

Major advance for transfusion service

THE Trust's Department of Blood Transfusion has been successful in winning a £158,000 grant from the NHS Modernisation of Pathology Services programme for a leading-edge project to ensure the safe and effective use of blood in the largest acute Trust in the UK.

Current regulations require all hospitals to have systems to "track" units of blood throughout their journey from the Blood Bank to the patient.

This is to ensure that blood is stored correctly in accredited transfusion refrigerators in the central Blood Bank or satellite refrigerators in locations such as operating theatres and intensive care units.

Blood must not be out of a fridge for more than 30 minutes before transfusion. It is also essential that blood is only transfused within its "use by date", i.e. within 35 days of collection from the donor.

Our current systems rely on checking and form-filling by staff collecting blood from fridges and, like all manual systems, there is scope for human error and non-compliance. Where the "paper-trail" is not properly completed then the blood may be wasted as there is no positive proof of ideal storage.

All 28 blood fridges on the six hospital sites in the Trust will be fitted with state-of-the-art touch-screen computers and barcode readers designed to be as simple to use as cashpoint machines.

Staff using blood fridges will identify themselves using a barcode built into their Trust secu-

rity badge and units are scanned into and out of the fridge rather like a supermarket checkout.

Linked to a central computer in the Blood Bank, the system will know the location of every unit of blood in the Trust. If blood has been incorrectly stored or is out of date the computer immediately alerts the user and the Blood Bank using visible and audible alarms together with instructions on how to proceed.

The computer can even be programmed to give verbal instructions. Users require no computer or keyboard skills to use the system and the screen prompts them through each step of the process.

Before the system goes live in the next few months all staff responsible for using blood fridges will have thorough workplace-based training.

Although the Blood Track system has already been installed successfully in a few smaller hospitals, this Trust is by far the largest and most complex site where the technology will operate.

We will be working closely with the manufacturers to develop the system and passing on our experience to other hospitals in the NHS.

The project is a key element in our plan to use computer technology to ensure the quality and safety of the whole clinical transfusion process "from vein to vein".

It will reduce the risk of transfusion reactions by ensuring ideal storage conditions and allow us to make the most efficient use of precious, freely donated blood.