

The background is a solid yellow color. It is decorated with numerous hexagons of varying sizes and colors, including white, light yellow, and dark yellow. Some hexagons are solid, while others are outlined. A large, stylized, thick yellow cross is positioned in the lower right quadrant of the page.

Diagnosing Your Health System's IT Support Desk

A guide to using service level metrics to uncover hidden costs, increase user satisfaction and efficiency, and case studies of health systems who have tackled IT support challenges.



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What makes CereCore an expert in health system support desk operations?

Any number of organizations offer expertise in IT service desk operations. Few have delivered highly scalable support services to their own health system. CereCore leverages our heritage as an operator to provide services that empower the delivery of care across the nation.

High-performing service desks are critical to hospital operations. The service desk sees all the issues on the front line – software, hardware, and more. Through the service desk, there is a unique opportunity to provide a level of insight not seen elsewhere in the organization and use this knowledge to improve productivity, customer satisfaction, and cost of operations.

Our experience supporting hundreds of facilities across the country informs our best practices and focuses on driving continuous improvement through the service desk. We hope this guide provides insights to help your Health IT leadership solve the challenges of supporting your care providers and communities.

[SEE HOW WE HELP CLIENTS](#)

KEY TERMS

FIRST CONTACT RESOLUTION (FCR)

- + Number of user incidents resolved during the initial contact without the need for any subsequent contact

FIRST LEVEL RESOLUTION (FLR)

- + Includes all FCRs as well as any incident that is resolved by a first-level agent via subsequent contact

ACTUAL FCR/FLR

- + Total Contacts Resolved/Total Contacts Received

IN-SCOPE FCR/FLR

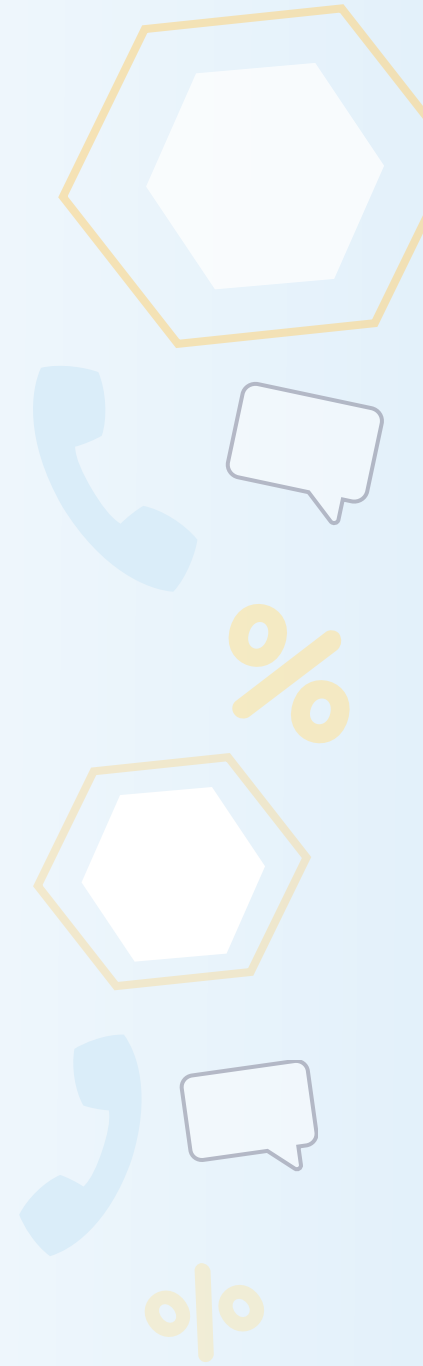
- + Resolution rate of incidents that are deemed resolvable through agreement

AVERAGE SPEED OF ANSWER

- + Average hold time in mm:ss before an agent picks up, or
- + Percentage of calls answered within a specified timeframe, such as 80% answered within 60 seconds

ABANDONMENT RATE

- + Percentage of calls abandoned before end user speaks to an agent



First, are you capturing the correct metrics?

"All of my metrics are showing green, but when I'm on the floor gauging our employee population, I hear red."

This is a growing sentiment in the service desk industry, despite all the best practices around call answering times, resolution rates, speed to answer, and related metrics that are considered standard measures of high-performance.

What this type of statement really means is that the metrics are only telling you a piece of the user experience. You could be looking at the wrong metrics for the issues you are trying to resolve, or only reviewing metrics that meet your contractual service level. Either way, focusing on the right metrics for the issue at hand is the first step.

Defining the correct metrics is critical.

The service desk sees all of the issues on the front line— all incidents that are submitted to your service desk—hardware, software, or any other area within your technical environment. This puts Health IT leaders in a unique position to gain insight regarding the health of your environment.

The amount of data that can be pulled from those types of issues can help drive organizational improvement beyond the service desk level.

For example, an issue that is resolved at the root cause can rule out any front-line clinicians experiencing the problem.

Defining the right metrics is essential to delivering value to the organization from a service desk perspective. How can you show ROI in the internal or external capital spending on your service, the technology platform such as IT Service Management (ITSM) software, and the volume of personnel working the service desk?

The metrics you focus on should be indicators of the following:

- + Financial value added to the organization
- + Satisfaction of the end-user community
- + Identify needs for improvement
- + Demonstrate the capability to restore normal service operation as quickly as possible, minimizing any adverse impact on business operations or the user

Defining what you truly need your metrics to indicate, and then using the proper metrics can help drive continuous process improvement, find cost savings, and resolve issues proactively so clinicians can focus on patient care.

Best practice: Define what you truly need your metrics to indicate, and use the proper metric for addressing process improvement.

First Contact Resolution (FCR) versus First Level Resolution (FLR)

No one enjoys waiting for a return response. Whether it's a chat, email, or a phone call, First Contact Resolution (FCR) indicates the ability of support agents to resolve a user's incident without any subsequent contact. This metric is the best indicator of end-user satisfaction and service-desk productivity.

While First Contact Resolution (FCR) and First Level Resolution (FLR) are entirely different measurements, the lines between the two are often blurred. First Level Resolution includes all FCRs as well as any incident that is resolved by a level 1 agent. This could be a callback to the end user from a more experienced agent to help resolve an issue that an initial agent could not. Or it could be a subsequent call to the end user by the level 1 technician who has received guidance from a level 2 or level 3 technician after escalating the incident.

There are benefits to each metric and using both can help you understand the user experience more realistically.

- + **First Contact Resolution** is a better indicator of user satisfaction and understanding the percentage of incidents that have a lesser impact on downtime/unproductivity.
- + **First Level Resolution** helps give an overall understanding and indicator of financial savings based on incidents that would be handled by level 2 or 3 resources if the incident had not been resolved by a tier 1 agent.



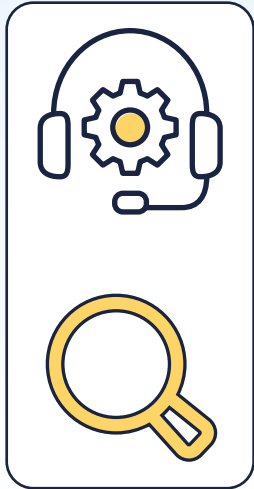
Reporting challenges blur the lines between these two metrics.

Reporting on FCR can be difficult depending on the technology and nuances in your service desk solution. The biggest challenge has been the technology's ability to tie an incident to a call. Incident records and call records are often separated in different databases. It is critical to have sound logic that combines the databases to correctly report on the metric. For example, the average talk time for a specific incident type can't be determined without associating each incident to a call and call length. The complexity increases when an ITSM integration is in place with two separate incident systems talking to each other. However, the ability to report separately on the two metrics can help identify gaps in the service being delivered and understand the user experience more fully.

Best practice: Use First Contact Resolution as a better indicator of user satisfaction and productivity.

The Tale of Two FCRs

Experience shows that First Contact Resolution (FCR) is the primary metric for productivity. However, it is important to understand the tale of two FCRs: Actual versus In-Scope FCR.



Actual FCR is calculated with a simple calculation of Total Contacts Resolved/Total Contacts Received. It is a true indicator of how many incidents your service desk is resolving on the first contact at the first level. Actual FCR provides Healthcare IT Management with an understanding of the ROI they are getting on a service desk solution. Management can see the actual number of incidents handled at level 1 without engaging a more expensive resource, which demonstrates cost savings within the organization as well as higher productivity on optimization/enhancement projects that transform the business versus “keep-the-lights-on” work.

In-scope FCR measures the resolution rate of incidents that are deemed resolvable through an agreement between the service provider and the healthcare entity. For example, let’s say there’s a broken phone. This incident will require a second-level user to either replace that phone or troubleshoot, which would be factored completely out of your in-scope metric. However, in-scope resolution indicates how efficiently your service desk is operating given the knowledge and access provided to resolve issues.

Both FCRs are useful in finding gaps for process improvement.

A common example of in-scope FCR incidents is active directory password resets. Taking a look at measuring the resolution on just these expected tickets, the result would typically indicate a high resolution. If you’re only measuring all tickets and factoring in all different issues, including the ones that the service desk cannot resolve, you will be unable to see the gaps between the two and determine opportunities for improvement.

Actual and in-scope metrics together provide meaningful data to drive actionable items that improve the service desk experience attained by your IT organization. Additionally, each metric can be a check on the other to ensure your organization’s needs are met. It is recommended that both metrics are used in contracting. Based on our years of service experience, 60% actual FCR and 90% in-scope FCR are good starting points for contract discussions.

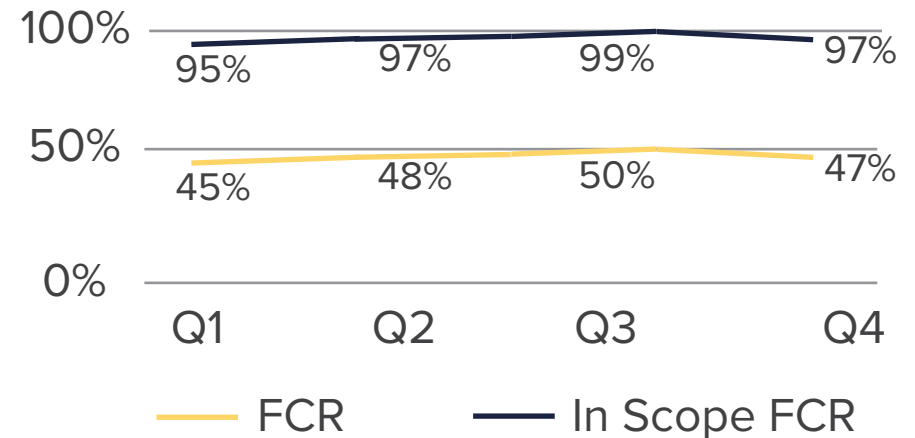
Best practice: Compare Actual and in-scope FCR for finding areas of improvement.

Driving Efficiency with FCR Metrics: Case Studies

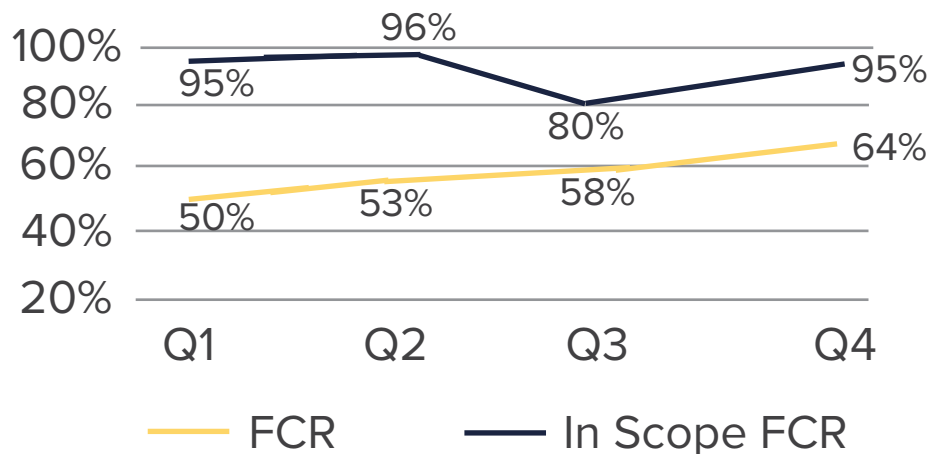
What happens when you utilize FCR metrics for improvement? These scenarios follow the metrics at health systems for one year.

This health system's In-Scope FCR at 95-97% demonstrates a very high efficiency of agents resolving incidents within their capability to resolve, and doing so at a high clip. Focusing on Actual FCR, you'll see it hovering around 50%. This indicates that a second-level resource is being engaged on half of all issues, which probably isn't bringing the best return on investment. What needs to happen here is an analysis of high-volume issues currently being escalated to determine if these incidents can be resolved by the service. If yes, this is an area to give the level 1 desk additional access and knowledge to close the gap between these two levels. Having level 1 resources solve more incidents allows the level 2 resources to focus on true enhancements in the organization.

CASE STUDY 1



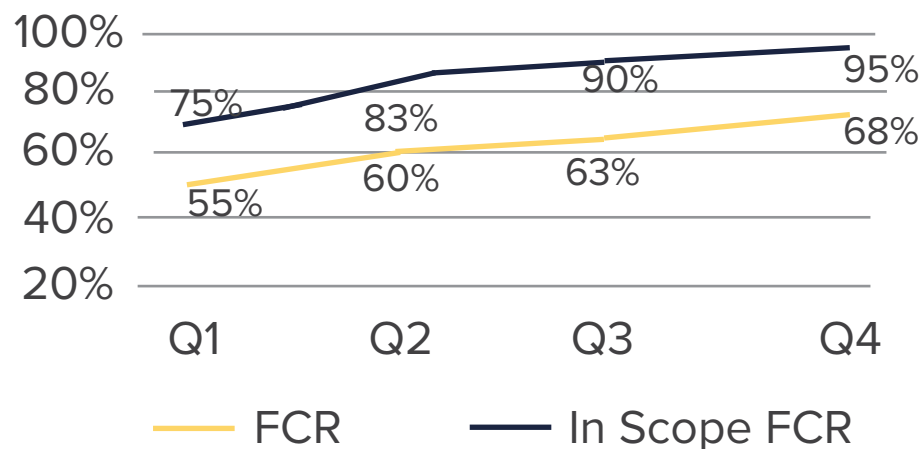
CASE STUDY 2



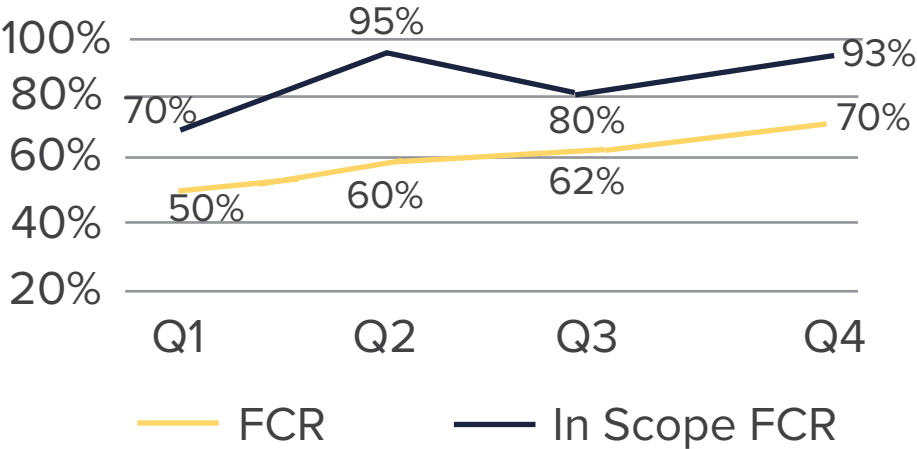
The second study starts with a high in-scope resolution with about half of the incidents going to a level 2 resource. In this case, we identified some incidents that the level 1 resources could resolve. The dip in the third quarter represents a time where the level 1 resources have taken on these incidents after gaining new access and training—so you see an adjustment period. Even during this period, fewer level 2 resources are engaged. And the following quarter, in-scope efficiency is back to 95% as these resources have adjusted to handling the new incidents and the gap between the two metrics has continued to narrow.

Our third study is a situation where a managed services provider came in and the hospital provided all the information required to realize the high FCR at the onset of the service. It took some time for that service staff to get comfortable with all the processes. Keep in mind that onboarding a new provider is not “set it and forget it.” Through ongoing training and identification of gaps in processes, they achieved a 20 point gain in scope resolution.

CASE STUDY 3



CASE STUDY 4



Our last study is a mix of the previous scenarios. In quarter one, the service desk was not doing everything needed to execute the process they were already provided. Then they kicked into overdrive. Following training, they achieved a 95% in-scope resolution that merited a 60% overall resolution. Through gap analysis and interviews with level 2 groups, we identified additional areas that level 1 resources could resolve. After getting the information to the level 1 resources, you see the adjustment period but there was still a small increase in overall resolution. After the resources achieved a comfort level handling these new incident types, both metrics were in line with a high-performing service desk.

Best practice:
Continuously partner with your service desk resources to drive improvements.



Ticket Reassignment

Naturally, you aren't going to resolve every issue at the first level service desk. More advanced issues need a more advanced resource. One of the keys drivers of user satisfaction – and an area to examine closely is ticket reassignment. How is the process? What is the experience from the service desk perspective?

Having a non-critical incident misrouted to the incorrect team can potentially delay resolution for the end-user by days or even weeks. If the issue is critical, resolution delays can amount to 4-6 hours, which could potentially be detrimental to your end-users and even your patients.

Additionally, in hospital environments, it is equally as important for the Service Desk agents to collect the correct details for the second-level technicians to diagnose and resolve issues. In hospital environments, it has proven to be more difficult for technicians to get in touch with providers that are treating patients all day, moving room to room if more information is needed to resolve the problem. If an incident is in the queue, waiting to be worked, and the technician does not have the information needed to resolve the ticket and cannot reach out and contact the provider, resolution can be delayed for days.



TICKET REASSIGNMENT % IS ONE OF THE KEY DRIVERS OF SATISFACTION.



**MISRUTED INCIDENTS CAN POTENTIALLY DELAY RESOLUTION BY:
+ DAYS OR EVEN WEEKS FOR NON-CRITICAL INCIDENTS**

+ 4-6 HOURS FOR CRITICAL INCIDENTS

V. TICKET REASSIGNMENT

These shortcomings are a shared responsibility between the Service Desk and Organization. Initially, the organization needs to provide the Service Desk with the required information and routing matrices for issues. From the execution perspective, the Service Desk must place this information in knowledge base articles and have the correct process for the agents to probe and ask the correct questions to identify the issue, and then obtain the appropriate required information to resolve.

In most cases, ticket reassignment metrics are tracked through direct feedback from 2nd/3rd level teams via the ITSM tool. There are ways to capture ticket reassignments automatically, but there are times where a ticket reassignment is by the design of an escalation process.

For example, a suspected integration issue would first be sent to the application group to investigate before being escalated to the integration group. The process was followed but the reporting would be flawed.

“It is necessary to track and report on both of these instances through the ITSM system to gauge the effectiveness of the Service Desk.

Inevitably, there will be times when FCR is not possible; being able to properly escalate to promote resolution is just as important.

<1%

Best practice: Escalated tickets with incorrect details or assignments to the wrong group should occur no more than 1% of the time.

The Tipping Point of Costs: Answering Metrics

Average Speed to Answer (ASA) is one of the most important determinants of cost. It is critical to find a balance between acceptable hold times and resources to deliver on a 24/7 model.

FCR is the most important metric for driving user satisfaction, until the phone isn't being answered. Average speed to answer (ASA) tells an important piece of the user story, and it is also one of the most important determinants of cost.

Reducing the time it takes for an agent to connect with an end-user requires additional resources and represents an exponential increase in costs. Organizations should also factor in shrinkage to their answer metrics to account for sick time and PTO call-outs. For example, factor in an extra two or three personnel over what is needed for shrinkage. An increase in staff should generate a linear correlation to satisfaction the quicker your agents can answer the phone.

The flip side to this is a tipping point where customer satisfaction will plateau. A user is willing to wait on the phone for an acceptable number of seconds to get their call answered, as long as they know their issue will be resolved. However, if their call is answered within three seconds, but they typically get a ticket escalated each time due to an untrained Level 1 process, you will see that satisfaction plummet. Whether you are aiming for 30 seconds or 60 seconds, whatever number that is, it is important to look at the next level metric to find that sweet spot between what is acceptable versus the cost for staffing.

The next metric to consider is the abandonment rate, the percentage of calls that are abandoned before the end-user speaks to an agent. At CereCore, we use both ASA and abandonment metrics within our client contracts. In our years of experience, we've found that 80% of calls answered within 60 seconds is a success rate that demonstrates the happiest customers at the right price. Coupled with a high-resolution rate, this 80% ASA within 60 seconds would align with a 5% or less abandonment rate.

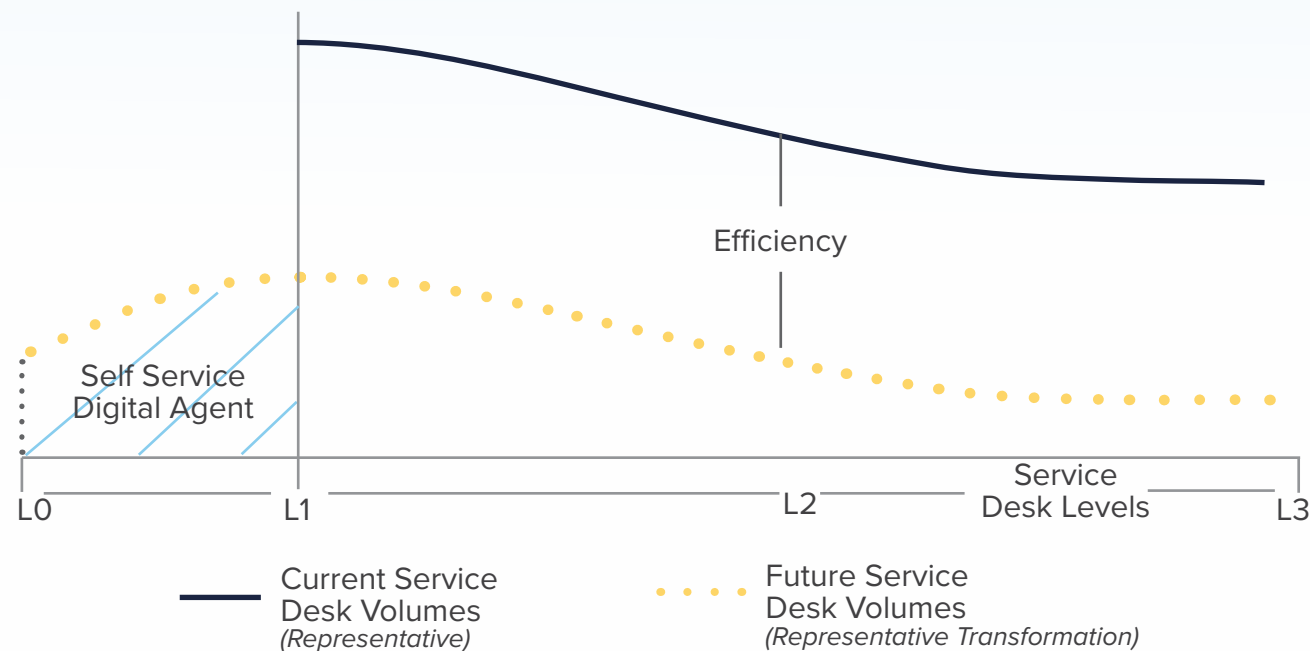
Best practice: The preferred metric for contracting with an outsourced service provider is the percentage of calls answered within the ASA.



Automation is Foremost a Strategy

The next step in the maturation process of a highly functioning service desk is looking at areas to automate and reduce overall contacts. This is done through shifting capabilities to resolve issues downward or to self-service. How can you shift level 2 cases to level 1, or level 3 to level 2? And how do you eliminate incidents altogether?

Whether through self-service or some level of contact reduction such as backing up software encryption to prevent issues, keeping this mindset helps to improve overall efficiency.



VII. AUTOMATION IS FOREMOST A STRATEGY

Though chatbots and AI technologies are often considered to deliver automated services, automation in this sense is a strategy. It doesn't always mean the presence of some type of tool that avoids contact with an agent. As Ardent Health points out, one of the strategies they employed was the use of queue manipulation and prioritization to address calls from physicians quickly and with more experienced resources. Through this strategy, calls from Ardent physicians were answered three times faster than calling into a standard line. This in turn supported stronger physician satisfaction and addressed the probability and possibility of reporting on issues that impact patient safety.

“**This in turn supported stronger physician satisfaction and addressed the probability and possibility of reporting on issues that impact patient safety.**”

Another example of this strategy is segmenting a call queue and team to deal with patients calling in to set up their MyChart accounts. Looking at automation as a valuable resource that supports patients with these issues helps drive efficiency, satisfaction, and the health system's reputation.

***Best practice:* Focus on automation strategies to drive improvements over technologies that avoid contact with the agent.**



Ardent Health's Prescription for Service Desk Efficiency

Ardent Health Services supports 4900 beds, 1200 providers, and over 25 thousand employees, making the service desk one of the most important services they provide. In 2016, Ardent began the transition from McKesson to Epic and needed to devote its in-house analysts entirely to that project. They began working with CereCore to provide support on the legacy systems, which included McKesson as well as some laboratory and surgery systems.

As Ardent began to grow, the partnership with CereCore grew as well, leading to CereCore providing all level 1 service desk support. When Ardent acquired additional hospitals in 2018 and 2019, they expanded CereCore support to handle the increased number of calls resulting from their growth.

Flexibility in partnership.

An outsourced service desk should provide four pillars of value: financial value, flexibility, customer satisfaction, and process improvement. The Ardent and CereCore partnership has established a mutually beneficial cost model, flexibility through years of growth, and success in addressing customer satisfaction.

Jim Mayercik, Vice President of IT at Ardent Health Services, describes what this commitment to continuous improvement and flexibility meant during the height of the COVID-19 crisis. “When the CDC recommended that hospitals stop performing elective procedures, we saw a significant reduction in the number of calls for the first couple of weeks. The full impact of this reduction was initially hidden due to the fact we also had a go-live event in one of our major markets, which inflated calls. In early April, it became apparent that we were running about 25 to 30% of anticipated calls. CereCore also noticed the trend and proposed a two-month reduction in our billing due to the downturn in volume, with the option to extend it should the trend continue.”

“Rather than furloughing some of their employees, CereCore took the opportunity to go through our online Epic training to further improve their ability to understand and address the calls as they come in. In June, we saw the volumes pick back up to 85-90% and in July, 100%.”

VIII. ARDENT HEALTH'S PRESCRIPTION FOR SERVICE DESK EFFICIENCY

Finding value in outsourcing.

Finding financial value is almost always the first objective of outsourcing service desk functions. For Ardent, finding the right balance of resources for incidents wasn't simply the first step, but continues to be re-evaluated throughout the partnership with CereCore.

Rick Keller, CIO at Ardent Health Services, describes the shared responsibility of finding the right balance of support resources for the value and customer satisfaction they require. "We realized that we needed outside help to address our expanding environment and a conversion to a new EMR. So measuring that right price for the average speed came through some trial and error and experiences that we were able to share with CereCore."




VIEW ARDENT HEALTH'S STORY

Perspectives from
Rick Keller, SVP and CIO - Ardent Health
Jim Mayercik, VP Information Technology - Ardent Health

“In our situation, there was a diminishing level of return if we were too quick to answer for the price point to achieve immediate responses. We discovered that our best practice was for 80% of our calls to be answered between 60 and 90 seconds to maximize value and customer satisfaction. CereCore consistently performed within the best practice of 80% calls answered within 60 seconds. As we were able to trust that performance, we continued to add more services to our contract with CereCore to help us achieve our goals.

Another critical aspect in partnering with CereCore has been flexibility during large Epic activations. CereCore services during these activations can expand to meet the needs of a two-week activation and then contract back to normal. They've allowed us to partner with outside parties and bring in agents who can seamlessly integrate into their operation and provide a high priority service desk for a limited amount of time. We can answer the calls quickly, keep satisfaction high, and help with the adoption of the EMR while minimizing frustration during the activation.”

Open communication fosters continuous improvement.

Analyzing service desk trends is the first step in driving process improvement, but the second is open communication. Mayercik points out that Ardent continues to lean on CereCore to share trending information after improving processes with critical groups within the organization.

“One of the metrics CereCore provided that was very critical to us was the number of calls that our CEO was getting from our physicians.

We tracked this metric weekly and I had to sit in front of the CEO and review with him,” says Mayercik. “Probably the biggest improvement came from reevaluating our levels of service.” CereCore employed queue manipulation and prioritization to address calls from physicians at a quicker rate and with more experienced resources. Through this strategy, calls from Ardent physicians were answered three times faster than calls coming into a standard line.

“Weekly and monthly CereCore metrics are allowing us to work with our markets to learn from each other,” adds Keller. “Who's doing what better, or who's not doing as well. We are analyzing why there may be more calls for password resets from New Mexico than from Texas, and we are finding many such opportunities to continually improve and refine our processes.”

Keller also explained how open communication allows a partner to work on behalf of their organization. “Shortly after Chris Wickersham was assigned to our account, I included him in our monthly leadership meeting so that he could learn about our strategic drivers and potential changes as a result of these initiatives. He has an open forum with all of our leaders. They know and trust him as an extension of our IT services environment to support our end users on the other end of the phone. End users don't care that it's a separate entity. CereCore is acting on our behalf through our service desk for Ardent Health Services to help meet our company's needs for technology services.”



What's Next?

We're ready to talk about your service desk performance and goals whenever you are.

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Hear from other health system leaders as they share how we have helped them with help desk services and more.

[SEE HOW WE HELP CLIENTS](#)

Curious about how your help desk measures up? Let's uncover hidden costs and challenges, and find ways to ensure your customers are happy.

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