this to anxious family members.

How about equipment? Is that old Pentium III 533 PC usable? If I have to dial in to the internet with my modem, the line will be

forever busy, so how are patients going to call in?

Most GPs are already using PCs in the office, especially now that most contract cases need electronic data entry for claims to be made. However, not all GPs are on broadband access. Reasons include the high cost of paying for corporate broadband accounts when the one at home can cost a third of the price, to simply no need for internet usage during office hours. Seeing six to ten patients an hour leaves little time to even go to the WC, "where got time" for PC.

However, I would like to suggest that broadband internet availability can be a very invaluable and indispensable tool in the consultation process. Appropriate use of the computer can be integrated into the consultation without necessarily disrupting doctor-patient rapport. A computer can be disruptive if it requires the doctor to spend time keying in data and findings, distracting him from making eye contact and thereby forming a barrier to effective communication.

GETTING STARTED

Invest in a LCD panel display for the consultation room, as it takes up very little space and can be discreetly positioned at



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◀ Page 20 – EMRX and the High-speed Internet Highway

a corner of the desk. It should ideally be angled to be visible to both the doctor and the patient, so that educational materials can be shared on screen. Make sure that you do lots of prior surfing and are familiar with the websites that you like. Bookmark them for easy availability. It is better to use a few reputable sites and be familiar with them, then to randomly pick sites from a search engine. It is not a good idea to search around for information once the patient is already in front of you. For one, your patients may develop the impression that you are searching for information because you have no idea what they are suffering from. For another, never click on random sites that you are not familiar with; there are a lot of "medical" websites belonging to alternative medicine and homeopathic groups.

AN AID IN HISTORY-TAKING

Most of the time, history-taking is quite straightforward. On occasion, readily available information from the internet is a useful resource. For example, a patient returns from the US and reports that he developed an allergic reaction to an OTC drug called Motrin. A quick search on Google tells you that the drug is Ibuprofen.

AN AID TO EXAMINATION

Having a digital camera attached to your PC will allow you to take clinical photographs and store them in the hard drive. Dermatological conditions can be recorded and easily recalled at each consultation to assess progress. Such photographs can be sent to specialists for comment if a referral is necessary. In future, the expertise of a specialist can be called upon with high-speed internet linkup, saving the patient a trip to the specialist clinic.

AN AID TO DIAGNOSIS

Although most health-related websites are meant for giving information to the non-medically trained public, there are many websites dedicated as a reference source for health professionals.

Forgotten what are the diagnostic criteria for Kawasaki's Disease? What about the difference between impetigo and erysipelas? They are all available at the click of the mouse.

<http://www.gpnotebook.co.uk> – The General Practice Notebook is an online encyclopaedia of medicine that provides a trusted immediate reference resource for clinicians.

<http://www.mdchoice.com> – A medical search engine with related information for healthcare professionals.

AN AID TO TREATMENT

Drug formularies abound on the internet. Dosages can be checked, and side effects and contraindications can be explained to the patient. One useful resource is to check on the drug's suitability for use during pregnancy and breastfeeding. Mothers do appreciate that effort has been made to double-check and confirm that the medication prescribed is safe.

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<http://www.bnf.org> – The British National Formulary is an impartial and valuable resource for drug information.

<http://www.perinatology.com/exposures/druglist.htm> – Get information about the suitability of drugs in pregnancy and breastfeeding.

PATIENT EDUCATION

The internet is truly a bottomless ocean of information for doctors, to trawl and find any and every form of educational materials for patients. Anatomical diagrams can be downloaded, menstrual cycle diagrams, treatment pathways, diet advice, take home brochures, and the list goes on.

COMMUNICATING WITH OTHERS

GPs sitting in their offices no longer need to feel isolated and confined. The internet is a door to the rest of the medical community.

<http://www.sma.org.sg> – Start with the SMA website. SMA Members can log on to the members' forum where there are lively discussions on the hot topics of the day. During the SARS period, the forum turned out to be a useful message board where the latest cases and policies were discussed.

<http://messenger.yahoo.com> – Instant messaging programmes, like Yahoo! Messenger, can also be a useful tool for GPs to connect with their best friends via the internet. Form a pool of trusted medical professionals and even create a chat room. Any questions or help can then be requested live and in real time.

NON-MEDICAL RELATED

By this, I do not mean all the endless uses of the internet during the doctor's free time; like booking concert tickets, watching the latest action on the Singapore Exchange or checking on the maid through their home web cam.

Children's websites like <http://www.storyplace.org> and <http://www.barney.com> can be useful to distract kids in the consultation room when you need some time to talk to mummy.

It is likely that EMRX will be a reality for GPs in the near future. GPs will have to start thinking of having their consultation rooms set up for internet access. However, we do not have to wait for EMRX to start. There are already plenty of useful things that can be done online that can justify investing in internet broadband access. Its usefulness is only limited by the doctor's own imagination. ■