

KNOWLEDGE INTO ACTION

The Knowledge into Action (K2A) Strategy for Scotland's health and social services has created high impact, efficient knowledge services and ways of working which help to bridge the knowledge-practice gap.

This has contributed to patient safety, person-centred care, more effective decisions in frontline practice, service redesign and new models of integrated health and social care.

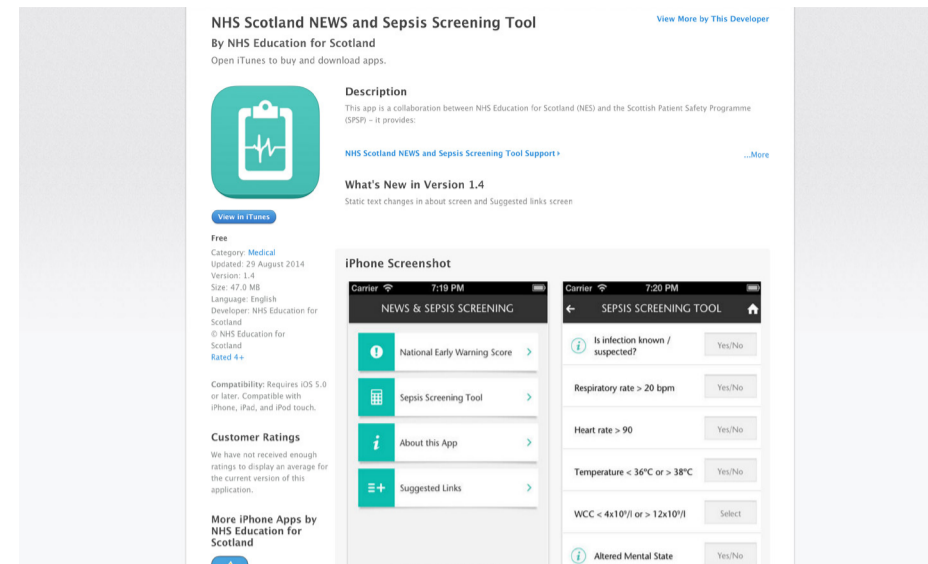
KNOWLEDGE INTO ACTION IN SCOTLAND'S HEALTH AND SOCIAL SERVICES

Implementation of Knowledge into Action 2013-2016

WHAT IS KNOWLEDGE INTO ACTION?

K2A brings together content, technology and skilled intermediaries – also known as “knowledge brokers” – to convert knowledge into decisions and actions.

The following examples show the benefits of Knowledge into Action.



LONG TERM AND MULTIPLE CONDITIONS

Knowledge into Action has contributed to better health for people with diabetes and to better care of people taking multiple medications.

Knowledge brokers supported diabetes clinicians in NHS Tayside and West Lothian to convert recommendations from the SIGN diabetes guideline into decision support rules which provide prompts to clinicians using the clinical system SCI-Diabetes. This saved clinicians’ time, and patients whose clinicians were using decision support had a small but significant improvement in control of blood sugar levels and significantly reduced kidney damage compared with matched case controls.

Knowledge brokers took the initiative in collaborating with pharmacists across NHSScotland to convert the national polypharmacy guidance into a mobile app. This supports prescribers in engaging with patients around the 7-step medicines review process and in managing common high-risk situations.

PATIENT SAFETY

Knowledge to Action has contributed to increased timely diagnosis and treatment of sepsis.

Knowledge brokers supported the national Sepsis Collaborative by summarising evidence, developing a virtual community of practice, and delivering a mobile app to help clinicians to detect and act on early warning signs of sepsis. This support has increased clinicians’ awareness of sepsis screening and treatment, enhanced decisions and saved clinician time. Clinicians report using the sepsis app in education and in frontline practice for timely decisions for safer patient outcomes.

“[The app] alerted me to the gentleman’s risk of deterioration and I requested an ambulance [sooner] than I would otherwise have done...the gentleman was assessed as ‘sepsis’ at A&E triage, and received ‘sepsis 6’ [care]... The gentleman recovered from his illness and is now home again.”
GP, Lanarkshire



DELIVERING NEW MODELS OF INTEGRATED HEALTH AND SOCIAL CARE

Knowledge brokers sourced and summarised evidence to inform integrated delivery of health and social care.

Rapid reviews have included:

- What are the elements needed to support quality improvement in integrated health and social care systems?
- What is the public health contribution to health and social care integration?
- How can local health and social care partnerships generate and interpret system-level evidence about how their services improve personal outcomes?

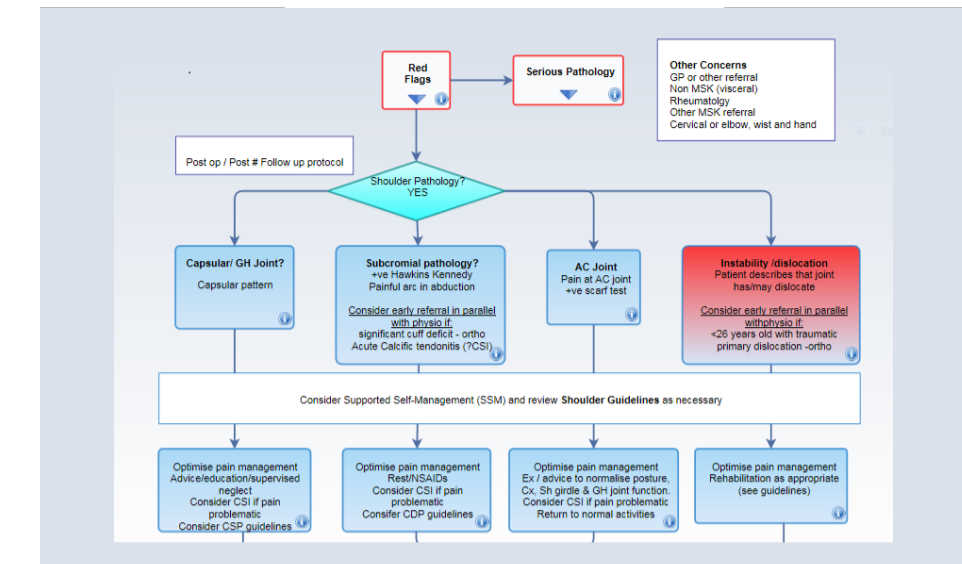
Knowledge brokers have also analysed knowledge needs of managers and practitioners in health and social care partnerships, and have played a key role in producing e-learning and information resources for self-directed support.

PERSON-CENTRED CARE

Knowledge brokers in NHS Greater Glasgow and Clyde introduced tablets and mobile apps to enable the community respiratory team to educate patients on self-management techniques on home visits. They mapped community assets to support a mental health resource team in Glasgow’s East End in helping people to feel more connected to the local community. Knowledge brokers’ rapid review of evidence for the benefits of having family and carers present at mealtimes changed practice in a dementia ward. Their presentation of relevant evidence supported spread of improvement in hospital admission of patients with first episode psychosis.

“I really like that this ward lets us come and be with them during mealtimes. This puts my mind at ease because I can make sure he’s getting enough to eat.”
Family member/Carer

Knowledge into Action has built practitioner skills in sharing health information and creative literature to improve self management.



Knowledge brokers across sectors were trained in bibliotherapy techniques, and delivered 9 programmes to 67 people. Participants reported increased awareness, improved attitudes to their health and well-being and changes in behaviour or decisions.

IMPLEMENTING GUIDELINES AND EVIDENCE-BASED PRACTICE

By January 2016 clinicians across all Boards had used NES’ Care Pathway Publisher to create 176 digital pathways, linked to evidence.

In a survey users indicated that the tool saves them time and that it has assisted consistent implementation of guidelines in brain injury, childhood asthma, falls management, referral management, foot and ankle surgery, cancer, ME, stroke, chronic pain.

“Excellent tool to support the service improvement work I am involved in. Have been able to support people in doing service improvement work in a much more professional and efficient manner.” Clinician user, Pathway Publisher tool

The national network of knowledge brokers produces evidence summaries to inform practice-based small group learning in primary care. Primary care staff report increased knowledge and change in practice in areas including cervical screening, management of red eye and palpitations.

Knowledge brokers supported junior doctors working in out of hours care in NHS Lothian with access to local and national Knowledge Network apps with guidance, formularies and handbooks for decisions at point of care. 55% of junior doctors accessed these resources and reported positive impact on their decisions and confidence in solo working out of hours.

SERVICE REDESIGN AND IMPROVEMENT

Knowledge brokers across NHSS Boards collaborated to deliver 30 evidence summaries with findings incorporated in the World Class NHS Review and new Clinical Strategy. They sourced evidence for the new palliative care guidelines and to develop a Palliative Care Knowledge Network portal. Clinical experts reported that the new guidelines were changing practice based on more up to date, evidence based knowledge of palliative care.

WHY DO WE NEED KNOWLEDGE INTO ACTION?

Effective delivery of health social services faces critical challenges: social and demographic changes are driving up expectations of what services can deliver; users of services are becoming more well informed and expecting higher quality and seamless services; and there is increasing pressure on resources.

Transformation of services in order to meet these challenges means building the capacity for innovation and improvement, moving on from “doing what we have always done”. This requires: a strong focus on ensuring that decisions about frontline practice, service design, development and delivery are based on sound evidence, combined with sharing, reflecting and learning from experience, and using the knowledge gained in these ways.

The challenge is to connect the world of research and knowledge on the one hand, and the world of day to day practice on the other so that we continue to improve the way we do things.

CURRENTLY THERE IS A GAP BETWEEN KNOWLEDGE AND PRACTICE;

- One-third of service users do not get treatments of proven effectiveness
- One-quarter of patients get care that is not needed or is potentially harmful
- It takes between 5 and 50 years to translate research evidence into routine practice.¹

Knowledge into Action aims to build the capacity of health and social services staff to bridge the gap between knowledge and practice, so that they can apply knowledge in decisions and actions, to improve services, and contribute to better outcomes for individuals and communities.

During 2012, Knowledge into Action Reviews were carried out in health and social services, to align and integrate knowledge support with the Quality Strategy, 2020 Vision for Health and Social Care, and strategic priorities for social services, subsequently captured in the Social Services Vision and Strategy for Scotland. The resulting strategies²⁺³ formed the basis of the integrated Knowledge into Action Implementation Plan for Health and Social Services 2013-16.⁴

THIS IMPLEMENTATION PLAN HAS THREE AIMS:

AIM 1: Create a national Knowledge into Action Network of content, knowledge management technology and intermediaries who support translation of knowledge into practice (“knowledge brokers”).

AIM 2: Through this is Knowledge into Action Network, provide a portfolio of services which help people in health and social services to translate knowledge into decisions and actions.

AIM 3: Deploy this portfolio of Knowledge into Action services to support quality improvement and transformation of health and social services.

K2A has delivered on these aims through collaboration across NHS Boards, social services, third and independent sector agencies, supported by national partners – including NES, HIS, Health Scotland, SSSC, IRISS, Social Work Scotland, Scottish Care and the Coalition of Care Providers in Scotland. Delivery has been through existing financial and human resource rather than an externally funded implementation programme, ensuring a sustainable operating model. There has been no specially funded implementation programme. This approach ensured the strategy delivered a sustainable operating model.

REFERENCES

¹ Kitson, A., Straus, S. In Knowledge Translation in Health Care: Moving from Evidence to Practice (Graham, I., Straus, S., Tetroe, J. Eds), Wiley, 2013.

² NHS Education for Scotland, 2012. Getting Knowledge into Action to improve healthcare quality: Report of strategic review and recommendations <http://www.knowledge.scot.nhs.uk/media/CLT/ResourceUploads/4016980/20120805%20K2A%20short%20report%20for%20Board%20distribution%20v2%200.pdf>

³ Scottish Government, 2012. A Strategy and Action Plan for Embedding Knowledge in Practice in Scotland's Social Services. <http://www.scotland.gov.uk/Publications/2012/10/4809>

⁴ NHS Education for Scotland, 2013: Implementing Knowledge to Deliver Quality Outcomes. <http://www.knowledge.scot.nhs.uk/media/CLT/ResourceUploads/4033293/20130322%20Implementing%20Knowledge%20to%20Deliver%20Quality%20Outcomes%20overview%20v0.3.3.doc>

HOW DOES IT WORK?

There are five elements to Knowledge into Action support, all of which have been developed over the three-year programme.

1 Action-focused resources and tools that make it easy for practitioners and managers to share and apply knowledge - for example:

- Collections of evidence summaries to support decisions in frontline practice
- A library of quality assured mobile apps
- New mobile apps for sepsis, polypharmacy, junior doctors' handbook
- Patient-specific decision support linked with the SCI-Diabetes clinical system
- Integrating evidence summaries into electronic health record systems e.g. TRAKCare
- Community of practice and social networking tools - People Connect, Community Builder Toolkit
- NES' Pathway Publisher tool

March 2016: 223 active communities of practice; 8017 visitors per month; 1600 members of People Connect; 32000 visits to Mobile App Library since April 2013.

2 A networked national service delivering knowledge support across health and social services. This includes:

- A multi-agency network of skilled knowledge brokers
- A networked national evidence search and summary service
- Consortium purchasing of electronic books for health and social care
- Planning collective delivery of a single national digital library platform

March 2016: 250 members of knowledge broker network - librarians, information officers, practice educators, learning and development leads across sectors. 120 completed knowledge broker training modules; 67 received evidence search and summary training. 51 evidence search and summary requests received in first three months of pilot

3 Transformation of the role of the librarian.

K2A gives a new focus to the classic librarian skills of sourcing, summarising, organising and presenting knowledge for easy use at point of need. Librarians now increasingly work closely with clinicians and managers as knowledge brokers, supporting them to convert knowledge into decisions and actions:

“K2A has resulted in us embedding dedicated knowledge brokers within improvement programmes to ensure that there is real-time identification of knowledge needs and ongoing knowledge sharing internally in the team and externally to the wider system.” NHS librarian comments

“K2A has promoted the role of knowledge brokers in my organisation and this has changed the way that some teams and individuals work. I think, as a knowledge broker, I have been included in a lot more work and exposed to new and different activities and tasks as a result of this.” NHS librarian comments

4 Development of digital, information and health literacy skills.

K2A delivered a survey in 2014-15 to identify the learning and support needed to create a technology-enabled health and social services workforce. The results informed development of knowledge broker support and training for health and social services staff to navigate digital services and share information with patients for self-management.

April 2013 - March 2016; 3935 health and social services staff received training in digital, information and health literacy skills through K2A.

5 All these developments have been enabled by consolidation of the national knowledge base provided by The Knowledge Network:

- Successful tendering 14,000 e-journals, 7000 e-books and 40 databases for all health and social services staff for next 3 years. National subscriptions to databases, e-journals and ebooks for health and social services from April 2016 to March 2019
- Expansion of public health and social services journals to support integrated care
- Collaboration with Higher Education to improve equitable access for staff, students, and practitioners to health and social care journals
- From April 2013 - March 2016:
 - 1.4 million visits to The Knowledge Network
 - 2.5 million fulltext articles downloaded
 - 6.8 million searches of Knowledge Network databases

WHAT NEXT?

Knowledge into Action has refocused existing resources and skills to create networked national knowledge services and tools which are already helping to improve delivery of care. Going forward we need input from all stakeholders to identify how we can best build on these achievements to exploit the full power of knowledge in delivering new models of care by 2020.

The new Clinical Strategy, Social Services Vision, Public Health Review and the forthcoming new eHealth Strategy all present opportunities to integrate use of knowledge in improvement, integration and transformation of health and social services.

An externally commissioned study conducted in 2015 gives us some pointers as to the challenges to be resolved, and the enablers which can help us to sustain and grow the impact of Knowledge into Action.

Challenges include: effective access to technology; competing priorities for time and effort; language; mindset, culture and stereotyped perspectives; 'big picture' issues such as the constantly changing landscape of health and social services. Some consultees highlighted the differences in the way social services as opposed to healthcare staff access, share and apply knowledge and were concerned at a perceived "one size fits all" approach dominated by a health model.

Enablers include: new developments in technology; improved access to technologies, skills and tools; communication through examples; effective language; organisational support and senior level buy-in; champions; policy drivers and changes that can act as opportunities. Key roles can also be enablers - champions with 'positional power' and those with passion (both features are necessary); relationship-builders; those who can identify and address the solving of priority problems.

The most critical enabler of Knowledge into Action, this study concluded, is the growing sense of co-production, community and shared ownership among librarians and the wider multi-agency network of knowledge brokers. Nurturing this network will enable us to move forward together to sustain and extend the achievements to date and realise the full potential of Knowledge into Action across Scotland's health and social services.

