



case study

Leicestershire Health Informatics Service

in brief

Leicestershire Health Informatics Service set out to introduce a multi-disciplinary patient administration system, treatment record and electronic patient record (EPR) to support the county's dietetics and four adult therapy services

Following a tender process, Ethitec was selected to roll out its Tiara9 software county-wide; to date, it supports three multi-disciplinary appointment call centres and is used by 400 users at 126 clinical locations across six PCTs

The system has enabled therapists to reduce waiting list times by up to 12 weeks, facilitated greater information sharing across disciplines, and made accurate data available to service managers as a by-product of clinical activity

the challenge

A reorganisation of the Primary Care Trusts (PCTs) in Leicestershire provided the impetus for the county's therapy services to re-examine their entire approach to the delivery of therapy services, including the IT systems used to underpin them.

This resulted in physiotherapy, podiatry, occupational therapy and speech and language therapy being brought together into the Adult Community Therapy Service under one clinical head.

Recognising that the inherited mixture of old IT and manual systems was unable to provide the accurate information needed to manage the combined service, however, Leicestershire Health Informatics Service (LHIS) was called upon to address the IT requirements going forward.

LHIS set out to support this unified structure by introducing a multi-professional patient administration system (PAS) and treatment record, and a multi-disciplinary electronic patient record (EPR). This was to be introduced for all four therapy services and the Dietetics & Nutrition service.

Managers on both the IT and therapy side recognised the value of accurate statistics in helping allied health professionals (AHPs) to improve the service delivered to patients, and were clear that data should be obtained as a by-product of clinical activity, rather than as an additional administrative burden on clinicians.

Specific goals included the modernisation of appointment scheduling and the sharing of appropriate patient information across all the AHPs where this was justified.



the solution

With the scale of the IT project involved, LHIS went to tender in the EU Journal to identify an IT supplier who could deliver the ambitious objectives set. The outcome of this process led to Ethitec being selected as a partner to implement a fully automated patient administration system and work with the Therapy & Informatics Services to develop a true EPR that was fit for purpose when it came to therapists' clinical practices.

Collaboration between Ethitec and Leicestershire's health community ensued, with hands-on involvement of clinicians ensuring that the system was designed for them and became something they wanted to use.

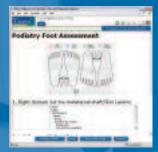
This deployment of practising clinicians to design workflow and subsequent interfaces – combined with effective software development – achieved the intended results of high levels of user acceptance of the Tiara9 system created.

Today, Ethitec's Tiara9 system is in use by 400 users at 126 clinical locations across the six Leicestershire PCTs, and has enabled the launch of multi-disciplinary appointment call centres with the ability to make appointments anywhere in the county.

The success of the project in terms of improved appointment booking, reduced waiting lists and cost savings through efficiencies generated, has resulted in the system being extended to the child therapy services within the six PCTs, delivering electronic 'cradle to the grave' therapy records for the county's residents.

Moreover, use of the Tiara9 system has been extended to offsite visits, with clinicians enabled to synchronise caseload records from the PCT server onto a laptop, record patient notes 'live' in a home or school during the course of an appointment, and then upload the new records when they return to base.







the benefits

The implementation of Tiara9 has resulted in tangible benefits for patients, clinicians and service managers. These include financial gains for the PCTs as a result of increased efficiencies; 12 week reductions in waiting lists; and improved management of resources.

Economic benefits

The six Leicestershire PCTs are making efficiency savings valued at over £2.5 million per year since the deployment of Tiara9 in October 2002. This figure is based on an increase of 73,000 additional patient contacts per year, with each contact being 'worth' £35, a conservative value derived from the nationally agreed figures for Payment by Results.

The increase in patient contacts facilitated by increased usage of the Tiara9 system can be explained by:

- A 12% reduction in Did Not Attends since patients have been able to choose the time and location of their appointment; an improvement which has resulted in 22,000 fewer wasted appointments per year.
- The increased ability to reallocate cancelled appointments successfully; 58% of cancelled slots are currently re-utilised, amounting to 9,500 contacts per year.
- The improved management of clinical resources, facilitated by the system's real-time monitoring of clinics and waiting lists, has helped each clinician on average to have over 100 more patient contacts per year, accounting for an additional 42,000 appointments annually.

Put another way, the £2.5 million efficiency savings are the equivalent of an additional 15 therapists in post at each of the six PCTs. This, combined with improved staff retention since the introduction of the system, has contributed to a significant improvement in the capacity of the county's therapy services to treat patients.

Management benefits

The very availability of such statistics is indicative of the powerful management information that the system has given service managers. Certain services, such as podiatry, have completed the transition to totally paperless records and, with all patients registered onto one system, are able to see at a glance activity patterns at each location.

This means resources can be reallocated at short notice to match patient needs with the decisions being made, based on accurate and up-to-date information. For example, if demand at one location has fallen but waiting lists are starting to form elsewhere, managers can identify this in time to redeploy clinical sessions to the sites where they are needed.

Information sharing across disciplines has also improved, due to the ability for allied health professionals to view summary patient histories and ensure that all the patient's therapy needs are being followed up.

Patient benefits

Therapy patients have benefited from the fall in waiting lists and their increased choice over the time and place of an appointment. Podiatry services in South Leicestershire have for example sustained zero waiting lists since March 2003.

Moreover, since the introduction of the system, services have noted a significant fall in the number of patient complaints received.

Senior Project Manager for Leicestershire Health Informatics Service, Derek Coker, said: "Tiara9 was a particularly rewarding project to lead. Not only were healthcare professionals involved at every stage of development, but the benefits to patients are measurable. This is what I joined NHS IT for - Tiara has improved service levels for patients and at a clinical level the system is synchronised with established clinical practice."

TIARA9 IN NUMBERS	
Clinicians using the system	455
AHP disciplines using Tiara9	Five
PCTs using Tiara9	Six
Average number of appointments through Tiara9 since July 2002	459,000
Average daily number of appointments through Tiara9 since July 2002	Over 745
Average fall in waiting lists since the implementation	Ten weeks
Waiting lists sustained by South Leicester's podiatry service since Oct 2003	Zero
Average DNA ratio BEFORE implementation	Over 22%
Average DNA ratio AFTER implementation	8%

Ethited