

HIGH IMPACT MOBILE CHANGES TO SAVE THE NHS MILLIONS AND IMPROVE CARE

EXECUTIVE SUMMARY

The NHS needs to find between £15 and £20 billion worth of savings over the course of the next five years. Deployments already in place in the NHS show significant savings across all care sectors are being achieved through better use of mobile connectivity for frontline staff.

As well as improving care and delivering savings, security of patient information has improved, by using highly secure, encrypted mobile platforms accredited by CESG, the security arm of GCHQ. This ensures patient data is protected on servers, in transmission and on mobile handsets, is fully auditable and can be wiped remotely should mobile devices be lost or stolen.

a. Community care

NHS community care services account for £11bn (more than a tenth of NHS spending) and employ a quarter of the clinical workforce in the NHS.

In **Portsmouth, midwives** use BlackBerry-enabled digital pen and paper to cut administration time when taking patient notes. Combined with GPS navigation and an easy-to-access panic buttons to protect community-based staff, this solution has more than halved the time spent on administration to achieve considerable savings on transport costs and time. If rolled out across entire community midwifery service, savings would exceed £32 million in England.

Northern Doctors Urgent Care service has used live, secure access to clinical records, to view and immediately record patient notes in their out of hours service. With minimal training, NDUC has achieved savings of £100,000 per year across the service with the potential to generate more than £5 million of savings if rolled out across England.

b. Accident and emergency care

Analysis by the NHS Institute suggests each ambulance trust could save between £1 million – £10 million by better managing variation in emergency admissions. **East Midlands Ambulance Service** uses a BlackBerry-enabled Emergency Care Solution that replaces paper-based report forms to give real-time access to patient details and wireless transfer to and from Hospitals and A&E, cutting the need to return to base to cover administration.

c. Acute care

Significant opportunities exist to improve clinical productivity, reduce turnaround time for hospital discharge data and minimise prescription errors. **Digital dictation** solutions already in place in **Sheffield hospital** are significantly improving the turnaround time to produce accurate medical records, increasing their accuracy and also allowing clinicians to spend more time with patients.

d. Moving care out of hospital and into patients' homes

Research suggests "smarter use of telecare technology... could prevent 70,000 older people from entering residential care every year" which would deliver in the range of £5-7bn of cost savings to the adult social care budget by 2015-16. While monitoring COPD in patients' homes could potential save £666m by 2015-16 through reduced admissions. Other research suggests home-based healthcare for appropriate patients could generate total savings of £540m- 1.2bn.

e. Across the NHS

The leaked McKinsey report suggested that spare NHS land and buildings could be sold to make £8.3 billion so long as the NHS can introduce mobile working and hot desking. Standard BlackBerry business productivity solutions allow mobile workers to Improve decision making, increase responsiveness and access key information immediately at the point of need. Research shows that the average user gains 250 hours of productive time per year and team efficiency improves by 38% as mobile staff can keep work moving for others while they are out of the office.

CONTEXT

The Pre-Budget Report in December 2009 confirmed that the NHS will need to find between £15 and £20 billion worth of savings over the course of the next five years. The DH has rightly identified that telecare and telehealth could yield significant savings.

Yet there are many other easy-to-achieve improvements through better use of mobile connectivity for frontline staff. As well as improving the quality of care, deployments already in place in the NHS show significant potential savings through cutting waste and unnecessary time spent on administration. This paper outlines some of the opportunities across the health service and begins to quantify those savings.

Because these solutions rely on tried and tested technology, much of which is already in place in the NHS, they can be deployed quickly with minimal training and for a low initial investment.

The solutions identified below have all been achieved using highly secure, encrypted mobile platforms accredited by CESSG, the security arm of GCHQ, for use across the public sector. This ensures patient data is protected on servers, in transmission and on mobile handsets, is fully auditable and can be wiped remotely should mobile devices be lost or stolen.

f. COMMUNITY CARE

The challenge

Inefficient use of resources, unnecessary time spent travelling to complete administrative tasks and a lack of good quality patient information available in real time.

NHS community care services account for £11bn (more than a tenth of NHS spending) and employ a quarter of the clinical workforce in the NHS.

The Audit Commission¹ has shown community care is a key area where NHS organisations need to improve productivity. With DH figures showing a 14% drop in health visitor staff between 2004 and 2008 from 10,137 to 8,764, it is essential that time spent on administration is minimised so that more time can be spent with patients.

In December 2009, the Department of Health² identified the lack of access to secure mobile technology to frontline staff as one of the principal reasons for community staff returning to base to file reports. This is a significant factor behind the huge variability in the number of patients seen by community-based staff. Addressing this variability could help achieve the 15% efficiency saving identified in the leaked McKinsey report that could be achieved by increasing the average number of visits per day by district nurses from 5.6 to 6.6. According to Dr Penny Dash, former head of strategy at the DH and now of McKinsey, "only 20 to 30 per cent of a district nurse's time is spent on actually caring for patients, with far too much paperwork"³

Key improvements by using secure mobile technology

- Keep track of community-based staff so planning and scheduling can continually match demand and capacity throughout each working day
- Deploy GPS navigation to ensure staff minimise time spent travelling
- Allow community-based clinicians to view medical records in the field without having to waste time returning to base

¹ [More For Less Report](#), Audit Commission, 2009

² [Transforming Community Services - Improving Information Stakeholders](#), Department of Health, 2009

³ [Financial Times](#), 11 Feb 2010

- Give clinicians the tools to enter patient data while with patients and eliminate duplication of record taking, e.g. through digital pen and paper or directly onto the mobile device according to individual choice
- Protect community-based staff with an easy-to-access panic button

Examples already in place in the NHS

1. Portsmouth midwives

- Proposition: scalable, flexible and easy-to-use community midwifery service using BlackBerry-enabled digital pen and paper to cut administration time when taking patient notes. System also includes lone worker safety and sat nav.
- Key benefits: average time spent on most administrative tasks including writing up records more than halved, and considerable savings on transport costs and time. If rolled out across entire community midwifery service, savings would exceed £32 million in England.
- [More information](#)

2. Northern Doctors Urgent Care – out of hours GP provision covering 1 million patients in the North East

- Proposition: live, secure access to NDUC's clinical records, to view and immediately record patient notes
- Key benefits: immediate uptake by 95% of doctors after minimal (10-15 min) training; care quality improves because available information is accurate; significantly less time by doctors spent on admin and more on patient care. Savings of £100,000 per year across the service with the potential to generate more than £5 million of savings if rolled out across England.
- [More information](#)

g. ACCIDENT AND EMERGENCY CARE

The challenge

Analysis by the NHS Institute of Better Care Better Value indicators⁴ suggests each ambulance trust could save between £1 million – £10 million by better managing variation in emergency admissions. This is supported by an [NHS Information Centre report](#)⁵ that revealed significant variation in the speed with which patients are dealt with by their local A&E departments.

Key improvements by using secure mobile technology

- Use real-time access to patient information to allow ambulance staff to treat patients in the community where clinically appropriate and reduce time spent travelling to and from base
- Enable ambulance staff to transfer rich data about patients while in transit to enable emergency care teams to prepare for patients before they arrive at hospital

Example already in place in the NHS: East Midlands Ambulance Service – “see and treat” visits

- Proposition: Emergency Care Solution that replaces paper-based report forms to give real-time access to patient details and wireless transfer to and from Hospitals and A&E
- Key benefits: no need to return to base to cover admin so staff can be away from the Trust for longer and focus on care delivery; fewer calls with base
- [More information](#)

h. ACUTE CARE

⁴ [Better Care Better Value For Commissioners](#), NHS Institute, 2009

⁵ [A&E patient journey analysis of 2007-08 HES data](#), NHS information Centre, 2009

The challenge

- **Improve clinical productivity:** the least productive 10% of doctors and nurses see one fifth of the patients seen by the most productive 10% according to leaked McKinsey report
- **Improve hospital discharge data and turnaround time** would improve care and reduce time wasted at primary care level. A CQC investigation⁶ revealed:
 - 81% of GP practices said details of medicines prescribed by hospitals were incomplete or inaccurate 'all of the time' or 'most of the time',
 - Only 53% of practices in the study said summaries were received in time to be useful for a patient's first follow-up GP appointment either all 'of the time' or 'most of the time'
- **Reduce prescription errors.** GMC research⁷ showed that of 124,260 prescriptions across 19 hospitals and around 9% contained errors. Of these, 40% were accounted for by prescriptions where the writing was illegible or the wording ambiguous.

Key improvements by using secure mobile technology

- **Digital dictation** solutions can significantly decrease the turnaround time to produce accurate medical records, reduce time spent on administration and improve increasing the level of participation by clinicians. In turn, this increases the accuracy of records while also allowing clinicians to spend more time with patients.

Example already in place in the NHS: Sheffield hospital – digital dictation

- Proposition: digital dictation application installed on BlackBerry smartphones enabling updates to patient records to be dictated and submitted wirelessly
- Benefits: productivity is significantly enhanced through faster note taking, updated patient records and workflow improvements. Digital dictation can also contribute to significant improvements in the turnaround rate and accuracy of discharge information including patient letters. The Care Quality Commission highlighted the importance and variability of current discharge information and the Quality Framework for Community Services draft indicators heralds a new focus on this area.
- [More information](#)

i. MOVING CARE OUT OF HOSPITAL AND INTO PATIENTS' HOMES

The CBI report, [Doing more with less](#) suggested that “smarter use of telecare technology – for example, fall prevention technology and monitors – could prevent 70,000 older people from entering residential care every year. This would deliver in the range of £5-7bn of cost savings to the adult social care budget by 2015-16, giving older people and their families the confidence to stay independently in their own homes”.

In addition, use of telehealth care monitors in patients with COPD “has reduced the number of admissions to hospital by 50%. If half of hospital emergency admissions across England were avoided – around 50,000 patients – the total saving by 2015-16 would be £666m”

The [Hospital care at home](#) report prepared by Dr Foster Intelligence for Healthcare at Home found that patients strongly prefer treatment at home rather than in hospital and that at a national level home-based healthcare for appropriate patients could generate total savings of £540m-1.2bn comprised of:

- £180m - £210m for long-term and other selected ACS conditions
- £217m - £837m for enhanced supported discharge
- £46m - £73m for specialised chemotherapy services
- £160m for end-of-life healthcare

⁶ [Managing Medicines Special Review](#), Care Quality Commission, 2009

⁷ [Research commissioned](#) by the General Medical Council, 2009

These findings are supported by a 2008 study in Northern Ireland, *Home Healthcare – an economic choice for the health service*, by the [Northern Ireland Health Economic Group](#), that concluded that on average the costs of delivering out-of-hospital care to 275 patients over an entire year was one fifth of the cost of comparable in-hospital treatment.

j. ACROSS THE NHS

The challenge

- The leaked McKinsey report suggested that spare NHS land and buildings could be sold to make £8.3 billion so long as the NHS can introduce mobile working and hot desking.

Key improvements by using secure mobile technology

Mobile access to standard business productivity solutions that allow mobile workers to:

- Improve decision making
- Keep work moving forward
- Increase responsiveness
- Reduce administration time
- Access key information immediately at the point of need

Research conducted by an IPOS Reid BlackBerry ROI survey⁸ found that the average user converts one hour of downtime into productive time per day. This equates to 250 hours per user per year in recovered downtime. In addition to their own personal productivity, the research found that users increase team efficiency by 38% as it allows mobile staff to keep work moving for others while they are out of the office.

For more information contact Daniel Morrison-Gardiner on +44 (0)772 568 4032 / dmorrisongardiner@rim.com or Elizabeth Kanter on +44 (0)7825 761841, ekanter@rim.com.

⁸ [IPSOS Reid 2007 BlackBerry ROI Study](#)