AKASA | 2021

ANNUAL REPORT ON AUTOMATION

2021 ANNUAL REPORT ON REVENUE CYCLE AUTOMATION

In 2020, AKASA, the first Unified Automation™ company for revenue cycle management in healthcare, commissioned and released results of a national survey to shed light on the state of automation in healthcare revenue cycle operations; drivers of future automation efforts; and plans regarding automation efforts within health systems and hospitals across the country.

The survey was commissioned by AKASA and conducted through the Healthcare Financial Management Association's (HFMA) Pulse Survey program. The survey was fielded between May 19, 2020 and June 22, 2020 among 587 chief financial officers and revenue cycle leaders at hospitals and health systems across the United States. The survey has a confidence level of 95 percent with a margin of error of plus or minus 5 percent.

In addition to the survey results, this booklet contains market insights informed by the hands-on experience of the AKASA team as they have partnered with provider organizations of all sizes across the country to fully automate revenue cycle functions.

2020 IN REVIEW

Automation Becomes a Future-State Mandate

Shifting business dynamics driven by the COVID-19 pandemic in 2020 have **intensified the need for automation as organizations face massive financial pressures** while abruptly transitioning their teams to remote work. When a hold on elective procedures and other early restrictions were put in place to slow the spread of the virus, many organizations had to furlough staff, operate with reduced capacity, and facilitate new work-from-home arrangements. When demand returned, hospitals and health systems had to bring staff back on campus and pivot operations once again. These challenges have many providers shifting their perspective of automation tools for the revenue cycle from nice-to-haves to future-state mandates. Organizations with robust automation solutions in place to fortify their revenue cycle operations were better able to mitigate the impact of these disruptions on their staff and their bottom line.

Challenges of Deploying New Technologies in a Pandemic

Traditional approaches to deploying automation or other technology tools typically require consultants to shadow employees to document workflows and processes. The new work-from-home environment and social distancing requirements for staff working on site significantly limited the ability to shadow staff. As a result, implementation timelines slowed or projects were paused altogether, especially for solutions that rely on tandem work with consultants to develop and maintain them. As a result, **revenue cycle leaders are prioritizing the ability of technology partners to deploy their solutions rapidly and entirely remotely.**

The Type of Automation Matters

As more hospitals and health systems have invested in automation for revenue cycle operations, it has become clear that the type of automation matters. Organizations have discovered that it can take up to 12+ months to build and deploy a robotic process automation (RPA) bot for one discrete task that may, or may not, deliver the anticipated efficiencies or return on investment. This makes the process of onboarding RPA slower than many organizations can afford.

Compounding this is the high rate at which RPA bots break, creating a constant and long-term need for maintenance which can also cause the return on investment to dwindle. According to a 2019 Forrester report, for every $1 spent on RPA technology an additional $3.41 is spent on consultants and support services to maintain it. As revenue cycle leaders gain insight into the limitations and challenges of RPA, **there is increasing demand for artificial intelligence (AI) and machine learning (ML) based solutions** that are better able to adapt to process changes, more fully automate complete functions and handle more complex tasks.

Automation Can Elevate Employees

It's also become clear that automation tools, when working properly, can help organizations elevate the nature of work on which employees focus. Many revenue cycle positions have high turnover. The organization's automation strategy can play a key role in efforts to improve retention. Using automation to handle the more mundane and repetitive tasks enables employees to focus on more complex roles and responsibilities that offer more challenging and dynamic positions within their organizations. This allows revenue cycle leaders to **invest in developing more specialized and skilled teams** while employees have more opportunity to work at the top of their skill set and expand their knowledge. Organizations are also benefiting from a shift to more patient-facing roles, such as financial counseling, that require human-to-human interaction and improve the overall patient financial experience. Additionally, team members who help lead automation efforts and take a hands-on approach to implementing and managing these tools build valuable skills that can position them well to lead other initiatives as organizations continue to expand digital transformation efforts.
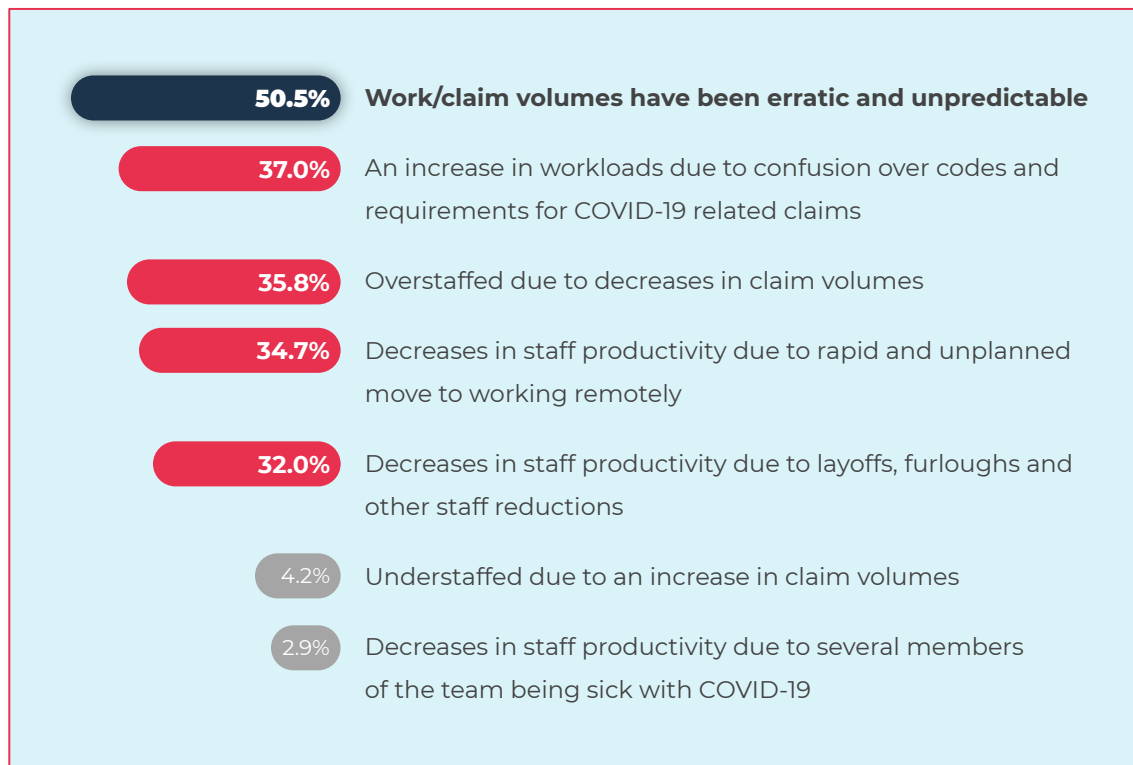
Automation solutions work 24/7 and are, to varying degrees, flexible and resilient. However, not all automation is created equal. Our Buyer's Guide to Revenue Cycle Operations includes more detailed discussion on how to identify solutions that are resilient and can effectively help revenue cycle teams scale their operations. Organizations are looking for automation tools that help bring consistency and continuity to their revenue cycle operations while mitigating the impact of erratic claim volumes to their staff.

SURVEY FINDINGS

COVID-19 is impacting revenue cycle operations at health systems and hospitals by creating erratic and unpredictable workload and decreasing staff productivity.
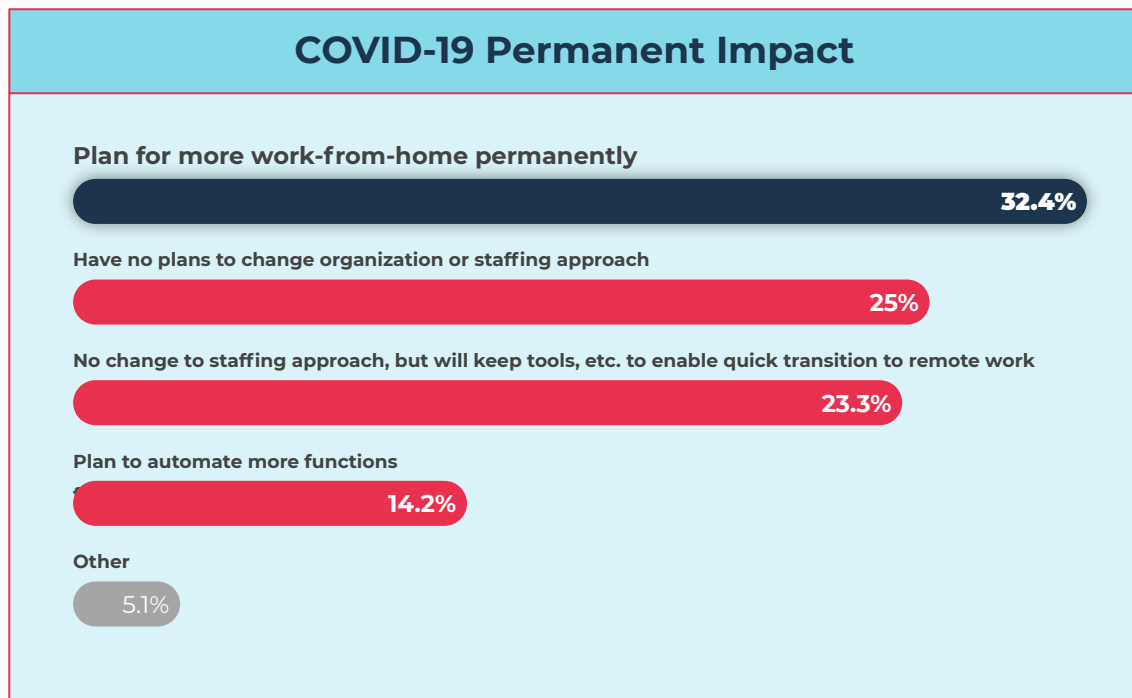
Survey respondents were asked, **"Which of the following impacts has COVID-19 had on your revenue cycle operations?"** Respondents were allowed to select more than one option.

50.5%	**Work/claim volumes have been erratic and unpredictable**
37.0%	An increase in workloads due to confusion over codes and requirements for COVID-19 related claims
35.8%	Overstaffed due to decreases in claim volumes
34.7%	Decreases in staff productivity due to rapid and unplanned move to working remotely
32.0%	Decreases in staff productivity due to layoffs, furloughs and other staff reductions
4.2%	Understaffed due to an increase in claim volumes
2.9%	Decreases in staff productivity due to several members of the team being sick with COVID-19

75% of organizations intend to restructure their revenue cycle operations in response to shifting business dynamics driven by the pandemic.

Larger healthcare providers with $1B – $10B net patient revenues; organizations that have experience with or currently use automation; and health systems (versus hospitals) are statistically more likely to restructure their revenue cycle operations to increase permanent work-from-home staffing post-pandemic.

Survey respondents were asked, **"Based on how COVID-19 has impacted your organization, do you expect to permanently change the structure of your revenue cycle organization?"**

COVID-19 Permanent Impact

Plan for more work-from-home permanently
32.4%

Have no plans to change organization or staffing approach
25%

No change to staffing approach, but will keep tools, etc. to enable quick transition to remote work
23.3%

Plan to automate more functions
14.2%

Other
5.1%

Health systems and hospitals that have experience with or currently use automation in their revenue cycle operations are more likely to have employees work from home permanently.

	Have never used automation	Do not use automation anymore	Use automation
Plan for more work-from-home permanently	19.4%	40%	**43%**
No plans to change organization or staffing approach	28.6%	**40%**	21.5%
No change to staffing approach, but will maintain tools and processes to enable quick transition to remote work	**27.6%**	10%	19.3%
Plan to automate more functions for business continuity	**17.3%**	–	11.9%
Other	7.1%	10%	4.4%

Health systems are more likely than hospitals to restructure their revenue cycle operations to allow more employees to work from home permanently.

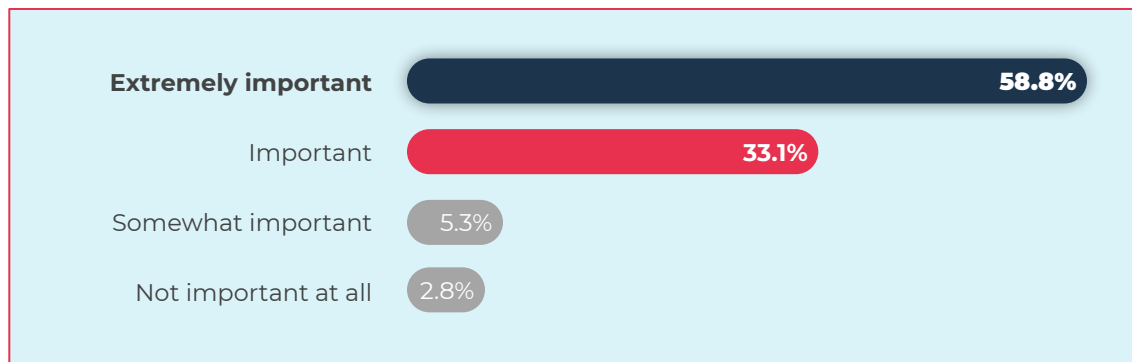|	Health System	Hospital
Plan for more work-from-home permanently	**35.7%**	31.1%
No plans to change organization or staffing approach	17.9%	**27.8%**
No change to staffing approach, but will maintain tools and processes to enable quick transition to remote work	21.4%	**24.1%**
Plan to automate more functions for business continuity	**19%**	12.3%
Other	6%	4.7%

Larger organizations are more progressive in their approach to automating functions and deploying a work-from-home model.

Larger organizations, with $1B to $10B net patient revenue, are more likely than others to restructure their revenue cycle operations to allow more employees to work from home permanently.

BUSINESS SIZE	<$500M	$500M–$1B	$1B–$10B	>$10B
Plan for more work-from-home permanently	23.8%	34.9%	**53.4%**	25.0%
No plans to change organization or staffing approach	**36.1%**	23.3%	6.8%	25.0%
No change to staffing approach, but will maintain tools and processes to enable quick transition to remote work	**25.2%**	16.3%	21.9%	25.0%
Plan to automate more functions for business continuity	10.2%	20.9%	12.3%	**25.0%**
Other	4.8%	4.7%	5.5%	—

More than 90% of financial leaders at health systems and hospitals say automation tools should be purpose built for healthcare revenue cycle management.

Survey respondents were asked, **"When evaluating automation tools for revenue cycle operations, how important is it for those tools to be designed specifically for revenue cycle management in healthcare?"**

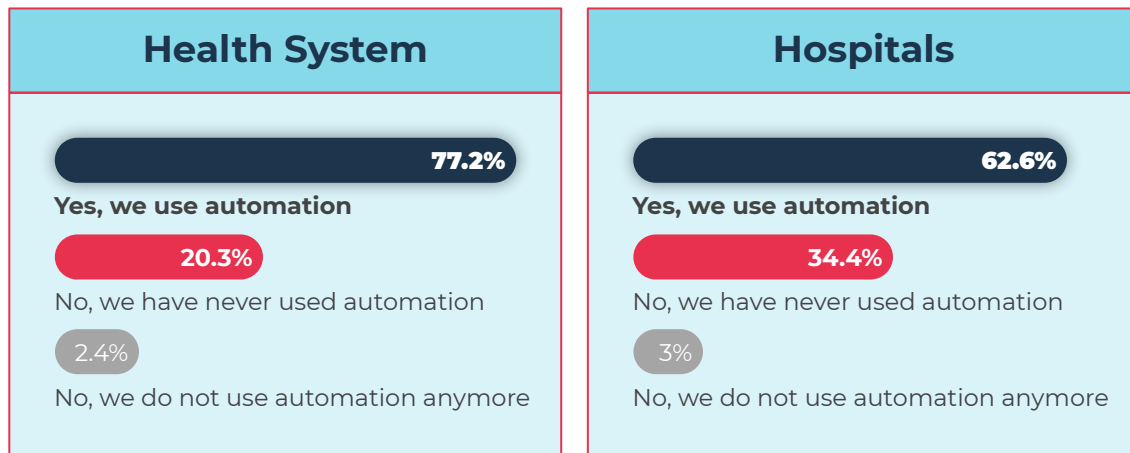|	
Extremely important	**58.8%**
Important	**33.1%**
Somewhat important	5.3%
Not important at all	2.8%

More than 66% of health systems and hospitals use automation tools for revenue cycle operations.

Health systems (versus hospitals) are statistically more likely to be currently using or implementing automation tools in their revenue cycle operations. Survey results also show that as size of the organization increases so does their use of automation tools with the largest healthcare providers, those with $1B – $10B net patient revenues, most actively using or implementing these tools.

Survey respondents were asked, **"Does your organization currently use any form of automation, or are you currently in the process of implementing automation in your revenue cycle operations?"**
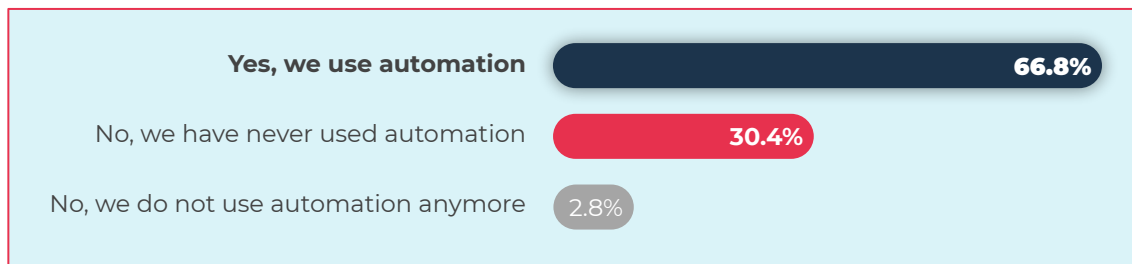
Yes, we use automation	**66.8%**
No, we have never used automation	**30.4%**
No, we do not use automation anymore	2.8%

Health systems (versus hospitals) are statistically more likely to have automation in their revenue cycle operations.

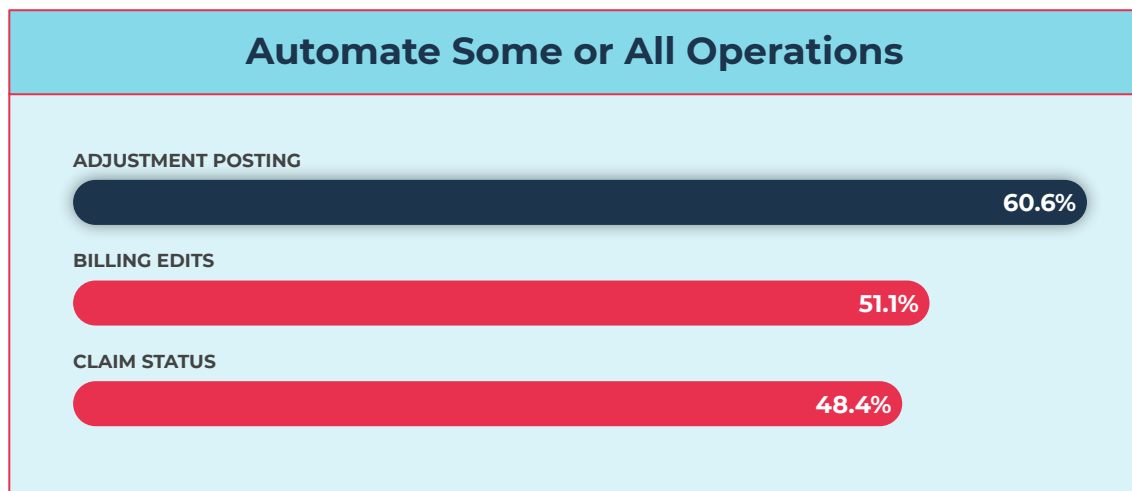| Health System	Hospitals
77.2%	**62.6%**
Yes, we use automation	**Yes, we use automation**
20.3%	**34.4%**
No, we have never used automation	No, we have never used automation
2.4%	3%
No, we do not use automation anymore	No, we do not use automation anymore

Organizations with the highest net patient revenue are statistically more likely to have automation in their revenue cycle operations.

BUSINESS SIZE	<$500M	$500M–$1B	$1B–$10B	>$10B
Yes, we use automation	36%	64.5%	78.9%	**83.3%**
No, we have never used automation	**60.3%**	33.3%	15.8%	16.7%
No, we do not use automation anymore	3.7%	2.2%	**5.3%**	–

Adjustment posting and billing edits are top areas where automation is applied in healthcare revenue cycle operations.

Survey respondents who indicated they currently use automation in their revenue cycle operations were also asked, **"In which of the following areas of revenue cycle operations do you automate some or all of the work?"** Respondents were allowed to select all that apply.

Automate Some or All Operations

ADJUSTMENT POSTING
60.6%

BILLING EDITS
51.1%

CLAIM STATUS
48.4%

According to the survey, the most common areas in which automation is applied is consistent across both health systems and hospitals as well as by organizations of all sizes based on net patient revenues.

More than 60 percent of health systems that do not currently use revenue cycle automation **plan to do so by end of 2021.**

Survey respondents who said that they are not currently using automation in their revenue cycle operations were asked, **"Does your organization plan to automate any functions in your revenue cycle operations in the future?"**

|	
Yes, sometime in 2021	51.8%
Yes, it is a priority for 2020	10.6%
No	37.6%
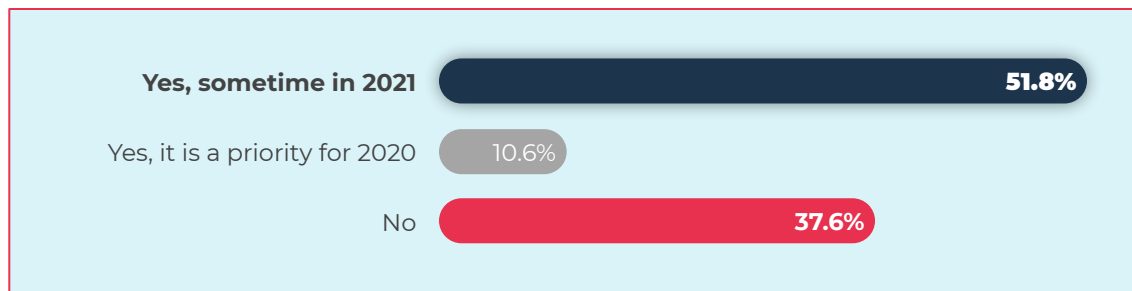
Responses were statistically consistent across organizations of all sizes based on net patient revenues and regardless of organization type (health system or hospital).

Nearly 60 percent of healthcare Chief Financial Officers (CFOs) and revenue cycle **leaders mistakenly consider** robotic process automation (RPA) to be a form of artificial intelligence (AI).

When statistically evaluated by past or current use of any revenue cycle automation tools, **more than 50 percent** of revenue cycle leaders in organizations that are actively using automation in their revenue cycle operations demonstrate confusion between RPA and AI.

According to the 2020 Forrester® Ten Golden Rules for RPA Success report, vendor messaging often conflates AI and RPA, though they are distinct and coevolving technologies; RPA is deterministic while AI is probabilistic. The same report points out that while RPA is a valuable tool for some, scale is difficult, with fewer than 10 bots employed in more than half of all RPA programs worldwide. According to the report, finding enough tasks to automate is the biggest scale issue, as there is too much variation, even when outcomes are the same, and RPA does not handle those variations well.
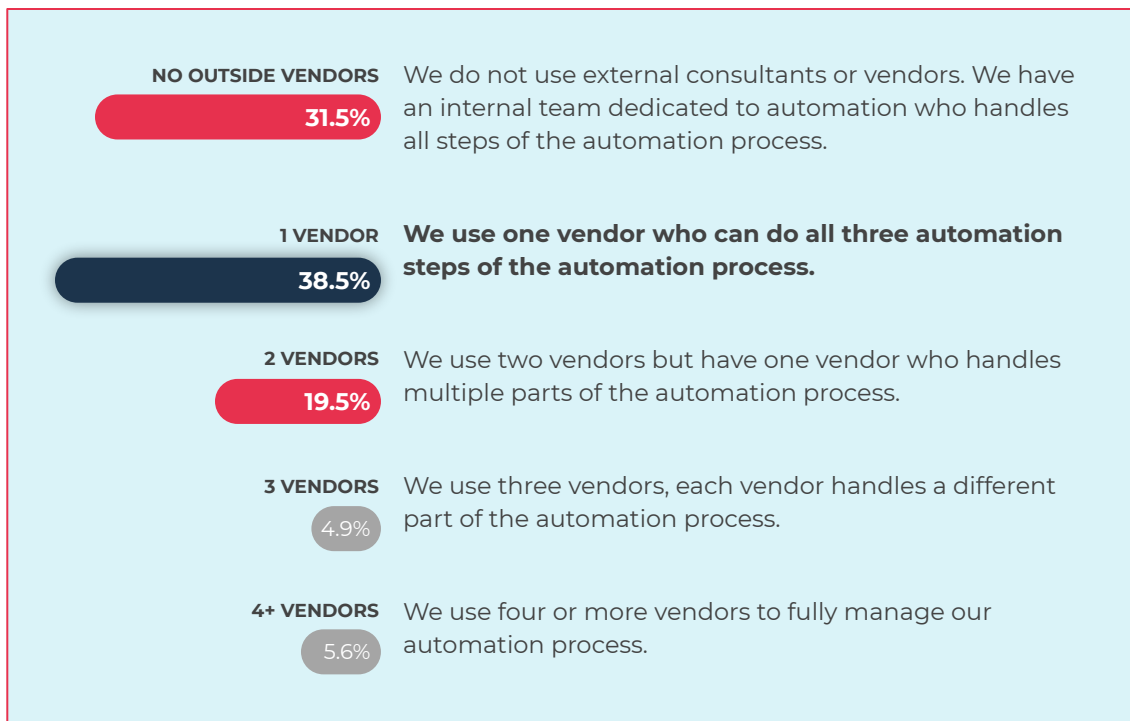
Survey respondents were asked, **"Do you consider RPA, as a technology, to be a form of AI?"**

Yes, RPA is a form of AI	58.8%
No, they are entirely different	41.2%
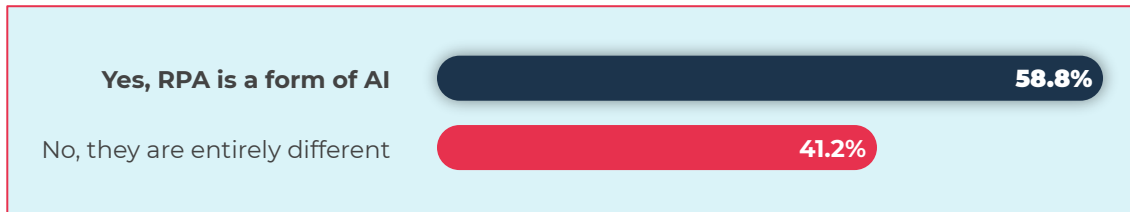
	No, they are entirely different	Yes, RPA is a form of AI
Yes, we use automation	46.4%	53.6%
No, we do not use automation anymore	20%	80%
No, we have never used automation	35.9%	64.1%

30% of health systems and hospitals using revenue cycle automation require two or more vendors to manage the process. Some organizations use four vendors or more to manage revenue cycle automation.

Survey respondents were asked, **"Which of the following best describes how many outside consulting firms and vendors you currently use to automate revenue cycle operations?"**

NO OUTSIDE VENDORS
31.5% We do not use external consultants or vendors. We have an internal team dedicated to automation who handles all steps of the automation process.

1 VENDOR
38.5% **We use one vendor who can do all three automation steps of the automation process.**

2 VENDORS
19.5% We use two vendors but have one vendor who handles multiple parts of the automation process.

3 VENDORS
4.9% We use three vendors, each vendor handles a different part of the automation process.

4+ VENDORS
5.6% We use four or more vendors to fully manage our automation process.

WHAT TO EXPECT IN 2021 AND BEYOND

While the pandemic continues to affect our health care system, organizations will continue to see volatility at different times and **automation can help add resiliency to revenue cycle operations.** With the greater stability, scalability and speed of implementation offered by solutions utilizing AI and ML, hospitals and health systems are looking to automation to mitigate the impacts of the pandemic to their bottom line. As a result, we expect hospitals and health systems to pursue revenue cycle automation with more urgency and greater purpose. We also expect revenue cycle leaders to be increasingly sophisticated in their analysis of automation solutions and better able to distinguish the approaches that overpromise and underdeliver from those that provide a solid return on investment.

AI and ML Increases Scope and Expectations of Automation

With more machine-learning and AI-based automation solutions available in the market, organizations are expanding the scope and complexity of tasks to automate. Many leaders are developing automation strategies focused on achieving end-to-end automation of entire revenue cycle functions. **Automation initiatives are also expected to not only reduce costs but also improve accuracy** of the work completed and improve key measures of success.

Purpose-Built Automation

We expect revenue cycle leaders to focus on automation for claims management (eligibility, prior authorizations, claims status); denials management (how to better predict, work/appeal denials and reduce initial denials and write-offs to improve overall revenue capture); and clinical revenue cycle management (in-patient/ out-patient coding, clinical documentation improvement to reflect acuity and increase appropriate reimbursement, case management or utilization review to reduce unnecessary utilization, and charge capture for overall billing improvements) – all of which are resource intensive. Hospitals and health systems will look for solutions that are purpose-built for their use, with an eye to a partner that can provide an automation platform that has potential applications across the organization.

Summary

2021 is poised to see more revenue cycle leaders invest in automation and those who already do will expand their programs.

As these automation tools roll out across hospitals and health systems, we expect the following aspects to be of utmost importance:

- Solutions that are purpose-built for hospital and health system revenue cycle operations

- Speed of automation integration/faster deployment

- The ability to deploy entirely remotely with limited or no need for staff shadowing

- The ability to automate full revenue cycle functions

- Automation that removes tasks from employee queues so staff can focus on more complex work

- The scalability, resilience and flexibility of the automation solution.

AKASA