UCL INSIGHTS: RESEARCH BRIEFING

Policy roundtable on digital healthcare

UCL and Department of Health policy roundtable on digital healthcare

On 14 September 2016, the Department of Health (DoH) and UCL jointly held a roundtable meeting at UCL to explore digital technologies, the potential for transforming healthcare delivery and the lessons that can be learnt from digitisation in other sectors, particularly banking, with a view to supporting patients in self-care tasks and improving NHS efficiency.

The meeting brought together 20 participants including academic experts, industry representatives (from the banking and retail sectors), those responsible for leading digital programmes in the NHS and senior DoH policy officials. This briefing outlines the key points of the discussion and provides several recommendations aimed at improving existing and future digital health programmes and policy.

Short presentations by the DoH, IMRG and UCL outlined the policy, industry and research challenge within sectors that use technological tools to encourage their customers to do more for themselves. Participants were asked to address the following **key issues**:

1. Identify the lessons learned from digitisation in banking and/or retail:
   - what other sectors have done to get customers to do more for themselves; and to what extent are customers **encouraged versus mandated**?
   - what kind of activities have been shifted to customers, and how extensively?
   - the motivation and main objective for getting customers to do more for themselves; how far it was achieved; and any **unintended consequences**?

2. Assess the extent to which these lessons can be applied to the health and care sector, in terms of the ease and impact of implementation, barriers and enablers.

3. Identify pertinent recommendations that could support the improvement of existing and future digital health programmes and policy.

Societal context

Electronic communications are increasingly important to the way we live our lives. People are increasingly accessing the Internet through their mobile phone and tablets. Innovation in the mobile sector is leading to new types of devices (e.g. smart watches and other wearable technologies) and new user interfaces that allow people to interact with mobile devices in a range of ways (e.g. speech recognition).

People are increasingly **making use of online resources** to engage with healthcare services (e.g. online appointment booking, online repeat prescriptions) and support greater understanding of their own health (e.g. NHS Choices Health A–Z Symptom Checker).

The combination of **increased access to technology and greater demand for online services** offers scope for delivering services more effectively and efficiently in response to patient demand. In other words, **digital technologies can be leveraged to transform healthcare delivery**.

Ensuring healthcare service delivery keeps pace with innovation and technological change without compromising on quality requires a **highly skilled workforce**, an outward approach, and joint working between government, industry, and academia.

Key lessons learned from digitisation in banking

The banking sector has traditionally been organised around different product lines (e.g. investment offers, mortgages, savings accounts) with customers wishing to access a particular service transferred between different product specialists. The need to introduce efficiency savings and meet public expectations that information and services should be available 24 hours a day, coupled with increased digital advances that have enabled new types of service platforms, has led to a move **away from siloed service delivery towards a focus on supporting customers to manage their personal 'financial health'**. This digital transformation – whilst still evolving – offers insights for the healthcare sector on how services can be redesigned and improved to meet the needs of the user and encourage greater self-care.

Firstly, providing **one-stop-shop secure access** to standard account functionality, such as checking balances, making payments and viewing statements, as well as supported email and 'chat' customer service and basic product information, has **reduced the need for customers to travel to a branch** to undertake routine banking transactions and account management activities. Online services have thus enabled customers to use self-serve via online channels rather than rely on (more expensive) face-to-face and call centre transactions.

Secondly, **digital transformation has happened in phases, over time, and alongside maintaining existing face-to-face, chat and telephone banking functions**. Maintaining functions has allowed an uninterrupted financial journey as customers can at different points choose to use different channels. This, in turn, has helped banks to deepen customer relationships.

Thirdly, **reconceptualising the customer relationship** from selling products and services to understanding customer goals and helping them to achieve those while maintaining overall financial health has been key to efficiency savings. For example, **developing personalised banking** by taking account of customers' life stages and personal goals, as well as gathering analytical insights into customers' needs. Banks can understand how to develop, prioritise, and tailor future products, services, and information to meet the objectives customers are trying to achieve and thus identify ways to improve the customer experience.

Applications for healthcare

Healthcare comes with its own unique set of opportunities and challenges that will require tailored solutions that evolve over time. The health sector is seeing a **shift in patient behaviour towards more consumer-focused and active service user involvement**. Patients remain the focus of care but with an emphasis on co-production of care between a physician and patient; as with banking, patient-centricity is essential to developing personalised and thus effective digital interventions.

Healthcare digital service provision will need to **identify and target populations most at risk** to prevent disadvantaging the more elderly population and those suffering from chronic diseases. This will necessitate discovering whole patient populations' motivations and their ease of use around digital to ensure that no one is left behind.

Digital technology is **a game changer in terms of how services are designed and delivered**, as well driving a cultural shift occurring amongst patient populations. Realising this potential whilst also engaging staff to manage growing expectations of technological development appropriately will require service users and healthcare professionals with appropriate knowledge and skills. Initiatives such as '**digital eagles**' – demonstrators of technology – to show the application and success of digital interventions could be vital. Digital eagles could be co-located within high street shops, places of work and areas with high footfall suitable for such training.

Conclusions and policy implications

Digital technology presents an opportunity to better integrate health and care services, move beyond individual service silos, support greater self-care, and empower individuals to take charge of managing their own conditions. To enable this:

- everyone should be able to access reliable information about health and wellbeing online and, through secure portals where necessary, access help and advice in a variety of ways (live chat, email, text and phone)
- both service users and clinicians should be equally encouraged and supported to make the most of digital tools and services
- populations with low levels of digital literacy should be targeted to guard against the risk of creating a 'digital divide'
- there is no need for digital services to completely substitute conventional services – not all interactions will be appropriate to conduct via digital means, and some people will require more support than others in moving to digital channels
- technology demonstrator initiatives, such as 'digital eagles', could be located within easily accessible places for people to take advantage of self-care training and support.

Participants

Senior policy officials from the Department of Health (e.g. Strategy, Implementation and Performance, Information and Transparency, Informatics Assurance), leading academics (e.g. UCL Computer Science, Epidemiology & Public Health, Human-Computer Interaction and Health Informatics) and Industry experts (e.g. Bupa, Microsoft, IBM, Innovate UK, the ICS, IMRG, Royal Bank of Scotland).