

# Coventry & Warwickshire NHS Trust

## Overview

Accident and Emergency performance is high on the agenda of every NHS Trust Chief Executive. Coventry & Warwick A&E treats over 68,000 cases each year. The working process of the A&E department can be enhanced by the correct use of technology that eliminates manual tasks. The same technology provides vital data that can be used to improve patient services.

## The Position

Accident & Emergency Services at University Hospitals Coventry & Warwickshire NHS Trust needed to improve the proportion of time spent treating patients and improve A&E records access.

With a busy A&E Department functioning 24 hours a day for 365 days of the year it is vital that the people working in the department are supported by technology. Accurate records are vital. Every one of the 68,000 patients must be examined, treated where necessary and then either admitted to a ward or discharged. The management of this process is an important task as each patient record provides vital data that must be recorded for legal, statistical and medical purposes.

The requirement is to print exactly what is required, where it is needed, in such a way that it provides the most effective document that is both accurate and intuitive to complete. The same document must then allow for subsequent data capture and enter a Content Management System that will enable the patient record to be retrieved by any authorised user. This is of enormous benefit to the medical team where a medical history can be assembled from previous records.

## The Solution

The solution for Coventry & Warwickshire NHS Trust was developed as a partnership between Xerox, Stellent Software, Kofax Software and XLPrint Software. Each partner brought their own expertise and experience in their given fields to the project, which was managed by Xerox.

The solution was to laser print Patient Record documents with the patient's details. An eight page document is created from the patient record with full details on every page along with a supply of labels.

### Managing Patient Records

The first phase of the operation is the creation and production of the Patient Record. In the case of Coventry & Warwickshire this is a double-sided booklet of eight pages. There are different booklets for adults and children under 16. These are accompanied by a sheet of barcoded labels that can be used to attach associated items, such as X-rays. XLPrint's Paris software manages this part of the process.

The Paris software will receive a single page of patient details. This will be created from the Hospitals patient administration system and any details taken from the patient upon arrival in the A&E department.

Paris will receive the data and then produce a personalised set of

documents that are printed double-sided onto plain white paper.

*[The previous method involved the use of a single card that had to be attached to a pre-printed booklet. Each page on the pre-printed booklet needed to have a self-adhesive label attached to it for identification.]*

With the new system, in the event that a single sheet of the set gets detached, it can always be identified. The Paris system still prints a sheet of self-adhesive labels, which are used for identification of other documents that may be created during the treatment process.

The accuracy of printing is very important since other processes in the cycle rely on certain data being in the

## Who are XLPrint?

XLPrint has been developing software for the electronic document industry since 1986. During that time, XLPrint's customer base has increased to the point where we now have thousands of installations in over 40 countries around the globe.

Every day, XLPrint's software is responsible for the production of millions of pages of electronic documents which are printed, emailed, faxed or stored in document archive systems.

Visit us at [www.xlprint.com](http://www.xlprint.com)

correct place. Paris is a 100% accurate printing solution, so data is always printed exactly where it is required. The final function of Paris is to make sure that the printer behaves correctly by selecting the correct paper stocks and then finally stapling the patient record set together.

As the patient goes through A&E, the clinicians make notes in the normal way, so their working process has not been altered by the introduction of the new system.

The next improvement occurs when the patient leaves the A&E department. Under the old system, the patient record would be filed, making retrieval an unwieldy process. With the new system, the same Xerox device that is used to print the patient record from Paris scans the filed in record card.

A Stellent Content Management System provides the core technology to achieve this. The software uses the scanned data and files the record against any existing record, thus starting the process of building up a true picture of the patient medical records.

## Benefits

The solution integrates with the existing patient administration system and provides the following benefits to Coventry & Warwickshire NHS Trust.

- Stationery savings. Expensive pre-printed patient record booklets have been dispensed with. Elimination of pre-printed forms.
- Each record book is now fully personalised so no unnecessary label sticking is needed.
- Post treatment, storage problems are eliminated and accurate records are available to all.
- Patient record files automatically indexed into content management system
- Instant retrieval of patient 's records to view demographic library established and populated with every patient record
- Access to records to support legal requirements.

## Paris Software

Paris is a 32-bit Windows application. The solution consists of three main modules that allow users to:

- Design applications in a WYSIWYG session
- Convert Xerox DJDE applications (optional)
- Print documents to any PostScript or PCL printer attached to the network
- Utilise a number of advanced design features that allow documents to be dynamically created from unformatted data

Other modules include sets of tools for:

- Barcode creation
- Currency translation
- Database record input
- Access to device specific features such as stapling
- Charts