



Cost no object as new agency tries to restore blood system's credibility

Janis Hass

In brief

Canadian Blood Services has presented several initiatives to revitalize Canada's blood distribution system. Included is a plan to spend \$20 million annually to prevent a handful of cases of hepatitis and HIV infection.

Canada's new blood agency is pulling out all the stops in an attempt to restore public confidence in Canada's blood supply network.

Chief Executive Officer Lynda Cranston told the first public meeting of Canadian Blood Services (CBS) in January that her agency is installing a new "vein-to-vein" tracking system. To make donating easier, the service is also considering donor appointments that will slash waiting times.

However, the most obvious indication that blood collection has entered a new era came with the announcement that CBS will spend \$20 million annually for a new screening weapon, genome amplification testing (GAT), that allows earlier detection of the viruses that cause hepatitis C infection and AIDS. CBS estimates that the new process will uncover an additional 5 to 7 cases of hepatitis C infection among blood donors each year, as well as an additional case of HIV infection every 2 to 3 years.

When questioned about the cost-effectiveness, Cranston replied: "[The cost] does seem significant in terms of those numbers, but you have to look at the costs of someone contracting HIV and the costs of treatment. I think you have to look at the long-term impact."

Unlike existing tests that can detect hepatitis C if the donor was infected at least 60 days before giving blood, GAT will be able to detect minute quantities of viral genetic material if the donor was infected within 15 to 20 days of making the donation.

However, GAT's effectiveness in detecting HIV offers only a marginal improvement — detection time will be reduced from 22 days prior to the donation to 16 days.

Genome amplification testing, which is also being adopted by Héma-Québec and blood agencies in the US and Europe, will be done at regional laboratories across Canada.



Canadian Blood Services CEO Lynda Cranston attended the public meeting

CBS will also spend more than \$10 million annually on leukoreduction, a process in which white blood cells are removed from whole blood; this reduces the risk of side effects for transfusion recipients. Last fall Ottawa ordered the new blood agency to implement leukoreduction and CBS hopes to comply by June.

Wooing donors

Another challenge facing the blood agency is donation levels. These plummeted — along with public confidence in the Red Cross — after the tainted-blood scandal. "A lot of people think it's unsafe to donate blood and we have to change that perception," said Cranston. The CBS plans to launch campaigns to woo back donors who have "dropped out" and also to attract new donors, especially young Canadians.

The agency also hopes to make donating a more user-friendly process by holding clinics at more convenient times and by booking appointments for donors. The latter change is a response to complaints about the time required to donate blood; the Halifax regional office has already reduced donation time from 60 to 30 minutes. "The donors love it and we love it as well," said Ian



Murray, assistant collections manager for Halifax and Prince Edward Island. "The true reward is donor retention."

He said scheduling appointments is beneficial not only for donors but also hospitals. If there is a need for a specific blood group the Halifax clinic can schedule appointments for these donors, thereby ensuring that the hospital will have sufficient units available. "This lends stability," said Murray, "because hospitals can schedule surgery based on planned donations."

New tracking system

The CBS also plans to install a new computerized tracking system (see sidebar) to replace a computer system that is several generations out of date. At present, the CBS can only track its products to the hospital door — it does not know how the blood has been used or in which patient. With its new system, the blood agency will ultimately be able to provide "vein-to-vein" tracking.

During the open meeting, board members were asked what CBS was going to do about blood shortages. "I'm not so sure that emergency blood drives are necessarily a bad thing," commented board member and former federal minister of health Mary Collins. "People want to believe that they are part of an initiative."

However, she said the CBS is looking at improving the use of blood products and inventory management, and at alternatives to using blood products. "We've got a long way to go. In the meantime, we will continue to call on Canadians to give the gift of life."

Still a national system

The CBS will share blood with Héma-Québec, which is responsible for blood collection in that province. "We will have a compatible computer system to have an integrated donor base," CEO Cranston explained at the public meeting. In an interview, she said that some parts of Canada, including Quebec and Newfoundland, are classified as exporters of blood, meaning that they collect more blood than they normally use. Other large urban areas, such as Toronto, are considered importers. "We move blood across the country and that's one of the benefits of a national program. We can move blood to where it's needed."

Yet another challenge facing Canadian Blood Services is name recognition. Prior to the tainted-blood scandal, the Canadian Red Cross Society benefited from a rosy reputation built on years of work on disaster relief, international development and first-aid and water-safety programs. Unlike its predecessor, CBS will focus solely on operating the blood supply system. "We know we don't have the name recognition the Red Cross did," said Cranston, "but my belief is that we probably never will because the Red Cross is an international organization. However, we certainly can raise the awareness."

CBS has already commissioned some market surveys. "Part of our education strategy will be to develop liaisons with the CMA and provincial and national colleges to look at issues surrounding the education of professionals about blood and its uses."

Janis Hass is an Ottawa journalist.

Vein-to-vein tracking

Imagine arriving to donate blood, and instead of having to produce a driver's licence for ID purposes your thumb print or iris is scanned. Alternatively, you could whip out your Canadian Blood Services (CBS) photo ID, then have it swiped through a card reader. These scenarios are a not-too-distant reality because of the new computer system being installed by CBS. Chief information officer Ken Anderson says the new system promises more than tighter security. "It opens up a myriad of opportunities to improve the system."

His ultimate goal is "vein-to-vein tracking" of blood from donor to recipient. The more immediate goal is to make the existing software program used for

blood tracking, blood typing and inventory management Y2K compliant.

A team of computer experts has a September 1999 deadline for making the current out-of-date system compliant and "to ensure the uninterrupted, safe supply of blood and blood products through this millennium transition." Work will then begin on the \$35-million MAK Progesa system, which will take between 24 and 30 months to implement fully. After the system is in place, work will still have to be done with hospitals across Canada to marry their computer systems with MAK. "Somehow we have to figure out, to the benefit of the patient, how we can provide vein-to-vein tracking, given that there are 800 to 900 hospitals across

Canada, all working independently."

Currently, tracking down the source and destination of blood and blood products can take several days because records have to be searched, some of them manually. With the new system, a code will be entered into a computer and the result will appear instantly on screen. To ensure donor privacy, a code will be assigned to the donor and the blood. "Definitely, patient confidentiality is probably nearly as important as blood safety, although safety is paramount," stressed Anderson.

The MAK system is being used by more than 200 blood agencies around the world. In North America, Héma-Québec, New York, Florida and Arizona will be using the same system.