

# Printing in Healthcare

## A White Paper

How Can Print Management  
Dashboards Help to Address the  
Print Challenges in Healthcare?

November 2022

## Contents

Introduction.....	3
Key Trends in Healthcare.....	3
Covid as a Major Catalyst for Change.....	4
Healthcare Spending.....	4
IT Budgets in Healthcare.....	4
Printing in Healthcare.....	5
The Cost of Printing in Healthcare.....	5
Tangible Waste: Printing Resources.....	5
Intangible Costs.....	5
What Can Healthcare Organisations Do to Reduce the Cost of Printing?.....	6
How about Print Management Dashboards?.....	6
Benefits of Intuitive Business Intelligence Dashboards.....	7
The 7 Benefits of Print Management Dashboards.....	7
Sources.....	9

## Introduction

Across the world, whether run publicly or privately, hospitals and businesses have strict budgets with large overheads; so can't afford to waste time or money on inefficient printing issues. This is especially true in an industry where every pound or dollar spent on printing means fewer resources for patient care.

This White Paper considers the challenges around print management in the healthcare sector, and discusses how a better understanding of printing activity could be highly beneficial.

## Key Trends in Healthcare

As Forbes stated in early 2022 there are three key trends in healthcare - consumerisation, automation and consolidation.

(<https://www.forbes.com/sites/forbestechcouncil/2021/11/29/three-trends-expected-to-accelerate-for-healthcare-providers-in-2022>)

- **Consumerisation** – the growth in drop-in care and also virtual care, which has seen demand grow particularly in response to the Covid pandemic.
- **Consolidation** – in the US market, as pressures continue on margins and increased competition, there is increasing merger and acquisition activity in healthcare.
- **Automation** – staffing shortages in healthcare are driving the move to automating using digital assistants to help with appointment setting, symptom logging and appointment follow ups

### What are the major challenges to adopting technology in the health and care system?: (We asked respondents to rank their top four.)

#### Cultural Behaviours

54%

#### Outdated IT Infrastructure

46%

#### Lack of Funding

44%

#### Data Silos in Healthcare Organisations

30%

#### Complex NHS Procurement Process

27%



intuitive

[Source: making-healthcare-digital-tech-powered-health.pdf \(pwc.co.uk\)](#)

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## Covid As a Major Catalyst for Change

The healthcare industry is currently going through a period of seismic change, which will continue into 2022. Healthcare providers need to be prepared for every technological trend coming their way if they want to stay competitive and effective in this ever-changing environment.

In light of the Covid-19 pandemic, on-demand healthcare has seen strong growth in providers with the ability to deliver healthcare services remotely. Clinicians became empowered to engage with digital solutions and lead on enacting change, whether that's through using barcodes and scanners to identify patients and equipment to track and monitor the use of non-invasive ventilators during the pandemic, virtual wards for those recovering from COVID-19, or the switch to digital general practice.

However, Digital Transformation in the health and care system remains a huge challenge, and ambitious targets can be missed. One example is the 'Paperless 2020' ambition set in 2015 by the UK government – by 2019, only 12% of NHS trusts were fully digitised.

However, some of the greatest barriers to digital care remain: lack of interoperability between systems, ageing and inadequate digital infrastructure, inconsistencies across digital platforms, and the lack of necessary skills. In many cases and in many countries, there still workforces using clunky, analogue solutions for everyday problems.

Clinicians are working with fragmented systems which struggle to share data between different parts of the care system, which means there is still a strong reliance on printing and paper-based processes.

## Healthcare Spending

Healthcare spending in the United Kingdom (UK) as a share of the gross domestic product (GDP) has increased since 1990, where it was 5.1 percent. By 2020, healthcare expenditure in the UK amounted to 12.8 percent of the GDP (Source: Statista.com)

And in the US, health care spending grew 9.7% in 2020, reaching \$4.1 trillion or \$12,530 per person. As a share of the nation's Gross Domestic Product, health spending accounted for 19.7 percent.

(Source: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical#:~:text=U.S.%20health%20care%20spending%20grew,For%20additional%20information%2C%20see%20below.>)

## IT Budgets in Healthcare

Current spending on technology across local and national NHS organisations is around 2.7% of the total NHS budget. In 2017/18 this amounted to £3.5bn against a total budget of £130bn.

In the US, the average IT operating expense budget across approximately 4,660 hospitals is \$7.7 million. This is about 3% of the average total operating expense of \$238.2 million for these hospitals.

## Printing in Healthcare

Despite the many advances in digital transformation, paper-based resources are still prevalent throughout healthcare, for example:

- Appointment letters (and reminders)
- Patient records
- Leaflets
- Posters

These are all costly to produce.

A strong healthcare budgeting process can allow leaders to plan and establish priorities around care and clinical departments. A healthcare budget is an important tool to understand where funds are best spent and how to allocate capital among various departments and projects. This enables healthcare organisations to be more efficient in delivering effective and efficient patient care.

However, there needs to be an easy way for organisations to ensure effective departmental cross-charging to ensure that budgets are actively monitored and managed.

*Surrey and Sussex Healthcare Trust in the UK is a medium-sized acute hospital with a total income of almost £300m (2016/17). It serves a population of more than half a million people. This Trust spends approximately £450,000 a year on printing and faxes, a cost which includes maintaining and procuring printing equipment.*

## The Cost of Printing in Healthcare

The average 1,500-bed hospital prints 96M pages each year — at a cost of \$3.8M (source: Beckers Hospital Review <https://www.beckershospitalreview.com/finance/the-average-1-500-bed-hospital-prints-96m-pages-each-year-at-a-cost-of-3-8m.html>)

The average 1,500-bed hospital continues to print 8 million-plus pages a month, according to the report. At an average cost of \$0.04 per page, a 1,500-bed hospital can spend \$3.8 million on printing each year.

Let's take a look at where these costs come from.

### Tangible Waste: Printing Resources

Often the most visible source of excess costs, tangible waste refers to improper use of consumables like paper, toner and ink. Inefficient systems can result in duplicate print jobs or jobs sent to the wrong location and reprinted at the correct one. This causes significant physical waste — and it also means wasted money. When the cheapest printer ink goes for more than twice as much per ounce as Dom Pérignon Champagne, and the most expensive for nine times that, the costs start to hit home.

### Intangible Costs

Printing headaches are a thorn in the side of IT departments, draining their time from more valuable activities and forcing them to dedicate resources toward constant maintenance issues like support tickets or print configuration management.

Printing is critical to many healthcare operations, such as access to patient information. When printing operations fail, healthcare providers and staff can't print patient charts or forms to sign. Instead, providers are stuck standing around a printer, unable to care for patients because they can't add their medical histories to their file. Printing must be quick and reliable, able to keep things moving, otherwise critical issues like patient care or new patient processing will stall.

But all this tangible waste accounts for less than half of money lost to printing issues: 55% of the cost of ownership of printing devices are indirect costs like management, configuration, and end user productivity reduction.

Intuitive for PaperCut has also been implemented in a number of healthcare organisations. As Alex Taylor, Major Accounts Manager in Healthcare and Emergency Services from Konica Minolta explains:

*“The Healthcare sector is seeing sustained cost pressures. An often overlooked cost is print usage and in the past, data has often been hidden in static pdf and excel reports. No longer.*

*Our partnership with Intuitive Business Intelligence helps to overcome this lack of data transparency by presenting that data in useable dashboard format. Faster, reliable, easy to use, access to data from department, team, end user in a few short clicks helps to identify cost savings and take action on driving that cost down.”*

## What Can Healthcare Organisations Do to Reduce the Cost of Printing?

Three steps to take for hospitals to reduce printing costs:

1. Assess the total cost per page printed
2. Create a committee comprising representatives from IT, finance, supply chain, operations and security to manage printing
3. Capture data, analyse it and use it to find out where printing can be better managed

Many healthcare providers have already invested in print management software. These software packages, such as PaperCut, effectively allow healthcare providers to:

- Make cost savings through more effective printing.
- Ensure the confidentiality of patient information sent to printers.
- Make printing easy so that healthcare staff can focus on more important work

## How About Print Management Dashboards?

Having invested in software tools like PaperCut, many healthcare providers still face challenges around data visibility:

- In terms of reporting on print usage, hospitals have found that the standard style of reporting from print management software can be ‘clunky’ and simplistic with specific reports needing to be run and emailed to individual users each month.
- Healthcare providers need dashboards which will allow them to: understand the data, establish where the demand is coming from, understand printing trends and determine what is being printed across different departments so that they can be cross-charged.
- Healthcare providers are looking to understand where print cost trends are going and why. Once this information is visible, they can then create or adjust printing policies

And this is where Intuitive for PaperCut comes in. There are many ways in which Intuitive Business Intelligence can help healthcare providers understand these issues and can help to show the way that these organisations can achieve their goals.

## Benefits of Intuitive Dashboards

Many traditional Business Intelligence toolsets can take months or years to deliver, with traditional Business Intelligence implementations often very lengthy projects, requiring the specialist skills of BI knowledge workers.

Intuitive's approach of providing embedded Data Analytics and Dashboards which are pre-integrated with leading Print Management solutions means that healthcare organisations can quickly increase the value of the data held in their systems without needing specialist technical resources in-house.

In our experience, the *critical success factors* for print management dashboards are:

- Personalisation – is the data presented relevant to that user and quickly shows them what they need to know, without having to plough through pages of irrelevant content?
- Data Enhancement – is the user provided with more than “raw” data – for example rather than just reporting actual numbers, are these compared against targets, forecasts or historic trends?
- Actionable Information – does the data presented allow the user to take action to correct issues quickly?
- Seamless – is the user able to access the information wherever they are (for example on a tablet or phone in a departmental or budgetary review meeting?)
- Fit for Purpose – does the data answer the business questions relevant to that user?

Here are some of the initial key questions for healthcare that dashboards should be able to answer:

1. Which devices are being over and underutilised across the entire organisation?
2. How is print demand being generated across the hospital – and can we analyse by staff members, department and application to enable cross-charging to be implemented.
3. How can we manage our print costs down by using more efficient devices?
4. Can we see some early insight into volume trends for different parts of the organisation?
5. How are different departments/teams using our print estate?
6. Where are the print hotspots across the entire organisation?
7. How do volumes compare for colour/mono, simplex/duplex, print/scan?
8. Are we achieving our environmental targets for reducing print usage?

## The 7 Benefits of Print Management Dashboards

Modern Print Analytics should deliver the following key benefits:

1. Simple to use – to encourage user adoption across the organisation.
2. Designed to make data interaction easy for end users without any technical input required

3. Provide new ways of navigating through the data, simplifying the user journey for more powerful analytics.
4. Dashboards should be pre-designed to answer specific queries – in this case focused on print usage / patterns and costs across different users and departments.
5. The dashboards should be able to bring in external data from a range of systems for more powerful analysis e.g., costs against budget, and trends over time.
6. All dashboards should be fast to build and deploy – getting rid of the endless user waits for new reports to be developed by overstretched in-house IT teams.
7. Provide complete control over the look and feel of the user interface with colours and formats that match the organisation branding and style.

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