“Information will increasingly become the currency of healthcare in the future...

Our ability to access, understand and interpret it will be a key determinant in the future success of our healthcare system.”

In May 2014 a batch of contaminated total parenteral nutrition caused an outbreak of *bacillus cereus* septicaemia that affected nineteen babies across eleven hospitals in England, including Brighton and Sussex University Hospitals NHS Trust.

As the cause of the infections became apparent a series of rapidly evolving clinical questions were asked: How does *b. cereus* grow and spread? What organs are affected in neonates? What is the appropriate length of treatment? What adjuvant therapy is recommended?

Working alongside clinicians our team identified the research to answer these questions. The evidence we supplied informed management of the affected babies and influenced the outcomes of care. Information synthesised by our clinical librarian was passed up to Public Health England in order to help their investigation and recommendations.

From the medical student browsing an *Oxford Handbook* on a mobile phone to the Director of Public Health’s Annual Report, the influence of the Library and Knowledge Service extends across local health care.

Our goal is to aid learning and improve the quality, safety and efficiency of care in Brighton, Hove and Mid Sussex through the application of information and evidence.

We work with hospital, community, mental health and primary care staff and students as well as local authorities. And we believe that by sharing knowledge and aiding its translation into practice we can improve the care provided to local patients.

Here we set out our strategic plans for the next five years.

Ben Skinner
Head of Library and Knowledge Services
July 2014

“The most important single change in the NHS...would be for it to become, more than ever before, a system devoted to continual learning and improvement of patient care, top to bottom and end to end.”

The Library and Knowledge Service in 2014

The Library and Knowledge Service (LKS) runs three libraries (at the Royal Sussex County Hospital, Princess Royal Hospital and Mill View Hospital) and manages the library service for Brighton and Sussex Medical School staff and students.

Our team works out-and-about in local health and academic organisations, providing evidence and advice to clinical, educational, research and governance staff.

Online books, journals and point-of-care tools

Through smarter purchasing our journal subscriptions have doubled over the last three years. The proportion available in full text online has risen from 30% to 90% in line with members’ expectations.

Our print books remain extremely popular, with 31,000 loans in the last year. Use of ebooks is smaller but increasing and we have doubled our provision since 2011. Usage of our evidence-based point-of-care tools, UpToDate and BMJ Best Practice, continues to increase every year.

Finding the best evidence

Information is now easier to find than ever before but finding the right information on which to base patient care and service change remains challenging. The need for information retrieval expertise continues to grow as shown by the number of requests we receive for searches, which have risen each year for five years.

Improving the skills of the workforce

The number of staff and students that we teach to find and evaluate research remains at around 1,600 per year. Finding opportunities to teach groups remains important to ensure we are working efficiently.

With community and mental health staff so dispersed we have introduced the option to learn via web conferencing.
How we are funded

Our regional funding has undergone significant changes in recent years and is now linked to the number of undergraduates and trainees in the organisations we serve. This has changed flows of funding, resulting in the formation of new stakeholder relationships but less clarity about levels of service now and in the future.

Brighton and Sussex University Hospitals (BSUH), Sussex Partnership and the local authorities in East Sussex and Brighton & Hove also fund us to provide enhanced services such as embedded librarians and the library at Mill View Hospital.

Significant achievements since 2011

- In 2014 Health Education Kent, Surrey and Sussex visited and confirmed that we were 100% compliant with all 61 national and regional quality criteria.

- In 2011 students at Brighton and Sussex Medical School (BSMS) expressed 100% satisfaction with their library services in the National Student Survey.

- A new approach was piloted to improve evidence-based decision-making in primary care. Evidence requests from GPs went up by 98% during the pilot.

- Our Medical School Librarian negotiated the introduction of an Open Access research fund at BSMS and continues to provide expert advice on Open Access.

- Our team developed an Information Prescriptions website for Brighton & Hove aimed at connecting patients with relevant support and information.

- At BSUH our team helped to launch a new Innovation Forum that gives staff at every grade the opportunity to pitch their ideas to senior management.

- The Head of LKS worked alongside senior colleagues to develop a strategy and structure for the new Directorate of Education and Knowledge.

- Self-service kiosks were introduced to our libraries allowing members to borrow books for themselves, including during the evening and weekends.

- Our KnowledgeShare system, which provides targeted evidence updates and manages our core services, was re-developed as a web-based application. The system has been licensed to 10 local trusts to aid collaboration.
The national, regional and local context

In 2015, Health Education England (HEE), the NHS body that provides leadership and funding for education published *Knowledge for healthcare: a development framework*. In his preface, Professor Ian Cumming, the Chief Executive of HEE, explains that “it is through sharing knowledge, research evidence and best practice, that we inspire and inform innovation and improvements in patient care and safety, experience and outcomes.”

The framework directs LKS teams to pursue initiatives such as our KnowledgeShare system that provide quality information tailored to specific users and enable sharing of back-office functions. It indicates that clinical and outreach models of service should be expanded and the skills of the LKS workforce should be enhanced.

This framework will be central to our development over the next five years; we will consider the impact of its recommendations locally and will contribute to national working groups aimed at implementing the proposed changes in practice.

Health Education Kent, Surrey and Sussex

Regionally, Health Education Kent, Surrey and Sussex (HE KSS) have published their Skills Development Strategy, which guides us towards the areas of health care that are a particular focus for the South East. These are: compassionate care, dementia care, primary care, emergency care, and children and young people. Our work has been shown to impact on all of these areas directly, along with many more.

Our local partners

BSUH, in partnership with Brighton and Sussex Medical School, aims to “create a workforce that is equipped and skilled with the knowledge and capability that will ensure we deliver patient care to the highest possible standard”. The “3Ts” hospital build will increase the Trust's ability to provide nationally recognised teaching to healthcare staff and this is supported by a new Directorate of Education and Knowledge, which brings multidisciplinary educators together with the LKS in a unified structure. At the same time, the Trust is undergoing significant redevelopment in terms of its clinical structures and its values and behaviours.

Research is a local strength, not only at BSUH but also for Sussex Partnership and Sussex Community, who are developing their “extensive research programme to include innovation”. In addition, our local trusts are challenged to provide a level of care that offers patients an alternative to London. Sussex Partnership are “doing everything they can to make sure people don’t have to leave Sussex to get the specialist services they need”. There is therefore a strong requirement locally for an academic ethos and for service change that is robust and evidence-based.

Finally, with the intention to move care closer to home, Sussex Community Trust, Brighton & Hove Clinical Commissioning Group (CCG), and Brighton & Hove City Council must ensure that carers are properly supported and that people with long-term health needs have greater choice and control over their care.
Our strategic goals

We will work with local health care staff and students to facilitate access to the information and evidence they need, when they need it and in a form they can use.

We will provide expertise, tools and techniques to allow colleagues to create, share and apply new and existing knowledge.

We will consolidate on our successes, building a strong team that is well-placed to innovate and further improve the quality of our service.

By doing so we will improve the health, well-being and quality of care for local patients and the public, broaden the knowledge and skills of health care professionals and help ensure that services and patient pathways are fit-for-purpose.

To achieve these aims we will focus on the following strategic goals in the next five years:

- Shaping our team to support changing demands
- Increasing involvement in technology enhanced learning
- Maintaining a strong focus on the quality of our services
- Providing the right information resources at the right time
- Engaging with our partners and expanding our role
Shaping our team to support changing demands

Our diverse team provides specialist resources and services to a wide variety of sectors and professions, making a difference to patient care. However, as the environment in which we work has changed, so too have the demands on our team. The shift towards electronic information, combined with a growing need for evidence-based decision-making, has gradually changed the queries that we receive from colleagues. Simpler questions have become easier to answer without our help but complex questions are more difficult to resolve.

As a result we receive more requests for evidence than ever before, the requests are more challenging and require a higher level of analysis in order to speed up decision-making. In addition, electronic resources are more complex to administer than print as online publishing becomes more fragmented.

Other changes are driven by the evolving health care environment. Colleagues still look to us for teaching in finding and evaluating evidence but have less time to attend scheduled sessions; we must be flexible while maximising opportunities for group teaching. Meanwhile, the shift from acute to community care requires us to build new relationships across Sussex.

Finally, as the team has grown organically over time there are issues to resolve in terms of standardising quality, internal communication, decision-making and career progression.

We will maintain the high quality services that we are known for and improve our efficiency by focusing on the skill mix of our staff. We will reshape our team to resolve more, and more complex queries, to be more reactive to members’ needs, and to engage more effectively with community and public health staff while maintaining a quality service for our hospital colleagues.

Over the next five years we will:

- Restructure our posts and their roles in order to increase team flexibility, improve the skill mix and aid career progression, taking advantage of vacancies to make changes where possible.

- Increasingly specialise our roles so that standardisation is easier to achieve and decision-making is more streamlined.

- Continue to improve the skills of our staff so that enquiries can be dealt with at the appropriate level and we can continue to improve the quality of our service.

- Continue to bring together policies and procedures across our three sites so that our members receive a consistent service.

- Ensure that staff within the team feel supported and communicated with, can act with appropriate levels of autonomy and work to their strengths, and that they exhibit the BSUH Values and Behaviours when interacting with their colleagues.
Involvement in technology enhanced learning

Technology enhanced learning is a rapidly growing field in the NHS. HE KSS plans on “increasing and improving access to e-learning for the whole workforce” and BSUH is rapidly expanding its simulation training facilities. We are well-placed to influence these changes due to our work in virtual learning at BSMS and the expansion of our KnowledgeShare system for sharing evidence more widely.

The online information resources that we provide, and the portals that we create to give access to those resources, are a means of bringing technology to bear on learning.

In addition, our team has considerable experience in managing the virtual learning environment for the students of Brighton and Sussex Medical School, including the development of online modules and teaching academics how to effectively move to a blended learning approach.

Our staff have also been integral to the BSMS Mobile Medical Education project (MoMEd) from its inception.

In the last few years we have developed and launched KnowledgeShare, an online tool for improving access to library and knowledge services, enabling health care colleagues to learn from the best evidence and from other each other. The system facilitates collaboration between NHS library and knowledge services and has already been licensed to ten health care economies in the region.

The development of KnowledgeShare is ongoing and there is growing interest from across the country in its adoption.

Over the next five years we will:

- Significantly increase the development of new online learning resources for BSMS, ensuring consistency across undergraduate and postgraduate curricula.
- Take a leading role in the development of a virtual learning environment for BSUH NHS Trust, drawing on our BSMS experience, which will improve access to education for all staff, including professional education and statutory / mandatory training.
- Continue to develop the KnowledgeShare system, launching modules for the management of information skills teaching, networking with health care colleagues, and reporting on activity.
- Seek to expand uptake of KnowledgeShare by health care organisations beyond Brighton and Sussex, promoting the system further afield and providing ongoing support to organisations that license the system to ensure its successful implementation.
- Support the online learning initiatives of partner organisations by ensuring that staff can access elearning content in our libraries and benefit from a robust IT / WiFi infrastructure.
A focus on service quality

According to the feedback we receive from members, our key services (answering enquiries, teaching, evidence updates and document delivery) are all provided to a very high standard. Maintaining this consistent quality service ensures that our colleagues continue to seek our expertise in finding and applying information, evidence and knowledge to improve services and patient care.

We constantly refine what we do based on feedback and discussion, reviewing each other's work, improving our processes, and finding innovative solutions to our challenges. The BSUH Values and Behaviours programme is an opportunity to reflect on how we interact with our members and further improve the quality of service that we provide.

One of the critical success factors for a team serving so many and such varied members is to provide a consistent level of service to everyone, regardless of their sector, profession, grade and any difficulties they may face in taking advantage of our resources.

This aim for a consistent, high quality service becomes ever more important as our team expands to take on new roles and the same tasks are carried out by more people in more dispersed locations.

We have worked hard over recent years to increase quality, standardise practice and introduce opportunities to review one another's output. This work will continue over the coming years and we will seek opportunities to reconsider the way services are delivered in order to balance flexibility, quality and efficiency.

Over the next five years we will:

- Improve our internal training and peer review processes to ensure that the quality of response at our enquiry desks, and the content of our evidence reviews, teaching and updating service is consistently high.

- Increase the accessibility of our resources and services by introducing appropriate assistive technologies to aid those with physical or learning difficulties.

- Explore new opportunities for simplifying access to resources and services through the use of technology, for example instant messaging for enquiries, online payments for printing, etc.

- Continue to seek input from our members on the quality of service they receive and their suggestions for improvements.

- Maintain the quality and timeliness of our document delivery service, evidence search service, evidence updates and teaching while continuing to adapt processes to improve efficiency while meeting members' needs.
The right resources at the right time

Access to information is shifting, not only from print to online but potentially from paid-for subscriptions to Open Access and from desktop to mobile. The online information resources we provide are extremely well-used and we must be at the forefront of managing these changes on behalf of our staff and students.

Whether studying, drafting a policy or proposal, or seeking a quick answer to a clinical question, our members increasingly expect instant access to the information they need.

Although this is not always possible, due to budgetary constraints, technical limitations, publisher restrictions, changes to national purchasing and so on, our aim is to continue to reduce these barriers where we can.

Freely available search tools such as Google and Wikipedia are convenient for answering questions in low-risk environments but cannot be relied upon for decision-making related to patient care and service improvement. We will therefore ensure that members have easy access to the best evidence for decision-making despite an increasingly diverse and fragmented online publishing environment.

We must continually re-evaluate the information resources that we make available, increasing the availability of research articles, books, health promotion materials and other resources based on the needs of our members.

We must also continue to increase both the proportion of resources that are available electronically and the number of our colleagues who have the skills and knowledge to access these resources for themselves.

Over the next five years we will:

- Continue to shift the balance of purchases towards electronic information resources, simplifying access, accommodating mobile resources and raising awareness of Open Access publishing where possible.

- Seek opportunities to embed selected online evidence-based resources into organisational systems such as websites and electronic patient records systems.

- Evaluate and analyse our book and journal stock, introducing a programme of stock takes, assessing book and journal usage and ensuring funds are spent appropriately to benefit all professions, learners and organisations served.

- Increase the number of staff and students able to use their NHS OpenAthens password to access electronic resources for themselves.

- Expand SABRE (the library catalogue for students and staff working across the universities of Brighton and Sussex) to include NHS holdings, and refresh our Library and Knowledge Service website, so that access to online learning resources is as straightforward as possible.
Engaging with our partners and expanding our role

Being hosted and primarily located within BSUH NHS Trust there is a natural tendency towards working with the staff and students in acute care. While these groups must remain a core focus of our work we must also ensure that health care staff and students from primary, community and mental health are fully engaged with the use of evidence in decision-making.

Our current pattern of usage across organisations broadly matches their relative size, but there is more work to be done on engaging with staff at Sussex Community Trust, Sussex Partnership Trust, our local authorities and our local clinical commissioning groups.

This will be particularly important in the coming years as health care activity and funding shifts towards community care.

The roles taken on by library and knowledge services continue to evolve, with increased involvement in learning technologies, knowledge management, research support and other areas. Providing health information directly to patients, for example, is an area with considerable potential for improving outcomes, particularly in relation to hospital satisfaction ratings.

We must take on new roles where we have the skills and knowledge to add value, continuing to promote the importance of basing practice on the best evidence, not simply the most convenient information.

Finally, we must be mindful of the uncertain and evolving funding arrangements for library and knowledge services and match service provision to the funding received from each organisation.

Over the next five years we will:

- Increase usage from mental health, community and public health colleagues by collaborating with local organisations to raise awareness of our services, continuing to make our resources more relevant and accessible and through effective outreach roles (seeking additional funding where necessary).

- Increasingly contribute to the evolving BSUH education and knowledge strategy, including involvement in trust-wide safety, quality and innovation initiatives, knowledge management, organisational development and income generation.

- Seek to increase our provision of information to patients and the public through partnership with public library services, participation in outreach to schools and colleges, and bidding to introduce a Patient Information Librarian role.

- Seek to increase our involvement in research support through partnership working with medical school and R&D staff, linking funding to research activity and facilitating the development of a collaborative research repository.

- Continue to use a wide range of tools and techniques, including social media, to raise awareness of our service, seek and respond to feedback from our members and promote the importance of evidence-based decision-making and innovation.
References and further reading


