



INTELLIGENT AUTOMATION:  
**THE NEXT FRONTIER IN  
HEALTHCARE AUTOMATION**



Artificial intelligence (AI) is not a new concept, and neither are the pros and cons that come with the technology. In its most basic form, AI is categorized as an automated task or process that does not require human support. In today's world, some more advanced examples of AI include chatbots, language translation services, and facial recognition technology.

For healthcare, AI presents the industry with an exciting challenge: how can it leverage the cost and operational benefits of AI while delivering an exceptional patient experience? Basic automation, a simple form of AI, has already helped deliver cheaper and more efficient operations for health providers. Some examples of this include language transcribing of electronic health record (EHR) notes and automated pre-appointment emails to patients. Unfortunately, the healthcare industry is woefully behind other industries and has only touched the tip of the iceberg when it comes to AI and automation.

The next era of AI and automation is called intelligent automation, and it combines the power of automating routine healthcare tasks with the ability to glean insights from healthcare's abundance of data.

## **INTELLIGENT AUTOMATION: THE NEW CO-WORKER FOR THE DIGITAL HEALTH ERA**

Automation uses software that follows pre-programmed rules. For example, many programs are set up in a binary sense of **"if X happens, then perform Y task."** While this can be helpful for rudimentary tasks, such as an email notification if a contact has filled out the **"contact us"** form of a website, there are much deeper levels of automation sophistication available for the healthcare industry.

Intelligent automation transforms the traditional ways of performing tasks by weaving automation software, data, and employees together seamlessly. An example of intelligent automation is when a patient fills out their health insurance information on an online form before their appointment. In most instances the front desk staff will simply use this information at a later time for submitting a claim. With intelligent automation, the software program will automatically check for insurance verification, provide a patient financial liability calculation, and, if the patient is noted for possibly needing financial assistance, the program will flag the front desk employee to provide a financial assistance program brochure to the patient upon check-in. This improves the experience for both the patient and the front desk staff.

Intelligent automation delivers fundamental changes to how healthcare organizations and their employees complete tasks. While automation can complete repetitive tasks far quicker than a human employee, that same human employee can solve problems much better than an automated program can. Individually, they both have their strengths and weaknesses, but together, they can transform what's possible for the healthcare industry and the patient experience.

## **MYTH: AUTOMATION WILL KILL JOBS**

Like all technological advancements, automation will reshape job responsibilities, but it will do so by augmenting the jobs of tomorrow, not doing away with them. As MobiHealthNews says, intelligent automation will **"eliminate some human effort from the healthcare system without eliminating the humans."**<sup>1</sup>

<sup>1</sup> <https://www.mindflowdesign.com/insights/how-intelligent-automation-is-changing-healthcare/>



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Intelligent automation is a complex set of scripts and scenarios that leverages data and insights to determine the best next steps. These scripts match what employees are doing to help remove the mundane and repetitive work which requires little effort. By removing this type of work, employees are free to tackle higher value challenges.

## **PUTTING THE “INTELLIGENT” IN COMMONLY AUTOMATED TASKS**

The bad news is healthcare is behind other industries when it comes to the adoption of automation. The good news though, is the industry has started to automate some basic functions and is opening up to the idea of intelligent automation. Here are some examples of commonly automated tasks and how intelligent automation can take them to the next level:

### **Pre-appointment reminders**

Notifications and reminders are some of the most easily implemented healthcare automation processes. By simply texting an appointment reminder to patients, health providers have decreased the level of no shows.

Intelligent automation can take this task to the next level by giving patients the option to schedule Uber rides or provide specific bus route and timing information to help ensure the patient arrives on-time and ready to be seen.

### **Cash posting and credit balances**

Many health providers are using automation to simplify the recording and posting of payments to automatically update patient accounts and send out updated patient bills. The identification, payment, and updating of credit balance accounts is another common task getting automated.

Intelligent automation consolidates payment information from all sources to improve the overall quality of data, providing risk analysis for all patients and payers that helps to reduce delinquent debt and total days outstanding.

### **Provider enrollment**

The credentialing and contracting of health providers has long been a slow, manual process. Automation is beginning to reduce the documentation burden and improve the speed of provider enrollment.

Intelligent automation allows health providers to fill out a form once and sends the right information to each applicable health plan in the necessary format for quicker processing. A centralized database allows for easy activation, deactivation, and updating of doctors from the system to keep all information up to date.



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## THE FUTURE OF INTELLIGENT AUTOMATION

The future is very bright for healthcare and intelligent automation. Consulting firm Accenture recently hosted a webinar and gave three examples of intelligent automation we might see in the next handful of years.



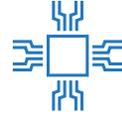
### DIGITAL AVATARS AND CHATBOTS

A sophisticated digital assistant which interacts with patients during the intake process to streamline all tasks and answer all questions the patient might have.



### 24/7 VIRTUAL CLINICIANS

Human and robot clinicians available at any time to answer any pre- or post-appointment questions a patient might have about a procedure or medication.



### EMBEDDED MICROCHIPS

In the future, patients could be given embedded microchips to perform all kinds of tasks including the monitoring of vitals and activity tracking.

## WHERE TO BEGIN: DEPLOYING AUTOMATION WITHIN A HEALTH SYSTEM

Let's be clear, there are countless ways automation can deliver results that are only limited by our imaginations. At Sutherland Healthcare, we always advise our clients to do four things when considering automation.

### STEP 1: BUY-IN FROM THE TOP

First, gain complete strategic and financial buy-in from the c-suite and leadership teams to ensure a more successful implementation..

### STEP 2: IDENTIFY PILOT PROGRAMS

Select a few strategic programs for pilot runs. Focus on projects that could benefit most from automation in the long run, and not what may create the biggest immediate return. We advise our clients to start a pilot simply for the right reasons. Once you've begun to automate it, the return on investment will come afterward.

### STEP 3: START SMALL

It's far easier to start an automation project at a granular level and, once it's successful, scale that project up to other areas. Trying to automate a large, complex program from the start can be challenging and impede progress.

### STEP 4: GET HELP

Finally, don't go it alone. Whether using internal programmers, consultants, or vendors, or some combination of the three, realize this challenge is a very complex one. Health providers simply don't have the budget or bandwidth to take on automation without any help.

It won't happen overnight, but intelligent automation will help transform healthcare organizations, helping better prepare them for the digital health era.

**Is your organization ready for a new model of process transformation that puts exceptional customer experiences first? For more information on how we can help you transform your process to optimize the customer experience, please visit us at [www.sutherlandglobal.com](http://www.sutherlandglobal.com), email us at [sales@sutherlandglobal.com](mailto:sales@sutherlandglobal.com), or call 800-388-4557 ext.6123.**

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