



AN INTRODUCTION TO PROCESS AUTOMATION IN PRIVATE HEALTHCARE



CONTENTS

ENHANCING ACCESS TO HIGH-QUALITY
PATIENT CARE **3**

WHAT IS PROCESS AUTOMATION?
A SIMPLE DEFINITION **5**

HOW TO CAPTURE VALUE FROM
AUTOMATION IN HEALTHCARE **9**

IN SUMMARY: HOW PROCESS
AUTOMATION ENHANCES PATIENT CARE **11**

ENHANCING ACCESS TO HIGH-QUALITY PATIENT CARE

Giving patients timely access to expert, high-quality clinical care is a herculean task for healthcare providers. This has become even more challenging in recent years, with the pandemic weighing heavily on national healthcare systems.

In the UK, for example, the NHS been under strain for some time, leading to long waiting lists for many types of patient care. Private healthcare providers like full-service and speciality clinics have a valuable role to play in alleviating this burden by expanding on and complementing NHS services. Private healthcare organisations can speed up and scale up access to high-quality clinical care, especially in care pathways that have not traditionally been a core focus area for the NHS. Some examples include specialist cancer care, menopause care, osteopathy and chiropractic care, to name but a few.

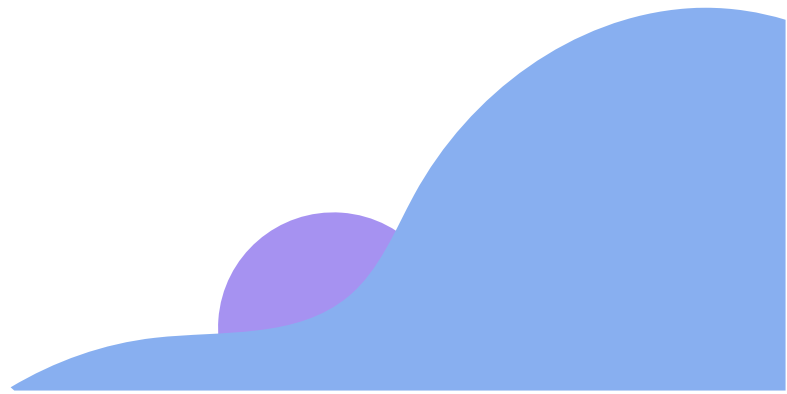
To make a real difference, however, an innovative approach is needed. As a private practice committed to reducing wait lists and caring for patients who may have been left behind, you'll need to make sure you have the right infrastructure and tools in place to scale up your services.

Automation technologies create multiple opportunities for private healthcare providers to increase the efficiency of administrative and clinical processes, allowing clinicians to focus on increased care for patients.

One specialist private clinic that has successfully taken this approach is the [Newson Health Menopause and Wellbeing Centre](#).

Newson is a clinic of onsite clinicians, looking to support the demand of thousands of people seeking care. Newson needed more clinicians on their team, and it was proving challenging to recruit UK-based specialists with the necessary skills and experience.

The team at Newson decided to find new ways of expanding care and this included the launch of remote consultations, which created an opportunity for Newson Health to hire globally. The centre planned a massive recruitment drive, but realised that they would either have to expand their team or rethink their manual approaches to ensure the success of this initiative.



Rather than adding to their admin team and appointing additional clinical directors, Newson Health decided to automate their recruitment, onboarding, and governance processes. They digitised and automated multiple elements, including:



Application forms



Contract management



First-level screening



Orientation scheduling



Interview scheduling



Systems setup...



Evidence management

...and more

This approach enabled Newson Health to rapidly expand their team of clinicians to scale up high-quality patient care – all while minimising internal administrative overheads and maintaining high governance standards.

In this e-book, we explore in more detail how private healthcare organisations can harness process automation to help improve patients' access to high-quality clinical care.

WHAT IS PROCESS AUTOMATION? A SIMPLE DEFINITION

Process automation is a modern form of mechanisation that uses digital technology to execute tasks and, where possible, entire processes. Saving time and shrinking human workloads enables organisations to add greater value on multiple levels.

In a healthcare setting, this could include unleashing new opportunities for efficiency and productivity, creating a better working environment for healthcare professionals, and being able to deliver a higher quality of patient care.

How did we get here?

The concept of process automation dates back to ancient times. One example can be found in the Iliad, where Homer describes how the metalworking god Hephaestus created 'automata' to help him in his workshop on Mount Olympus. However, let's fast-forward to the 20th Century – the birth of the digital revolution – and look at which sectors were among the first to adopt computer-enabled automation capabilities.



Milestones in the evolution of process automation

The [first digital electronic computer](#) was developed between 1936 and 1939 in the IBM Patent Department by Arthur Halsey Dickinson, offering a calculating device with a keyboard, processor and electronic display.

Late 1930s

One of the first modern industries to use process automation was the automotive sector, where term 'automation' was used at the [Ford Motor Company](#) to describe the growing use of automatic devices and controls in mechanised production lines. In the latter part of the 20th century, the [use of robots in vehicle manufacture](#) became increasingly common, where they helped increase output, standardise quality and control costs.

Mid 1940s

In 1950, computer scientist Alan Turing proposed that as humans use information and reason to solve problems and make decisions, machines could potentially do the same thing. In 1956, the [first AI proof of concept](#) was presented at the 1956 Dartmouth Summer Research Project, hosted by John McCarthy and Marvin Minsky, where the term 'artificial intelligence' was coined.

1950

As computers were able to store more information, progress continued in the field of AI. The healthcare sector was an early adopter of this technology. For example, biomedical researchers began building [computer-aided systems for diagnostic applications](#) in medicine and biology, which used patients' symptoms and lab test results as inputs.

Late 1950s

Machinery manufacturer J.I. Case worked with IBM to develop a [material requirements planning \(MRP\) system](#) – a precursor to today's enterprise resource planning (ERP) solutions. Early MRPs tracked inventory and production. By the 1980s, more sophisticated systems emerged to support more processes and other industries beyond manufacturing.

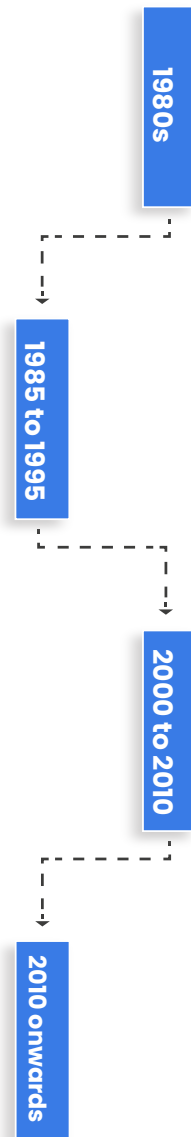
1960s and '70s

While [many inventors' creations](#) paved the way for the internet as we know it today, it became an established phenomenon during this period. In 1989, British computer scientist Tim Berners-Lee proposed a concept for a 'web of information' to his employer, CERN, Geneva, for making all the information available on CERN's computer network quicker and easier to access. In 1993, the launch of the Mosaic browser made the web available beyond academic circles. By 1995, Netscape Navigator had around 10 million global users.

2010 heralded the arrival of low code BPM solutions and in 2012 the term RPA was coined. While the technology had been evolving for some time, the term 'robotic process automation' (RPA) was [put forward by Phil Fersht of HFS Research](#). RPA solutions soon entered the mainstream as enterprises in multiple industries used this automation approach to liberate people from monotonous manual tasks, with low code RPA tools arriving in 2017.

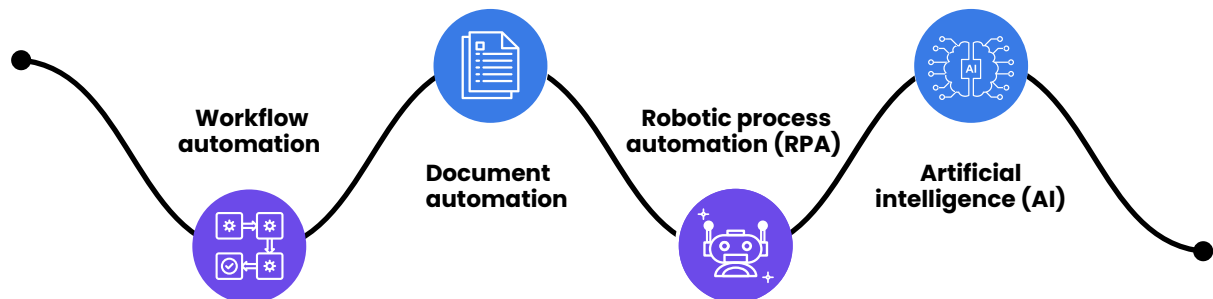
The value of workflow optimisation came under the spotlight in the 1980s with the rise of new methodologies in the manufacturing sector. A well-known example is Six Sigma, introduced by Motorola, which focuses on continually collecting data to eliminate errors, speed up cycle times and improve process quality.

In the 2000s, the term '[business process management system' \(BPMS\)](#) emerged to describe software solutions that focus on optimising and automatically orchestrating business processes (or workflows). Over time, BPMS grew more sophisticated to include low-code application development, document management, process analytics and AI capabilities, among others. [Gartner](#) calls these solutions '[intelligent business process management systems' \(iBPMS\)](#)'.



The key automation technologies we use today

In the 2020s, it's possible to automate and transform a wide variety of processes in the healthcare sector and other industries using a combination of different technology approaches. These include:



Workflow automation

This software provides organisations with tools to standardise and digitise any type of process, even those that don't follow the exact same steps each time. The flow of work can be orchestrated between different people, systems and data sources, to ensure efficiency and compliance with best practices and regulations, if applicable. This type of technology also supports a remote or hybrid workforce, as processes are managed digitally, and data is securely accessible from anywhere.

Document automation

Rather than manually creating critical documents like contracts and invoices, this software equips teams to generate, share and collaborate on content in just a few clicks – using familiar tools and data from any system. This reduces effort and errors, ensuring all documentation is accurate, current, compliant and delivered on deadline.

Business Intelligence (BI)

Actionable insights are a cornerstone of business improvement, and a great place to find these insights is by analysing business intelligence. Once you have automated processes within your practice, one of the by-products is great data. This can be harvested, collated and reviewed to give succinct operational data for clinics that highlights areas of potential improvement and facilitates data-driven decisions.

Robotic process automation (RPA)

This software brings the benefits of robotics into the workplace, with software robots that automate routine, easily definable and repeatable tasks. As these 'bots' are programmed to emulate the same steps humans use when they carry out a process on their laptops or mobile devices, RPA can execute work across any system without the need to code integration points. This includes older systems that would be difficult or impossible to connect to otherwise. As a result, RPA can efficiently transfer data, compile reports, auto-fill forms, create and send emails, process transactions and more.

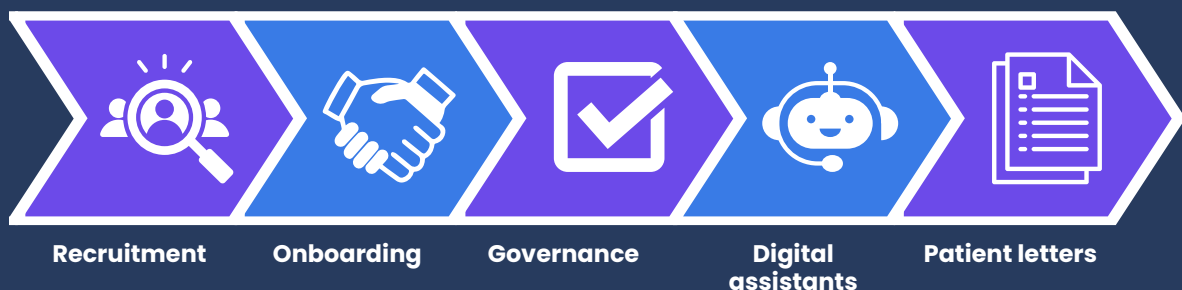
Artificial intelligence (AI)

This is a vast field of computer science that focuses on giving technology the ability to mimic certain aspects of human intelligence. Practical examples include the ability to find patterns in data, understand language, translate speech into text, and extract key pieces of information from unstructured content formats like emails and audio files. There are many practical applications of AI available today that help to automate more complex processes and save humans even more time.

HOW TO CAPTURE VALUE FROM AUTOMATION IN HEALTHCARE

Process automation has the potential to improve the entire patient experience. [McKinsey & Company](#) estimates that as many as a third (33%) of all tasks managed by healthcare providers have the potential to be automated. This could have a transformative impact on reducing costs, increasing accessibility and closing the healthcare divide.

Outlined below are some examples of how various automation tools and technologies can be harnessed to make clinical operations more efficient and scalable, and give healthcare professionals the data, time and support they need to give patients the expert clinical care they deserve.



Recruitment

Automate key components of the healthcare professional recruitment process to increase speed and accuracy, and ensure easy scalability. Solutions include:

- Digital application forms to eliminate paperwork
- Workflow and RPA solutions to compose and send emails, manage the availability of busy candidates and clinicians, and schedule interviews
- Automated first-level screening to vet all candidates and filter out those who do not meet minimum requirements
- Workflow automation and evidence management to ensure all critical information (e.g. registration numbers, certification, references, etc.) is obtained, validated, stored and processed in a compliant manner

Onboarding

Get new professionals up and running immediately without overloading existing clinical and administrative teams. Solutions include:

- Document automation software to accelerate the generation, review, approval and digital signing of contracts
- Workflow and RPA to handle orientation scheduling, calculate earnings, and set up systems access
- Workflow automation to chase people internally and externally to complete tasks, and ensure the right people have the right information at the right time
- Automated reporting on status of recruitment and onboarding
- Business Intelligence to analyse governance data

Governance

Operate with confidence that ongoing governance and patient care is looked after:

- Process automation technology provides clear digital audit trails to support monitoring and compliance
- Workflow automation optimises annual reviews, training, certification and other processes

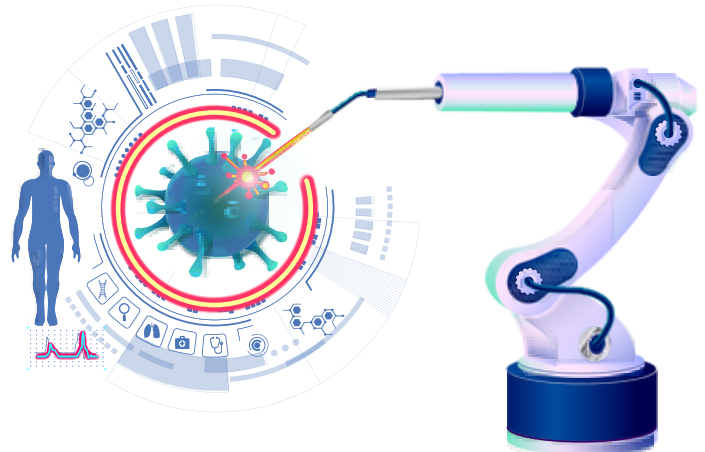
Digital assistants

AI-enabled chatbots can be created to support non-clinical patient interactions, collect and capture information, and gather insights to feed into business intelligence reports. Interactions include:

- New patient registrations
- Appointment scheduling
- Managing complaints
- Gathering feedback

Patient letters

Using document automation systems and other capabilities, organisations can enable the automatic creation of advanced patient letters, including consultation letters, fully integrated into the practice management system.



IN SUMMARY: HOW PROCESS AUTOMATION ENHANCES PATIENT CARE

Operational excellence:

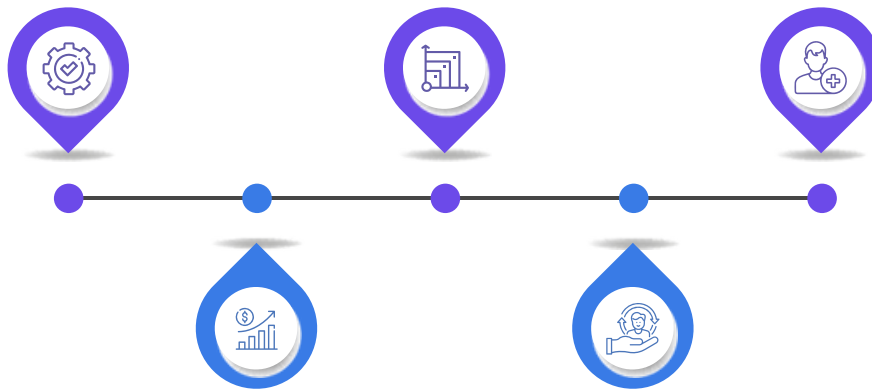
With a strong foundation for ongoing governance, organisations can ensure best practice and compliance with legal, ethical and professional standards.

Enhanced scalability:

Through digital consultations and telehealth tools, providers can expand their services to meet patient needs quickly, easily and at low cost. This enhances patient access to quality care.

First-class patient experience:

Self-service solutions save time for patients and providers, helping to reduce waitlists. Healthcare workers can focus on providing excellent patient care rather than admin.



Increased profitability:

Automation stimulates investment in further improvements in patient care, such as delivering new offerings to patients.

Improved retention and team wellbeing:

Accelerated end-to-end recruitment helps to secure the best talent. More efficient working practices help to retain skills in the practice and support the wellbeing of healthcare workers.

How jaam can help you put patients over paperwork

Our mission is to empower exceptional people with great technology. As a private healthcare provider looking to expand your ability to offer the very highest quality of patient care, we can work with you to find the right technology capabilities and solutions to make your vision happen.

One of our core strengths is helping organisations that are rapidly expanding to envision and deliver automation in weeks rather than months. Private healthcare is one of our most active sectors, and our clients report business demand growing anywhere between 200 to 1000%. Using automation to rapidly ensure that the demand is not only met, but delivered with high-quality customer service, is proving critical.

If you'd like to learn more about the technologies, advisory services, and delivery solutions we provide,

[Get in touch](#)



 info@jaamautomation.com

 jaamautomation.com

 +44 203 468 3579