The Economic and Wider Benefits of Clinical Access at the Point of Care from Hospedia

This White Paper draws on substantive analysis, performed by Deloitte, of the Hospedia Clinical Access Service, alongside recent industry commentary, to assist hospitals in creating an evidence base and business case for using the service to improve patient care while supporting Cost Improvement Programmes (CIPs)

Contents

Executive Summary 3

Introducing the Need for Clinical Access 3

The Quantitative Benefits of Hospedia Clinical Access 5

The Qualitative Benefits of Hospedia Clinical Access 6

The Wider Benefits of Hospedia Clinical Access 7

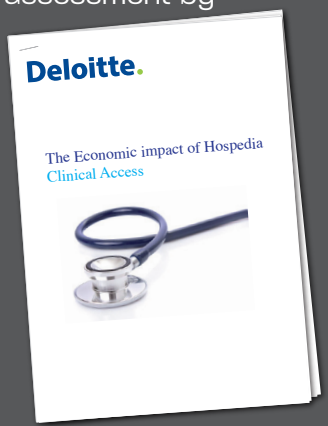
How Hospedia Clinical Access Works 8

Implementation - Process and Support from Hospedia 9

How Hospedia Clinical Access is Supporting Existing Users 10

Conclusion 11

Based on economic assessment by



Executive Summary

The growing pressures on the NHS Acute sector to reduce costs while improving patient care indicate a serious need for Trusts to identify efficiencies to current processes and utilise existing resources to deliver on their Cost Improvement Programmes.

Investing in Clinical Access at the Point of Care from Hospedia has been validated by Deloitte to deliver financial benefits worth at least £395k per annum in a typical hospital, supporting not only cost improvement goals but also patient engagement and involvement, improvements in patient care and NHS initiatives such as the drive to become paperless.

This paper draws on substantive analysis performed by Deloitte, as well as recent industry commentary, to provide an independent evidence base for the use of Clinical Access from Hospedia in your hospital.

Introducing the Need for Clinical Access

Against a backdrop of the NHS needing to find £15-£20 billion of savings[1], the time is right to consider how existing infrastructure can be better leveraged to support increased productivity, reduce administrative burdens and deliver Cost Improvement Programmes (CIPs). Guidance from Monitor, the industry watchdog, suggests that "the majority [of CIPs] should be based on changes to current processes, rather than 'top-slicing' current budgets."[2]

Clinical Access from Hospedia provides a method by which hospitals can utilise the power of existing IT systems directly from the patient bedside, improving clinical workflow and patient experience without the barriers to use that affect mobile solutions – such as the high cost of purchasing and maintaining the devices and the inherent information governance concerns.

IT solutions can deliver significant benefits to patients and clinicians, from improvements in patient well-being and reduced length of stay to clinical efficiencies, streamlined workflows and reduced paperwork. Frequently, however, these benefits go unrealised as a consequence of the inherent issues surrounding increasing IT access in wards and choosing the right device, ultimately resulting in clinical staff duplicating effort and working inefficiently.

There is a persistent and clear focus on improving patient care, with a current theme focusing on increased patient involvement and engagement[3] – this brings to the foreground that the point of care is a key area both where IT access needs to be always available and changes in clinical workflow should be addressed.

In the constant drive to increase quality and meet productivity targets, more and more information needs to be recorded and shared during the patient journey, leading to concerns that nursing staff are "drowning in a sea of paperwork"[4]; the natural response to such a concern being to take the NHS paperless.[5]

---

1 http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_113807.pdf
2 Source: Audit Commission Paper: Delivering sustainable cost improvement programmes - January 2012
3 http://www.kingsfund.org.uk/projects/gp-inquiry/patient-engagement-involvement
4 Source: Royal College of Nursing (RCN) Annual Conference 2013
5 http://www.ehi.co.uk/news/ehi/8315/hunt-wants-paperless-nhs-in-five-years

©Hospedia Ltd 2014

Going digital is a key driver of NHS priorities, and Clinical Access provides a platform from which hospital staff can access a range of applications directly at the bedside, including; Picture Archiving and Communications Systems (PACS), blood results and ordering, e-pharmacy, patient admissions systems, and even patient records, reducing the reliance on paper based processes.

The Hospedia T3 bedside system is always on, always powered and always securely networked, and most importantly is multi-purpose, driving down the investment needed to provide increased access to IT at the point of care and supporting the reduction in capital budgets required in the current climate.

Establishing the business case for IT access and workflow systems, alongside credible ROI calculations, is a major sticking point in the strategic decision making process for NHS Trusts. We are therefore delighted to be able to provide independently produced business case support for Clinical Access, detailing not only the estimated financial savings but also the indirect benefits to patients and staff, based on a number of case studies produced by Deloitte detailing the quantitative and qualitative benefits arising from Hospedia's products and services.

Using the Treasury Green Book Methodology, including in person interviews and deriving calculations from real world examples, Deloitte evaluated the economic impact of using Hospedia's Clinical Access service to provide clinical workflow improvements in the hospital environment.

Deloitte calculated the quantitative, qualitative and indirect benefits of using Clinical Access as part of their thorough analysis of the service, identifying time savings and production savings, as well as patient experience and reputation benefits.



Figure 1: Methodology Diagram[6]

[6] Source: Deloitte Report "The Economic benefits of Hospedia. Supporting hospitals and patients"

©Hospedia Ltd 2014

The Quantitative Benefits of Hospedia Clinical Access

"It is estimated that Clinical Access can deliver benefits of £395k per annum in a typical hospital"[7]

The £60k production saving associated with Clinical Access represents savings generated through simply avoiding the volume of paper currently produced for each in-patient[9] by accessing electronic patient records (EPRs) directly from the bedside.

Benefits	Hospitals p.a
Production saving	£60k
Time saving	£335k
Total benefits	**£395k**

Figure 2: Economic Benefits of Clinical Access[8]

Handling patient records, including processing and transporting medical notes, requires significant administrative resource. Interviews with NHS Managers confirm that using Clinical Access to deliver efficient electronic transmission of patient records, and time saved on handling, duplicating and searching for medical records, releases the equivalent of 14 members of staff per year, time that can be spent on delivering patient care and producing a time saving valued at £335k per annum.[10]

These figures don't address the additional cost savings of using Hospedia's network-connected devices already provided at the point of care, rather than needing to invest in alternative devices such as laptops, tablets or Computers on Wheels (COWs).

The potential capital investment savings leveraged by Clinical Access are influenced by the stages of a hospital investment cycle. For example, a hospital preparing to invest in IT access at the point of care would realise enormous savings by choosing to use the multi-purpose Hospedia system over the option of purchasing additional devices. Hospitals already employing alternative devices can still gain significant financial benefits by adopting Clinical Access, however, through reducing the on-going costs associated with maintenance, repair and replacement of often fragile and easily misplaced devices.

7 Source: Deloitte Report "The Economic Impact of Hospedia. Clinical Access"
8 Source: Deloitte analysis
9 The number of pages was estimated by Deloitte to be between 75 and 125 sheets. Calculations above are based on the average figure of 100 sheets
10 Source: Deloitte Report "The Economic Impact of Hospedia. Clinical Access"

©Hospedia Ltd 2014

The Qualitative Benefits of Hospedia Clinical Access

"Hospedia's Clinical Access can potentially support improvements to patient experience, align with government initiatives and help to protect hospitals' reputations"[11]

Having, and more importantly using, powerful computer functionality at every patient bedside can provide benefits far in excess of the pure cost savings leveraged by Clinical Access.

Patient Experience and Personalised Care

Research indicates that patients are reassured by discussions with clinicians at the point of care[13]. The Health Secretary, in response to the Caldicott Review on information governance, stated that technology can only have a transformational effect on healthcare if the agenda respects the relationship of trust that exists between a medical professional and their patient.[14]

"...Patients want nurses by their bedside, not ticking boxes"[12]

Using Clinical Access to view patient information at the point of care puts technology in the position of being able to strengthen the relationship of trust, showing patients how their data is being accessed and involving them in decisions about their care.

Government Initiatives

According to the National Director of Patients and Information for the NHS Commissioning Board, the NHS should aim to be paperless by the end of 2018[15]. As part of the quantitative cost savings already identified, Clinical Access is ideally placed to drive significant progress in achieving a paperless hospital environment through reducing the use and duplication of paper records.

Deloitte have also identified a number of national policies where Clinical Access can support hospitals in compliance. With significant financial incentives surrounding VTE risk assessments, the NHS Safety Thermometer and the Friends and Family Test, Clinical Access can potentially help to achieve CQUIN payments of up to £750k per annum.

Reputation Protection

Almost 2 million patient records are lost each year across the NHS[16]. Clinical Access can help to reduce the risk associated with losing patient records by providing secure electronic access on a device that won't be lost or stolen. As well as reducing the risk of reputation damage through the loss of patient records, Clinical Access can also help avoid the punitive fines associated with data being lost.

---

[11] Source: Deloitte Report "The Economic Impact of Hospedia. Clinical Access"
[12] Source: Dr. Peter Carter, RCN Chief Executive and General Secretary, Royal College of Nursing (RCN) Annual Conference 2013
[13] http://www.ncbi.nlm.nih.gov/pubmed/21480494
[14] https://www.gov.uk/government/news/health-secretary-to-strengthen-patient-privacy-on-confidential-data-use
[15] http://www.ehi.co.uk/news/ehi/8315/hunt-wants-paperless-nhs-in-five-years
[16] Source: Deloitte Report "The Economic Impact of Hospedia. Clinical Access"

©Hospedia Ltd 2014

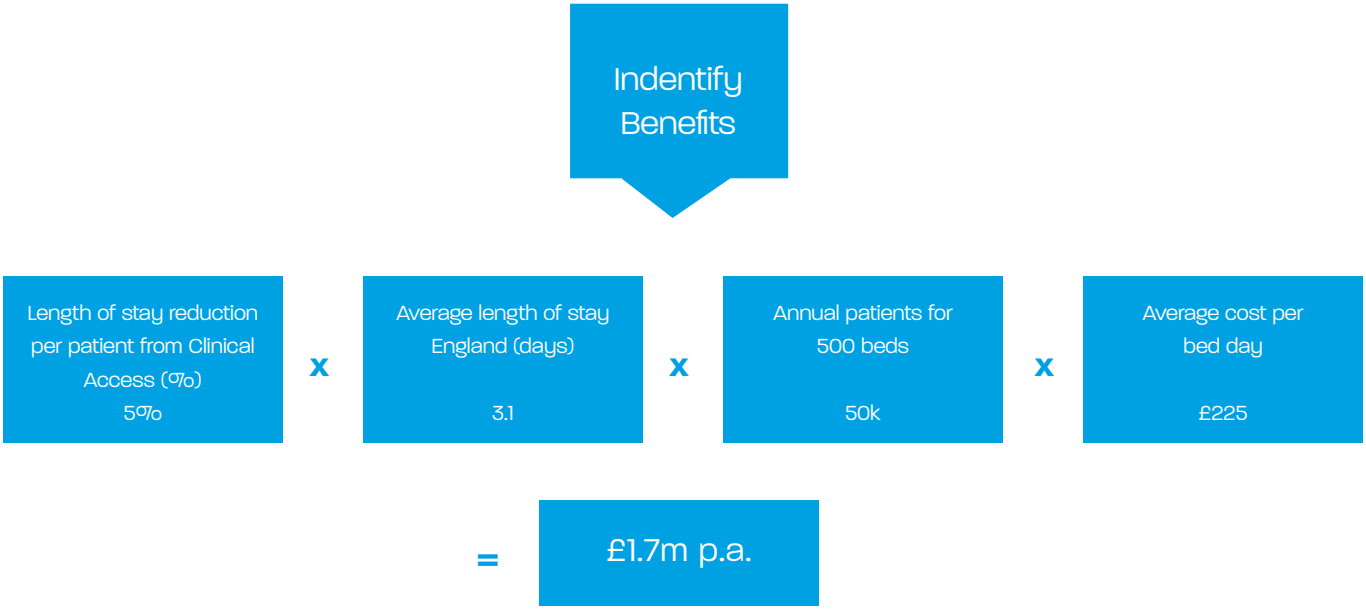
The Wider Benefits of Hospedia Clinical Access

Clinical Access can provide even wider benefits to hospitals, beyond those already identified. One such example, identified through Deloitte's discussions with NHS managers, is the potential to use Clinical Access alongside a hospital's patient flow management software to generate substantial further savings.

The management tools provided at the bedside, through Clinical Access, can be used to update and share bed occupancy information in real time, helping to facilitate more timely admission and discharge, supporting reductions

in length of stay and releasing a significant efficiency saving.

> "As an example, a 5% reduction in length of stay is estimated to generate efficiency savings of £1.7m per annum"[17]



[17] "5% is the assumed length of stay reduction Clinical Access may help to achieve. Based on length of stay reductions from other bed management tools, such as Hospedia's ExtraMed IPFM, 5% represents a conservative approach" – Source: Deloitte Report

[18] Source: Deloitte analysis

©Hospedia Ltd 2014

How Hospedia Clinical Access Works

> "Having worked with a lot of IT suppliers in my career, it has been a pleasure working with Hospedia. They have been incredibly responsive, and helped us to get our systems running on the terminals in just a few weeks. The doctors are extremely enthusiastic, and find the terminals so easy to use – they love that they only ever have to log in once!"
>
> Jas Cartwright, Head of Clinical Informatics, Worcestershire Health ICT Services

Hospedia's Clinical Access, allows hospitals to access their own applications simply and effectively, at the point of care. The Hospedia bedside units have been configured to securely identify a member of staff through a personal smartcard or RFID, which switches the bedside units to a Clinical launchpad, or portal.

From the Clinical launchpad, hospitals can enable access to individual browser applications or access complete virtualised desktops, providing access to Trust I.T. environments and applications.

Providing both nurses and clinicians with decision making information and data capture at the point of care supports the NHS overall goal of becoming paperless, while maintaining a vital connection to patient care. Chair of the Intellect Health and Social Care Council, Andrew Hartshorn, cautions that the NHS shouldn't strive to become paperless for the sake of being paperless, but that joined-up processes are necessary to generate efficiencies and ensure a positive patient experience.[19]

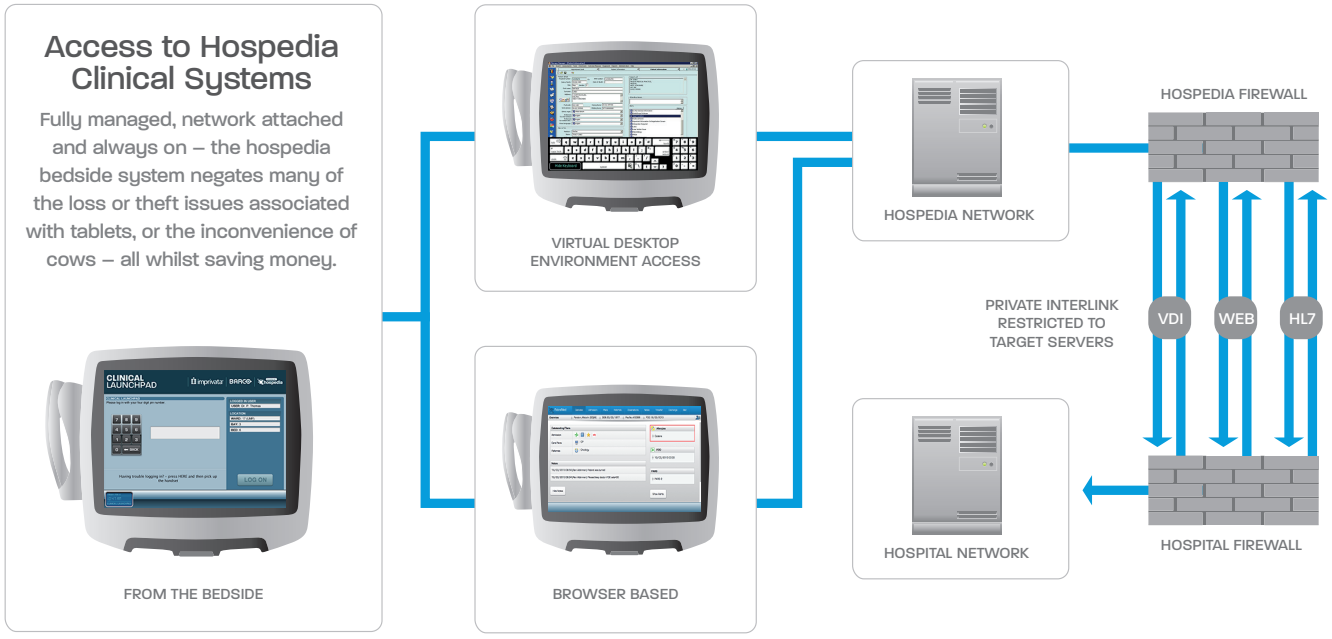


Figure 4: Network Connectivity Diagram[20]

The importance of sharing data, listening to patients and enabling patient choice through information provision are key messages from the Francis report, all of which can be achieved and supported through providing access to clinical information at the point of care.[21]

[19] http://www.ehi.co.uk/news/ehi/8480/paperless-nhs-possible---intellect
[20] Source: Hospedia
[21] http://www.midstaffspublicinquiry.com/report

©Hospedia Ltd 2014

Implementation - Process and Support from Hospedia

Post contract, a dedicated Hospedia commissioning and implementation team is provided to ensure the smooth installation and delivery of the project. No disruption to either normal ward routines or the patient media service is experienced during set up of the clinical access systems.

A network interconnect is installed between the Hospedia infrastructure and the hospital network. This will create a firewalled connection between the two infrastructures, providing the necessary security and connectivity to support Clinical Access.

Recognising the value of single-sign on (SSO) solutions in creating efficient workflows and providing unobtrusive IT access during patient interaction[22], the Hospedia system integrates with SSO systems such as Imprivata or Vergence, to provide a seamless user experience.

1	Joint working between NHS and Hospedia teams to establish Connectivity and Test environment
2	Project Kick-off meeting to agree goal milestones and resources
3	Engage IT and clinical teams in User Acceptance Testing (UAT) and feedback sessions
3	Prepare system for live trial testing based on UAT signoff and clinical input
5	Trial in single area to embed awareness and enable Train the Trainer approach
6	Rollout to wards with Hospedia and Trust support teams
7	Ongoing support, including engagement in Hospedia User Groups to enable Trust contributions to the product roadmap

Figure 5: Implementation Process[23]

[22] http://www.ehi.co.uk/news/acute-care/8544/oxford-adds-sso-to-virtual-desktops

[23] Source: Hospedia

©Hospedia Ltd 2014

How Hospedia Clinical Access is Supporting Existing Users

The power of Hospedia's Clinical Access service is already supporting hospitals in delivering clinical workflow improvements throughout the UK. A few examples of how hospitals are using the system are detailed below.

Guy's and St Thomas' NHS Foundation Trust

Guy's and St Thomas' hospitals are using Clinical Access as part of their overall device strategy from both an IT and Clinical perspective.

From an IT management standpoint, using Microsoft Remote Desktop Services through a Microsoft Internet Access Gateway, the Trust is able to support access to secure information systems such as iSoft ICM and CSC MedChart – all within their existing security framework and with significantly less capital investment than alternative devices.

From a clinical staff point of view, having familiar and consistent access at every in-patient bed to ePharmacy supports the change in workflow needed to realise the true benefits of going digital, by easing the transitional process and minimising training needs.

Worcestershire Acute Hospitals NHS Trust

Worcester and Redditch hospitals are partway through a process of digitising all of their patient notes. Using remote desktop services, authenticated through Imprivata, they are accessing Orion Portal" through Clinical Access, directly at the point of care.

Once the digitisation process is fully complete and the new point of care workflow established, the hospital will move on to deliver wider patient care record access and ePharmacy applications.

©Hospedia Ltd 2014

Conclusion

It is evident through the case studies and the reports produced by Deloitte, as well as the NHS priorities identified throughout this paper, that Clinical Access is not only economically advantageous, it is also highly adaptable and powerful. From delivery of time and productivity savings, to alignment with national priorities and initiatives, it is clear that Clinical Access delivers significant support to patient care and CIPs.

> "...The driving ambition underlying the challenge to deliver greater productivity and a stable financial position is not only to maintain the quality of services to patients, but to improve it."
>
> The Kings Fund, February 2013[24]

Leveraging direct cost savings of £395k per annum, alongside numerous direct and indirect benefits, Clinical Access puts IT at the heart of the NHS Acute care environment, supporting front line staff in day to day activities while improving the hospital's bottom line.

Clinical Access has also been shown to improve the patient experience by promoting greater interaction with clinical staff through information being delivered right where it is needed, at the point of care.

Utilising a bedside device that also provides entertainment services to patients ties in to the concept of patient-centred care, the importance of which has been heavily emphasised following the Francis Enquiry.[25] Combining access to clinical information at the point of care with a familiar and ever-present device increases the interaction that can be achieved and promotes patient involvement and engagement.

[24] http://www.kingsfund.org.uk/publications/how-health-and-social-care-system-performing-february-2013
[25] http://www.midstaffspublicinquiry.com/report

©Hospedia Ltd 2014

About Hospedia

Hospedia is the world's leading provider of point of care systems in healthcare. Hospedia's Patient Centred Care Platform provides patient media, patient engagement and clinical workflow solutions that support hospitals, staff, patients and visitors worldwide, through powerful software, hardware and integration capabilities. The Platform delivers a range of services that make a real difference to patient care while providing clinical efficiencies and substantial financial benefits.

If this white paper has been of interest, and you would like more information about how the solution can be implemented to support your hospital priorities, please contact our team of experts. This paper summarises the case studies produced by Deloitte; our team can provide the full cases and work with you to help build a business case for individual circumstances, formulate an implementation plan that works around operational requirements and assess how to tailor the service to your specific needs.
clinicalaccess@hospedia.com

©Hospedia Ltd 2014