

# A Complete Guide to **Medical Records** Scanning

---



# About the Author



**Ruth Gooda**  
Head of Healthcare Solutions at  
Restore Digital

Ruth Gooda is the Head of Healthcare Solutions at Restore Digital and has more than 15 years' experience implementing information management solutions for high profile organisations looking to manage and reduce their paper, and improve efficiency through process change.

Over the past five years Ruth has specialised in the healthcare sector, advising on and undertaking some of the largest and most challenging medical record digitisation projects across the country.

“

Whilst Trusts are often discouraged by the initial investment necessary to move from paper to electronic data at a time when the NHS is under extreme financial pressures, the return on this investment is soon realised, not just by real estate savings but by the efficiencies that digital transformation delivers.

I am proud to have helped deliver many such projects and look forward to continuing this work with more Trusts in the future.

”





# Introduction

While most industries are already on the path to digitisation, **the healthcare sector is falling behind**, with only 25% of NHS Trusts considered to be 'paper free' at the point of care. However, strict regulations such as GDPR and the initiative for healthcare organisations to be paper free by the end of 2023 in the NHS 10 Year Plan are urgently driving the need for rapid digitisation across the healthcare sector.

There is an ever-increasing demand for the technology to **enable new ways of working that will improve and enhance patient services, experience and care whilst reducing overall costs**. For healthcare organisations, the pressure to do this can be overwhelming, however they must be prepared to meet these challenges head-on if they want to be on track with the NHS' plan for digital transformation. The COVID-19 crisis has allowed many Trusts to accelerate their digital programme with Government support.

One of the ways healthcare organisations can begin their digital transformation journey is through medical records scanning. In this guide, we outline everything that healthcare organisations need to know about digitising their medical records: from why paper medical records are causing issues in the healthcare sector, to how to choose a vendor for your document scanning needs.





# The problem with paper medical records

Despite the pressure to digitise, many healthcare providers are **still using legacy systems and manual processes**, including the use of paper medical records. As it stands, it currently costs the NHS **£300 million a year** to store and manage these records, money that could be better spent elsewhere by the NHS. On top of this, paper-based medical records pose huge challenges for healthcare organisations, including:



## Paper medical records are **prone to human error**

Physical paper records which will contain sensitive and private information are at risk of being misfiled or lost, **which could potentially have serious consequences**. Additionally, where paper medical records are being manually filed they become prone to mistakes happening, such as staff recording incorrect information, which increases clinical risk.

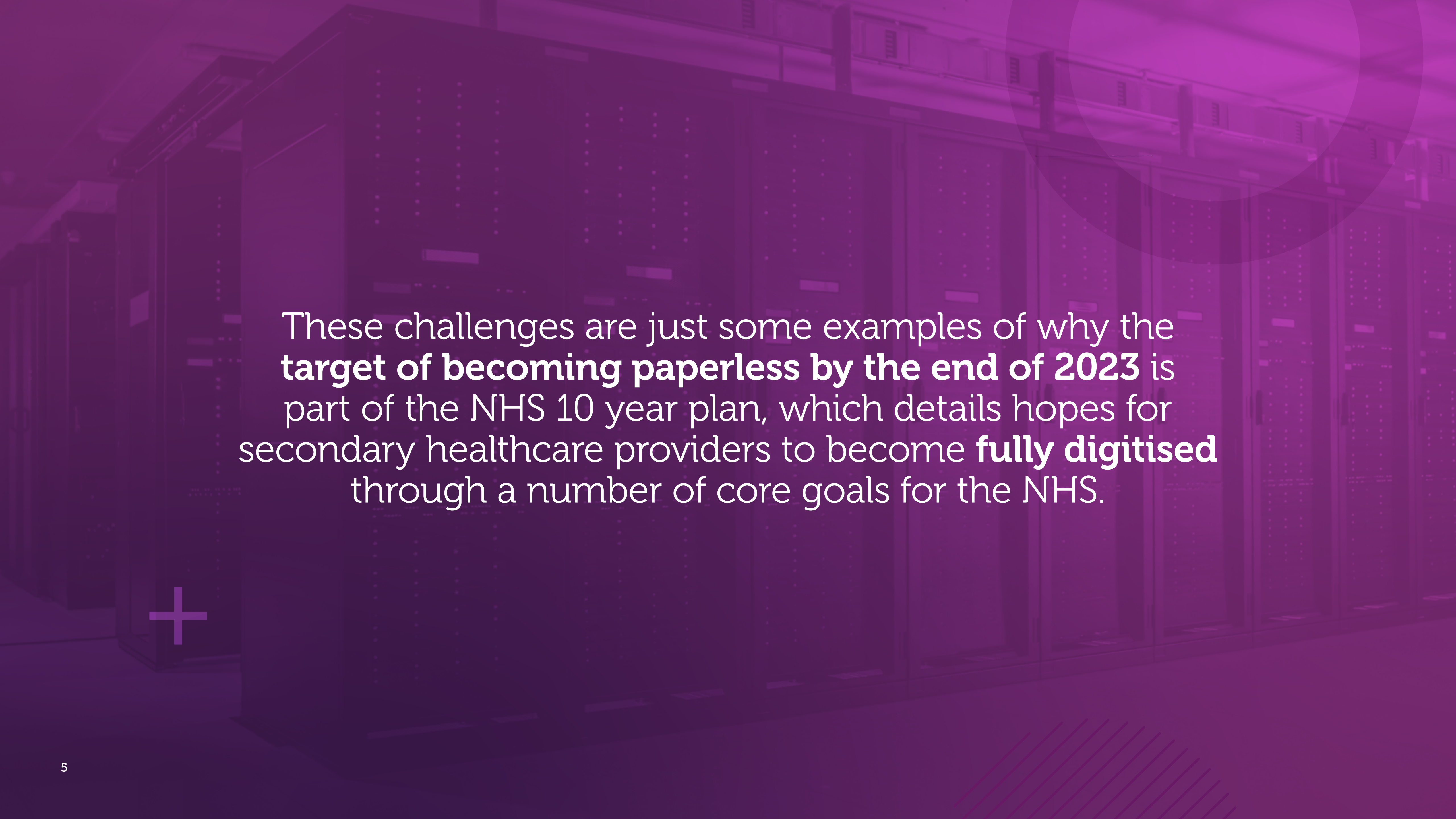
## Paper medical records **leave healthcare organisations open to compliance issues**

The introduction of data protection regulations such as GDPR means that now more than ever, medical records in paper format are particularly prone to risk, and ensuring those records are protected is of vital importance. If a disaster occurs such as irreversible damage or loss, this can put healthcare organisations at risk of serious compliance violations.

## Paper medical records are **expensive**

The true cost of managing paper medical records is often underestimated, and creating these documents is just one part of the costs. The NHS reported that the estimated annual cost of maintaining an onsite medical records library is **between £500,000 and £1 million for each Trust** - which could be better spent on additional medical resources.





These challenges are just some examples of why the **target of becoming paperless by the end of 2023** is part of the NHS 10 year plan, which details hopes for secondary healthcare providers to become **fully digitised** through a number of core goals for the NHS.





# Common records management challenges

Paper medical records and manual processes have proven to present **significant challenges for healthcare organisations** across the sector, including NHS Trusts, GPs and private practices.

These challenges are **jeopardising the quality of healthcare** that these organisations are able to provide, and impacting negatively the care that patients receive. These are just some examples of the challenges that healthcare organisations are facing when managing medical records that directly impact patient care:

- There are a limited or lack of effective systems for **opening, tracking and indexing medical documents**.
- **There is a lack of training, legal and regulatory tools** in place regarding records management.
- Staff have **no effective method** of capturing and preserving records.
- There is a **lack of knowledge of electronic records** and how they should be stored.
- The current records management system is **inadequate**.
- There are **no plans in place** for managing electronic records effectively and efficiently.

Each of these challenges leads to complications which can directly impact the care that patients receive: from loss of documents to inexperienced staff tasked with managing important medical records.

However, in order to avoid these issues, healthcare organisations **need to have an effective records management system in place** that ensures that the quality of healthcare isn't affected by poor internal processes.





# Why are only 25% of NHS Trusts considered **paper free**?

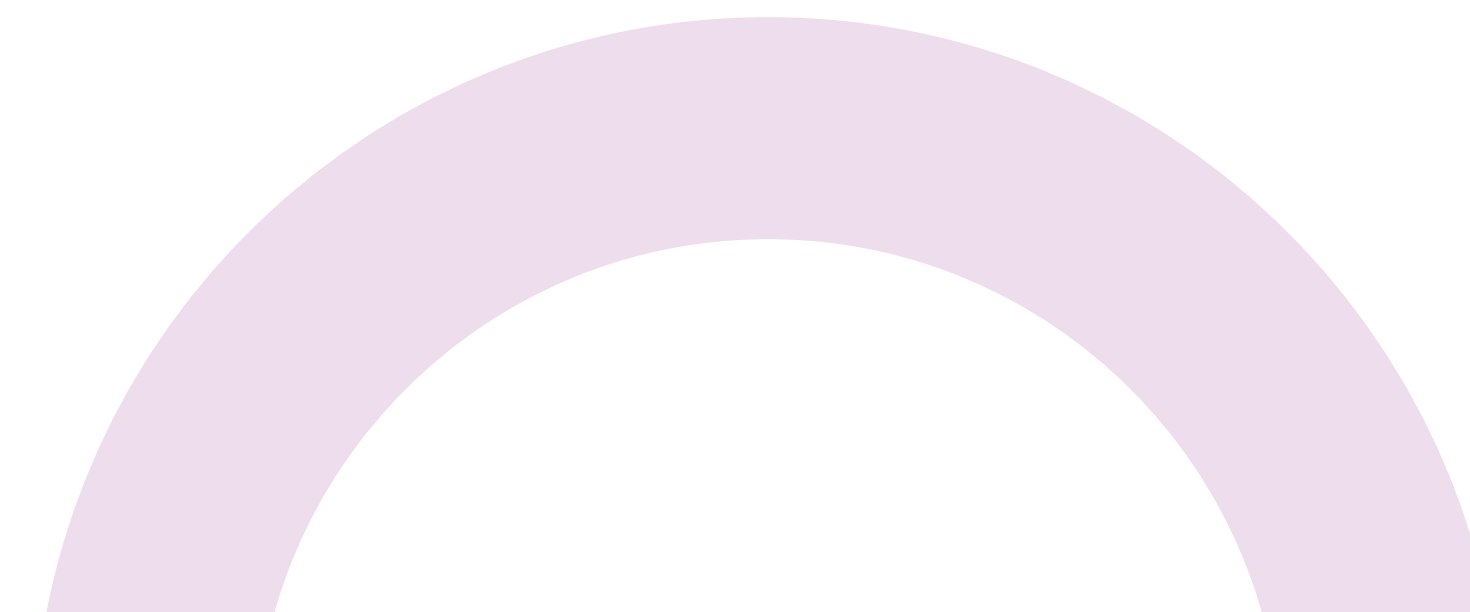
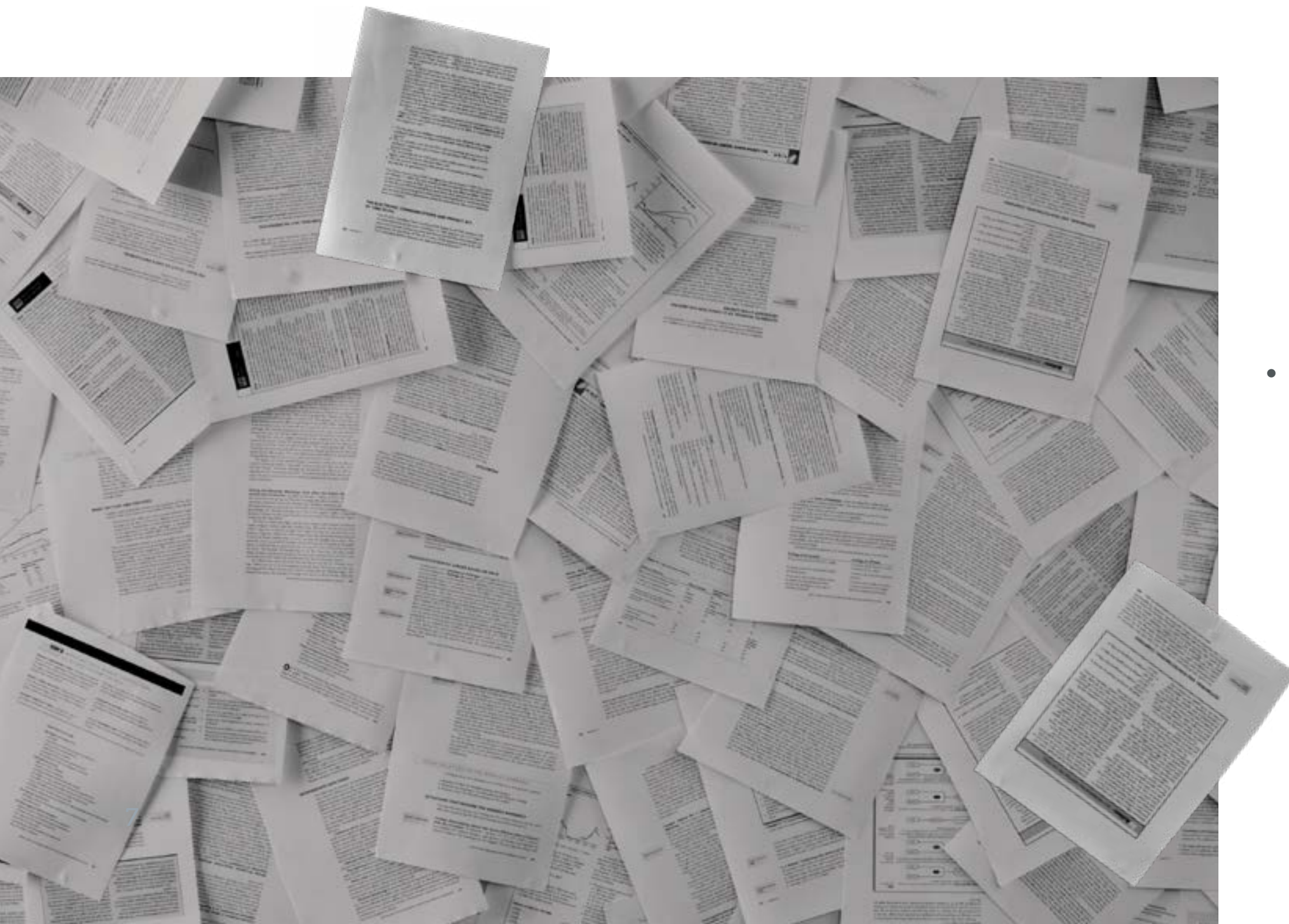
It is widely acknowledged that the healthcare industry could **significantly benefit from digitisation**. Unfortunately however, despite the ambitious NHS 10 Year Plan progress has been much slower than anticipated - with only **25% of NHS Trusts** currently considered to be 'paper free' at the point of care.

There are a number of reasons why the healthcare sector is so far behind when it comes to digitisation, despite the obvious benefits.

These include:

- Medical records libraries often hold **thousands of documents in paper format**, which poses an obvious problem when it comes to digitisation: where to begin?
- Many organisations are overwhelmed by the perceived enormity of this task, and are reluctant to change as a result. **London North West University Healthcare NHS Trust** faced these exact issues - their huge file repository meant that the process of finding and accessing files was very time-consuming; however, they overcame these challenges first by reducing the number of medical records libraries by four to two achieved by removing inactive files for offsite storage, and then by accelerating their digital transformation programme to create an effective yet flexible digital solution which will make files immediately accessible to clinical staff once rolled out throughout the organisation.
- In a sector with strict rules surrounding patient confidentiality, security risks are a huge concern. Digitisation would require a **complete overhaul of cybersecurity** where additional protection is required, especially in relation to **GDPR**. However, many Trusts have been able to overcome these compliance concerns and future-proof their medical records to comply with GDPR and ensure that patient confidentiality is maintained throughout the organisation.

These are just some of the reasons why NHS Trusts are **behind on digitisation**, as well as how organisations can work to overcome digital barriers.





# What are the **key benefits** of digitising medical records?

Digitisation will allow healthcare providers and organisations to deliver **coherent and improved services**, because it will enable staff to focus their attention on patients, rather than the demanding administrative work required to manage paper medical records. In the NHS 10 year plan, this was the driving force - with a clear desire to create **collaborative services** that could be achieved through the digitisation of medical records.

Healthcare organisations stand to gain a number of key benefits from digitising their medical records, including:

## Increased **efficiency**

Across the NHS as a whole, it takes an estimated 10,000 full time staff to manage medical records, which means other, more important tasks are neglected in favour of maintaining, sourcing and accessing paper medical records from a physical location. When these medical records are digitised, less staff are required in these roles, meaning you can **make better use of resources**.

Digitisation also supports the need for **quick, safe and secure access to medical records**, all of which cannot be achieved with paper document storage. When medical records are made digital through scanning, they are made instantly accessible in the Trust's electronic document management system and staff can view updates in real time.

## Reduced paper handling costs

NHS England reported that the estimated annual cost of storing paper storage is between **£500,000 and £1 million** for each Trust - a cost which goes away when medical records are digitised.

Once medical records are electronic, there is limited need for physical storage - which saves healthcare organisations' real estate costs and allows the space to be used for clinical purposes.





## Improved patient care

When healthcare professionals have instant access to the most recent clinical information, patients receive better care.

Because everyone has access to the same information in real-time, digital medical records can **provide information in an instant**, which enables healthcare professionals to stay up-to-date with changing patient requirements and reduces the clinical risk.

Digital records facilitate the access of patient notes from existing on-site and off-site storage, which drastically **reduces the time spent on administration**. When healthcare professionals don't have to devote time to maintaining and sourcing medical records, they are able to deliver better care to their patients - clinical staff can access records when required, and physicians can assess them when they need them.

## Improved compliance

Healthcare organisations often handle personal and private data on a daily basis, which leaves them at **risk of non-compliance** with strict legislation such as GDPR. When there is no effective records management process in place, **the risk is even greater**.

This is a major problem for NHS Trusts, where medical records libraries **are too large and disorganised to manage** and access records efficiently. As a result, this means records are easily misplaced, and the records become vulnerable to data breaches and loss of integrity.

With digital medical records, **these risks are significantly reduced**. Electronic storage means that records will no longer be misplaced, and since digital records are only accessible to authorised personnel, it improves the security of the document, guarantees compliance with ISO 27001, 9001 and BS10008, and ensures patient confidentiality is maintained.





# In-house vs. outsourced medical records scanning: Which is best?

Some healthcare organisations are already aware of the benefits that come from scanning paper medical records: it can dramatically reduce costs, keep your patients' medical data more secure, reduce clinical risk and improve patient care. However, the volume of medical records that healthcare organisations need to digitise has **increased tenfold in the last five years**, which can make the process of scanning documents difficult and overwhelming.

Despite this, when done correctly, medical record scanning can be **a painless process that quickly shows a return on your investment**. With this in mind, there are two ways that healthcare organisations can choose to digitise their medical records - you can do it in-house, or outsource it to a professional document scanning and management company.





# Option 1

## In-house medical records scanning

The majority of healthcare organisations will have a vast number of active and legacy medical records, and to scan all of them is a huge task to take on in-house. In order to scan records so that they are future proof and compliant with data regulations, organisations choosing to scan in-house will have to consider the following:

### Do you have the right scanning equipment?

Standard office-based scanners will not be able to cope with a high volume of records, so you will need to invest in a scanner that is fit for purpose. However, you must bear in mind that this technology will become obsolete, and many scanners will still not be able to cope with the complexity of medical records.

### Do you have the resources?

Even if you do have the correct equipment, you need to have the resources to manage it. This would require staff to be trained on how to use the equipment and meet deadlines set by physicians, and this isn't always possible in busy environments.

### What are your indexing requirements?

After scanning, you will need to consider how you plan to search and retrieve records, which may require manual indexing. If your indexing requirements become complex, then this will slow down the entire scanning process and potentially increase the number of medical records that need to be scanned.

If your organisation doesn't meet these requirements listed (or additional requirements listed in our article), it could be beneficial to seek an outsourced medical records scanning provider.

# Option 2

## Outsourced medical records scanning

Outsourced scanning is usually recommended for large-scale digitisation projects and is generally faster and more affordable than trying to do it in house. However, it's important to select a company that understands the healthcare sector and the regulations they need to be compliant with. That being said, a good scanning provider will deliver a number of benefits to your business, including:

- Providing the necessary knowledge, experience and skills to undertake scanning of records for the healthcare sector, **so your documents will be scanned to meet regulatory requirements.**
- **Possessing the ability to undertake large-scale scanning projects with ease,** reducing the risk of error and disruption to day-to-day activities.
- The fact that outsourced scanning is usually a **faster and more affordable process than scanning in-house.**
- **By not scanning in-house your resources can be better utilised** - staff are able to focus on more important tasks to support the delivery of patient care.

While outsourcing medical record scanning is a more cost-effective and efficient solution, whether you choose this method depends entirely on what is best for your business in terms of cost and resources.





Medical records scanning requires an established, well thought-out and detailed plan, where records are scanned to an agreed timeframe.

A summary of the steps of this plan **are as follows:**



# How does the medical records scanning process work?

## Step 1

The process begins by preparing the records to be digitised. This involves either internal Trust staff or our Workspace Optimisation Team barcoding and packing the records into boxes. The boxes are then securely transported and are electronically tracked using the online Medical Records Tracker - a system driven by the Trust's Patient Administration System.



# How does the medical records scanning process work?

## Step 2

The records are then safely transported from the hospital by a fleet of GPS tracked vans and DBS-checked drivers to the processing facility. The live tracking of the records ensures that if a record is urgently required, the van can be alerted to turn back. If the file arrives at the facility, it can be prioritised to be scanned within 4 hours, or returned physically within 24 hours.





# How does the medical records scanning process work?

## Step 3

At this stage, records are expertly prepared for scanning. This can consist of anything from repairing damaged corners and unfolding ECGs to specialist handling of items such as post-it notes and mount sheets. This careful preparation ensures that records are able to be scanned at speed. On average it takes 8.5 hours preparation time to equal one hour of scanning and therefore is a vital aspect of the process.

Within each record, the standard sections are mirrored (such as nursing notes, history, anaesthetic, correspondence, results and charts etc.) Top of the range scanners are capable of scanning different sizes and weights of paper - without risk of damage - averaging at a speed of 10,000 pages per hour.

It is always recommended that records are scanned in colour to maximise legibility, especially where handwritten notes or faded paper or print is present. However, these scanners can generate monochrome and greyscale if required.



# How does the medical records scanning process work?

## Step 4

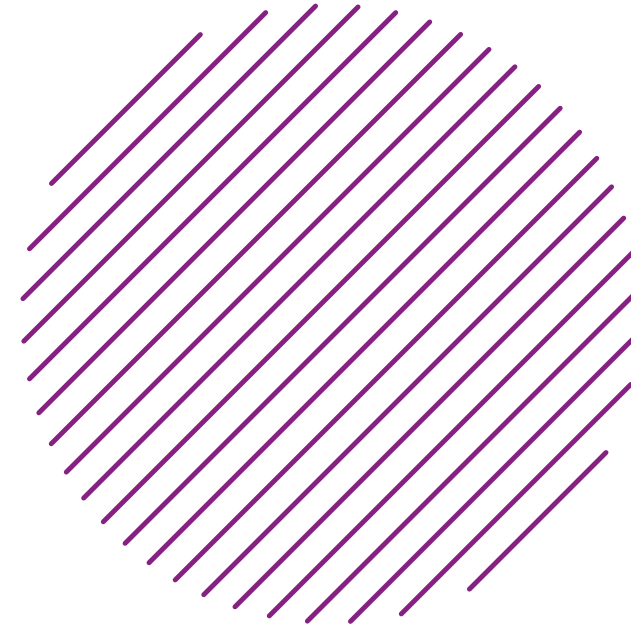
Once scanned, the resulting images are processed, quality checked and usually converted into PDF format at volume or section level. The recommendation for medical records is for the images to have OCR functionality added, to allow text searching across the entire file. The files are then stored in a secure hosted document management system.

Typically after three months, once Trusts have conducted their own QA, the original records are securely shredded and a proof of destruction is provided.





# How does the medical records scanning process work?



## Step 5

More often than not, terabytes' worth of images are transferred into multiple document management systems and other repositories that the Trust manages in-house. However, the sheer volume of data ultimately pushes the systems to the limit of their capabilities, which makes managing an in-house repository difficult for Trust staff to maintain effectively.

The Restore's EDMonline™ platform, on the other hand, was built to be multitenanted, secure and hosted from the ground up. The flexibility and ease of integration of the Cloud, combined with the Digital Vault API enables medical records stored in Restore Digital to be easily integrated into any other system.

This allows for the viewing, searching for and adding of new documents to any patient's medical record.

Records will be easily accessible within the Trust as well as being made available to the community. GP systems can be connected to the same Digital Vault, as well as allowing individuals visibility of their own medical records – all with appropriate access.

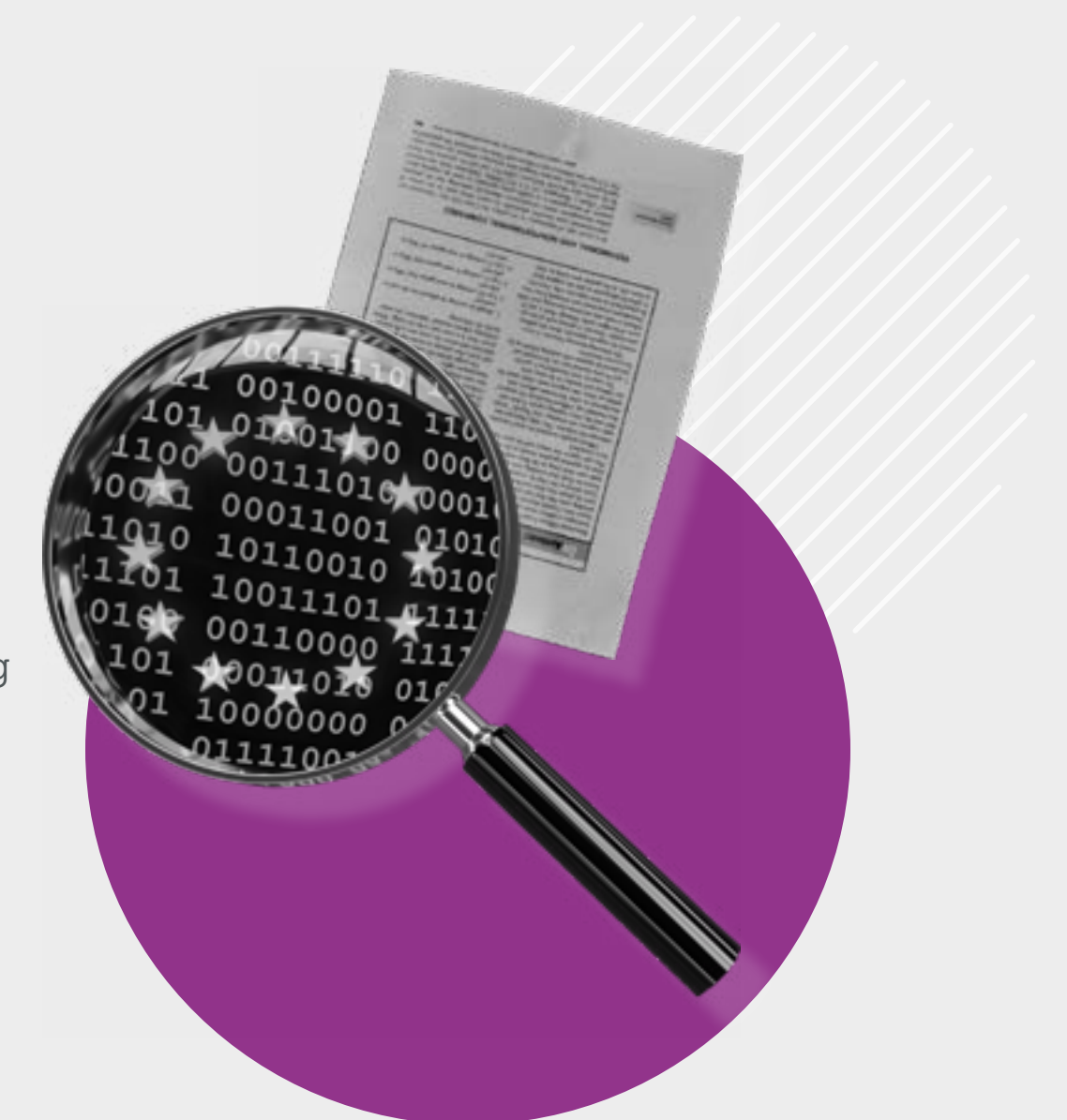


# How does the medical records scanning process work?

## Step 6

The final step in the 'life of a digital medical record', is research. In obtaining GDPR-specific permissions for the use of patient records for research purposes, powerful tools can be applied to the Digital Vault.

This will allow for functionality such as automatically redacting personal details and allowing for medical records to be searchable in very much the same way as internet searches are conducted - finding any word or phrase in seconds across millions of pages of records and producing helpful federated results.





# Digitised medical records: What's next?

Once medical records become electronic, they have the potential to **revolutionise the way healthcare organisations deliver patient care**. Instant access to medical records means they can be shared throughout different organisations - through means of integrated care - all with complete ease.

Additionally, it becomes much easier for **patients to access their own records**, involving them in your decision-making process and giving them more control over their own care. This can help streamline processes and enable collaborative care, because everyone is able to access important information - from clinical staff and physicians to the patients themselves.

Ultimately, once your medical records are digitised, **it significantly improves patient care**. Once you are able to store and access medical records in an efficient way, you reduce the time spent organising and maintaining them. There is less risk involved with digital medical records, as they are scanned according to GDPR regulations and stored in a highly secure platform where your patients' information is completely safe. Digitising your existing paper medical records is the **first step** for healthcare organisations in the digital journey to becoming paperless. By taking your organisation through this digital transformation, you enable the ability to deliver **seamless care across traditional organisational boundaries** by sharing clinical information and providing access to patient information for those that need it in every environment across the healthcare sector.







# Crucial questions to ask a medical records scanning provider

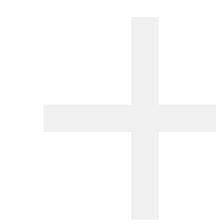
Once you have decided to outsource medical records scanning, how do you select a provider - especially when you have a large-scale project? There are key considerations and questions to ask before making a decision. This will ensure that the organisation you choose is equipped to handle and safely process medical records in-line with your requirements. These are just a few examples of the points you should be considering:

1. What is the typical turnaround time for bulk scanning projects? Do you have the capacity to handle large projects?
2. How can we be sure our documents/records are safe in transit when they leave our premises?
3. What quality and security standards do you hold?
4. How can scanning documents help us comply with our regulatory requirements?

The medical records scanning provider you choose should be able to answer these questions with ease, and prove they have the knowledge and experience to deal with the complexities and requirements of your particular organisation.







# Restore **Digital**: The best choice for medical records scanning

The time for healthcare organisations to go paperless **is now**.

With the NHS facing government cuts and research revealing the considerable impact of the cuts upon patient care, it is now imperative that healthcare organisations begin the digital transformation process as soon as possible. Those that have already gone down this route will have been much better placed to manage patient care during COVID-19.

As avid supporters of NHS Digital Transformation, our dedicated healthcare experts understand the complexities and concerns the healthcare sector has regarding digitisation: from regulation worries to concerns about the confidentiality of medical records. Our medical records scanning solution aims to help healthcare providers become less reliant on paper, by making medical records digitally available to all healthcare professionals easily in order to improve patient care - without compromising compliance.

We have worked with and supported the digital transformation of many high profile Trusts, delivering digital solutions to each aspect of these organisations through the scanning of medical records, with the shared primary goal of improving patient care, as well as meeting NHS goals.



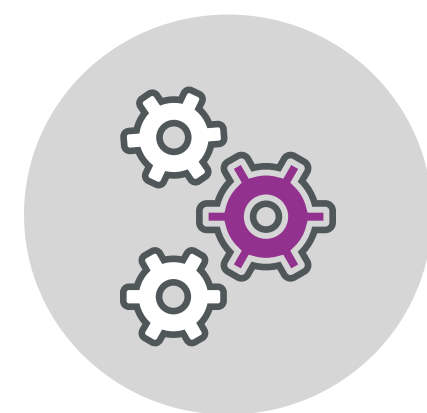


# About Restore Digital

**Restore Digital has a proven track record of working with large organisations across the financial, health, insurance and retail sectors to deliver high profile and high volume document digitization projects within strict SLAs and to a high standard.**

Restore Digital has helped some of the world's most prestigious organisations become more efficient and protect against risk. Our expertise enables us to bridge the gap from analogue to digital using proven technologies to handle business-critical information and processes more effectively.

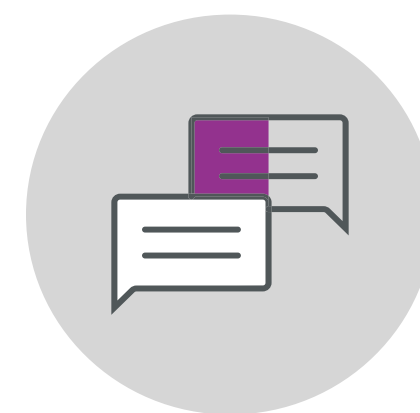
Our innovative solutions ensure that both private and public sector businesses can transform their processes that will provide a multitude of benefits such as:



**Improved  
productivity**



**Lower  
operating costs**



**Enriched customer  
engagement**



**Improved  
responsiveness**



**Competitive  
advantage**



**Improved quality  
and compliance**



# About

# Ask Us

Restore Digital is a leading independent provider of document scanning, content input, capture, and business process automation solutions. We're an innovative, digitally orientated division of Restore plc, and our reach is rapidly expanding.

Our mission is to equip our customers with compliant document management solutions and contribute to a world shaped by digital transformation.

**T: 0333 043 5483**  
**E: [info@restoredigital.co.uk](mailto:info@restoredigital.co.uk)**

Restore Digital  
2 Tally Close,  
Agecroft Commerce Park,  
Sinton Manchester,  
M27 8WJ

**[www.restore.co.uk/Digital](http://www.restore.co.uk/Digital)**

Founded in 2000, our consultancy led approach to the implementation and delivery of integrated digital solutions has enabled thousands of customers to accelerate business processes, reduce costs and improve operational efficiencies.

Here at Restore Digital, we're passionate about what we do, and we take tremendous pride in striving to provide the best possible outcome for our customers.

Visit our website at [www.restore.co.uk/Digital](http://www.restore.co.uk/Digital) for more information about us, the services that we provide, and how we may be able to kickstart your digital transformation.