"The NHS in the UK is constantly going through change. In this case study, Józefa Fawcett highlights how KM principles can be utilised in the Public Sector as a mechanism to help support individuals and organisations manage this process. Using an *organic* KM infrastructure she describes how a County-wide project is leading the way towards better communication, understanding and improvements in service provision and care for patients."

**Knowing me - Knowing you?**

*(An organic KM solution to organisational change)*

Let me briefly introduce you to the National Health Service, some of the current changes impacting on healthcare provision, clinical development & training and present a case study of how the Knowledge Management Centre(nhs) Network in Berkshire is encouraging a new way of learning, collaborative working and sharing of knowledge and expertise across professional, organisational and sector boundaries.

**Modernising the NHS**

The National Health Service became a reality on 5th July 1948, and over the last 54 years there have been constant changes in Health Care provision, some of which have caused major organisational headaches and ongoing Human Resource problems. Financial constraints over the years have made it impossible to accurately predict the day-to-day costs of running the NHS as more expensive and more frequently used drugs are constantly being developed and public expectations grow. These tensions continue to challenge senior management and indeed successive governments. The current government's answer to this was in its White Papers in
1997\(^1\) and 1998\(^2\) making clear the aim to build a modern and dependable health service that provides a fast responsive and high quality service across all parts of the country. The NHS Plan\(^3\) further outlined a five-stage improvement programme, which included breaking down barriers between different parts of health and social care and investing in staff, buildings, equipment and information. The restructure of the NHS started on 1\(^{st}\) April 1999 with the creation of 481 Primary Care Groups each responsible for the co-ordination of healthcare provision. After only five months, two fifths of these were aiming to become Primary Care Trusts with further responsibilities for developing partnerships in commissioning and provision. Berkshire is made up of 6 Primary Care Trusts, one Mental Health & Learning Disabilities Trust, one Ambulance Trust and two General Hospitals.

**Changes in the provision of healthcare**

The whole of the NHS is working towards an 'Interface' model of health care, a fundamental principle of which is to encourage and enable different relationships between the patient, the clinician and other clinical professionals. This new relationship - based upon consensus teams, integrated practice, blended roles, management integration, mutual acceptance and support for the good of the whole patient/client - also means a change in leadership and management styles. Many writers have focused on the strategic issues around consensus building, integration and collaboration, Rosabeth Moss-Kanter (1999)\(^4\) highlighted that to create world class 21\(^{st}\) Century organisations, what is needed are a range of skills that allow the organisation to operate either with a 'collaborative advantage' or as a 'collaborative ambassador', these skills are categorised within three important elements, **CONCEPTS; COMPETENCE & CONNECTIONS**.(see figure 1 below)

To those in the NHS, this model of collaborative and consensus working between the professions might seem like an impossible dream, but it is from this starting point that the idea for the Knowledge Management Centre(nhs) Network originated.

**Various KM approaches in the NHS**

One definition often quoted is from the Swedish writer Karl-Erik Sveiby (1999), he says:

"...Knowledge Management is an organisation's capacity to influence and create value from its intangible assets"
While others have described KM as managing both explicit and tacit knowledge, what is clear is that few activities depend on knowledge as much as healthcare management, clinical practice and patient choice. To date the NHS has spent more energy managing buildings and money than managing its knowledge. This is now changing, and there is a major shift to embrace both strands of Knowledge Management. The traditional strand offering a scientific approach where the emphasis is on the management of information and the speed and accuracy of data storage, retrieval and dissemination and the increasingly popular European strand, concentrating on a more organic approach and the management and mobilisation of people and their knowledge utilising this for creativity and innovation within an organisation. There is however, growing confusion between Information, which is embedded in tools for processing data quickly and Knowledge, which is embedded in the minds of the workforce and depends on a variety of social interactions to encourage "knowledge harvesting/creation". The key to any successful KM strategy is to apply a blended KM approach adopting the best fit for the organisation and its context - no longer does "one size fit all".

Over the last few years the NHS has developed four distinct KM approaches (see figure 2)

The **HR/OD approach** (most likened to the organic model)
Regular forums, which raise awareness of how to support change initiatives through the Human Resource and Organisational Development professionals.

The **Informatics approach** (most likened to the scientific model)
The NHS Information Authority is working with NHS librarians across the UK in how to adapt and influence this new environment, there is also a National Electronic Library for Health

The **Research & Development approach** (a mix of the scientific and organic)
A national tool designed to identify ways to increase individual and organisational research and development capacity and promote systematic take up of research evidence.

The **Learning Network approach** (a mix of the scientific and organic models)
Regional Learning Networks offer leadership and management development programmes for non-executive directors and clinical leaders, learning centres, learning partnerships and beacon sites for sharing intelligence
The Berkshire KM project

The Knowledge Management Centre(nhs) Network (KMC) started in May 2000, its purpose being to encourage the sharing of knowledge across Berkshire's professional, organisational and sector boundaries, build up working partnerships for the future and provide a wide range of information regarding traditional and eLearning opportunities. The project's key deliverables by March 2003, are to:-

- Set up KM Centres around Berkshire creating local ‘Communities of Practice’ each with a ‘learndirect’ eLearning access point
- Create an infrastructure (see figure 3) that aligns the KMC Network with other development going on around the County and creates working partnerships
- Market the provision of eLearning facilities to all health and social care staff in Berkshire
- Support eLearning study through the establishment of an eLearning Advisory Team
- Act as a 'signposting' service connecting people to other people so as to fully utilise the vast array of explicit and tacit knowledge held within Berkshire
- Facilitate cross boundary working relationships so as to underpin the next phase of health and social care changes post 2003.

This 'parachute' analogy represents a vehicle through which staff on the ground can access national and other high level directives and information (guidelines, learning provision etc..), share expertise across joined up initiatives and find collaborative partnerships via their own local supportive framework. Through 'human portals' the KM intermediaries, who run the KM Centre(nhs) Network help staff get advice on how to find information (electronic and paper),
discover what county-wide initiatives are going on and encourage them to share their local learning (tacit knowledge). The role of these KM co-ordinators is to mobilise this knowledge, rather than manage it, and ensure that those responsible for future decision making and problem solving have access to their own talented workforce.

Berkshire has well established Post-Graduate libraries that guide you to a wide range of existing databases, as well as a Corporate Intranet and various PCT and clinically specific websites. This organic KM approach seeks to widen the knowledge base, particularly about all of the existing information that is available, to healthcare staff who have limited time or no access to computers in their day to day work.

In July 2000, the KMC Network was invited by the south-east regional office to promote the UK-wide NHS eLearning initiative - a partnership between the NHS and University for Industry (Ufi) - this led to the KM Centres becoming Licensed 'learndirect' sites for enrolment onto any of the 700+ products available.

**Project methodology**
The plan is to establish the whole network through at least 6 KM Centres across Berkshire during the period 2000 - 2003. Local Implementation Teams (made up of partners from health, social, independent and voluntary care sectors and Borough councils) have been brought together to oversee the introduction of each KM Centre for their own geographical area. The eLearning Advisory Team addresses cultural issues associated with the development of the new learning technologies, and a Project Advisory Board regularly reports progress to the DoH via a National eLearning Action Group. As one of 16 eLearning pilot NHS sites across the UK, Berkshire is unique in that is approaching this with a KM focus across many sectors on behalf of a whole County. Funding for the project is from the DoH and south-east regional office with local ongoing support from the project sponsor, Windsor, Ascot & Maidenhead PCT and other stakeholders across the County.

**Lifelong Learning & KM**
Each KM Centre is organised into KMzones, and provides a wide range of initiatives, including

- The **Reflection Zone** with dedicated 'learndirect' computers
- The **Information Zone** with Internet connections, books and journals and completed assignments, dissertations and general information donated by staff
- The **Networking Zone** for neutral-space meetings, protected time learning for GPs etc.
- The **Interprofessional Learning exchange**

This last KMzone is exciting because it is introducing ways to further promote and encourage collaboration through a variety of KM initiatives:-

- A Post-Graduate Advanced **Certificate in Change Management** (accreditation pending)
- **KM SHAREMATCH scheme** - a cross between ‘Blind Date’ and ‘Jim’ll Fix It’ – offering staff an opportunity to workshadow any profession they like across sector boundaries
- **KM database** capturing information about the talented workforce in each geographical area
- **Development for Trainers in Berkshire Forum** - a supportive network through which members can reflect upon the latest learning practices and share professional knowledge
- **The KM Collaborative** - For those who are leading KM initiatives whether it be from a technological, management or social perspective. This new network is looking at how to apply KM principles to other KM initiatives
Strategic partnerships
We are constantly seeking out ways to strategically and operationally mobilise local knowledge and in doing so look for areas where we can create local partnerships to drive this work forward. As this is part of an ongoing communication and activity plan, the KM co-ordinators regularly visit existing meetings and conferences across the County to promote the KMC Network - this is now paying off, as more interest in sharing knowledge grows. One long-standing partner has been the Health Promotion Service who use the KM Centres as their shop window for the leaflets and information they produce.

Constraints
Working on a project of this scale, based on collaboration and networking, during a period of such major multi-organisational restructuring offers both exciting challenges and very practical constraints. These have included the need to regularly energise some of the original project champions who, as part of the boundary changes, find themselves with other more immediate priorities, as well as constantly looking to identify new champions. One of the most significant challenges has been defying the more traditional approach to cultural change - usually top down - by approaching this from a bottom-up perspective.

Local resourcing of the project has also been patchy as a result of the changes taking place during 2001/2002, however, the economy is now entering a period of stability and the project can resume at level and pace to meet its original target dates.

Finally, there is always a danger that as interest in KM grows, access to the technology becomes the more important issue, creating yet more information 'junk yards' as opposed to constantly looking at access, mobilisation and utilisation of the knowledge that is being created.

Project achievements so far

1. Two KM Centres are currently open with two more opening on 16th May 2002, on national Learning @ Work Day (part of Adults Learners Week 13-17 May)
2. KM database built around a generic taxonomy that reflects the clinical governance agenda
3. Introduced a mechanism for capturing 'tacit' knowledge from local workforce communities
4. Seen as a signposting service to other providers of information, learning and initiatives
5. eLearning statistics by professional grouping show a steady increase in eLearners over the last 12 months (see figure 4 overleaf)
6. There have been a variety of regular users of the KMC, with local ownership getting better once the health economy stabilises, however, it is already proving to be a good framework upon which to develop other countywide initiatives, eg. ECDL training and assessment, Health Promotion front of house publicity, forthcoming links with a new Centre for Primary Care and Public Health (Reading University) and the soon to be developed Public Health Network
7. Creation of a KMC website to promote to on-line community
8. Developed links with the wider global KM community, including membership of the European KM Forum (a European KM community), Timsoft Romania & eLearning Centre UK; and the European Training Village (interactive vocational education and training). Details of the various URLs are at the end of this article.
**NHS/Ufi Hub Pilot Project**

Start-up/Phase One. Rolling 2001/2002

Statistics,

<table>
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<th>Staff Group</th>
<th>Job Description</th>
<th>Jan/Aug %</th>
<th>Oct-Jan %</th>
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<tr>
<td>1 Support Staff</td>
<td>21 37 26 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Nurses &amp; Health Visitors</td>
<td>27 47 24 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Professions Allied to Medicine</td>
<td>5 9 2 3</td>
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<tr>
<td>4 Social Care Staff</td>
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<td></td>
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<tr>
<td>5 Managers</td>
<td>4 7 5 8</td>
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<td></td>
</tr>
<tr>
<td>6 Medical Staff</td>
<td>0 0 3 4</td>
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</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>57 100 59 100</strong></td>
<td></td>
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</tr>
</tbody>
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Notes/additional information:

Course take-up since October 2001 (NHS HUB)

- ICT courses 60
- Soft Skills courses 39

Course completions since October 2001 8

Student figures relating to start-up through local university

Revised @ 18th January 2002

**Next steps**

In taking this pilot project through to its natural end in 2003 (and hopefully its local beginnings after this) there is a need to further build upon the current CoPs and encourage more usage of the expertise stored in the local databases to inform future decision making and problem solving. Though eLearning opportunities are well publicised there needs to be a learning and development policy in each organisation that incorporates this new and flexible learning solution, and more anecdotal evidence to be collected from the 'Sharematch' workshadowing scheme and how this underpins better understanding and future networking.

In 2001, a special Knowledge Work Contributions tool was designed to assess the effect of this project in the areas of:
Learning and sharing behaviour changes
Impact on recruitment, retention and other organisational imperatives
Trends in eLearning take-up across professions
Establishing Communities of Learning (CoL)

This tool will be applied during 2002, and a further paper produced to report its findings and make recommendations as to how each organisation in Berkshire can build the mobilisation of knowledge into their strategic planning processes.

Conclusions
This project is focusing less upon the mechanics of managing knowledge and more on the challenge of how to mobilise and effectively share this knowledge across organisations. Innovations that enable the workforce to learn and share are hard to maintain, and if KM is to be successful then the end result must be a change of culture at all levels. It is not enough to introduce a website or database, but also to have in place a plan as to how an organisation can build the skills needed to use the knowledge that is being created. Berkshire has taken this first important step in crossing what were once traditional NHS boundaries in learning, knowledge sharing and utilisation of local intellectual capital - and in so doing is creating opportunities for the workforce to influence and inform the future provision of health and social care services for patients.

Article references:
1. 'Modern & Dependable', Department of Health; 1997
2. 'A First Class Service', Department of Health; 1998
3. 'NHS Plan', Department of Health, 2000
4. Moss-Kanter, R.; Change is everyone's job; Organisational Dynamics Journal; Summer 1999, pp7-22
5. The 'Knowledge Work Contributions' tool was developed specially for the Knowledge Management Centre(nhs) Network, by David Simmonds, author of 'The Evaluation Tool Kit', Fenman Publishing

Useful KM websites:
www.knowledgebusiness.com
www.sveiby.com/au
www.stevendenning.com
www.trainingvillage.gr
www.vistacompass.com
www.knowledgeboard.com
www.berkshire.nhs.uk/knowledge

Background reading & research:
Bünz.A.P & Kirch-Verfuss. G.; Mapping the value of KM, Knowledge Management, Jan 2001
Iske. P & Boekhoff. T., The Value of Knowledge doesn't exist, Knowledge Management, Oct 2001