

HEART AND SOUL

There's no life like it

Commander Hans Cunningham is an MD on a mission. The Vancouver-based general surgeon is trying to expand British Columbia's fledgling telehealth services, and at the same time he's trying to improve trauma training for Canada's military physicians.

From his base at the Vancouver Hospital, Cunningham acts as clinical director of the ER/Trauma Tele-Health Program, chair of the Canadian Forces Telehealth Working Group and as the Surgeon General's adviser in surgery at the new Canadian Forces Trauma Training Centre (West).

Cunningham, 1 of 11 general surgeons in the armed forces, says technology is allowing the military to change the way it prepares medical staff. "Until recently, once you had done your basic medical training, that was it. You went and did exercises with your unit and saw some simulations where you looked at a card and read that the patient had a [simulated] sore chest, so you said, 'that's a chest wound.' And then you moved to the next step. It was the best we could do for realism."

Now the trauma unit "provides the polish. If you haven't seen a trauma case ever in your career, Bosnia should not be the first place to see it," says Cunningham, who has served there with Canadian peacekeeping troops. The 6-bed trauma unit, which delivered its first course last fall, is designed to provide such training. (Under the military's agreement with the Vancouver Hospital, military surgeons are allowed to practise full time at the hospital under an arrangement that allows them to maintain specialized skills while working in a civilian environment. Vice-Admiral Ron Buck, commander of Maritime Forces Pacific, describes the agreement as "a partnership that works.")

Cunningham is also looking to telehealth technology to improve the skills of military and civilian physicians, with an ultimate goal of making the tech-



Vancouver Hospital

Dr. Hans Cunningham: an emphasis on training

nology "as easy to use as a telephone."

Funded by the Canadian Health Infostructure Partnerships Program, the telehealth program initially involves the provision of emergency care in relatively remote areas of southeastern and northwestern BC. It allows teaching and consultation in real-time video, with the specialist, physician and patient "meeting" face to face. The program also employs "store/forwarding" technologies that allow a physician to consult an expert — this includes the transfer of video clips and electrocardiographs — via email.

Cunningham is confident that the technology will be cost-effective. "We just have to reduce our air evacuations by one [person] and that pays for the communication. If you can keep the patient in the community, the family stays in the community and continues going to work."

The main challenge lies in giving physicians the confidence to use the new technology. "They have to feel that it is theirs. The physicians in the communities are driving this — they will tell us what they want to learn."

Although the project is currently tied to the Vancouver Hospital, Cunningham would like to include trauma surgeons from other Lower Mainland hospitals.

Cunningham, who joined the armed forces 20 years ago, says the military started experimenting in telemedicine during the 1990s, when military doctors began sending x-rays electronically from overseas to Canadian bases. The move saved a lot of money, and Cunningham says similar savings could be achieved in civilian settings.

Cunningham may be working partly in a civilian role, but he has both medical and military genes — his father is a retired Royal Navy physician. He completed his first year of medical school at McGill University before joining the military. At first he wanted to be a neurosurgeon, but after practising as a GP for 3 years he decided that he preferred the variety offered by general surgery.

"If you approach [medicine] with the attitude that you can do something and that you are going to enjoy doing it, then you can make a difference." — Heather Kent, Vancouver