

High Tech Patient Safety Project Highly Commended In Health Awards

<http://www.oxfordradcliffe.nhs.uk/news/detail.aspx?Articleid=1102>

A project to bring an electronic solution to blood transfusion safety at Oxford hospitals has been named as one of the top three nominees in the Patient Safety category at last Friday's NHS Southern Region Health and Social Care Awards.

A team, led by Prof Mike Murphy, a consultant at the Oxford Radcliffe Hospitals, who also works for the National Blood Service, developed and implemented a barcode patient identification system which simplified and improved the safety of the clinical transfusion process. Barcodes are used to identify patients (on their wristbands), staff (on their identity badges), and the blood to be transfused. A bedside handheld computer is used to prompt staff through the key steps of the process to ensure the right blood is transfused. It has simplified the process of transfusion and has led to a significant improvement in patient safety – far more so than has been achieved in the past by staff education and training. The new process also nearly halved the time taken for a transfusion process, meaning better efficiency and money saved.

Questionnaires have shown that staff have found the system easy to learn and to operate, and preferred it to standard procedures. Patients expressed interest and nobody objected to being barcoded!

The project's initial aims were to create a system for blood sample collection for compatibility testing and blood administration in routine clinical settings: a haematology day case unit and haematology inpatient ward. It was then adapted for the acute clinical settings of cardiac surgery operating theatres and recovery unit, and also to provide electronic control of the complete hospital transfusion process by incorporating the control of blood collection from blood fridges. Throughout the trials, detailed evaluation and auditing was carried out so that improvements could be made as the project progressed.

This work is unique to the Oxford Radcliffe hospitals, and has been adopted by both the National Patient Safety Agency and Connecting for Health (formerly the National Programme for IT) as the national solution for transfusion safety. It has provided support for similar work in other countries, and for similar initiatives to prevent errors in other hospital procedures

requiring patient identification such as drug administration.

The project team was made up of staff from the Oxford Radcliffe Hospitals, National Blood Service, and two commercial partners (Olympus and iSoft). The Trust staff included Mike as the lead haematologist for blood transfusion, Jonathan Kay, a consultant clinical biochemist with long experience in medical informatics, senior members from the blood transfusion laboratory and the information technology (IT) department. Nurses from each clinical area involved in the project were seconded to the project.

Mike said: "We are very pleased that our work has been recognised by a regional NHS award as it is directly applicable to other hospitals. This recognition is a great credit to the project group and the many other staff at the ORH that have worked on and supported the project. We are very grateful to the National Blood Service for funding this work and to our commercial partners. This continues to be an exciting project to improve patient safety. We are now incorporating prescribing of blood into the process. Doctors will use the handheld computers to obtain information about when patients should and should not be transfused. "

In November 2004 the project won the "Working smarter" award for improvements in the workplace in the Thames Valley Healthcare Awards.