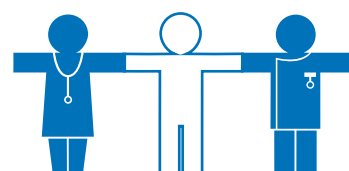


# *Elearning and NHS Connecting for Health: An Overview*

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## Executive Summary

The purpose of this paper is to demonstrate the central importance of elearning to the success of the National Programme for IT (NPfIT), and to provide an introduction to the activities, projects and products already in existence or under development at a national level.

It is not a comprehensive treatment of elearning in the health sector, but a high level overview of how it relates to, and is affected by, NPfIT in particular. It forms part of a much larger strategic initiative, which is more fully conveyed in the National Workforce Group's 'Road Map for Elearning' (*Modernising Healthcare Training: Elearning in Healthcare Services, April 2006*).

## The basic proposition

- Elearning – either on its own or as part of a blended approach – is vital to the future of the NHS. The NHS is certain to be affected by a trend that is sweeping all levels of education and all other sectors of training and development.
- It is essential to the success of the National Programme, given the number of learners to be reached and the ongoing need for refresher training for upgrades, after initial deployment.
- Elearning is developing rapidly and is allowing people to learn about their jobs and new technologies, not only through formal courses, but also through 'free-play' or self-directed inquiry. It is thus blending with aspects of knowledge management.
- At present, it is largely at the 'cottage industry' stage of development in the NHS, with lots of disconnected initiatives and strategies. This is wasteful and confusing. We need strong coherent leadership and advocacy for elearning. At the moment this is being provided by the National Alliance for Elearning in Health; a relatively informal coalition of individuals and organisations. The four principal pillars of that alliance are the Department of Health, Skills for Health, NHS Connecting for Health and the organisation of Strategic Health Authorities.

## Why it's important to NHS Connecting for Health

- The only way that NHS Connecting for Health (NHS CFH) can reach the number of learners over such a geographical spread, in a relatively short period of time, is by using elearning as part of an integrated or 'blended' solution. Also, NHS CFH will probably be the largest single provider of elearning to the NHS in the future.
- Elearning fits well with the train-the-trainer cascade-based approach which lies at the heart of the deployment of the NPfIT.



- Whereas the provision of desktop, laptop and handheld devices is a local responsibility, the National Programme will, through N3, inevitably need to provide a significant part of the infrastructure needed to run an integrated elearning service. It should also provide advice on interoperability standards to join up the many free-standing learning management systems (LMS) currently in use in the NHS.
- Elearning will allow NHS CFH to make the most of the benefits of all the investment in the NPfIT, by integrating learning resources with the applications to which they relate.
- Properly developed elearning resources will allow learners to gain credits towards their continuing professional development. They may also be used in universities and other learning environments to ensure that students working towards joining the NHS already have a good knowledge of how the National Programme's applications, systems and services work.

## What we need now

- Explicit recognition of, and support for, elearning as a prime way of supporting professional development across the NHS, including in the deployment of NPfIT applications, systems and services.
- A set of standards, so that elearning materials developed by different suppliers, NHS organisations or trusts have a common 'look and feel' and will work on a variety of platforms.
- Ideally a shared LMS but, if not, interoperable systems, so that we know at any given time who has learnt what, and who is still to be trained.
- A common repository (content management system) for elearning resources ('re-usable learning objects') to prevent duplication of what already exists.
- Professional development for those involved in education, training and course development because teaching electronically and online requires different skills from those for teaching face-to-face.
- Support for NHS organisations and local health communities to build capability and capacity to so they use elearning appropriately as part of their local NPfIT deployment strategies.



## Background

The NPfIT is being delivered by the NHS, supported by NHS CFH. It involves training up to one million end-users in the various functions and applications being rolled out. This can only be achieved in a timely and quality-assured way through the use of elearning as part of the total solution.

In addition, following the initial deployment of NPfIT programmes and applications, there will be an ongoing need for training and development, partly because of staff turnover, partly because of new or additional functionality, and partly because of the need for refresher training. These needs can best, or perhaps only, be met through using elearning. Accordingly an investment in elearning now will have benefits for the future as well as the present.

The existing use of elearning across the NHS is uneven. Some trusts and health communities have sophisticated and comprehensive provision, while others have not yet ventured far down the elearning route. Even when individual organisations have embraced elearning, they have often developed local solutions and programmes, which lead to duplication, redundancy and waste of resources.

Clearly, it is beyond the remit of NHS CFH to develop, advocate, promote or mandate the use of elearning for the entire NHS; nevertheless there is a compelling case for NHS CFH to employ elearning for its own purposes and, because of its scope and scale, this is likely to provide a significant contribution to the broader national effort to use elearning within the NHS. In this regard, NHS CFH is an active member of the National Alliance for Elearning in Health, and through this, it attempts to harmonise its activities with those of other stakeholders.

## What is elearning?

There is a huge and growing body of literature around elearning and a bewildering range of definitions to go with it. For the purpose of this paper, elearning is referred to as:

*Technologically supported learning; predominantly via networked rather than free-standing machines. It includes access to formal programmes of study with assessment and tutorial support, participation in communities of practice and other forms of online forums and threaded discussions, and use of various digital resources on a self-paced, independent and free-play basis.*



## Why is it important?

Like all technology applications, the potential of elearning has been both underestimated and overestimated. By some, it has been dismissed as little more than a 'fad' that will soon pass, or as simply a mode of delivering training that is inexpensive because the costs of printing are borne by the recipient. By others, it has been hyped as the most significant, dramatic and transformational approach to education and training in history. The truth lies somewhere between these extremes. It is certainly true that elearning (and its close relation knowledge management) is infiltrating all types and levels of education and training and that a vast amount of money has been, and is being, poured into elearning developments. On the other hand, it is no panacea and its successful use, especially in formal education and training, requires careful planning and development, along with skilful facilitation.

One thing is certain: elearning is here to stay and, with an increasing amount of elearning in schools, colleges and universities, other sectors of industry and government and even in the community, it has definitely passed the point of experimentation and is now mainstream.

## Why is it important to NHS CFH?

It is often claimed that the NPfIT is the largest civilian IT project in the world, and that its very size poses huge organisational, as well as technological, challenges. One of these organisational challenges is ensuring that everyone who needs to use NPfIT applications is willing and able to do so.

When the National Programme originally began its roll-out, the approach to training was (and for that matter, still is) cascade-based. Suppliers are contractually obliged to train a cohort of 'super-users' who in turn train another generation of trainers and so on, until training reaches the end-users. Responsibility for end-user training rests with local organisations, making use of training materials provided by the supplier.

This model seems appropriate, as it places the onus for technical training on the supplier, and end-user training on the local health community. In practice, however, it has posed significant challenges for suppliers and local NHS organisations alike:

- It has proved difficult to place technical training into the broader organisational and philosophical context of deployment;
- end-user training has on occasions been difficult to synchronise with roll-out schedules;
- it is costly and time-consuming to release staff for face-to-face training;
- there has been a surge in demand for trainers with consequent high costs to local health organisations; and



- perhaps most importantly it is difficult to guarantee that end-users are receiving accurate, timely and relevant training in relation to the applications being deployed, despite the best efforts of suppliers and local organisations.

Accordingly, there would seem to be a number of challenges, many of which might usefully be addressed, and some solved, by the judicious use of elearning as part of a blended solution. So what, then, are the potential benefits of elearning?

### **Increasing familiarity**

The first benefit is that a large proportion of the workforce has already experienced elearning in education or in other workplaces, and accordingly expects it to form part of their experience at work in the NHS. This is particularly, though by no means exclusively, the case when learning about new technologies. Even when staff members have not experienced elearning itself, many are familiar with the use of technologies in their everyday lives:

- mobile phones;
- programmable devices at home;
- digital cameras;
- email;
- interactive digital television; and
- online booking and purchasing.

As a result, members of staff may be expected to adapt readily to elearning, if offered the opportunity.

### **Quality of learning**

A second benefit is that, when properly planned and conducted, it can lead to superior learning outcomes. Gone are the days when elearning was a second-rate way of learning, it having been transformed by:

- high quality, realistic materials;
- interactive and real-time communications;
- threaded discussions and forums;
- video and audio streaming;
- podcasts; and
- online learning support.



## Access to help

For those whose elearning experience has been limited to 'page-turning' CDs or websites, it may seem that it is a lonely and unsupported way of learning. However, networked computers facilitate contact with expert tutors or trainers and with other learners who may be able to help. Even if the elearning application does not support communications, people in the work environment – mentors, trainers, super-users and other colleagues – can support each other, and significantly increase the assistance and encouragement available.

## Convenience

Face-to-face training is time and place bound; a disadvantage for staff working shifts, and particularly problematic when work needs to be done by others whilst staff attend training sessions. With elearning, as long as staff have protected time for learning, dedicated terminals, quiet learning environments and supportive conditions, they can access the materials at times and in locations that are most convenient for them. When uncertain, they can review the material, or ask for extra help, without embarrassment or inconvenience to a wider class group. Elearning can be particularly helpful for peripatetic and mobile workers, as they are able to learn in 'bite-sized' chunks, and can access their own learning and information environments from anywhere on the network.

Of course, the NHS is not at a stage where the technology is sufficiently available or intuitive, where managers are universally supportive and understanding, or where users are confident and technologically fluent so that elearning is commonplace or easy. However experience in parts of the health service, and in other organisations and sectors, shows that this is the direction in which learning, information sharing and productivity support is moving.

## Savings and sustainability

One of the great fallacies about elearning is that it is an inexpensive way to train, commonly based on the mistaken view that it simply entails uploading notes, instructional manuals or PowerPoint slides that can then be accessed as required by the learners. In fact, the production of high quality elearning resources can cost tens of thousands of pounds, perhaps more.

However, there are savings to be made. For a start, once the resources have been developed, the actual cost of providing the information to ever larger numbers of learners is virtually free. The materials can then, depending on their design, be maintained and enhanced relatively inexpensively. Furthermore, although the cost of producing a single set of high quality resources may be high, it is considerably lower than the cost of producing similar – and at times identical – materials in many separate locations. Thus there can be enormous savings to the service as a whole, by reducing duplication and redundancy.





## Reusable resources

Elearning resources, developed for use in NPfIT deployments, may be readily redeployed for other uses and purposes. For instance, generic training materials created to explain major NPfIT applications may be used as part of pre-service education in universities, or alternatively may be offered to Royal Colleges and providers of short courses as part of continuing professional development for those already in the service. As long as the resources are in an accessible repository, and can be located by potential users (trainers and learners), this reusability is a major benefit.

## Up-to-date materials

Elearning resources that are captured on electronic media such as CDs, like books and other hard copy, are fixed in time. But when elearning materials are hosted on a server, and are updated as deployments occur, users are viewing the best and most current information available. Naturally, this depends on maintaining the currency of the resource, but it means recent changes in functionality are reflected dynamically in the learning materials, and that out-of-date materials are a thing of the past.

The fact that a single, authoritative, centralised resource is available helps to overcome any problems associated with the cascade approach, ensuring that learners, wherever they are, are exposed to the most recent and most comprehensive information about the functionality being deployed.

## Links with other knowledge applications including decision support

Historically, initial training is separated from on-the-job support, and help with a specific function, application or technique comes from a technical manual, dedicated assistance, a helpdesk, or from registering for another course or programme. With elearning, all these functions can be rolled into one. Through accessing dedicated materials and facilities, or through having an online help function, small uncertainties can be cleared-up in 'real time' without leaving the workstation.

This convergence of elearning and on-the-job support means that materials developed for one use can be utilised equally for the other.

## Quality assurance and learner tracking

The provision of elearning packages and programmes is only one part of a bigger picture. By linking learning resources – whether formally developed programmes or self-directed free-play – with an LMS, a whole range of additional benefits can be realised.

- Staff are able to identify and register their own learning needs and identify appropriate and preferred ways of meeting those needs.
- Managers are empowered by an LMS that incorporates approval mechanisms that authorise staff to undertake relevant learning.



- Each staff member's personal learning profile and competency set can be automatically updated by an LMS that is linked to an HR system, such as the electronic staff record (ESR).

## Regulation and compliance

An LMS integrated with elearning resources allows an organisation to identify and track those who are currently trained to use the applications. This can be of inestimable value within an organisation or trust, in identifying trained users including those who may be willing to act as super-users or mentors to others, and for reminding people when they need refresher or upgrade training. If there are aspects of training that are mandatory, or where patient safety is involved, it can assist trusts and other organisations in discharging their legal obligations to report on mandatory training provided and undertaken, thus saving on Clinical Negligence Scheme for Trusts (CNST) premiums.

## Towards a learning organisation

A system that allows people to learn without leaving their workstation saves costs of travel and staff cover and, by utilising technology that is deployed for work purposes to support learning, it also allows familiarity with one application to carry across seamlessly to the other.

The advantages are not only practical and financial; elearning also has more philosophical and intangible benefits. Once people are used to learning this way, they usually think of elearning as a way of keeping up to date with new releases, increased functionality or refreshment training. From such practical considerations, it is just a short step to increased openness towards learning more generally and, beyond that, towards creating a culture where learning is considered second-nature and routine. This openness to new learning is a prized attribute in any workplace, but particularly in one marked by continuous change.

## 'Double dividend' capitalising on the deployment

Finally, one of the most persuasive arguments for embracing elearning within the NPfIT is that it takes advantage of the functionality being deployed. It is even possible to build self-guided learning applications and drop-down support menus into the functions forming the National Programme's deliverables. This is a major benefit, as it means that the National Programme – both for initial deployment and for ongoing learning or continuing professional development – is a beneficiary of the very technology it is rolling-out. Not only that, but, as other elearning applications can use the same platforms and functions used by the National Programme, it means that NHS CFH is delivering an additional benefit to the whole service. This may be thought of as the 'Double Dividend' of the NPfIT.



## Does embracing elearning mean we won't require TraMS?

Working at a national level, one of the principal deliverables for Education Training and Development (ETD) is a 'like live' training environment that will link with the various local solutions, and will allow end-users – now and in the future – to learn how the Spine operates. It will enable experience of its functionality with thousands of concurrent users, without using live patient data. Called a Training Messaging Service (or TraMS) this learning environment will be populated with up to 2.5 million 'dummy' or training patient records, on which users can practise basic skills such as Trace, Create, Update, Merge, Un-Merge, Resolve Duplicate Records, etc.

Because elearning programmes and TraMS are both being delivered using the same basic infrastructure, some people have asked whether we still need TraMS. After all, they argue, if elearning has all these advantages, surely it is possible to create an elearning programme that replicates the functionality of the Spine.

Unfortunately this is not the case. TraMS is not simply an environment where learners are presented with information about the functionality. It is an interactive environment which precisely replicates the experience of using the live system, including the complexity of multiple records with the same or similar names. It also replicates the response times based on the sophistication of the particular application, as well as the number of concurrent users. Whilst in theory it might be possible to create a learning package that could do this, the cost would be at least equal to, if not greater than that of procuring the TraMS. Also the TraMS is based on precisely the same architecture as the live environment, and any learning environment could not easily replicate the subtle differences between the various local solutions.

In time, a self-instructional elearning package, that will introduce users to the functionality provided by the spine, by linking the Spine to TraMS, may be possible but there still remains the need for a database which supports initial and refresher training, on-demand and personalised learning, that does not compromise patient safety or confidentiality.

## What is the current situation?

Given these potential benefits, it might be expected that there would be widespread uptake of this approach. However, this is not always the case. Although there is no reliable overview of the extent of elearning across the NHS, or indeed in the NPfIT, evidence suggests that the uptake of elearning is very patchy.

There may be many reasons for this. One of the most obvious is lack of confidence. Despite the availability of Foundational IT Skills in the form of the European Computer Driving Licence (ECDL), and the fact that there have been over 200,000 registrations to



undertake ECDL modules, many users may not feel competent to use elearning. Another might be lack of protected time for learning. Unless and until individuals have an agreed entitlement to time for professional learning, engagement in learning in the workplace will continue to be limited.

However, the problem is not so much low engagement by learners as low uptake by trusts and other NHS organisations. Many NHS organisations have a limited number of networked computers, or machines that are capable of delivering elearning. In a classic 'Catch 22' situation, those machines that could be used tend to be dedicated to clinical and management purposes. Even with a number and spread of machines that could support learning, some managers are reluctant to allow users to access them for this, in the belief that staff will abuse the privilege by accessing inappropriate sites. There is also the fear that there will be an adverse public reaction to staff being online rather than engaging in other activities directly related to patient care. This latter problem is a reflection of the absence of dedicated learning resources, which itself is explained by the tight budgetary situation in many trusts.

In other situations, it is neither the availability of technology, nor the attitudes of managers that is the issue, but that of those involved in Information Management & Technology (IM&T) who do not provide the bandwidth necessary to run elearning applications or even to open the ports necessary for access to the Internet or learning resources from outside the trust's own firewall.

However, the most persuasive reason of all is that, in many cases, there are no relevant resources available, or their quality is not high, so there is little incentive for staff to be encouraged or enabled to undertake elearning.

For all these reasons, there is considerable work to be done, by NHS CFH and all those agencies and individuals in the wider NHS committed to a greater availability of and engagement with elearning. Clearly a multi-pronged approach is required, which simultaneously addresses issues of competence, confidence, access, support and available resources.

Accordingly, there are two complementary approaches to this issue; those on the 'supply-side' (providing better and more abundant elearning resources and materials) and those on the 'demand-side' (building a receptive context for teaching and learning in this mode, and ensuring that individual organisations and individual learners have the capacity and capability to take up such opportunities).



## What are we doing about it?

Following the publication of the National Workforce Group's 'Road Map for Elearning' (*Modernising Healthcare Training: Elearning in Healthcare Services*, April 2006), a National Alliance on Elearning in Health has been established. This is a voluntary consortium of those committed to enhanced elearning opportunities and uptake for the 21st century. The challenge of drawing together hundreds of separate projects and ensuring they are harmonised and interoperable is daunting, especially when it is being undertaken on a voluntary basis, by a distributed team, with no formal mandate and no dedicated support. Nevertheless, considerable progress is being made, and NHS CFH is an active and prominent member of that alliance.

Until now, our own work in the domain of elearning has been fragmented. However a coordinated approach is now being developed, which has four cardinal points:

- content;
- delivery;
- professional development for ETD practitioners; and
- learner support.

Each of these is dealt with below.

## Content

There are already many elearning resources available and in use across the wider NHS, including those associated with NHS CFH products and applications. Many of these are of a very high standard and, whilst some meet a local need, others could be used more widely if their existence was publicised.

- Under the heading of 'Content' the national ETD team is working on:
- establishing standards;
- developing or procuring our own resources; and
- storing and finding elearning programmes and 'assets'.

## Establishing standards

Because there is a lot of uncoordinated elearning development work across the wider health service, the national ETD team is producing a set of suggested or recommended standards, aligned to and based on the standards already in place for face-to-face teaching and learning. These standards focus on the educational design of elearning resources. Although there is also some attention to technical issues, this is principally to ensure that resources developed in one setting can be used in another, and that



resources are 'future-proofed' to complying with established norms in the field. These standards have been developed with the assistance of a Training Design Authority drawn from across the service, and have been published on the ETD part of the NHS CFH website.

### **Developing or procuring our own resources**

As with the rest of the NHS, the NPfIT has variable and uneven take-up of elearning. The Local Service Providers (LSPs) and National Application Service Providers (NASPs) have used some elearning as part of their solutions. But even where this is the case, they have concentrated on 'technical training,' which focuses on the functionality of the application itself and not on its purposes, benefits or relationship to other applications.

To fill this gap, the national ETD team has commissioned a small number of elearning packages that 'wrap around' the technical training solutions. These, allow end-users, managers and others to appreciate the broader context of particular NPfIT deployments. The first topic to be covered in this way is the Personal Demographics Service (PDS)<sup>1</sup> Others under development or being considered include the Personal Spine Information Service (PSIS), the Summary Care Record, the Electronic Prescription Service (EPS), the Spine, patient confidentiality, the Registration Authority, and possibly SNOMED. Other topics may be included if there is sufficient demand and justification for a national product. Clearly, these packages will exemplify good elearning practice, and will comply with the standards recommended for the NHS at large.

### **Storing and finding elearning programmes and 'assets'**

One of the reasons for pursuing elearning is that many health communities are independently developing resources which duplicate the same content. This is wasteful, so to ensure maximum use of existing resources, the national ETD team is to assemble a repository of elearning programmes and other digital resources that are available for sharing. This repository is being hosted in the North West by an SHA on behalf of the whole service, but there are plans to create a repository hosted by the National Library for Health (NLH), as a specialist library. This will ensure rigorous quality standards and, more importantly, mechanisms that allow users to find what they are looking for through the use of embedded descriptors or 'meta-data tags.'

*Note 1: <http://www.connectingforhealth.nhs.uk/etd-nasp-learning-material/spine-applications/pds-elearning>*



## Delivery

With the exception of the Essential IT Skills programme, currently ECDL, the national ETD team is not involved in the direct provision of elearning to the NHS. Instead, the intention is to facilitate elearning by ensuring that appropriate infrastructure is in place and, wherever possible, by obtaining buy-in on the part of stakeholders able to encourage or inhibit the use of elearning. In addition to working with managers and Chief Information Officers (CIOs) to get their support for elearning, the national ETD team is working on the following major national initiatives to support delivery:

- mobile training units;
- learning management systems; and
- a unified 'like-live' training environment.

### Mobile training units

Through an OJEU procurement, ETD has secured a national call-off contract with PC Coaching. This allows any NHS organisation or local health community to call a dedicated number and, at a preferential price, have a mobile or portable learning facility (pod, cabin or coach). These are suitably equipped with networked, high-specification computers, configured to represent the organisation's own and are installed temporarily at their premises. This service helps cover temporary peaks in training demand and covers shortfalls in available resources during the initial deployment of National Programme systems. The agreement with the supplier is that these facilities may be used for any legitimate NHS elearning applications, so NHS CFH has already supplied the service with access to an important function that supports elearning delivery.

### Learning Management Systems

As mentioned above, there is more to elearning than simply accessing online resources. An organisation requires an LMS that provides two different kinds of functionality to engage in this form of learning. It allows the provider of education or training to control learner access and to track their progress. It also provides the mechanism by which learners access the learning resources and participate in the learning experience. A preliminary study within the wider service has shown that there is a diverse range of LMS products already in use, some commercial and some developed or adapted locally. Not only does this mean that there is different functionality available to learners depending on where they work, but more importantly, because of local incompatibilities, there is no way in which individual health communities can be compared or by which overall participation and performance can be monitored.

The national ETD team is engaged in collaborating with other major stakeholders, including the Electronic Staff Record, Skills for Health, the DH Widening Participation in Learning Strategy Unit and, through the National Alliance, R-ITI (the Radiology - Integrated Training Initiative) to specify, procure and deploy learning management solutions that are common (or at least interoperable) throughout England.



## A unified 'like-live' training environment

To guard the confidentiality of patient data and ensure its integrity, it is inappropriate for users to learn about National Programme applications working with live patient data. To prevent this, the national ETD team is procuring and deploying a 'like live' training environment called the Training Messaging Service (or TraMS), that will link with the local LSP training solutions.

This project will provide 1.5 million (eventually rising to 2.5 million) 'dummy' patient records, with associated patient journeys, on which users can learn in a way that simulates the real application. This service will support face-to-face instruction (either individual or group-based) and elearning applications, by providing an environment that looks, feels and behaves like the Spine. As at September 2007, this was available for deployment, awaiting integration with the LSPs' training environments. It will be augmented and refined in line with future Spine releases.

## Professional development for ETD staff

While elearning content and platforms are vital, it is important to recognise that online learning requires some facilitation, and that online learning and teaching poses challenges (and offers opportunities) for educators and trainers. Not everyone welcomes the advent of elearning. For every trainer who feels positive about elearning, as a valued addition to his or her repertoire of training approaches, there is another who either fails to appreciate its potential, or else appreciates it but fears for his or her own future. In either case, it is vital that educators and trainers across the service recognise the potential of elearning and the need for them to acquire new skills to get the most out of the medium and the resources provided. Given the size of the teaching workforce and the potential complexity of the subject matter, strategic partnerships with various providers are both inevitable and desirable.

In support of this aim, the National ETD team is working on:

- conferences, short courses and master-classes; and
- communities of practice.

### Conferences, short courses and master-classes

The national ETD team is working to provide a range of short professional development activities and programmes to the ETD community. Both national and local conferences have been supported, allowing experienced and new practitioners to meet and exchange experiences, and to learn from leading-edge practice in government, industry, education and the community sector. The team will also offer a variety of short courses via the medium of elearning, and some will make use of existing networks and programmes that are already available.





This will reduce the costs of developing new materials and resources and will have the additional advantage of bringing ETD practitioners from within the NHS into contact with counterparts from other sectors and organisations.

### **Communities of practice**

Since valued learning and exchange of insights occurs through professional networks and communities, the national ETD team is encouraging the development and extension of groups which cover the full range of skills from novice to expert. Supported by online discussion groups, resource databases and repositories of lessons learned, these communities will form a vital centrepiece of our attempt to raise the profile and lift the amount and quality of elearning in relation to the National Programme.

### **Learner support**

The fourth set of activities and interventions provided by the national ETD team concerns learners themselves. As previously mentioned, the provision of ETD is a local responsibility, geared to the needs and priorities of local organisations, and integrated with local plans for organisational development and service improvement. Nevertheless, there are certain initiatives best undertaken at national level, either because of economies of scale or to encourage uniformity of provision or equity of access. These include the following:

- essential IT skills;
- learning-to-learn programmes; and
- local learner support.

### **Essential IT skills**

The first and most obvious way in which learners can be supported to undertake elearning is by ensuring that they have the necessary foundational skills. NHS CFH has for several years been providing an IT Foundation Skills Programme (currently ECDL) free to the service. While this particular solution will not be offered beyond the end of March 2008, plans are under way to specify, procure and deliver an alternative, more closely aligned with the actual needs of NHS CFH and the NHS. This will include the capacity for users to learn online and through other technology.

### **Learning-to-learn programmes**

Essential IT skills are necessary, but not in themselves sufficient, and in the same way that trainers and educators need to learn how to teach online, users may also need to acquire the skills for learning online. As a result, the ETD team is developing or procuring courses and other programmes to help end-users to learn using technology, either as free-standing activities or as an optional extension of the Essential IT Skills programme.



## Local learner support

In addition to ensuring that users have appropriate elearning skills, it is important that their learning is supported. Some of this support will be provided by professional trainers, coaches and mentors, and some by a distributed network of workplace-based super-users. Some of their learning will be assisted through helplines and helpdesks and some using the technology itself, via drop down menus and online tutorials. In many elearning settings, users will help each other through blogs and wikis and other kinds of social software<sup>2</sup>, and this kind of user-generated content may also find a place in the NHS in due course. Finally, the national ETD team is creating a series of drop-in facilities or local learning resource centres, so that users do not feel abandoned or isolated. This will involve producing toolkits and other mechanisms so that learning centres (or perhaps Academies) can themselves learn from each other, and good practice may spread.

## Where to from here? Local Capability and Capacity Development

During 2007-08, promoting the uptake, spread and use of elearning is a priority area for ETD, especially in relation to National Programme applications, but also with a wider impact on learning in the NHS. This approach will bring benefits, but are organisations willing to wait for long-term results? Elearning takes time to develop and produce payoffs, and each organisation will face a learning curve and substantial start-up costs.

There are limits as to what can be achieved by the national ETD team through advocacy and encouragement, partly because of the distributed nature of responsibility for training and development, partly because uptake is dependent on the attitudes of leaders and managers, and partly because of the variable capacity of local organisations to engage with this form of learning. So, in addition to continuing with the above initiatives and projects, and in line with the philosophy underlying the NPfIT Repositioning Programme (NRP), ETD is undertaking a project to help build local capacity and capability for elearning.

This cannot be unilateral and needs to be understood and supported by the trusts and other organisations across the wider NHS. Experience in other sectors, and the health service itself, commonly shows that, even when managers, trainers and others are convinced of the value of elearning, they commonly underestimate the costs involved. These costs are from adjusting their administrative and other processes to take account of the differences between online and face-to-face training and learning support. There are also implications in the classic trilogy of people, processes and technology and, to this end, ETD will be producing a set of guidelines to help the local NHS determine its preparedness to engage with elearning.

*Note 1: For an overview of recent developments, see Boulos, MNK, Maramba, I & Wheeler, S (2006). Wikis, blogs and podcasts: a new generation of web-based tools for virtual collaborative clinical practice and education. BMC Medical Education 2006, 41. Available online at: <http://www.biomedcentral.com/content/pdf/1472-6920-6-41.pdf>*



Two online resources are of particular relevance here. One is the January 2007 report of the E-Skills Council on Models of Organisational Readiness:

[http://www.e-skills.com/cgi-bin/orad.pl/395/Towards\\_Maturity\\_Summary\\_Report\\_Jan07.pdf](http://www.e-skills.com/cgi-bin/orad.pl/395/Towards_Maturity_Summary_Report_Jan07.pdf)

and the other is a toolkit, produced by a strategic partnership led by City and Guilds, and supported by both the Treasury 'Invest to Save Unit' and the Department for Education & Skills:

<http://www.iccaonline.co.uk/index.jsp>.

Finally, the national ETD team is exploring a voluntary benchmarking exercise where NHS organisations can benchmark themselves against each other or against organisations in other sectors. This could build on a major national benchmarking study and methodology developed by Professor Paul Bacsich:

<http://www.cs.mdx.ac.uk/news/Benchmark-theory.pdf>

## **Conclusion:**

### **Elearning and NHS Connecting for Health**

The rapid growth in the amount and complexity of knowledge in most professions and sectors means learning needs to be available easily and continuously. Much of this learning is provided through, or supported by, technologies which themselves are becoming ubiquitous and easier to use.

In the NHS, this move towards technologically-supported learning or elearning is facilitated by the rollout of the NPfIT. Although it is being deployed to support clinical and organisational improvements, it is nevertheless changing both the information and learning landscape.

Although there are many separate elearning initiatives, programmes and interventions across the health service, they are not always of equal quality, and there is also a lot of duplication and redundancy. In addition, some health communities have been slow to adopt these approaches, meaning that learning opportunities are unequally available from one area to the next. It is desirable to have some sort of 'joined-up' elearning strategy nationally and, as a result, the national ETD team has been pursuing:

- the procurement of elearning materials and resources to support high priority clinical and organisational issues;
- the creation of a single repository for nationally available materials, with agreed standards for tagging and indexing such materials;
- the development and promotion of two voluntary sets of standards: one relating to technical interoperability and one to educational design and functionality;



- the creation of educational programmes to encourage managers and leaders to understand and engage with elearning as an important element of service transformation and improvement;
- the development of courses and programmes so that staff members everywhere have the skills and confidence to learn in this mode;
- the creation of programmes of professional development to help education and training practitioners feel comfortable and confident;
- the procurement of a single LMS, probably linked with the ESR, to allow learners and others to manage their enrolments and track their progress;
- approaches to building some level of technological fluency into National Occupational Standards, to emphasise the vital importance of such skills for the 21st century workforce;
- collaboration with Workforce Directors and others (such as the DH Widening Participation in Learning Strategy Unit) to ensure protected time for learning and equitable access to elearning materials and opportunities;
- collaboration and engagement with the NHS National Knowledge Service (National Library for Health) to connect formal elearning opportunities with less formal information access and point-of-care delivery of performance support; and
- the creation of an integrated communications plan to encourage a thoughtful awareness of elearning developments both within and beyond NHS CFH.

Overall, the development of an integrated, high level strategy for elearning is perhaps one of the most important challenges confronting the NHS. It is one which deserves (and indeed requires) an unusual level of collaboration and sharing for the greater good of the staff and, beyond them, patients, carers and the community.



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