ABC of Knowledge Management

Freely extracted from the NHS National Library for Health at http://www.library.nhs.uk/knowledgemanagement/
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Table of Contents

1 WHAT IS KNOWLEDGE MANAGEMENT?

Knowledge management is based on the idea that an organisation's most valuable resource is the knowledge of its people. Therefore, the extent to which an organisation performs well, will depend, among other things, on how effectively its people can create new knowledge, share knowledge around the organisation, and use that knowledge to best effect.

If you have read any of the huge array of knowledge management books and articles that are currently available, you are possibly feeling slightly bewildered. Perhaps you are wondering whether knowledge management is just the latest fad and hoping that if you ignore it, it will eventually go away. Let's be honest – knowledge management is surrounded by a great deal of hype. But if you can put the hype to one side, you will find that many of the tools, techniques and processes of knowledge management actually make a great deal of common sense, are already part of what you do, and can greatly help you in your job.

1.1 What is knowledge management?

Many of us simply do not think in terms of managing knowledge, but we all do it. Each of us is a personal store of knowledge with training, experiences, and informal networks of friends and colleagues, whom we seek out when we want to solve a problem or explore an opportunity. Essentially, we get things done and succeed by knowing an answer or knowing someone who does.

Fundamentally, knowledge management is about applying the collective knowledge of the entire workforce to achieve specific organisational goals. The aim of knowledge management is not necessarily to manage all knowledge, just the knowledge that is most important to the organisation. It is about ensuring that people have the knowledge they need, where they need it, when they need it – the right knowledge, in the right place, at the right time.

Knowledge management is unfortunately a misleading term – knowledge resides in people's heads and managing it is not really possible or desirable. What we can do, and what the ideas behind knowledge management are all about, is to establish an environment in which people are encouraged to create, learn, share, and use knowledge together for the benefit of the organisation, the people who work in it, and the organisation's customers (or in the case of the NHS, patients).

1.2 What is knowledge?

Academics have debated the meaning of "knowledge" since the word was invented, but let's not get into that here. A dictionary definition is "the facts, feelings or experiences known by a person or group of people" (Collins English Dictionary). Knowledge is derived from information but it is richer and more meaningful than information. It includes familiarity, awareness and understanding gained through experience or study, and results from making comparisons, identifying consequences, and making connections. Some experts include wisdom and insight in their definitions of knowledge. In organisational terms, knowledge is generally thought of as being "know how", or "applied action". The last point is an important one. Today's organisations contain a vast amount of knowledge and the NHS is certainly no exception. However, in applying knowledge management principles and practices in our organisation, knowledge is not our end, but the means for further action. What we are trying to do is to use our knowledge to get better at doing what we do, i.e. health care and health care improvement.

1.3 Why do we need knowledge management?

Knowledge management is based on the idea that an organisation's most valuable resource is the knowledge of its people. This is not a new idea – organisations have been managing "human resources" for years. What is new is the focus on knowledge. This focus is being driven by the accelerated rate of change in today's organisations and in society as a whole. Knowledge management recognises that today nearly all jobs involve "knowledge work" and so all staff are "knowledge workers" to some degree or another – meaning that their job depends more on their knowledge than their manual skills. This means that creating, sharing and using knowledge are among the most important activities of nearly every person in every organisation.

It is easy to see the importance of knowledge in the health sector. As clinicians, managers and other practitioners, we all rely on what we know to do our jobs effectively. But....

Do we know everything we need to know or are there gaps in our knowledge? Of course there are. Medical advances are being made all the time so there is always new knowledge to be learned. Government policies are constantly evolving, as are management practices. The current modernisation programme requires us to let go of what we knew and to learn and apply new knowledge. Changing doctor-patient relationships are requiring us to revisit our whole approach to the provision of health care. And of course, every new patient that comes through our door brings a potential new learning opportunity.

Do we share what we know? The NHS is made up of over a million individuals in hundreds of organisations, each of which have their own knowledge. Is the knowledge of individuals available to the whole organisation? Is the knowledge or organisations available to the whole NHS? Not at present. How many times have we lost valuable knowledge and expertise when a staff member moves on? How many times have we "reinvented the wheel" when we could have learned from someone else's experience? How many times have patients suffered as a result of the "postcode lottery"?

Do we use what we know to best effect? Not always. In the NHS Plan, the NHS was described as "a 1940s infrastructure operating in the 21st century". Clearly our knowledge has not always been applied to best effect, and we have fallen behind the times. How many times have we had an idea about how a process or an activity could be improved, but felt we lacked the time or resources to do anything about it? How many times have we had an idea that might help our colleagues, but we keep quiet because our colleagues might not appreciate us "telling them how to do their job"? How many times have we implemented a new initiative, only to find we reverted back to the "old way" a few months later? Perhaps we have had insights about how our patients" needs could be better met, but there was no forum for us to share and explore those insights so we just forgot about it.

These are just a few examples.

Almost everything we do in the NHS is based on our knowledge. If we do not constantly update and renew our knowledge, share our knowledge, and then use that knowledge to do things differently and better, then our people, our organisations, our patients and the general public will ultimately suffer. We know this because it has already happened. As The NHS Plan (2000) affirms, in spite of our many achievements, the NHS has failed to keep pace with changes in our society. What can transform that, along with the current investment and modernisation programme, is harnessing the vast collective knowledge of the people working in the NHS, and using it to best effect. That is why we need knowledge management.

1.4 What does knowledge management involve?

Knowledge management is essentially about facilitating the processes by which knowledge is created, shared and used in organisations. It is not about setting up a new department or getting in a new computer system. It is about making small changes to the way everyone in the organisation works. There are many ways of looking at knowledge management and different organisations will take different approaches. Generally speaking, creating a knowledge environment usually requires changing organisational values and culture, changing people's behaviours and work patterns, and providing people with easy access to each other and to relevant information resources.

In terms of how that is done, the processes of knowledge management are many and varied. As knowledge management is a relatively new concept, organisations are still finding their way and so there is no single agreed way forward or best practice. This is a time of much trial and error. Similarly, to simply copy the practices of another organisation would probably not work because each organisation faces a different set of knowledge management problems and challenges. Knowledge management is essentially about people – how they create, share and use knowledge, and so no knowledge management tool will work if it is not applied in a manner that is sensitive to the ways people think and behave.

That being said, there are of course a whole raft of options in terms of tools and techniques, many of which are not new. Many of the processes that currently fall under the banner of knowledge management have been around for a long time, but as part of functions such as training, human resources, internal communications, information technology, librarianship, records management and marketing to name a few. And some of those processes can be very simple, such as:

- providing induction packs full of "know how" to new staff;
- conducting exit interviews when staff leave so that their knowledge is not lost to the organisation;
- creating databases of all publications produced by an organisation so that staff can access them from their desk;

- providing ongoing learning so that people can constantly update their knowledge;
- encouraging people with a common interest to network with each other;
- creating electronic filing systems that can be searched in a number of ways, making the information much easier to find;
- redesigning offices to be open plan so that staff and managers are more visible and talk to each other more;
- putting staff directories online so that people can easily find out who does what and where they are;
- creating intranets so that staff can access all kinds of organisational information and knowledge that might otherwise take a great deal of time and energy to find.

1.5 Some "textbook" definitions of knowledge management

Here are a few definitions:

- "Clinical knowledge management means enhancing the identification, dissemination, awareness and application of the results of research relevant to clinical practice in health and social care."
  Jeremy Wyatt
- "The creation and subsequent management of an environment, which encourages knowledge to be created, shared, learnt, enhanced, organised and utilized for the benefit of the organisation and its customers."
  Abell & Oxbrow, tfpl Ltd, 2001
- "Knowledge management is a process that emphasises generating, capturing and sharing information know how and integrating these into business practices and decision making for greater organisational benefit."
  Maggie Haines, NHS Acting Director of KM
- "The capabilities by which communities within an organisation capture the knowledge that is critical to them, constantly improve it, and make it available in the most effective manner to those people who need it, so that they can exploit it creatively to add value as a normal part of their work."
  BSI's A Guide to Good Practice in KM
- "Knowledge is power, which is why people who had it in the past often tried to make a secret of it. In post-capitalism, power comes from transmitting information to make it productive, not from hiding it!"
  Peter Drucker
- "Knowledge management involves efficiently connecting those who know with those who need to know and converting personal knowledge into organisational knowledge."
  Yankee Group
- "Knowledge management is not about data, but about getting the right information to the right people at the right time for them to impact the bottom line."
  IBM
- "The capability of an organization to create new knowledge, disseminate it throughout the organization and embody it in products, services and systems."
  Nonaka & Takeuchi, 1995
- "Knowledge management is a relatively young corporate discipline and a new approach to the identification, harnessing and exploitation of collective organisational information, talents, expertise and know-how."
  Office of thee-Envoy, 2002
- "Knowledge management is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation. It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organization and appropriately applied."
  David J Skyrme, 1997

2 PRINCIPLES AND PROCESSES OF KNOWLEDGE MANAGEMENT

A "rough guide" to some of the main general approaches to knowledge management.

2.1 Right knowledge, right place, right time

Some people mistakenly assume that knowledge management is about capturing all the best practices and knowledge that people possess and storing it in a computer system in the hope that one day it will be useful. In fact this is a good example of what knowledge management is not about! Consider this: how often has information or knowledge been pushed at you when you don't need it – paper, emails, training, another irrelevant meeting? Then later, when you do need it, you vaguely remember seeing something relevant but can't find it. Some surveys suggest that professional workers spend ten per cent of their time looking for information they know is somewhere. And if what you want is in people's heads, and they're not always around, how can you access it when you need it? What if you don't even know whose head it's in, or if they'd be willing to share it with you?

In a nutshell, good knowledge management is all about getting the right knowledge, in the right place, at the right time.

The right knowledge is the knowledge that you need in order to be able to do your job to the best of your ability, whether that means diagnosing a patient, making a decision, booking a referral, answering a patient's question, administering a treatment, training a new colleague, interpreting a piece of research, using a computer system, managing a project, dealing with suppliers etc. Information and knowledge can usually be found in a whole variety of places – research papers, reports and manuals, databases etc. Often it will be in people's heads – yours and other people's. The right place, however, is the point of action or decision – the meeting, the patient helpline, the hospital bedside, behind the reception desk and so on. The right time is when you (the person or the team doing the work) need it.

2.2 Types of knowledge: explicit and tacit

Knowledge in organisations is often classified into two types: explicit and tacit.

1. Explicit knowledge is knowledge that can be captured and written down in documents or databases. Examples of explicit knowledge include instruction manuals, written procedures, best practices, lessons learned and research findings. Explicit knowledge can be categorised as either structured or unstructured. Documents, databases, and spreadsheets are examples of structured knowledge, because the data or information in them is organised in a particular way for future retrieval. In contrast, e-mails, images, training courses, and audio and video selections are examples of unstructured knowledge because the information they contain is not referenced for retrieval.
2. Tacit knowledge is the knowledge that people carry in their heads. It is much less concrete than explicit knowledge. It is more of an "unspoken understanding" about something, knowledge that is more difficult to write down in a document or a database. An example might be, knowing how to ride a bicycle – you know how to do it, you can do it again and again, but could you write down instructions for someone to learn to ride a bicycle? Tacit knowledge can be difficult to access, as it is often not known to others. In fact, most people are not aware of the knowledge they themselves possess or of its value to others. Tacit knowledge is considered more valuable because it provides context for people, places, ideas and experiences. It generally requires extensive personal contact and trust to share effectively.

2.3 Types of knowledge: old and new

Most knowledge management strategies generally have one (or sometimes both) of two thrusts. The first is to make better use of the knowledge that already exists within the organisation, and the second is to create new knowledge.

Making better use of the knowledge that already exists within an organisation ("old" knowledge) often begins with "knowing what you know". Very often leading managers comment: "if only we knew what we knew". Too frequently, people in one part of the organisation reinvent the wheel or fail to solve a problem because the knowledge they need is elsewhere in the organisation but not known or accessible to them. Hence the first knowledge management initiative of many companies is that of finding out what they know, and taking steps to

make that knowledge accessible throughout the organisation. Specific approaches might include conducting a knowledge audit, mapping the organisation's knowledge resources and flows, making tacit knowledge more explicit and putting in place mechanisms to move it more rapidly to where it is needed.

Creating new knowledge can equally be approached in a number of ways such as through training, hiring external resources, bringing different people and their knowledge together to create fresh knowledge and insights, etc. It is also about innovation – making the transition from ideas to action more effective. Many managers mistakenly believe this is about R&D and creativity. In fact there is no shortage of creativity in organisations – not just in R&D but everywhere. The real challenge is not to lose these creative ideas and to allow them to flow where they can be used.

In reality, the distinction between "old" and "new" knowledge is not always that clear. Innovation will often draw on lessons from the past, particularly those that have been forgotten, or those that can be put together in new combinations to achieve new results. Similarly, the application of (old) knowledge almost always involves some adaptation, and so in the process of adaptation, new knowledge is created. At the end of the day, the quality of knowledge does not depend on whether it is "old" or "new" but rather whether it is relevant. Whether it is old or new hardly matters. The question is: does it work in practice?

2.4 Ways with knowledge: collecting and connecting

Knowledge management programmes tend to have both a "collecting" and a "connecting" dimension.

The collecting dimension involves linking people with information. It relates to the capturing and disseminating of explicit knowledge through information and communication technologies aimed at codifying, storing and retrieving content, which in principle is continuously updated through computer networks. Through such collections of content, what is learned is made readily accessible to future users.

Current examples in the NHS include various intranets, the National electronic Library for Health, the CLIP database, The Cochrane Library, and many more. This collecting dimension is often the main emphasis of many European and US knowledge programmes. However it has its limitations. Even where comprehensive collections of materials exist, effective use may still need knowledgeable and skilled interpretation and subsequent alignment with the local context to get effective results, just as reading a newspaper article on brain surgery does not qualify or enable a reader to conduct brain surgery. An organisation that focuses completely on collecting and makes little or no effort at connecting (see below) tends to end up with a repository of static documents.

The connecting dimension involves linking people with people – specifically people who need to know with those who do know, and so enhancing tacit knowledge flow through better human interaction, so that knowledge is diffused around the organisation and not just held in the heads of a few. Connecting is necessary because knowledge is embodied in people, and in the relationships within and between organisations. Information becomes knowledge as it is interpreted in the light of the individual's understandings of the particular context. Examples of connecting initiatives include skills directories and expert directories – searchable online staff directories that give much more detail about who does what and who knows what, collaborative working, communities of practice – networks of people with a common interest, and various "socialisation" activities designed to support knowledge flows. This connecting dimension tends to be the main emphasis in Japanese knowledge programmes. However an organisation that focuses entirely on connecting, with little or no attempt at collecting, can be very inefficient. Such organisations may waste time in "reinventing wheels".

Most knowledge management programmes aim at an integrated approach to managing knowledge, by combining the benefits of both approaches and achieving a balance between connecting individuals who need to know with those who do know, and collecting what is learned as a result of these connections and making that easily accessible to others. For example, if collected documents are linked to their authors and contain other interactive possibilities, they can become dynamic and hence much more useful.

2.5 Ways with knowledge: people, processes and technology

One popular and widely-used approach is to think of knowledge management in terms of three components, namely people, processes and technology:

- People: Getting an organisation's culture (including values and behaviours) "right" for knowledge management is typically the most important and yet often the most difficult challenge. Knowledge management is first and foremost a people issue. Does the culture of your organisation support ongoing learning and knowledge sharing? Are people motivated and rewarded for creating, sharing and using knowledge? Is there a culture of openness and mutual respect and support? Or is your organisation very hierarchical where "knowledge is power" and so people are reluctant to share? Are people under constant pressure to act, with no time for knowledge-seeking or reflection? Do they feel inspired to innovate and learn from mistakes, or is there a strong "blame and shame" culture?
- Processes: In order to improve knowledge sharing, organisations often need to make changes to the way their internal processes are structured, and sometimes even the organisational structure itself. For example, if an organisation is structured in such a way that different parts of it are competing for resources, then this will most likely be a barrier to knowledge sharing. Looking at the many aspects of "how things are done around here" in your organisation, which processes constitute either barriers to, or enablers of, knowledge management? How can these processes be adapted, or what new processes can be introduced, to support people in creating, sharing and using knowledge?
- Technology: A common misconception is that knowledge management is mainly about technology – getting an intranet, linking people by e-mail, compiling information databases etc. Technology is often a crucial enabler of knowledge management – it can help connect people with information, and people with each other, but it is not the solution. And it is vital that any technology used "fits" the organisation's people and processes – otherwise it will simply not be used.

These three components are often compared to the legs of a three-legged stool – if one is missing, then the stool will collapse. However, one leg is viewed as being more important than the others – people. An organisation's primary focus should be on developing a knowledge-friendly culture and knowledge-friendly behaviours among its people, which should be supported by the appropriate processes, and which may be enabled through technology.

3 GENERAL CONCEPTS

3.1 A brief history of knowledge management

Knowledge management as a conscious discipline would appear to be somewhere between five and fifteen years old. It evolved from the thinking of academics and pioneers such as Peter Drucker in the 1970s, Karl-Erik Sveiby in the late 1980s, and Nonaka and Takeuchi in the 1990s. During that time, economic, social and technological changes were transforming the way that companies worked. Globalisation emerged and brought new opportunities and increased competition. Companies responded by downsizing, merging, acquiring, reengineering and outsourcing. Many streamlined their workforce and boosted their productivity and their profits by using advances in computer and network technology. However their successes in doing so came with a price. Many lost company knowledge as they grew smaller. And many lost company knowledge as they grew bigger – they no longer "knew what they knew".

By the early 1990s a growing body of academics and consultants were talking about knowledge management as "the" new business practice, and it began to appear in more and more business journals and on conference agendas. By the mid-1990s, it became widely acknowledged that the competitive advantage of some of the world's leading companies was being carved out from those companies' knowledge assets such as competencies, customer relationships and innovations. Managing knowledge therefore suddenly became a mainstream business objective as other companies sought to follow the market leaders.

Many of these companies took the approach of implementing "knowledge management solutions", focusing almost entirely on knowledge management technologies. However they met with limited success, and so questions began to be asked about whether knowledge management wasn't simply another fad that looked great on paper, but in reality did not deliver. In fact for a while, it looked as if knowledge management was destined to be confined to the "management fad graveyard". However on closer inspection, companies realised that it wasn't the concept of knowledge management that was the problem as such, but rather the way that they had gone about approaching it. Reasons for their limited success included:

- The focus was on the technology rather than the business and its people.
- There was too much hype – with consultants and technology vendors cashing in on the latest management fad.
- Companies spent too much money (usually on "sexy" technologies) with little or no return on their investments.
- Most knowledge management literature was very conceptual and lacking in practical advice, which led to frustration at the inability to translate the theory into practice – "it all makes so much sense but why isn't it working?"
- Knowledge management was not tied into business processes and ways of working.
- It was seen as another laborious overhead activity or yet another new initiative.
- A lack of incentives – employees quite rightly asked the "what's in it for me?" question.
- There wasn't sufficient senior executive level buy in.

Fortunately companies are now recognising these early mistakes and are beginning to take a different approach to knowledge management – one in which the emphasis is more on people, behaviours and ways of working, than on technology. Of course there are still some sceptics who believe that knowledge management is just a fad. But according to a number of company surveys, it would seem that they are in a minority. A more popular view is that knowledge management may not remain as a distinct discipline, but rather will become embedded in the way organisations work. This can be compared to Total Quality Management which was the "in thing" in the 1980s; nobody talks about "TQM" any more, but many of its principles and practices are an integral part of how most organisations operate. It looks likely that this could also be the future for knowledge management.

3.2 The "knowledge economy"

"As we enter the 21st century we are moving into a new phase of economic and social development, which can usefully be referred to as a "knowledge economy", in which knowledge will be a key determining factor in organizational and economic success or failure. The most effective organizations in the knowledge economy will be those which recognize and best harness the crucial role that knowledge plays both inside and outside their organisation."
From: Knowledge Enhanced Government: A strategy for the UK Office of the e-Envoy, July 2002

The government's objective is to make the UK one of the world's leading knowledge economies.

3.3 Knowledge management in the public sector

In both the private and public sectors, more and more organisations are beginning to take responsibility for managing knowledge as a means to create value. But what does "value" mean in the context of the public sector? Public sector organisations are not usually seeking a competitive advantage, so why bother with knowledge management? If we go back to our definition of knowledge as "the capacity for effective action" (see the section What is KM?) then this probably better describes the expectations of government and public services. Every public service involves a wide range of relationships between policy makers, service providers, local authorities, the general public and various other interested parties such as voluntary and community sector organisations, the private sector etc. If we think about the many interactions within and between these groups, and their impact on policy and service provision, then we begin to see the scope for knowledge management in the public sector. How does one of these various parties share an experience and introduce one policy driven initiative with that of another for the benefit of all concerned? How can everyone involved have an awareness of the "bigger picture" as well as their own individual standpoints? How can all parties be better prepared to act?

In recent years there has been a number of government policies aimed at equipping the public sector to function more effectively in an information society. These have included:

- our Information Age (HMSO, 1998) – the de facto UK national information policy
- open for learning, open for business (National Grid for Learning, 1998) – establishing a commitment to a national grid for learning
- modernising government (HMSO, 1999) – committed government to modernising public services so that all would be capable of being delivered by computer by 2005
- e-government (Cabinet Office, 2000) – a strategic framework for public services in the information age

Building on this, subsequent developments have focused on making better use of the tacit knowledge within, and improving knowledge transfer across, the public sector.

The Office of the e-Envoy's UK Annual Report 2000 announced the development of a cross-government knowledge management system, focusing on the creation of a Knowledge Network – "a unified cross-government communications infrastructure to enable officials in all government departments and associated bodies … to communicate electronically with each other and share common, secure access to databases, discussion forums, web-based community sites and "knowledge pools"."

From there, a new programme of modernisation led by the Office of the e-Envoy known as Knowledge Enhanced Government (KEG) was launched. The KEG team is working with the major central government departments in ensuring that there are departmental teams and processes in place to support participation in KEG. The Department of Health is already a key player in these processes.

As part of KEG, the Office of the e-Envoy has recently considered the development of a knowledge management policy framework to provide a holistic view of knowledge management and recommendations for activity. Early proposals have suggested that this framework could be based around ten key areas of activity:

1. knowledge capture – policies and processes for identifying and capturing explicit and tacit knowledge.
2. knowledge transfer – policies and processes for transferring knowledge among and between its various sources and forms.
3. knowledge retention – policies and processes for retaining organisational knowledge, especially during periods of organisational change.
4. content management – policies and processes for efficiently managing the organisational knowledge base.
5. knowledge capital – policies and processes for measuring and developing the government's human and social capital.
6. enabling communities – policies and processes for promoting and supporting knowledge-based community working across and between departments.
7. supporting a knowledge culture – policies and processes to create the necessary cultural changes to embed the knowledge management ethos into working practices.
8. knowledge partnerships – policies and processes for promoting and supporting knowledge partnerships between central government and key partners such as local government, departmental agencies, non-departmental public bodies, voluntary and community organizations etc.
9. supporting key business activities – policies and processes to support key business activities in government such as project management, the legislative process, delivery monitoring etc.
10. knowledge benchmarking – policies and processes for benchmarking current knowledge management capabilities and practices against UK and international best practice, and for improving performance.

For more information about Knowledge Enhanced Government and related initiatives, see the Office of the e-Envoy website at http://archive.cabinetoffice.gov.uk/e-envoy/index-content.htm.

4 GETTING STARTED

With such a wide range of definitions, philosophies, methodologies, tools and techniques, approaching knowledge management can initially seem quite daunting. In starting out, many practitioners tend to offer the following types of advice:

4.1.1 Review your options

It is useful to gain a broad understanding of the variety of approaches to knowledge management. Not only are there many alternatives, but also some of them differ quite widely from others in their methods. Before selecting your approach or approaches, try to explore the many options open to you.

4.1.2 Don't get too hung up on "the best"

There is no single "right" way to approach knowledge management. Knowledge management methods are as varied as the organisations in which they are implemented. Every organisation is different and so its approach to knowledge management will need to reflect its own particular circumstances. There is no "one size fits all". The "best" approach will be one that works well for your organisation.

4.1.3 Keep it simple – avoid rocket science

There is still quite a lot of confusion about what knowledge management actually is and what it involves. Don't add to that confusion by blinding people with rocket science and textbook definitions. Get clear on what knowledge management means for your organisation. Then make the concepts of knowledge management real for others in your organisation. Use simple definitions and simple language to explore real problems and opportunities. Create a clear, tangible picture of the benefits of knowledge management as they relate to your organisation's specific goals and circumstances.

4.1.4 Learn while doing

Avoid the temptation to wait until you have "mastered" the theory of knowledge management before getting started on the practice. (The theory is constantly evolving, so the chances are you will never master it). One of the best ways to learn is "on the job". You can learn a great deal from what others have done, but you will only learn what does and doesn't work for your organisation when you actually get started and do something.

4.1.5 Celebrate what you're already doing

Start from where you are, with what you have. In most organisations there will already be examples of good knowledge management practice – except they won't usually be thought of as knowledge management. Look around your organisation for current activities that might already be related to knowledge management – not necessarily big projects or initiatives, but simple, day-to-day ways of doing things. Look for teams or groups that are currently sharing knowledge, and make connections with these people. Find out how it is benefiting those people and the organisation as a whole. Celebrate and build on these examples of good practice.

4.1.6 Look at your organisation's goals

Given that knowledge management is not an end in itself, but rather a means to achieving organisational goals, then this is a logical place to start. Look at both the long-term goals and short to medium-term objectives of your organisation: what are they? How might knowledge management help you to achieve them? Then look at what people – teams and individuals – do in your organisation. What are the services they provide? What activities and processes do they perform in order to provide those services? How might they be done better for the benefit of individual staff, the organisation a whole, and your patients? What knowledge do people need in order to do their jobs? What knowledge might they need in order to do them better? How can you acquire, create, use and share that knowledge to bring that about? In what ways are you already doing so? How might you do it better?

4.1.7 Look for needs, problems and pains

Another good place to start is with what some managers call "needs, problems and pains". These are the things that are not working well in your organisation: things that are getting in the way of people doing a good job, things that irritate people and make their lives difficult, things that hamper the quality of your service to patients. Talk to people and start to build up a list of some of the major needs, problems and pains in your organisation. From there, you can select one or several of these with which to start, and look at how you might resolve it using knowledge management principles and practices. A great advantage of this approach is that it can allow you to achieve "quick wins". These are problems that are generally fairly simple and quick to resolve, but their resolution has a big impact and the results are clearly visible. Quick wins can be very useful in demonstrating the potential benefits of knowledge management to both managers and staff – there is nothing like real results to win people over.

4.1.8 Start small

Attempting to launch an organisation-wide knowledge management programme without building the evidence first is unfortunately a common mistake, but one to be avoided. Some organisations prefer to "dip their toe in the water" with one or two initiatives before considering a formal knowledge management strategy; others choose not to create a formal strategy at all, choosing instead to take a more informal or incremental approach. Either way, whether you choose to create a formal knowledge management strategy or not, a large-scale, high-cost, "big bang" roll-out is not recommended. Knowledge management is more an iterative process of continuous development. Hence, it is far better to gradually introduce a series of practical, manageable changes. Then, as interest develops, you can look to expand your initiatives.

4.1.9 Don't take off without a pilot

When looking to implement any major new initiative, conducting a pilot is essential. A pilot involves "test driving" the initiative on a relatively small scale in order to learn what works and what doesn't, make any necessary changes accordingly, and gather clear, demonstrable evidence about the benefits, before rolling out the initiative on a larger scale. This means that when you come to roll it out, you have already made most of your mistakes, and you have something that has been proven to work well in practice. In terms of securing resources and support, this is a whole different proposition to having an idea in theory.

4.1.10 Remember the "big three": people, processes, technology

In implementing knowledge management tools and techniques, never forget the importance of creating the right kind of environment. Your organisation's people, processes and technology will at all times be acting as either enablers of, or barriers to, the effective use of your knowledge management tools. You need to identify the barriers and remove them, and build on the enablers. If you have already tried to implement something and it hasn't worked, this is where you need to look. If you are about to implement something, look before you leap.

4.1.11 The ultimate aim: institutionalisation

Granted, you are just starting out with knowledge management. This is the beginning of the road. However it is worth keeping one eye on the horizon further down that road. It is useful to bear in mind that success in knowledge management does not involve building up a big new department or a whole network of people with "knowledge" in their job title. You may need to do these things to some degree in the medium-term. However the ultimate aim is for knowledge management to be fully "institutionalised". Or in other words, so embedded in the way your organisation does things, so intrinsic in people's day-to-day ways of working, that nobody even talks about knowledge management any more – they just do it. So if you are a knowledge manager, you will know that you have fully succeeded when you have worked yourself out of a job!

4.2 KM toolbox – inventory of tools and techniques

The following "toolbox" presents some of the most common tools and techniques currently used in knowledge management programmes. The aim is to give an introduction, to present an overview of what is involved, and to provide some pointers to further resources.

1 After Action Reviews (AARs)
A tool pioneered by the US army and now widely used in a range of organisations to capture lessons learned both during and after an activity or project.

2 Communities of Practice
Widely regarded as "the killer KM application', communities of practice link people together to develop and share knowledge around specific themes, and are already being established in the NHS.

3 Conducting a knowledge audit
A systematic process to identify an organisation's knowledge needs, resources and flows, as a basis for understanding where and how better knowledge management can add value.

4 Developing a knowledge management strategy
Approaches to developing a formal knowledge management plan that is closely aligned with an organisation's overall strategy and goals.

5 Exit interviews
A tool used to capture the knowledge of departing employees.

6 Identifying and sharing best practices
Approaches to capturing best practices discovered in one part of the organisation and sharing them for the benefit of all.

7 Knowledge centres
Similar to libraries but with a broader remit to include connecting people with each other as well as with information in documents and databases.

8 Knowledge harvesting
A tool used to capture the knowledge of "experts" and make it available to others.

9 Peer assists
A tool developed at BP-Amoco used to learn from the experiences of others before embarking on an activity or project.

10 Social network analysis
Mapping relationships between people, groups and organisations to understand how these relationships either facilitate or impede knowledge flows.

11 Storytelling
Using the ancient art of storytelling to share knowledge in a more meaningful and interesting way.

12 White pages
A step-up from the usual staff directory, this is an online resource that allows people to find colleagues with specific knowledge and expertise.