

# Digital dictation at Aintree Hospital



Elaine Kelly

*Following a successful pilot of digital dictation in one directorate in October 2006, project manager Elaine Kelly was asked to develop a business case for the trust-wide implementation of digital dictation with a view to then moving to voice recognition*

**A**lthough the original pilot had been fairly small, the results were impressive: 28% to 56% improvement in letter production times (from dictation to typing) and a contribution of £38k to the trust's cost improvement programme.

The full business case went to the executive team in June 2007 and, once accepted, an OJEU compliant procurement process started.

Procurement was the most protracted part of the whole process but included activities to allow users to see and assess short-listed suppliers so as to ensure that they had some involvement in choosing the final product. There was also a wish to pre-empt and prevent potential problems regarding

user-engagement later in the implementation process.

Each stage was rigorously applied and presentations from companies were fully assessed and marked against pre-agreed criteria. Although this was time-consuming, especially against a backdrop of wanting to get a system in place, this paid off in dividends as, post implementation, there have been few problems in terms of user engagement and what has been encountered has been easily solved.

Having gone through this lengthy and laborious process the final choice of supplier was a company called G2 Speech UK and a contract was agreed in March 2008 with implementation starting in May and finishing early September.

The anticipated outcomes were improved time in the provision of clinical letters to GPs and other health professionals; reduced delays in the pathway of care between all levels of health care (primary, secondary, tertiary) as a consequence of improved communication times; the delivery of a cost-benefits realisation programme arising from implementation of digital dictation/voice recognition; potential to attract higher referrals as a consequence of improved clinical communications; and improved administrative and clerical processes which take account of organisational targets and monitoring arrangements (referral to treatment times etc.).

In addition to these outcomes, the business case clearly outlined where financial

savings could be achieved which broadly related to reducing secretarial overtime – often used to deal with backlogs of tapes, reducing the use of agency staff – predominantly used to cover longer term absences such as sickness or maternity leave and through streamlining medical secretarial staffing back to a 1:1 ratio with consultants. Directorates have now been charged with delivering these savings into the CIP.

The implementation process was challenging as we opted for an accelerated roll-out in order to start realising benefits sooner rather than later.

- Eighteen specialties in eighteen weeks
- Approximately 270 dictation users trained
- Approximately 144 transcription users trained
- New intake of junior doctors trained
- Office managers trained in use of workflow system
- IT service desk staff trained
- Super users trained in each specialty
- Installed dictation hardware in all outpatient clinics, theatres and wards
- Installed transcription hardware on all medical secretarial PCs

To make sure that dictation facilities are available as close to the point of care as possible, speechmikes have been installed on all outpatient consulting room PCs, in all theatres and on all wards. This will encourage dictation at the time of patient contact and will be especially helpful in reducing the time taken for discharge letters to get to GPs.

Because dictation is transferred electronically from the point of dictation directly to the point of transcription this takes out the previous time taken to finish a session's dictation and transport the tape and case notes to the secretary. Dictated letters are transferred individually as soon as each one is completed. It is often the case now that a secretary is typing clinic letters whilst the clinic is still taking place. Some specialties are reporting a 30% - 50% improvement in letter



production times and in many cases these are now measured in days rather than weeks. It is anticipated that this will improve further as the system beds in.

One of the major benefits, however, is the workflow system which is integral to G2 speech digital dictation. This allows managers access to clear and undisputable information regarding workload both by author and transcriptionist. Regular monitoring with the office manager should lead to further improvements in letter production times as workloads are monitored and work is moved from one secretary to another to ensure an equitable typing workload and to reduce delays.

Most specialties previously kept a record of how many tapes were outstanding for typing and the date of the 'oldest' but this didn't give an accurate picture of the actual workload because – without listening to an entire tape – there was no way of knowing how much dictation was contained on a tape. The workflow system gives a clear indication of workload also

showing the priority given to the work and where an additional instruction to the secretary has been included, which usually represents further work or tasks.

Pre-requisites for a successful implementation are user involvement in selection of the system/supplier; top down support with an executive director as project sponsor to make sure that implementation is seen and accepted as a trust-wide initiative; and adequate project resources – ideally resourced as a 'spend to save' investment with both quality and financial benefits. This also needs to include trust project management and project support to work closely with the supplier

User feedback received so far has been very positive although there was some reluctance amongst clinicians to type in the seven digit case note number as the identifier for the dictation but in most cases perseverance paid off. Only one department opted to buy barcode scanners to support this part of the process.

One or two users are reluctant to completely relinquish tapes

seeing these as a stand-by in the event of system failure despite the fact that dictation can still take place even if the server is not available – as soon as the server is back on again the dictations transfer.

A minor frustration is the 'movement' of some speechmikes from one area to another which is overcome by using a simple cable device to permanently attach the hardware to the PC.

It can also be difficult to obtain accurate information regarding current letter production times to use as benchmark data for benefits realisation as staff are reluctant to admit the extent of existing backlogs in case they're perceived as being inefficient.

The next step for the trust is to make sure that the anticipated benefits are delivered and to thoroughly assess the costs and benefits of moving to voice recognition. A number of successful pilots are in place to support this.

