

# The Definitive Guide to Call Center Workflow Automation

How healthcare providers can reduce call volume and increase patient satisfaction



Among other industry-defining changes, the COVID-19 pandemic has transformed the experience patients have come to expect from their healthcare providers. The move to socially distanced operations forced businesses across industries to roll out technology-enabled solutions to connect with customers and provide access to information and services.

However, in this new digital world where consumers are accustomed to booking flights, ordering meals, or applying for a mortgage with the click of a button, healthcare experiences driven by manual calls and paper forms appear more antiquated than ever before.

Today, the call center still serves as a "non-digital" front door and an echo of the old normal for most health systems today. Whether distributed across clinics or centralized within a consolidated business office, call centers play a critical role in care delivery including:

→ **Managing inbound requests:**

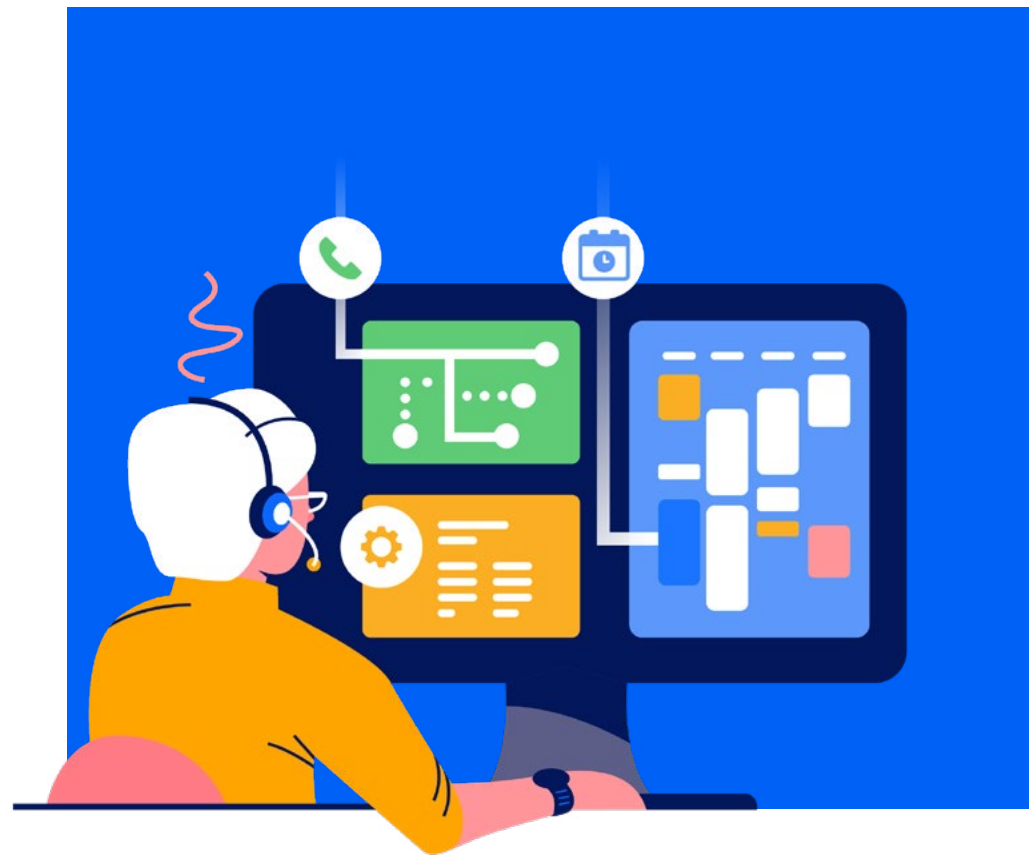
Serving as veritable switchboard operators triaging calls to the appropriate provider, department, individual, or patient room

→ **Performing back office tasks:**

Completing manual workflows that support the patient journey from scheduling and registration to billing and collections

→ **Supporting clinical care:**

Powering nurse advice lines, disease management programs, and marketing campaigns for health programs



Health systems face numerous challenges in supporting these critical functions. Staffing shortages are at an all-time high with many health systems losing staff as a result of COVID-19 vaccine mandates. Continually hiring and training staff for a role that has a 45% turnover rate imposes a substantial economic burden on administrators.

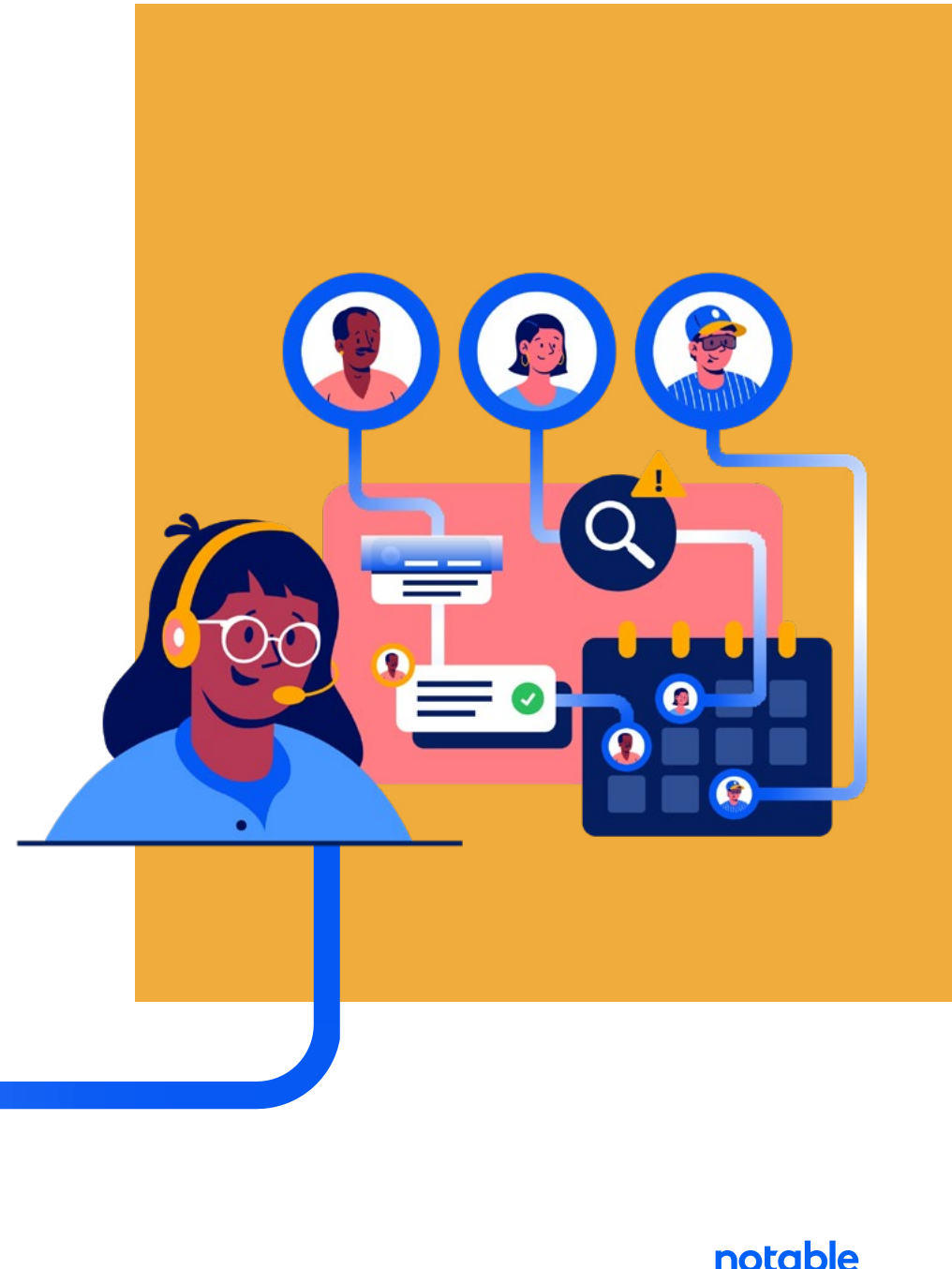
As a result, almost every healthcare provider has a plan to implement a digital front door to ease the burden on their call center agents. This effort is aided by the fact that most patients would rather engage with an app to book an appointment or pay a bill than wait on hold to talk to an agent.

The stakes for executing effectively on such a strategy could not be higher. Today, 61% of young patients would consider switching providers over a poor digital experience. Twenty percent of patients have given a negative review of a provider because of a poor digital experience<sup>1</sup>. And 50% of patients say that a poor digital experience "ruins the entire experience" with their provider<sup>2</sup>.

This whitepaper offers strategies for leveraging modern technologies like artificial intelligence (AI) and robotic process automation (RPA) to reimagine the role of the call center, transforming it from a source of patient frustration and increasing administrative costs to a competitive differentiator that compliments a world-class patient experience.

<sup>1</sup> <https://www.fiercehealthcare.com>

<sup>2</sup> <https://www.accenture.com>





# What is intelligent automation?

Intelligent automation refers to the use of AI, RPA, and patient engagement technology to automate manual workflows otherwise performed by staff.

- **Artificial intelligence** determines when and how to perform workflows. For example, using machine vision and predictive intelligence, AI can analyze an insurance card image shared by a patient and select the correct payer and plan. Using this information, it can trigger automated workflows like requesting a prior authorization or triaging a patient to the right in-network provider.
- **Robotic process automation** enables digital assistants to perform automated workflows in the EHR by clicking into fields, typing notes, or uploading documents just like human staff would. For example, once digital registration is received from a patient, RPA enables all collected information to be entered into discrete fields in the EHR and for clinical documentation to be produced, just like an MA would enter this information after collecting it from a patient in the clinic.
- **Patient engagement** allows providers to request and collect information from patients that can be used to trigger different automated workflows. For example, a mobile web portal can allow patients to share their symptoms and insurance coverage in order to trigger a workflow that surfaces appropriate in-network providers.

See below for three examples of common calls that health systems have begun to eliminate upstream through intelligent automation:

### Reason for call

#### Scheduling and triage

Field inbound calls from patients and direct them to the right site of care.

#### Pre-visit registration

Collect information needed from patients in advance of their visit.

#### Authorizations

Contact payers to request authorizations for services while managing updates for patients.

### Eliminating the call with intelligent automation

Collect symptoms and insurance card via digital experience.

Leverage AI to determine appropriate site of care based on clinical indication and insurance coverage.

Surface one-click scheduling for patients or direct them to the ER.

Use AI to scan patient records in the EHR and determine what information they need to complete.

Configure and send personalized digital conversational intakes via SMS and/or email.

Leverage digital assistants to automatically populate the EHR with data collected from patients.

Analyze payer information to determine the need for an authorization.

Use digital assistants to log into a payer portal or submit an efax to request authorization.

Leverage machine vision to analyze the payer portal for a response.

Provide patients with digital notifications directing them to self-service scheduling once the authorization has been approved.

# Getting started with automating call center workflows

Based on our work with leading health systems to automate call center and central business office workflows, we recommend the following three-step approach to call center transformation:

**1. Define the highest ROI workflows to automate.**

Perform a judicious examination of call volume to identify areas of highest impact.

**2. Implement supporting technology.** Define the best path to implement AI, RPA, and patient engagement to automate processes currently managed through calls.

**3. Measure impact and iterate on approach.** Internalize learnings and use them to guide an automation roadmap.



# 1. Define the highest ROI workflows to automate

To determine a starting point, we recommend performing an analysis of all current inbound and outbound call volume, segmenting out different categories or reasons for high-volume calls. Using this trend data, calculate the total time spent on each call type to use as a general proxy for potential automation ROI.

With this information in hand, assess what percentage of current call volume could be reasonably automated. For example, can the inbound call workflow agents are supporting be easily redirected to a self-service portal? For a workflow like payment collection, the answer may depend on the specific makeup of the patient population.

In tandem with this analysis, assess the following factors that contribute to the overall value of managing a call with automation as opposed to staff:

**Complexity:** How easy or difficult is it to train agents to effectively perform the task? Prioritize automating workflows that are more difficult to staff and train.

**Patient impact:** How much value does a human touchpoint add or subtract from the interaction? For example, patients may not see much difference in getting an appointment reminder via call or voicemail compared to an automated text, but they may be more inclined to speak to a human when it comes to payment reminders for a large outstanding balance.

**Cost of error:** How much value is lost when agents make mistakes? For example, errors caused by mistyped information during registration can lead to downstream denials that are costly to address.

**Difference in performance:** How much more or less effectively can the workflow be performed by a person compared to automation? For example, identifying insurance information can often be performed even more accurately using AI than trained staff.

While every health system is unique, the following table details the four workflows we recommend starting with for call center automation in light of the above framework:

| Call reason           | Time spent by agents | Call complexity | Patient impact | Opportunity to increase revenue |
|-----------------------|----------------------|-----------------|----------------|---------------------------------|
| Prior auth            | ● High               | ● High          | ● High         | ● High                          |
| Registration          | ● High               | ● Moderate      | ● High         | ● High                          |
| Referrals             | ● Moderate           | ● Moderate      | ● Moderate     | ● Moderate                      |
| Appointment reminders | ● High               | ● Low           | ● Low          | ● High                          |



## 2. Implement supporting technology

For a technology-led transformation of the call center, choosing the right partner is critical.

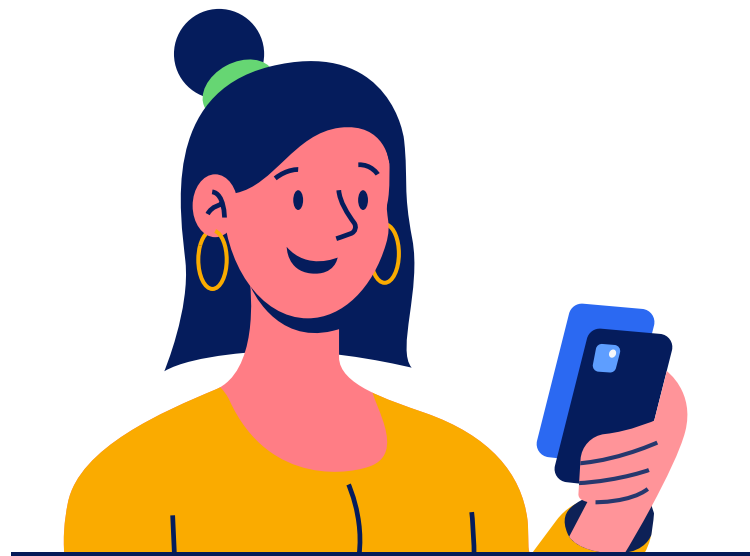
Many health systems fall into the trap of choosing point solutions to address individual reasons for patient calls. For example, they may look to implement a digital billing solution to minimize billing-related calls, a scheduling solution to minimize scheduling calls, and a patient intake solution to minimize registration-related calls.

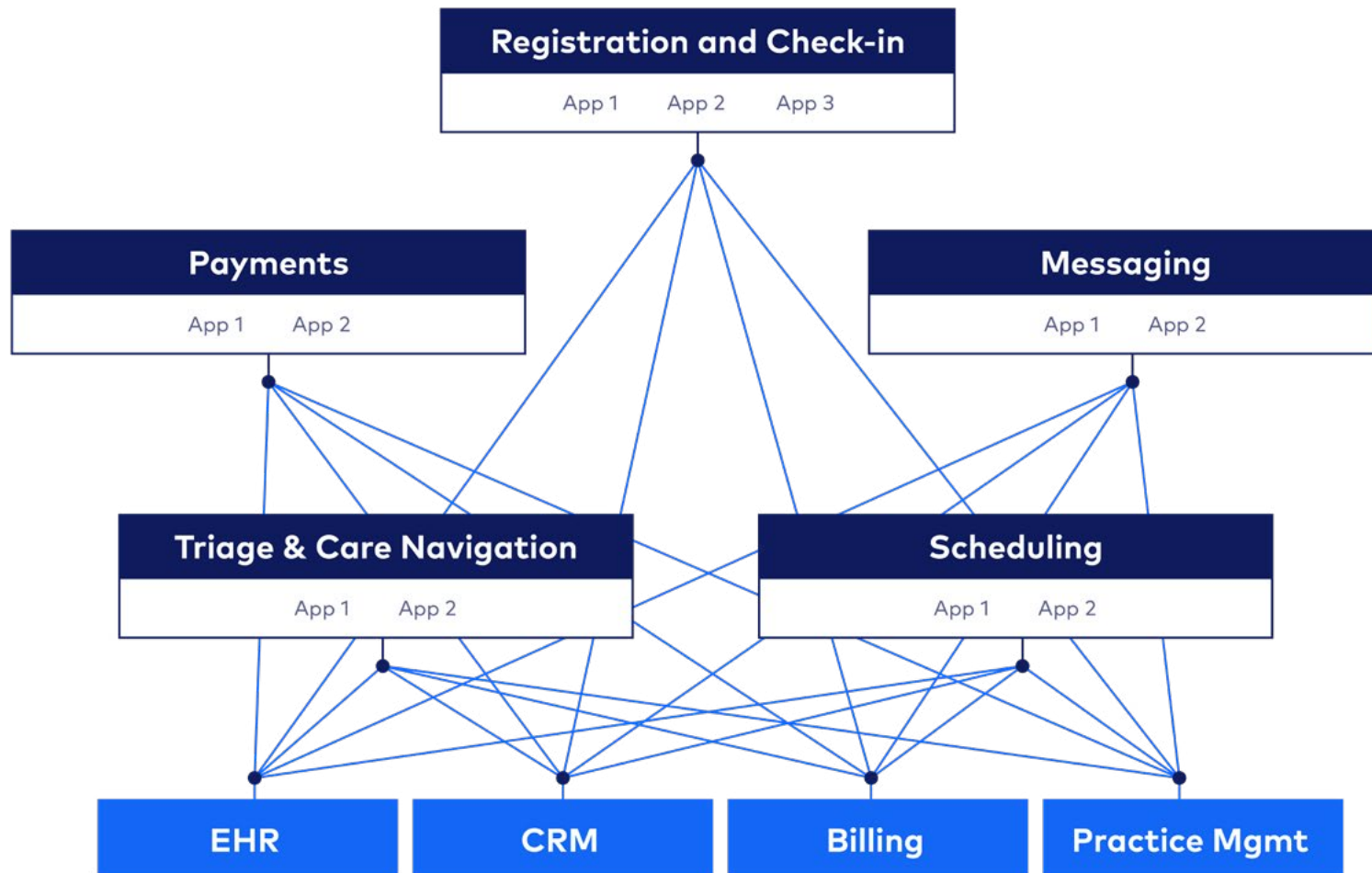
While well-intentioned, this point solution approach often does more harm than good. Introducing multiple new technologies across the care continuum leads to a disjointed patient experience, often requiring multiple passwords, apps, and logins along with repeated manual data entry and an inconsistent experience across channels. Using disparate systems can also create more work for staff and providers who have to learn each new tool well enough to support their own workflows and troubleshoot with patients. Last but not least, acquiring multiple point solutions introduces long and expensive IT projects to connect them all with the EHR, not to mention the recurring IT bandwidth required for the maintenance of this web of solutions.

Another common but misguided approach is to focus entirely on the digital experience of the patient without considering how the changes might negatively impact back-end staff workflows.

For example, a health system might implement a chatbot that allows a patient to automatically book an appointment but may overlook the need for agents to review appointments and contact patients in case they booked with the wrong provider. A digital registration solution may offer a sleek front-end interface for patients but produce a PDF on the back end that still requires manual data entry from staff.

To improve the patient experience without compromising operational efficiency, providers must implement technologies that offer a patient-friendly front-end experience while simultaneously simplifying back-end operations.





*Point solutions often introduce as many challenges as they solve*

### 3. Measure impact and iterate on approach

Even the most thoughtfully considered automation program will reveal opportunities for improvement after implementation. The most successful health systems embrace an iterative approach to intelligent automation rollout and deployment.

After defining prioritized workflows to automate, agile implementations focus disproportionately on effectively enabling two to three key workflows to automate. In contrast, many technology implementation teams spend months or years on a big-bang automation program that spans the enterprise while teams wait to see the touted effects. Meanwhile, health system needs and industry trends or technologies continue to evolve, often making solutions partly obsolete before they have time to launch.

Once a system is in place, staff are a rich source of insight for feedback on how automation can be optimized. Surveys and focus groups can help identify pitfalls in technologies and training to improve efficacy and adoption of new processes for both staff and patients. Collecting baseline data also helps leadership determine the ROI on implemented automations. From there, digital teams can make an educated choice on how to prioritize iterating on existing automations versus developing new ones.

An agile model extends to how automations are implemented as well as to the internal change management required.

For example, large health systems commonly launch new solutions or processes with a handful of clinician practices. Teams iterate based on feedback from this smaller group and then roll out across a larger segment of the organization. Making changes in an iterative fashion with a smaller part of the organization is much easier than launching in broad strokes across the enterprise and making updates that affect a larger group of constituents.



## Case study:

# Modernizing call center operations with intelligent automation at a mid-sized southwestern healthcare provider

In 2021, Notable partnered with a healthcare organization in the southwest U.S. with over 350 providers and 1.1 million encounters to modernize their patient experience and transform their call center operations.

One of the organization's biggest strategic goals was to improve patient experiences by leveraging technology to eliminate manual processes. To that end, they had spent years optimizing for Epic MyChart portal activation but struggled to have more than 25% of their patients complete pre-visit registration via MyChart. They also found that whether or not patients used MyChart for registration, their staff almost always had to manually process or correct registration information - or deal with errors downstream once they triggered denials.

With Notable, the organization automated the end-to-end patient registration workflow for their central business office including:

- Appointment Text Message Reminders
- Registration Prompts
- New Patient Pre-Visit Registration
- Demographic Verification
- Payer / Plan Matching

- Triggering RTE / Insurance Eligibility Verification
- Existing Patient Pre-Visit Registration
- Consent Forms
- Payment Collection

Patients access all of these workflows digitally through a self-service mobile experience via automated text prior to their appointment.

With Notable, 78% of the organization's patient registrations no longer require any human staff involvement, and their patients reported a 94% satisfaction rate with the new digital experience.

This also had a transformational impact on their central business office. They project elimination of over 223,000 calls per year through automated outreach and digital registration in addition to the reduction of over 635,000 work queue items. This will create over \$790,000 in staff time savings. Furthermore, by leveraging AI to improve payer/plan selection and proactively identify registration errors, they have reduced eligibility and registration-related denials by 83%, creating additional time savings by eliminating the number of denials that need to be worked.

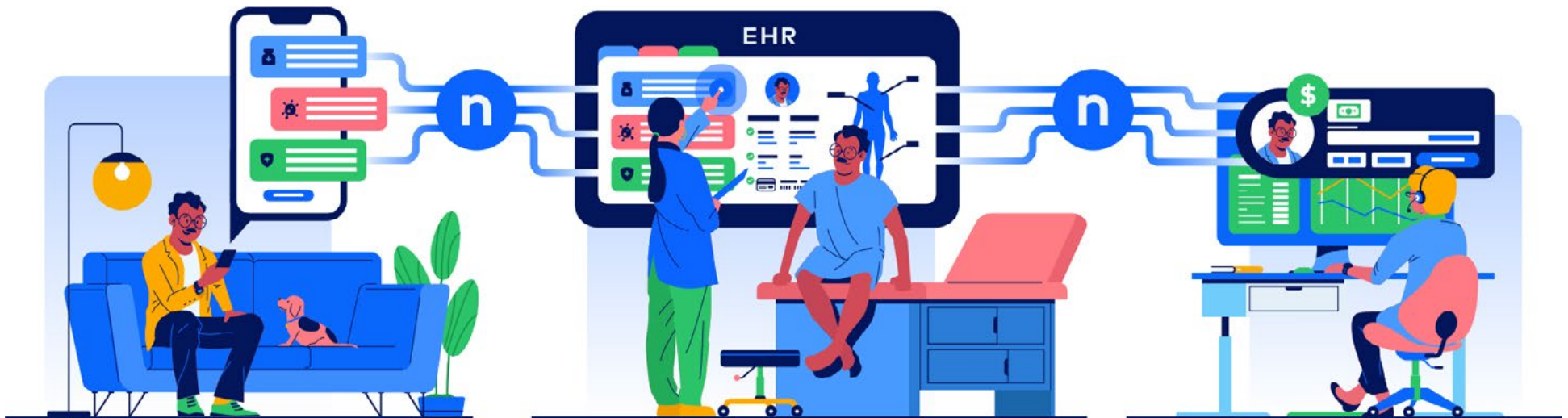
# Notable: The leading provider of intelligent automation for healthcare

Notable uniquely combines robotic process automation, artificial intelligence, intuitive design, and no-code configurability to automate any healthcare workflow and produce unmatched value.

Using AI, Notable can determine when and how to perform automated workflows by analyzing data from the EHR or any other source. RPA, complemented by other integration methodologies where appropriate, enables digital assistants to perform any workflow within the EHR just like a human would.

Notable is the only platform that unifies automation with omnichannel patient engagement, extending the scope of workflow automation by enabling collection of data from patients and providers.

The entire experience is configurable via an interactive user interface, enabling governed development of automations that are designed to meet the exact needs of your organization's workflows.



# Power your patient service center with Notable

With intelligent automation, Notable enables health systems to:

- **Simplify patient access with self-service scheduling**  
by leveraging AI-powered triage to enable one-click scheduling with in-network providers at the appropriate site of care
- **Automate every workflow and work queue** by using digital assistants to perform all call center tasks within the EHR, CRM, and other systems of record on behalf of staff
- **Reduce inbound and outbound call volume by over 50%** by addressing the reason for calls at their source with automated outreach, scheduling, and authorizations

This optimizes staffing by automating manual workflows to free up time best spent focusing on the highest value patient interactions and tasks. It offers a world-class patient experience through personalized, omnichannel engagement that allows every patient to be served through the ideal mix of digital and in-person channels. And most importantly, call centers are transformed into patient service centers that align to the mission of the health system, enriching the patient experience and improving outcomes while reducing the cost of care.

Results our partners realize using Notable include:

**97%**

patient satisfaction

**300%**

increase in self-pay collections

**85%**

patient engagement

**83%**

reduction in eligibility and registration-related denials

**64%**

reduction in no-show rate

**700+**

calls eliminated annually per provider

To learn more about how Notable's platform can power patient access transformation for your organization, [request a personalized demo](#) with a member of our team.