ON THE NET

Open-source medical software on the net

Under a general public licence, open-source code for computer programs is made available for users to analyse, redistribute and modify, as long as they operate under the same rules. The success of the GNU/Linux operating system demonstrates that programmers are willing to invest time and expertise in open-source projects; the resulting software is stable and also evolves quickly.

And user interest comes not only from medical students looking for pro-

grams for their hand-helds — cash-strapped practices and hospitals are also examining open-source software as an alternative to proprietary systems. As Douglas Carnall has argued in *BMJ* (**www.bmj.com/cgi/content/full/321/7267/976**), if the code is free greater resources are available for customization and customer support. Carnall's editorial provoked a lively online discussion (**www.bmj.com/cgi/eletters/321/7267/976**).

Granting agencies are also interested. The European Union will spend 3.6 billion Euros supporting research over the next 5 to 10 years, and has placed an emphasis on projects that will yield open-source software. In April 2001, the McMaster University Department of Family Medicine Primary Care Network received $1 million from the Ontario Ministry of Health Primary Care Reform Initiative to enhance and expand OSCAR, an open-source pri-

mary health care system (**www.openhealth.com/en/press/20apr01.html**).

SourceForge (**www.sourceforge.net**) hosts projects of all sizes, while the Spirit Project (**www.euspirit.com**) specializes in medical software. At LinuxMedNews (**www.linuxmednews.com**), Dr. Ignacio Valdes and fellow enthusiasts keep their fingers on the pulse with news, discussions and project lists. Vancouver-based Minoru Development Corporation maintains Openhealth (**www.minoru-development.com/en/healthcare.html**). Most software intended for desktops or mainframes (as opposed to hand-held computers) is still at the pre-release stage. Exceptions are the beta versions of FreePM (**www.freepm.org**), open-source practice management software that was recently reviewed at *LinuxMedNews*. Tk_familypractice (**www.psnw.com/~alcald#informatics**) provides patient record and other software for physicians. — *Alison Sinclair*, CMAJ

Community becoming a classroom for medical students

Medical education has moved from the classroom to the community at the University of Western Ontario.

First-year medical students at Western now go in pairs to visit patients with chronic medical problems who live at home and are maintained with community support. Dr. Tom Freeman says the experience allows the students to see and not just read about the way determinants of health affect how people function within the community.

"They are charged with learning from the patient what it is to experience this illness and what support systems they have that sustain them in the community, and with getting an idea of what their coping mechanisms are like," says Freeman.

The assignment is part of Health, Illness and Society, a mandatory interdisciplinary course that Freeman coordinates. Its learning objectives are addressed in several areas of undergraduate study, with community experience being one of several course objectives. The work is done while the students are

in their first and second year, and the knowledge they gain is supposed to be applied during their clerkship years.

Second-year students are assigned in groups of up to 5 pupils to 22 different community agencies. They determine the community as defined by their agency (who is served, how many, the age range) and then develop a health-improvement strategy tailored to it. For instance, in 1999/2000, students assigned to the local Arthritis Society developed several information pamphlets that will be used nationally. In 2000/01 they developed a support group for families of children with juvenile arthritis.

The amount of time spent on the course is discretionary, although students must have a minimum number of meetings with their "patient" during their first year.

Freeman says the emphasis on community care and support services is important because this type of care and its related services are quickly becoming pillars of the health care system. "The

determinants of health, which include these community supports, are at least as important as any interventions we devise medically in terms of patient outcome." — *Lynne Swanson*, London