



Enabling Partnerships:

Sharing knowledge
to build the mutual NHS



Enabling Partnerships

Sharing Knowledge to Build the Mutual NHS

A Knowledge Management Strategy and Action Plan
for Better Health and Better Care in Scotland
2010-2012

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Foreword

from Helen Cadden

Helen is a patient focus and public involvement representative who supported development of this strategy on two of its working groups.

“ Knowledge, in truth, is the great sun in the firmament. Life and power are scattered with all its beams. ”

Daniel Webster
(1782-1852)



Helen Cadden

Knowledge is a key component in how we make decisions about all aspects of our lives. The Enabling Partnerships Strategy has been an essential step in encouraging staff within the NHS to be able to work together more closely and more meaningfully in partnership with patients and carers. Having been involved in the development of this Strategy from the outset, it has been very rewarding to see it help pave the way to a truly mutual NHS, where staff and patients work together using knowledge as a central factor in the management of health.

The Enabling Partnerships Strategy links very closely with the Quality Strategy and the Self Management Strategy. These three strategies all act together to empower the individual to be able to manage their condition and to be involved in fully informed decisions on all aspects of care. Use of The Knowledge Network provides access to information that is appropriate and accredited, rather than from randomly searching the Internet, and it is very encouraging to know that it will feed into the NHS Inform service led by NHS 24, for patients, carers and the public. The Knowledge Network and the Information Support Role within the work of so many health and care staff are key parts of allowing a true two-way dialogue between patients, carers and medical professionals.

Speaking from personal experience, life with a Long-Term Condition is not always easy. At times it can seem daunting and self-management can be an overwhelming prospect. However, one is never far away from the light that knowledge brings - it can shine like a beacon, even into the darkest corners. As such, a sunrise is never far away. The Enabling Partnerships Strategy aims to make it so much easier for healthcare organisations and staff to work in real partnership with patients to deliver safe, effective, patient-centred care, based on shared decision-making, and involving patients more fully in the management of their condition. After all, knowledge is an integral part of quality of life.

H. S. Cadden

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K Key messages

1 NHS Education for Scotland Knowledge Services Group has developed this knowledge management strategy and action plan to embed knowledge more strongly in Scotland's health and care. It aims to enable people and organisations to find, share and use knowledge, to deliver care and improve health for patients, carers and the public.

2 Giving people and organisations the power to find, share and use knowledge is at the heart of the vision of:

A truly mutual health service, supported by empowering organisations, staff, patients and carers to work and learn in partnership by accessing, sharing and applying knowledge as a vital component of improving health and delivering care.

3 In a context of financial constraint, we will work with partner organisations as a National Health Knowledge Network, to maximise use of our national knowledge infrastructure of shared information and learning resources, technology and competences. NES will support partner organisations in developing and delivering knowledge management plans that support their organisational priorities and the national vision.

4 We will work with partners, in NES and externally, to use this knowledge infrastructure to support the re-shaping of the healthcare workforce and the new models of care arising from service redesign.

5 We will provide information resources, technology and expertise to support NHS24 in their lead role of providing high quality patient information through the NHS Inform service.

6 We will promote and develop information literacy to give people power to ask questions, find, share and use knowledge. This will support self-management and shared decision-making.

7 All these actions will help to:

- build workforce capacity for sustainable service change.
- translate knowledge into safe and effective patient care;
- build a person-centred, enabling health service – a mutual NHS

8 While using information and knowledge has always been important in health and care, this strategy and action plan underline the transformative power of finding and sharing knowledge throughout the patient journey, as an integral part of the patient experience.



1 Introduction

1.1 The NHS belongs to the people of Scotland and exists to serve their needs. A mutual NHS is one where staff work with patients and carers as active partners and not just as providers and recipients of care. A mutual NHS also involves active collaboration across healthcare organisations in the NHS and partner sectors. Sharing the knowledge held by organisations, staff, patients and carers is key to achieving this mutual engagement and involvement. This strategy from NES Knowledge Services aims to ensure that knowledge management directly underpins the vision and principles of the mutual NHS as set out in *Better Health, Better Care*¹.

1.2 This strategy was developed in response to a commissioning brief issued by the Scottish Government eHealth Directorate (Appendix 1), which charged NES with developing a coordinated knowledge management strategy that would underpin all stages of the patient journey, and engage and involve all partners in care. The strategy is based on extensive consultation with practitioners, managers and patient groups, and on a series of strategic demonstrator projects that showed how the proposed developments would deliver benefits in practice. It aims to respond to the needs of the mutual NHS through maximising use of NES's established national knowledge infrastructure of information and learning content, technology and information skills, supported by organisations working in partnership across sectors.

The hub of this infrastructure is the new national online knowledge service, The Knowledge Network (www.knowledge.scot.nhs.uk). This provides a single point of access to millions of information and learning resources, with tools for sharing knowledge, and improving information skills. It supports organisations and the workforce in finding, sharing and using knowledge to deliver care and improve health.



1.3 The models and deliverables outlined in this strategy support the vision and goals defined by *Better Health Better Care*¹ and the associated national strategies which depend on information and knowledge management:

- *A Force for Improvement, the workforce response to Better Health, Better Care*². This highlights NES's responsibility for developing knowledge support to underpin workforce development for health and social care staff. Access to knowledge, and the skills to use it effectively, support the transition to a more flexible, integrated workforce, serving as ambassadors for patient safety and health improvement, sharing knowledge across health and social care boundaries, and shifting the balance of care to the community and to self-management.
- *Better eHealth, Better Care*³. Like this knowledge management strategy, the eHealth strategy focuses on use of information and related technology to improve the quality of patient care. It describes steps towards electronic patient records and electronic communication becoming the primary means to manage healthcare information within our healthcare system.
- *Delivering the National Health Information and Support Service – a National Partnership Agreement*⁴. This explains that while NES does not have a direct role in provision of information to patients, its national knowledge infrastructure provides content and technology to support NHS 24 and other organisations in patient information provision. NES also has a central role in developing the skills and values of healthcare staff to enable them to share information with patients, carers and the public.

1.4 *Enabling Partnerships* is closely aligned with the healthcare Quality Strategy⁵. It outlines how the NES Knowledge Services Group will work with partners to manage knowledge to support safe, effective, patient-centred care as outlined in the quality strategy:

- Underpinning clinical excellence, by enabling access to knowledge and evidence, and promoting competence in its use, as integral to the processes of patient care. Knowledge services technology and skills will support local and national education and learning to build a confident and competent workforce.
- Underpinning person-centred care, by developing the “information support role” – i.e., building staff confidence and competence in sharing knowledge with patients, carers and the public.
- Continuity of care based on sharing knowledge for effective collaboration across teams, organisations and sectors.
- Building organisational capacity for strategic knowledge management - finding, sharing and using knowledge in a creative way to support sustainable service change.



2 Vision and mission

2.1 This strategy is rooted in the needs expressed by a patient consultee

“ Knowledge needs to drive care. Information and information workers need to be an integral part of the planning and processes of care. ”

The aim is to improve access to knowledge and to promote competence in its use so that it becomes an integral component of delivering care and improving health and wellbeing on a day to day basis.



2.2 The strategic vision tries to respond to these needs and values:

A truly mutual health service, supported by empowering organisations, staff, patients and carers, to work and learn in partnership, by accessing, sharing and applying knowledge as a vital component of improving health and delivering care

This vision aligns directly with the new quality strategy. This aspires to a world class health service in Scotland, based on convergence of research evidence, sharing of personal knowledge by practitioners, patients and carers, and effective knowledge management technology, used with understanding and acceptance by both staff and patients. This will underpin high quality, safe delivery of care, centred on the patient experience, and based on the latest evidence of effectiveness. It will help to ensure that care and support are continuous throughout the patient journey, based on equitable access to knowledge and sharing of knowledge among all partners in care, in NHS, social services, the voluntary sector and education sectors.

2.3 In terms of day to day practical support, the **mission** of this strategy is to:

Get the right knowledge to the right people, when and where it is needed, and develop their skills and confidence to use that knowledge effectively in day to day work and learning.

3 NES's national knowledge infrastructure

3.1 Since 2005, when knowledge services became part of its core business, NES has been working to create a national knowledge infrastructure comprising organisations working in partnership, together with shared technology and knowledge management skills. This infrastructure:

- widens access to information and learning resources, through re-use and sharing across services and organisations.
- develops the skills of the workforce in finding, sharing and using knowledge effectively
- supports organisations in managing knowledge to support their priorities.

3.2 The role of the NHS Scotland e-Library is now well-established in providing healthcare staff with access to a wealth of journals, books, guidelines and databases. The Knowledge Network (www.knowledge.scot.nhs.uk) is a new service launched in January 2010. It incorporates the e-Library within a wider national knowledge infrastructure which provides staff, communities and organisations with access to information and learning resources, and tools to share and customise knowledge services.

- **Healthcare staff** use The Knowledge Network as an equivalent of "NHS Google"- enabling them to find millions of information and learning resources from hundreds of sources in one place. They can also create a personal webspace for quick access to their preferred resources, news and updates.

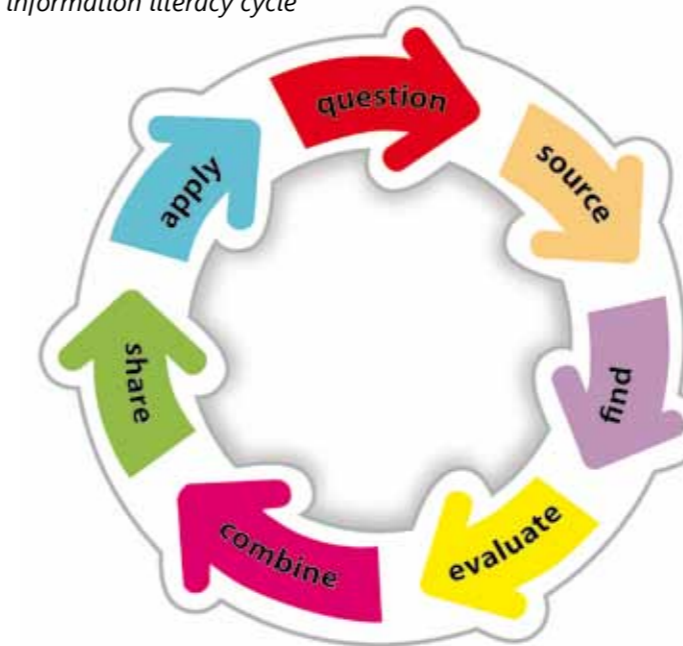
- **Communities and networks of practice** can use Knowledge Network technology in the form of the **community builder toolkit**. This toolkit enables them to create community websites within the Knowledge platform. Here communities can share information and learning resources, and share personal and local knowledge using social networking tools. The Children's Services Networks have been early adopters of this toolkit – see www.knowledge.scot.nhs.uk/child-services
- **Organisations** can use The Knowledge Network's powerful technology, information-sharing tools and information standards to share information and learning resources, creating a Scottish Health Information Environment. They can use Knowledge Network technology to create websites with tailored "views" of The Knowledge Network to support their organisational priorities. Social Services Knowledge Scotland (www.ssk.org.uk) and Borders Health in Hand (www.bordershealthinhand.scot.nhs.uk) are examples of such views, using the NES national knowledge infrastructure to support specific local and national knowledge needs, in health and partner sectors.

3.3 The quality and range of content has been the founding strength of the NHS Scotland e-Library and will continue to be so for The Knowledge Network. During the course of this strategy NES will re-tender for subscription content (e-journals, databases, books etc) for The Knowledge Network. This presents the opportunity to evaluate usage of existing resources, and to take a fresh look at the needs of users and non-users. As always, the goal is to extend equitable access to information and learning resources for the full range of clinical and non-clinical staff and partners in care. In line with the partnership principle of this strategy, NES Knowledge Services are actively exploring the potential for collaborative purchasing of subscription content with NHS Boards and the education sector. The aims of collaborative purchasing are, firstly, to reduce costs to NES and to partner organisations so that efficiency savings can be realised; secondly, to gain better value from the limited total funds available.

3.4 NES Knowledge Services' technology is accompanied by two capability frameworks which also form a core part of the national knowledge infrastructure. They support health and care staff, in all sectors, in developing the skills of finding, sharing and using information for health, care and wellbeing:

- The **information literacy framework** (see www.infoliteracy.scot.nhs.uk/information-literacy-framework.aspx). Information literacy is a well-established skillset in education, and is sometimes described as the skills of "learning how to learn". The NES model applies these skills, values and attitudes to the healthcare context. It describes how the information literacy competences of defining an information need, sourcing, finding, evaluating, sharing, combining information and applying it to practice, underpin evidence-based healthcare and translation of knowledge into practice.
- The **information support role framework**⁶. This highlights how the skills of sharing information, with staff, and with patients and carers, are an integral part of the existing roles of many healthcare staff, in clinical and non-clinical jobs and at all levels. It defines "technical" information retrieval competences as working hand in hand with the interpersonal skills and person-centred values of sharing information with colleagues and patients, and enabling others to find and use information for themselves.

The information literacy cycle



3.5 This strategy now aims to maximise use of this national knowledge infrastructure through three delivery channels. These all facilitate partnership working based on sharing knowledge to support the whole patient journey:

- **Online** access through the new national knowledge service The Knowledge Network, www.knowledge.scot.nhs.uk. This technology also enables NHS and partner organisations to share information and learning resources for mutual benefit.
- **Person to person** sharing of information and knowledge, based on information literacy and the information support role.
- **Libraries and information centres** in all sectors widening access to health information and support through sharing resources and expertise.

3.6 The strategy encompasses the three workstreams described below, which aim to harness knowledge to:

- Build workforce capacity for sustainable service change.
- Deliver safe and effective patient care;
- Build a person-centred, enabling health service, with a focus on supporting disadvantaged communities.

4

Workstream 1

Building workforce capacity for sustainable service change

4.1 The national knowledge infrastructure will support NES's continuing professional development and educational activities. Finding, sharing and applying knowledge are essential to re-shaping the healthcare workforce, enabling staff to work in redesigned services and changing models of care. The knowledge infrastructure will also support integrated workforce development across health and social care boundaries.



Deliverables for this workstream

This workstream will deliver:

4.2 Targeted knowledge support, developed in partnership with NES directorates, to maximise use of the knowledge infrastructure to underpin NES's educational curricula and programmes. This will include review of usage of existing knowledge services by the disciplines supported by the directorates. A review of the older "classic" portals developed between 2005-08, with a view to transfer to the new Knowledge Network platform, provides an ideal opportunity to engage the directorates and their stakeholders in assessing how the knowledge infrastructure can best support their education and learning needs. Collaborative objectives include:

- A programme of consultation with medical Training Programme Directors on how The Knowledge Network and community builder toolkit can best support the needs of medical trainees.
- Development of an e-Support portal for the Medical Leadership and Management Curriculum, linked with e-Portfolio.
- Development of the Evidence into Practice portal and associated knowledge management skills as outlined in workstream 2 - this is an integral part of the Patient Safety initiative within NES.
- A programme of outreach to Practice Education Facilitators to develop their role as intermediaries in facilitating effective use of knowledge services to support local practice needs.

Deliverables for this workstream

- Continued close collaboration with the Allied Health Professions Directorate to create integrated knowledge services for self-management, rehabilitation and long term conditions, and to deliver a community website for vocational rehabilitation. This includes creating tailored local services that build on the national knowledge infrastructure.
- Working with Educational Governance in NES to assess the potential for supporting communities of practice in educational governance and educational best practice.
- Providing integrated knowledge services to support Shifting the Balance of Care and education for community health - as described in Table 1.
- Offering training in use of knowledge services tools and systems to support clinical continuing professional development programmes.
- Working in partnership with the Remote and Rural Healthcare Educational Alliance (RRHEAL) team to develop a distributed education and knowledge service to support the workforce in remote and rural areas.

Deliverables for this workstream

- Collaborating with the NES Health Improvement lead and Health Scotland to support development of a Health Behaviour Change Knowledge Portal, and to explore development of the information support role within health promotion and public health.
- Collaborating with the educational lead for administrative, clerical and support staff to deliver an easy-to-use knowledge support website for administrative, clerical and support staff.
- A programme of awareness-raising and training for NES staff in use of knowledge services online tools and skills frameworks so that NES's own staff are equipped to act as champions and intermediaries for these services with their own stakeholders.

As NES develops its new corporate strategy, this knowledge management strategy will be continuously reviewed and updated to ensure close alignment with corporate vision and planning.

- 4.3 Integrated knowledge services, bringing together online and skills support for:
- interdisciplinary and team working;
 - leadership;
 - integrated health and social care, including intermediate and home care, learning disabilities, care of older people, learning disabilities, dementia, addictions, telehealth and telecare.
- 4.4 Work-based training modules for information literacy, at basic and advanced levels, linked to the Knowledge and Skills Framework, and integrated into the educational programmes supported by NES.

- 4.5 A programme of staff development to draw out the leadership role of library staff in managing knowledge to support strategic service development and modernisation.
- 4.6 An Education for Healthcare portal and Managed Knowledge Network. This will provide access to evidence and research, and facilitate the sharing of personal knowledge and experience, to support education and learning in the NHS and partner sectors.

Table 1: Knowledge services support for Shifting the Balance of Care.

Shifting the Balance of Care High Impact Changes ⁶	Knowledge Services Support
Enhance informal carer capacity	Developing information support role with carers organisations.
Rehabilitation and reablement	Self-Management and Rehabilitation Managed Knowledge Network Long Term Conditions Collaborative community website Falls community of practice Self-Management Toolkit development with South East Regional Educational Group. Borders Health in Hand website, NHS Fife, NHS Tayside long term conditions and self-management websites Long term conditions courses database Vocational rehabilitation community website Dementia Managed Knowledge Network with Scottish Dementia Services Centre Creation of integrated knowledge services for long term conditions, self-management and rehabilitation
Voluntary sector organisations	Voluntary organisations entitled to access e-Library subscription content and all services. Voluntary organisations are key partners in development of the information support role and of knowledge services for rehabilitation, self-management and social services
Better pharmaceutical care	Community pharmacy portal National access to key subscription resources through The Knowledge Network – e.g. e-BNF, BNF for Children, Martindale, Stockleys and others

⁶www.shiftingthebalance.scot.nhs.uk/improvement-framework/high-impact-changes/

Shifting the Balance of Care High Impact Changes ⁶	Knowledge Services Support
Electronic records and shared information	Information-sharing toolkit to enable organisations to share information and learning resources Development of point of care knowledge support with “plug-in” for electronic health record systems
Understand and reduce variation	Evidence into Practice portal will provide validated clinical evidence summaries, guidelines, pathways and quality improvement tools to improve quality and consistency of care
End of life care planning with families and carers	Developing information support role with carers organisations Palliative care area within Cancer Managed Knowledge Network; several palliative care communities of practice
Extended community teams	Knowledge management strategy and action plan for social services sector ⁷ NES knowledge services resources and tools available to social services and voluntary sector staff as well as health
Redesign care pathways	“Evidence into Practice” portal will provide access to comprehensive collection of validated pathways and underpinning evidence Pathways collection and widget within The Knowledge Network
Telehealth and telemedicine	Telehealth knowledge portal developed with Scottish Centre for Telehealth
Intermediate level alternatives	Development of integrated knowledge services for intermediate care and home care is a key strategic objective

Workstream 2

Delivering safe and effective patient care.

5

5.1 This workstream supports the healthcare quality strategy by integrating knowledge support into clinical systems and processes, to deliver safe, effective and timely patient care. It focuses equally on developing online knowledge services to support decision-making, and on the skills and values of knowledge transfer and knowledge translation – i.e., finding, sharing and applying knowledge to practice.



Deliverables for this workstream

This workstream will deliver:

- 5.2 An Evidence into Practice portal which supports the translation of evidence and knowledge into healthcare practice. This portal will provide summarised and validated evidence, pathways, a clinical enquiry service, and quality improvement tools to help staff not only to find evidence, but also to put it into practice. These developments are based on extensive consultation with quality improvement and patient safety leads and a multidisciplinary clinical reference group including senior-level clinicians from eHealth and the territorial Boards.
- 5.3 This online service will be supported by a network of Knowledge Champions based within NHS and partner organisations. This network will include mediators of knowledge translation, likely already to have a key role in knowledge management, learning, clinical governance, quality improvement and information services. They will take a lead in supporting their colleagues in using the Evidence into Practice online service and The Knowledge Network platform to ask questions, share knowledge and experience, and apply knowledge to practice.
- 5.4 NES Knowledge Services will support these Knowledge Champions in cascading knowledge transfer and knowledge translation skills, to support practitioners and managers in integrating evidence and best practice into day to day work. This is essential for staff to become "ambassadors" for patient safety and evidence-based practice as outlined in *A Force for Improvement*².

Deliverables for this workstream

- 5.5 A portable point of care knowledge support service. This will incorporate guidelines, evidence and medicines information, as priorities identified by clinicians for point of care knowledge support. The service will be designed for embedding in eHealth clinical systems, such as the clinical portal described in the eHealth strategy³, to deliver performance support at point of need.
- 5.6 Single sign on to support patient safety by providing simpler, quicker, seamless access between The Knowledge Network and clinical systems. This will involve close collaboration with the eHealth Identity and Access Management project, which aims to provide single sign on across all NHS clinical systems. This project is already underway, with The Knowledge Network being in the first tranche of national systems to be integrated with the Identity and Access Management framework.

6

Workstream 3

Building a person-centred, enabling health service.

6.1 Knowledge management is central to a person-centred approach as outlined in *Better Health, Better Care*¹, *A Force for Improvement*² and the *Quality Strategy*⁵. This workstream focuses on:

- knowledge support for management of long term conditions and for improving health and well-being. This sharing of information and knowledge between staff and patients can be understood as an implicit act of care. It is a vital and often unacknowledged part of delivering care and improving health.
- developing the role of healthcare staff in empowering patients, carers and the public to find, share and use knowledge to self-manage, participate in shared decision-making, and improve personal health and well-being. This area of work has a particular focus on supporting disadvantaged communities.
- supporting NHS 24 to use NES's national knowledge infrastructure of content and technology to enable patients, carers and the public to access health information, at basic and more specialist levels, when and where they need it.

Deliverables for this workstream

This workstream will deliver:

- 6.2** Further definition and evaluation of the information support role⁶ as part of the work of many staff in NHS and partner sectors, in empowering patients, carers and the public to find and use information to support self-care and shared decision-making. The Plan-Do-Study-Act model will be used to conduct small-scale pilots, with a view to transferring and scaling up in wider contexts. This will include work with: multidisciplinary clinical teams in long term physical and mental health conditions, stretching across primary and secondary care; Citizens Advice Scotland; community pharmacies and health centres, including support staff as well as professional staff; healthcare support workers; and unpaid carers.
- 6.3** An accredited training and support programme, to develop the information support role as a defined set of skills and values relevant to the work of many healthcare staff, both clinical and non-clinical, in NHS and partner sectors. It will focus particularly on the competences involved in sharing knowledge to support shared decision-making between patient and professional, and self-management in long term conditions. NES's role in developing skills and confidence in this area is a key element of the partnership agreement between NES and NHS 24.

Deliverables for this workstream

- 6.4 Evaluation of the impact of information prescriptions and bibliotherapy in supporting self-management, empowerment of service users and carers, and strengthening the role of information sharing in the patient-professional relationship. It will build on the range of projects already in place across Scotland, the national programme of work in NHS England and the previous work of partners such as Macmillan Cancer. Based on the results of this evaluation, NES Knowledge Services will explore and develop the role of library staff and other staff with information support roles in implementing information prescriptions and bibliotherapy to underpin self-management and shared decision-making.
- 6.5 In partnership with the NES health improvement team and Health Scotland, a Health Behaviour Change Portal to support healthcare staff in working with patients and putting knowledge about health and wellbeing into practice in day to day living.
- 6.6 As outlined in the partnership agreement between NES and NHS 24, NES's national knowledge infrastructure already provides content and technology to support NHS 24 in developing and rolling out its NHS Inform service, providing information for patients, carers and the public about health and health services. This will support the public, patients and carers in accessing information for self-management, shared decision making and anticipatory care.

Deliverables for this workstream

- 6.7 The consultation underpinning this strategy underlined the need for greater consistency and collaboration across libraries and information centres in different sectors in providing health information access and support. Demonstrator networks of health information access and support points for patients, carers and staff will be set up in selected Community Health Partnerships, both urban and rural. These networks will connect existing libraries and information centres in health, local authority and voluntary sectors. The pilots will include work on defining governance structures, establishing referral maps and identifying the training and support needs for the networks. These demonstrator projects will be carried out with local and national partners to provide a fuller assessment of networked models of health information access and support.

7 Developing a knowledge-based organisational culture

7.1 Organisational culture is as important as technology and individual skills in translating knowledge into healthcare practice. Developing knowledge management strategy, culture and processes within organisations forms a key component of our three-part model of knowledge management – bringing together organisations, technology and people. Building on the strengths of existing knowledge services groups, a National Health Knowledge Network will be formed. This will comprise representatives of healthcare organisations which will work and learn together over the medium to long term to:

- support realisation of this national strategic vision and work plan.
- use the national knowledge infrastructure to promote the uptake and use of information and knowledge within their organisations.
- share information and knowledge across their organisations;
- continuously improve the management of knowledge within their organisations. This involves defining and implementing common standards for knowledge management.

7.2 In alignment with NES's strategic engagement model, the NES Knowledge Services Group will facilitate this network by:

- Supporting network organisations in developing, implementing and evaluating their knowledge management strategy and policy.
- Providing accredited learning packages for organisational knowledge management. This will include encouraging organisations to nominate an executive-level lead to act as Chief Knowledge Officer with responsibility for ensuring the knowledge management strategy is defined and implemented within the organisation.
- Developing a quality assurance framework and accompanying impact evaluation toolkit for organisations to measure performance against the aims of the strategy and the impact of knowledge management on healthcare practice and patient outcomes. This will be an extension of the current Quality Assurance Framework for Knowledge Services as already implemented by NES for services across NHS Scotland.
- Providing guidance on the use of online tools to share the organisations' information and learning resources with the wider network.



Organisations, people and technology as the three components of the knowledge management model



8 Implementation and benefits realisation

The implementation and change management programme for delivering the outputs and outcomes described in this strategy is attached in Appendix 2. The benefits realisation plan outlined below is designed to support the dimensions of quality as described in *Better Health Better Care*¹, the eHealth Strategy³ and the emerging Quality Strategy⁵.



Benefit	Key Stakeholders	Performance measures	Target performance	Measurement source and timetable
a) Safer, more effective patient care	Clinicians – all disciplines Patients Quality improvement/ Patient Safety Managers	<p>Usage of evidence summaries, guidelines, pathways, quality improvement tools identified via The Knowledge Network and Evidence into Practice service.</p> <p>Changes in practice and policy as a result of using resources and tools provided via The Knowledge Network and Evidence into Practice service.</p> <p>Production of new evidence summaries/ evidence bundles and application to practice.</p> <p>Improvements in patient outcomes as a result of application of evidence from these sources to practice.</p>	<p>Minimum 4000 unique visitors per month for resources and tools within Evidence into Practice service.</p> <p>Minimum of 1 case report per month of change in practice and policy as a result of using these services.</p> <p>1 new evidence summary/bundle per year 2010 and 2011.</p> <p>Minimum of 2 reports per year of improved patient outcomes as a result of using these services.</p>	<p>Usage logs.</p> <p>Measurement monthly following launch of service.</p> <p>Online questionnaire survey and reporting by Evidence into Practice facilitators. Monthly collation of data.</p> <p>Publication of summaries.</p> <p>Reports of audits from Patient Safety / Clinical Leads. Biannual survey and interviews.</p>

Benefit	Key Stakeholders	Performance measures	Target performance	Measurement source and timetable
a) Safer, more effective patient care (cont)		<p>Uptake of accredited learning courses in knowledge-based practice, and improvement of skills and confidence.</p> <p>Formation of Evidence into Practice Facilitator Networks</p>	<p>Target 200 completed course with improved skills and confidence by 2 years post introduction.</p> <p>Aim to have 50 facilitators engaged in networks by 2 years post introduction.</p>	<p>Collation of data on course uptake. Pre- and post-course questionnaire to measure skills and confidence.</p> <p>Biannual review of progress with network membership</p>

Benefit	Key Stakeholders	Performance measures	Target performance	Measurement source and timetable
b) Efficiency and best value	<p>IT and Information / Knowledge Service Managers – NHS and partner agencies.</p> <p>Community and network administrators/ coordinators with responsibility for managing and sharing knowledge within their network.</p> <p>End-users of online services developed using NES infrastructure – workforce and patients/carers.</p>	<p>Use of NES infrastructure (content and technology) to deliver new knowledge services for local and national stakeholder groups.</p> <p>Integration into NES infrastructure of collections of information and learning resources from providers in NHS and partner agencies</p>	<p>By March 2012:</p> <p>Use of infrastructure to support NHS Inform service and at least one other new national information service in NHS or partner sector – eg Social Services.</p> <p>Use by at least 4 territorial Boards to support local services.</p> <p>Use of online community tools by at least 50 NHS communities and networks.</p> <p>Additional 10 organisations in NHS and partner sectors contributed information and learning collections to NES infrastructure.</p>	Biannual review.

Benefit	Key Stakeholders	Performance measures	Target performance	Measurement source and timetable
c) Continuity of care across organisations and sectors.	Multidisciplinary and interprofessional teams – NHS community and acute care; social services; voluntary sector. Patients, carers and public.	Full access to subscription (licensed) resources for all sectors involved in patient journey.	Extended license terms and conditions – by December 2010.	Review – Dec 2010
		Usage of subscription resources by partner sectors.	Minimum 15000 registered users outside NHS by March 2012.	Monthly review
		Uptake of NES infrastructure (content, technology, skills) by groups and organisations outside NHS.	At least 20 partner organisations or groups using NES infrastructure by March 2012.	Monthly review
		Usage and impact on practice in NHS and partner sectors of knowledge support packages developed for dementia, depression, intermediate care etc.	Minimum 1000 users per month for each service by March 2012. Interviews and questionnaire survey to determine impact.	

Benefit	Key Stakeholders	Performance measures	Target performance	Measurement source and timetable
d) Patient-Centred Care	Healthcare staff of all disciplines (clinical and non-clinical) and grades who share information with patients, carers and the public. Health promotion officers. Information and knowledge service providers in NHS and partner agencies. Patients, carers and public.	Uptake of accredited learning package for information support role, by clinical and non-clinical staff, information providers, NHS and partner sectors.	At least 100 individuals completed course by March 2012.	Course completion data – by March 2012.
		Improved skills and confidence among workforce in sharing information with patients and public and in helping patients, carers and public to find and use information for themselves.	Improved skills and confidence in at least 70% of those completing the course	Pre- and post-course questionnaire survey.
		Improved skills and confidence among patients and carers in finding and using information as a result of healthcare staff working in information support role.	On demonstrator sites, reports of improved skills and confidence from at least 50% of patients/public involved.	Questionnaire survey and interviews on demonstrator sites – 2011-12.
		Impact on self-management and shared decision-making.	At least 5 case studies in 2011-2012 demonstrating impact on self-management and shared decision-making.	

9 Resourcing based on sharing and re-use

"Collaboration is the multiplier that transforms limited resources into effective health outcomes."¹

¹ From *Patient-Centred Care 2015: Scenarios, Vision, Goals and Next Steps*. Institute for Alternative Futures for the Picker Institute, 2004.

9.1 This strategy is designed to deliver in a context of economic constraint. It works on the principle of maximising use of NES's existing national knowledge infrastructure of content, technology and expertise. Its guiding principles are sharing and re-use of resources and skills in the following ways:

- shared ownership and responsibility for managing and sharing knowledge, at all levels, rather than a centralised approach with over-dependency on one body.
- achieving best value through re-using and sharing existing information and learning resources and expertise.
- organisations re-using and customising NES's flexible knowledge management technology and shared pool of information and learning resources, to support their corporate priorities.

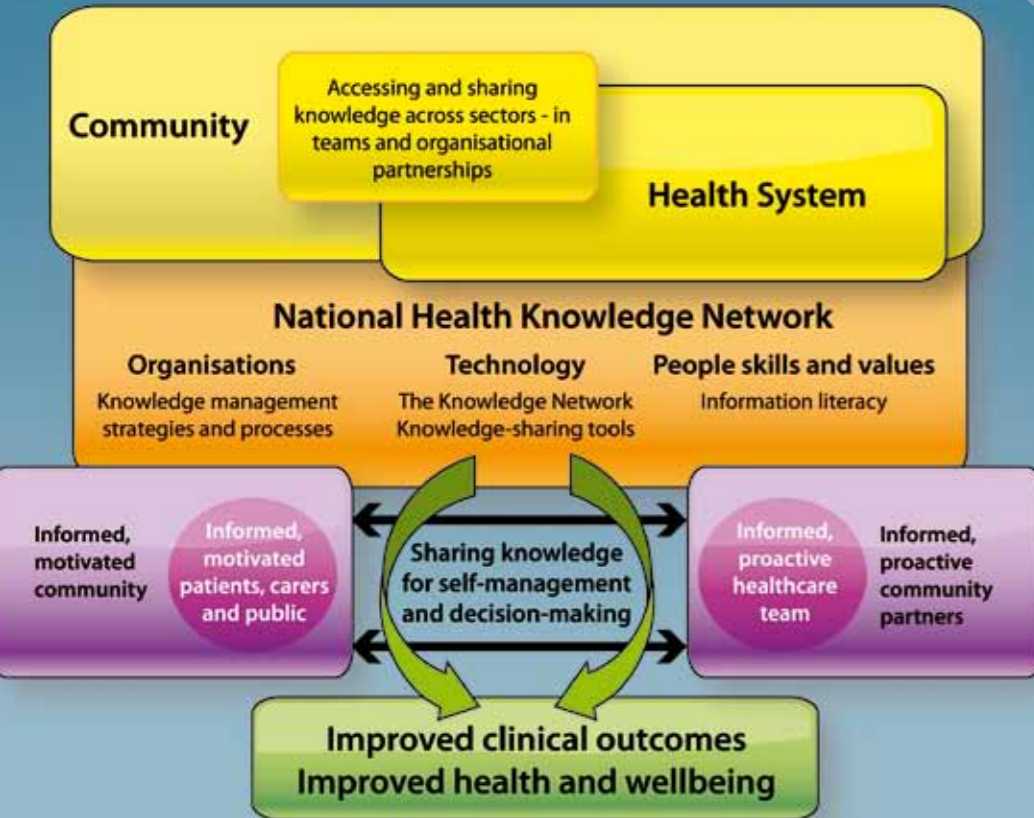
9.2 The strategy therefore does not argue for new financial investment but focuses on different ways of working across the whole healthcare system to make better use of existing resources, and achieve cost-savings in the medium term. The demonstrator projects show that innovation can be achieved and value added to existing services by building on existing infrastructure. This partnership principle is currently being extended to active exploration of collaborative purchasing of subscription content with NHS Boards and Higher Education. The aims here are, firstly, to reduce costs to NES and to partner organisations so that efficiency savings can be realised; secondly, to gain better value for the total funding available.

9.3 Overall, future sustainability will be ensured by the organisations within the National Health Knowledge Network working together, recognising that sharing and co-creating knowledge is an integral component of healthcare delivery and development.



10 Conclusion

11 References



Managing knowledge to build the mutual NHS: a whole systems model

The vision and values described in this strategy are established commitments within NHS Scotland policy as set out in *Better Health, Better Care*¹ and the new healthcare quality strategy³. This strategy shows how a whole systems approach to knowledge management can help to deliver the national vision for Scotland's health and care through collaboration to maximise use of NES's national knowledge infrastructure of content, technology and skills. Managing knowledge as outlined in this strategy will help to empower healthcare staff in all sectors to use knowledge in partnership with patients and carers as an integral part of giving and receiving care and improving health and wellbeing. Through accessing and sharing knowledge across traditional boundaries, NES's national infrastructure will strengthen relationships across organisations and sectors, and between practitioners and patients. In all these ways, knowledge management is a crucial enabler of the vision of a truly mutual NHS.



- 1 *Better Health, Better Care: Action Plan*. Scottish Government, 2007.
- 2 *A Force for Improvement: the Workforce Response to Better Health, Better Care*. Scottish Government, 2009.
- 3 *Better eHealth, Better Care. Scotland's eHealth Strategy for 2008-2011*. www.scotland.gov.uk/Publications/2008/08/27103130/0 Scottish Government, 2008.
- 4 *Delivering the National Health Information & Support Service – a National Partnership Agreement* Scottish Government, 2009.
- 5 *The Healthcare Quality Strategy for Scotland. Draft Strategy Document*. Scottish Government, 2009.
- 6 *Information support roles: enabling partnerships to find, use and share information for health and healthcare decisions*. www.knowledge.scot.nhs.uk/media/931648/information-support-role-framework.pdf NHS Education for Scotland, 2010.
- 7 *Sharing Knowledge, Improving Practice, Changing Lives: a knowledge management strategy and action plan for Scotland's social services*. NHS Education for Scotland and IRISS, 2010.

Glossary

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Bibliotherapy - An expressive, or creative arts, therapy, that uses the individual's relationship to literature, including books, poetry and the written word delivered in any medium. Like other creative arts therapies, it works on the assumption that the use of imagination and creative expression helps people to heal. Bibliotherapy covers a wide spectrum. At its most basic, it consists of the selection of reading material for a client that has relevance to that person's life situation, or provision of self help books and leaflets without therapeutic intervention. It extends to a therapist "prescribing" a book, website, leaflet or film, to support a client; to the use of storytelling to share and understand individual experience; to working with individuals or groups to facilitate self-awareness, self-expression, catharsis and readiness for change through creative literature.

Community of Practice - A community of practice is a group of people with a common sense of purpose who agree to work together to share information, build knowledge, develop expertise and solve problems. Communities of practice are cultivated and nurtured rather than formally managed.

A community of practice was first described as

"a group of people who engage in collective learning in a common area of interest" (Wenger 1998)

It is recognised that communities have three important dimensions:

- **PURPOSE** - community's aims as understood by its members.
- **FUNCTION** - members are engaged in related activities/projects.
- **OUTPUT** - published and unpublished resources, events, discussions and new ideas produced by community members.

Information prescriptions - Information prescriptions point people to sources of information about their health and care – for example information about conditions and treatments, care services, benefits, and support groups. They are usually produced by health or social services professionals in partnership with an information service. Information about evaluation and implementation of information prescriptions in England is available at www.dh.gov.uk/en/Healthcare/PatientChoice/BetterInformationChoicesHealth/Informationprescriptions/DH_088601.

Knowledge management - Knowledge management comprises the systems, processes, skills and values of translating information and learning into action. It describes the ways in which people and organisations capture, store, organise, access and share internal and external information and learning - including personal and collective know-how and experience - and put it into practice. Knowledge management focuses on making decisions and on action. It builds on effective data and information management and on learning processes. People who manage knowledge effectively are using information and learning to make decisions, take action, and achieve change in behaviour or practice. Organisational knowledge management translates information and learning into strategic and operational planning and development.

Managed Knowledge Networks (MKNs) - Extended, national groups of people and/or organisations in health and social care who need to access, share and apply knowledge in a common area of interest. MKNs comprise multiple linked communities of healthcare staff and partners in other sectors. The building blocks of Managed Knowledge Networks are Communities of Practice. These networks operate across boundaries of disciplines, organisations and sectors and are linked by a common need to access and share information. Some use portals or websites to help in finding and sharing knowledge.

Scottish Health Information Environment - NHS Education for Scotland's earlier knowledge management strategy From Knowing to Doing: transforming knowledge into practice in NHS Scotland (NES, 2006) set out a vision for a Scottish Health Information Environment. This is an open, online information environment, created by organisations collaborating across sectors, founded on interoperability standards and protocols, associated management policies and technology, to facilitate open and coordinated sharing of knowledge resources across services.

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Appendix 1

Commissioning Brief from Scottish Government eHealth Directorate

National eHealth Programme

KNOWLEDGE SERVICES

Commissioning Brief

January 2007



SCOTTISH EXECUTIVE
Health Department

Introduction

Purpose

This Brief is the eHealth Strategy Board's commissioning terms of reference for the Knowledge Services work stream. It is recognised that this work is already well established, nevertheless there is a requirement to produce a strategy and action plan which will direct future developments. It is also important to clarify how Knowledge Services will fit within the emerging eHealth governance framework.

NHS NES will lead the work stream, with the collaboration of NHS Board and other stakeholders.

Background

This workstrand reflects a prior body of work during the past two years which has laid foundations for the proposed formulation of a national strategy for collaborative, coordinated system-wide provision of knowledge services:

- Report of SEHD Working Group on coordinated national provision of online health information services (SEHD, 2005)
- Technical report commissioned by NES on Knowledge Architecture to Support the Patient Journey (summary attached; NES, 2006). The recommended architecture emphasises support for sharing of tacit knowledge and generation of new knowledge, in parallel with organization and integration of the published knowledge base. It underlines the critical importance of technical and information management standards and a distributed model of knowledge management, founded on the principles of interoperability, in order to achieve a coherent knowledge infrastructure which can operate across organisational and sectoral boundaries.
- Consultation commissioned by NES on the future development of knowledge services for NHS Scotland and associated benefits (NES, 2006). A key conclusion of this report is the need for greater collaboration across local and national knowledge services in order to maximise benefits to patient care and minimise duplication of effort.

- Scoping meetings organised by the SEHD Patient Focus Public Involvement Unit and the Patient Information Forum in January 2006, highlighting the commitment to collaborative working by NHS and partner sectors to provide quality assured health information for patients and the public, and recognising the need for a coordinated national strategy to achieve this goal.
- *From Knowing to Doing* (NES, 2006) –NHS Education for Scotland’s strategic framework for knowledge management. This defines the concept of the Scottish Health Information Environment, describing a cross-boundary, whole-systems approach to knowledge management.
- The forthcoming Health Department Letter *NHSScotland Knowledge Services: Guidance for Planning and Development*. This sets out requirements for production by NHS Boards by end of March 2008 of Knowledge Services Action Plans, led by Knowledge Management Champions established at Executive level.

Vision for eHealth Knowledge Services

The vision is of knowledge support articulating with all stages of the patient journey, including specifically the representation of the patient journey within electronic patient record systems.

Principles

The underpinning principles of the Knowledge Services work stream are ...

- 1 The goal of application of knowledge is to improve healthcare practice, delivery of patient care, and improvement of health.
- 2 An emphasis on coordination and collaboration in managing and sharing knowledge in a coherent, integrated way across boundaries of organisation and sector, in order to support integrated and continuous delivery of care.
- 3 Application of information management and technology standards (“interoperability”) to facilitate this sharing of knowledge, and consistency in knowledge access and retrieval throughout the system.
- 4 Build on existing strengths in current eHealth and knowledge services developments, both locally and nationally.
- 5 Facilitate development of culture and skills to enable application of knowledge to practice, in parallel with consolidating the supporting technology infrastructure.
- 6 Tailor knowledge support to meet the specific needs of different audiences and contexts.
- 7 The work should be supported by a clear governance model with respect to the wider eHealth programme.

Objectives and scope

The coordinated, national Knowledge Services strategy and action plan will encompass the following elements:

- Management of tacit and explicit knowledge
- Data, information and knowledge to support managerial as well as clinical decision-making.
- All stages of the knowledge management cycle – from accessing and evaluating knowledge to communicating knowledge and translating it into practice.
- The role of knowledge management within e-learning
- Knowledge support for healthcare staff and partners in other sectors, and for patients, carers and public.
- Development of technology and information infrastructure, culture and skills

... in order to support application of knowledge to healthcare delivery.

- It will be essential that this national strategy builds upon, and interfaces clearly with:
- Existing national knowledge management strategies – for example, within NES, NHS 24, NSS, Health Scotland
- Local knowledge strategies being produced within geographic NHS Boards for end of March 2008 in consequence of the forthcoming Health Department Letter (NHSScotland Knowledge Services: guidance for planning and development)
- National eHealth strategy
- National strategy for workforce development and education
- Overarching national healthcare policy as outlined in *Delivering for Health*.

Governance

The project sponsor is SEHD eHealth, and the reporting line for the project will be to the eHealth Programme Board.

The Project Board for Knowledge Services is chaired by NHS NES and includes members representing NHS Board Chief Executives, clinical interests, NHS Board eHealth, NHS Board knowledge/library services, SEHD eHealth, NHS 24, NHS QIS and Higher Education. In order to produce the coordinated national strategy and action plan required by this commissioning brief, the Project Board for Knowledge Services will be supported by a Knowledge Services Coordinating Group, with terms of reference as set out in annexe 1.

The Coordinating Group and Project Board for Knowledge Services will link with the eHealth Programme Board through dual membership with respect to the SEHD eHealth nominee. In addition the clinical and NHS Board eHealth members of the proposed Coordinating Group will also be members of the eHealth Clinical Reference Group and the NHS Board Heads of eHealth respectively.

As required by individual workstrands, the Coordinating Group will directly inform and seek advice from the eHealth Technical Board and Change Board.

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Appendix 2 Milestones and Change Management Plan



Milestone	Timescale	Associated changes
2009-2010		
Launch of The Knowledge Network www.knowledge.scot.nhs.uk	End of January 2010	<ul style="list-style-type: none"> • Train and support NES Knowledge Services staff in new ways of working for ongoing maintenance and enhancement of the service. • Transition current e-Library users to new platform. • Attract new users. • Engage librarians, training and OD Managers, clinical educators, and other knowledge management leads in promoting new service. • Identify local and national leadership and champions for new service.
Launch of the Community Builder Toolkit	End of January 2010	<ul style="list-style-type: none"> • Engage librarians, training and OD Managers, clinical educators, and other knowledge management leads in promoting new service. • Identify local leadership and champions for new service. • Identify administrators for new service. • Promote principles and values of managing and sharing knowledge to support communities of practice and team working in healthcare.
2010-2011		
Launch of Evidence into Practice online knowledge service	August 2010	<ul style="list-style-type: none"> • Engage clinicians and managers in using this service to support safe, effective care. • Identify clinical leadership to champion this service.
Produce knowledge support "portlets"/widgets for integration into clinical systems, eg clinical portal	August 2010	<ul style="list-style-type: none"> • Gain engagement from at least 1 clinical system and clinical portal programme in piloting these portlets.
Deliver knowledge-sharing toolkit	August 2010	<ul style="list-style-type: none"> • Engage managers of local and national online knowledge systems in: • Contributing information about collections and services. • Using collections and services provided by the toolkit to support delivery of their own systems.

Milestone	Timescale	Associated changes
2010-2011		
Deliver new round of contracts for subscription content	December 2010	<ul style="list-style-type: none"> Engage stakeholders (knowledge service providers, users and non-users) in analysing need and identifying new resources. Deliver programme of promotion and training for new resources. Engage Higher Education and NHS knowledge services managers in promotion and training for new resources.
Deliver learning package and toolkit for organisational knowledge management	December 2010	<ul style="list-style-type: none"> Engage managers in needs analysis to design package and templates. Engage managers in undertaking learning package and applying templates and guidance to define and implement local knowledge management strategies.
Deliver impact assessment toolkit for knowledge services	March 2011	<ul style="list-style-type: none"> Engage users in providing data to demonstrate impact. Engage knowledge managers in using toolkit. Communicate messages about impact and benefits to high-influence stakeholders.
Transition classic e-Library portals into new Knowledge Network infrastructure	March 2011	<ul style="list-style-type: none"> Engage users and non-users of current portals in needs analysis and evaluation of classic portals. Transition users of current classic portals to use new platform. Engage knowledge services manager, training managers, clinical leads and other champions in promoting new services and providing training.
In partnership with NHS 24, apply NES technology and content infrastructure to support NHS Inform service; assimilate Health Information Plus portals into NHS Inform infrastructure	March 2011	<ul style="list-style-type: none"> Knowledge transfer with NHS 24 to support implementation and maintenance of new technology and content. Engage users and champions of current services in needs analysis Transition users of current Health Information Plus portals into new service. Promote and train staff and service users in use of new service, making link with information support role competencies.

Milestone	Timescale	Associated changes
2010-2011		
Evaluate pilot of cross-sectoral person-centred network of information and support services.	March 2011	<ul style="list-style-type: none"> Engage library and information centre/service providers in different sectors (within and outside pilot) in sharing resources and expertise; undertaking information support role training and working to common standards. Gain senior-level support for this collaborative way of working.
Integrate e-learning services (Virtual Learning Centre, NHS Shared Learning) with The Knowledge Network	March 2011	<ul style="list-style-type: none"> Engage users of current services in needs analysis and evaluation of current systems. Transition users of current services into new platform. Train administrators/ service providers within Knowledge Services Group to use new system. Carry out promotion and training for new service. Engage knowledge services providers and other stakeholders in NHS Boards and partner sectors in promotion and training for new service.
2011-2012		
Launch of knowledge support facilitator networks for: Evidence into Practice *Health Behaviour Change *Remote and Rural Care *Health Equality	June 2011	<ul style="list-style-type: none"> Define facilitator role and associated benefits/motivating factors. . Identifying, training and supporting facilitators. Gain recognition and support within organisations for the facilitator role. Monitor and evaluate facilitator role.
Deliver online knowledge services for: * Health behaviour change * Dementia * Alcohol and addictions * Learning disability • Remote and rural staff • Leadership	June 2011	<p>Engage stakeholders at all levels in needs analysis and subsequent promotion and training for these services:</p> <ul style="list-style-type: none"> Frontline practitioners and managers Senior managers and leaders – clinical and non-clinical Partner knowledge services at national and local level, in NHS and partner sectors.

Milestone	Timescale	Associated changes
2011-2012		
Launch accredited training programmes for information support role and translation of knowledge into practice	June 2011	<ul style="list-style-type: none"> Engage high-influence stakeholders at national and local levels in supporting design and delivery of these programmes. Demonstrate connections with national strategies – quality strategy, patient experience, workforce development. Engage frontline and senior stakeholders in promoting and undertaking courses, sharing experience and benefits.
Complete first phase of pilot of knowledge support for eHealth system	June 2011	<ul style="list-style-type: none"> Engage pilot system in implementing knowledge support. Communicate project outcomes and benefits to wider clinical eHealth system.
Deliver standards for organisational knowledge management	June 2011	<ul style="list-style-type: none"> Engage senior-level stakeholders in applying standards within their organisations.
Deliver targeted knowledge support for medical training and other educational curricula	March 2012	<ul style="list-style-type: none"> Engage educational providers in NHS and partner agencies in using knowledge support tools and incorporating knowledge management skills within educational programmes.
Complete and evaluate pilot of accredited training programme for bibliotherapy and related information support.	March 2012	<ul style="list-style-type: none"> Engage relevant stakeholders in defining needs, designing and implementing appropriate delivery models. Gain recognition and acceptance of these roles and competences among education providers, accrediting and regulatory bodies.
Deliver Best Practice in Education portal	March 2012	<ul style="list-style-type: none"> Engage stakeholders in needs analysis, design and delivery of the service. Engage stakeholders in using the service as part of designing, delivering and evaluating educational activities.



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May 2010

