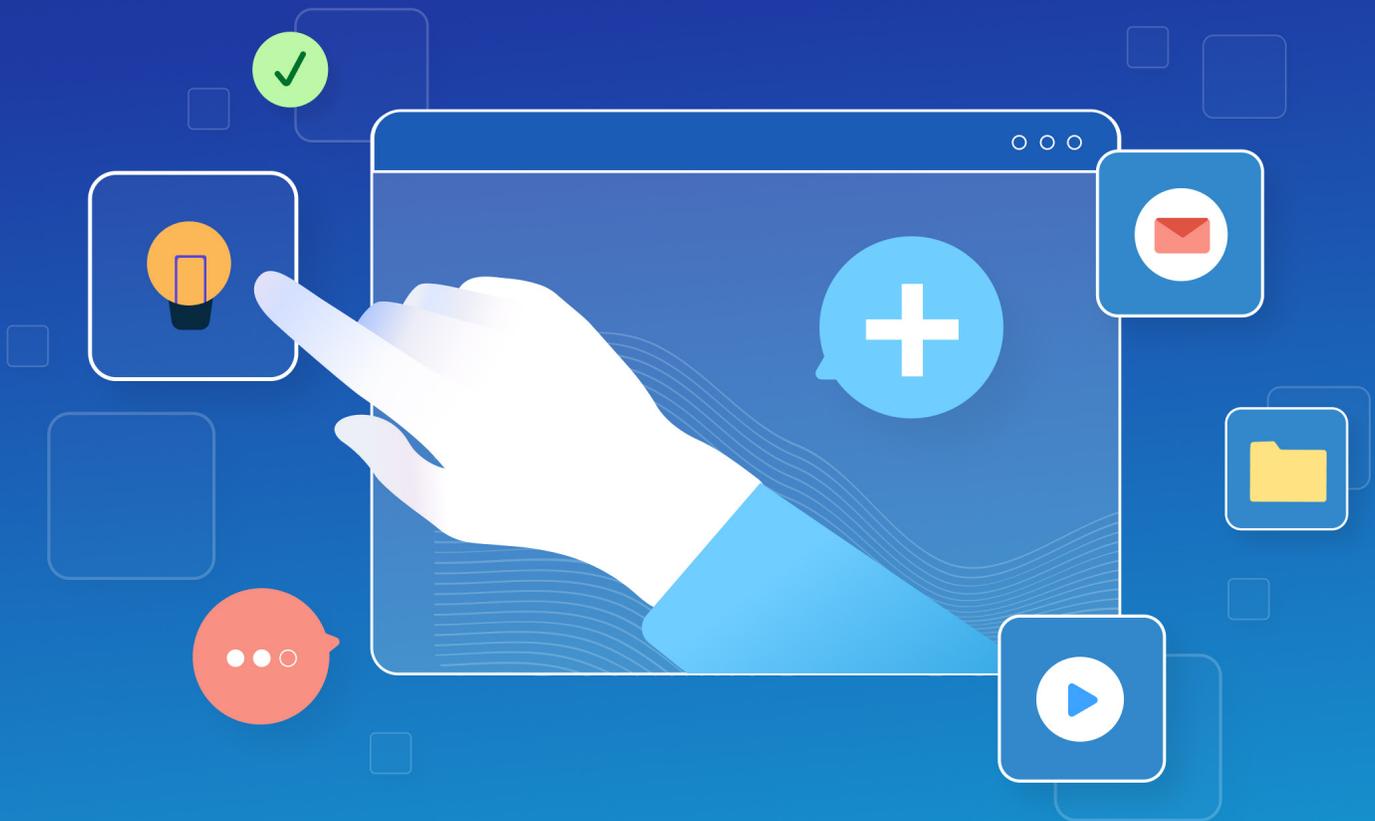


2022 Guide

Healthcare Application Support Strategy



About 314e



314e is a Healthcare IT products and solutions company based out of San Francisco, CA. Since 2006, 314e has worked with 250+ enterprise customers in North America, including healthcare providers, payers, and life science companies. 314e helps its customers by enabling their digital transformation journey via products like Healthcare Digital Adoption Platform (Jeeves) and Data Archival Solution (Muspell Archive). 314e also provides consulting services around cloud adoption, big data, integration, digital learning, EHR optimization, and revenue cycle management.



About the Author



Gaurav Mundra is the vice president of product management and marketing at 314e Corporation. He holds more than 17 years of experience in enterprise SaaS product management, product marketing, and service delivery. His expertise includes managing product vision and strategy, market and customer research, and product-led growth. He has managed product portfolios, out of which two have been listed on the Epic App Orchard. One of the products - Jeeves, has been listed on LinkedIn as one of the top Healthcare DAP products.



Acronyms

ATE	—————	At-the-elbow
BAA	—————	Business Associate Agreement
CDO	—————	Chief Digital Officer
CIO	—————	Chief Information Officer
CMIO	—————	Chief Medical Informatics Officer
CNIO	—————	Chief Nursing Informatics Officer
DAP	—————	Digital Adoption Platform
EHR	—————	Electronic Health Record
ERP	—————	Enterprise Resource Planning
HIPAA	—————	Health Insurance Portability and Accountability Act
HRMS	—————	Human Resource Management System
MSA	—————	Master Services Agreement
NDA	—————	Non-disclosure Agreement
NIH	—————	National Institutes of Health
SLA	—————	Service-level Agreement
SMART on FHIR®	—————	Substitutable Medical Applications and Reusable Technologies on Fast Healthcare Interoperability Resources
SME	—————	Subject Matter Expert
SoW	—————	Scope of Work
SSO	—————	Single Sign-on



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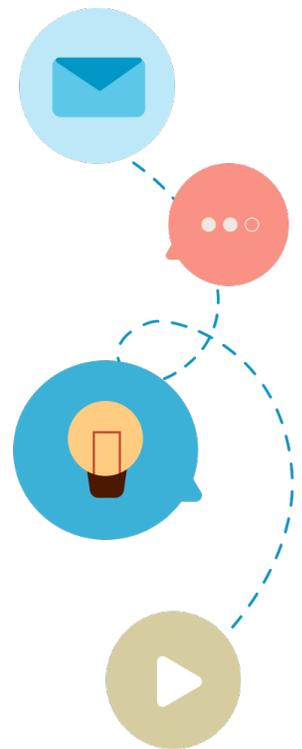
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Introduction

Digitalization has changed the globe in leaps and bounds over the past few decades. Almost every industry in the world has been under the direct impact of digitalization and technological innovations. While technology has definitely made things easier, it's important to note that if users are unable to adopt it well, it might turn more into a bane than a boon. When it comes to the healthcare industry, this statement is almost a universal truth!

On average, a US hospital might have more than 200 healthcare applications in use. The clinicians are not just expected to remember the process of accomplishing workflow-related tasks in dozens of these applications, but also do it within a bounded time. And moreover, this is often expected to be accomplished with a patient in front of them.

For a long time now, clinicians have been depending on service desks for application support. However, even that seems to come with its own set of inherent problems. From dealing with time pressures to the high costs of service desks, the burden is being heaped on the physicians, whose core job is - let's not forget - caring for the patients. So, since when did dealing with IT become the greater preoccupation for healthcare workers than health care itself? How is it that the application support practices end up adding layers of complications to the physician's job instead of making it easier? Read on to find out what exactly is missing in there and what needs to be done as a solution to overcome the challenges physicians face while adjusting to technology in healthcare.



Why Worry About Application Support Strategy?

A survey conducted by the **National Institute of Health** on physician burnout has brought startling facts to light.

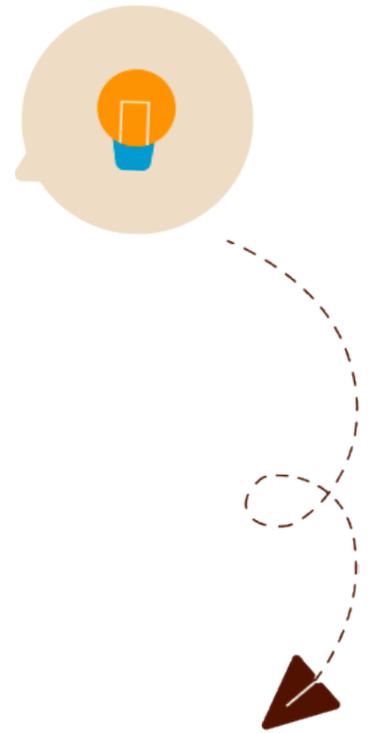
More than **one-fourth of physician respondents reported burnout.**

Among EHR users, **70% reported Healthcare IT-related stress**, with the highest prevalence in primary care-oriented specialties, often the front line.

Physicians reporting poor/marginal time for documentation had **2.8 times the odds of burnout** compared to those reporting sufficient time.

Physicians reporting moderately high/excessive time on EHRs at home had **1.9 times the odds of burnout** compared to those with minimal/no EHR use at home.

Those who agreed that EHRs add to their daily frustration had **2.4 times the odds of burnout compared to those who disagreed.**



02 Why Worry About Application Support Strategy?

A recent survey report from KLAS indicated that, “Among clinicians who strongly disagree their organization has implemented, trained on, and supported the EHR well, more than one-third say they are **likely to leave their organization** in the next two years - a larger proportion than any other clinician cohort.”

Clearly, if not used well, technology is not making life easy. Inefficient use of the EHR, which is the key software used by clinicians, emerging from not getting their queries resolved on time, is a leading cause of this stress. They describe their experience with any EHR changes as adding another layer of complexity to their already complicated work lives. So, is your organization using technology to solve challenges, or has technology itself become a challenge?

An average US hospital could easily have 200+ clinical applications in use. Clinicians are not only expected to remember how to accomplish clinical workflow-related tasks in several dozen of these applications screen-by-screen but also to do it in a time-bound manner, often with a patient in front of them.

In a Mayo Clinic research from 2018, the usability of current EHR systems received a grade of F (“not acceptable”) by physician users when evaluated using a standardized metric of technology usability. A strong dose-response relationship between EHR usability and the odds of burnout was observed.



02 Why Worry About Application Support Strategy?

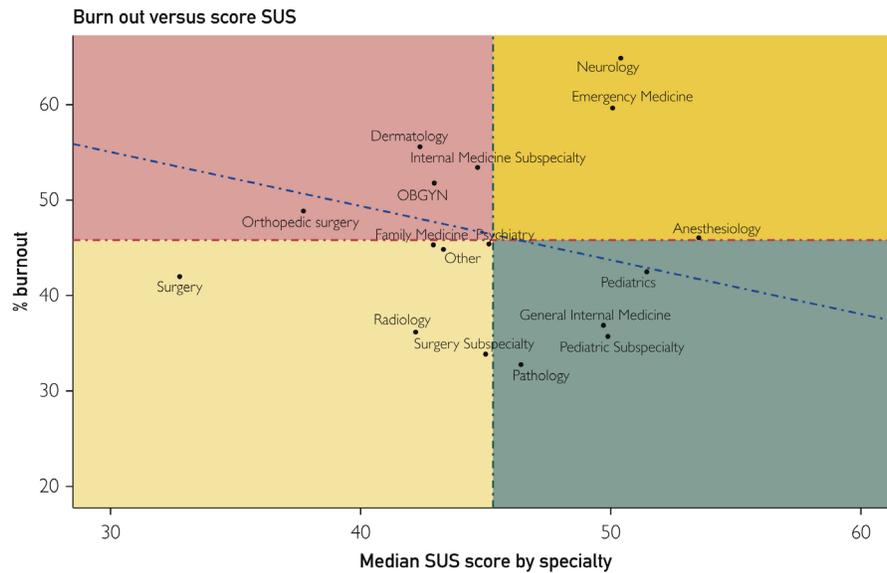


Figure: EHR usability as assessed by the System Usability Scale (SUS) and prevalence of burnout by specialty with regression line.

KLAS research points out that “Those who are very dissatisfied with the EHR have almost three times the proportion reporting they are likely to leave compared to clinicians who are very satisfied with the EHR. When clinicians feel the EHR is a help rather than a hindrance, they are more likely to want to stay at their organization. Healthcare leaders should focus on improving the areas of EHR satisfaction with the most room to improve.”

Given the association between EHR usability and physician burnout, improving EHR usability may be an important approach to help reduce healthcare professional burnout.



02 Why Worry About Application Support Strategy?

In another research, by Christine A. Sinsky, MD, from the American Medical Association, and published in the *Annals of Internal Medicine*, it was found that physicians spend almost 50% of their time on EHRs and desk work during the day, in addition to an extra 1-2 hours each night during their personal time. They only spent 27% (just about one-fourth) of their time providing direct clinical facetime to patients. The research pegged the number of U.S. physicians experiencing some signs of burnout at 54%. That is more than half of all physicians!

Why care about all this? Because clinicians mean care. EHR, technology, AI, etc., can all help, but only clinicians can deliver patient care; they are the last mile. Healthcare is still mostly high-touch. As an industry, it is our job to make the process less burdensome for clinicians. We have to make sure that technology is truly an enabler for patient care and not a hindrance. Keep reading to find out your options to deal with clinician burnout.



What Are My Options?

Historically, clinicians have depended on service desks for providing application support. There are several inherent problems with this approach. Due to time pressures and issue routing to different agents on different occasions, the service desk intends to treat the symptom, not the disease, i.e., more reactive than proactive. Not to mention the high cost of service desks, sometimes as high as \$20 per call!

“New EHRs and other software systems have increased physician complaints, either because of practical difficulties accessing the system or ongoing, unresolved system issues. Your IT department should anticipate a potential increase in service calls whenever a new system is implemented and plan for it”, says D’Arcy Gue of Medsphere.

To tackle this temporary surge in issues during new implementation or upgrade, many hospitals implemented human Go-live or At-the-elbow (ATE) support. While this was a great hit with clinicians as they had dedicated support literally at the elbow, this approach had three severe drawbacks.



03 What Are My Options?

First, the cost was exorbitant - the ATE support experts could cost \$50-80 per hour and solve only 3-5 issues per day while standing idle for the rest of the time. This meant that human ATE support could not be around forever and must be tapered down with time.

The taper-down led to the second problem; there were withdrawal symptoms! As soon as the ATE support was tapered, clinician complaints shot up, and productivity dropped. Many hospitals tried to deal with withdrawal symptoms by giving support “patches,” aka tip sheets, on a SharePoint folder.

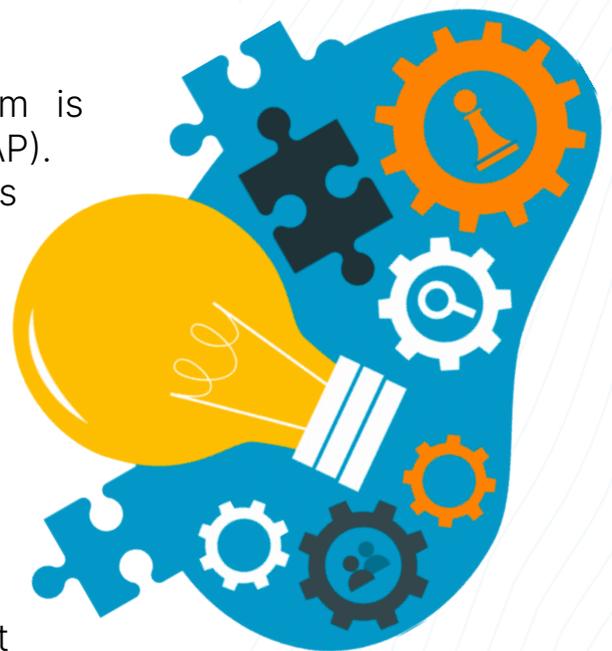
Unfortunately, tip sheets turned out to be nothing but a patchwork approach.

Third, the burden of discovery was left to the clinicians who hated shifting through dozens of documents looking for what might help them. In addition, tip sheets were not conducive to folder searches and were often out-of-date with the software version in use.

The modern approach to solving this problem is a Healthcare Digital Adoption Platform (DAP). A DAP is a solution designed to facilitate seamless application adoption and learning of your enterprise application by providing in-application, in-workflow, contextual training & support. It's like just-in-time training!

While DAPs have been extensively deployed over software like Salesforce, their usage in healthcare is in its nascent stages.

Read the next chapter to understand all about DAPs and how they can transform application support in healthcare.



What Exactly Is a Digital Adoption Platform (DAP)?

To keep pace with the increasing consumerism in healthcare, every hospital's IT team now has someone whose job description involves "Digital Transformation." This development is essential, and it means making your organization a digital-first organization for internal and external stakeholders.

You need to reimagine your existing processes, eliminate empty processes, and focus on KPIs. You must adopt Cloud, Intelligent Automation (RPA + AI + ML), Digital Adoption Platforms, and Analytics in some way, shape, or form. The more progressive ones are even adopting the Internet of Things (IoT) and Blockchain.



04 What Exactly Is a Digital Adoption Platform (DAP)?

While it is easy to throw more applications at users, hoping that they will benefit from them, nothing could be further from the truth. The critical challenges in low adoption rates of applications and user satisfaction are:

1

Too many applications and upgrades, leading to suboptimal adoption

2

Lack of training resources due to budget cuts in the post COVID-19 world

3

Poor retention of information from classroom training; studies show as low as 10% retention

4

Workforce churn with new users joining and leaving the workforce like never before

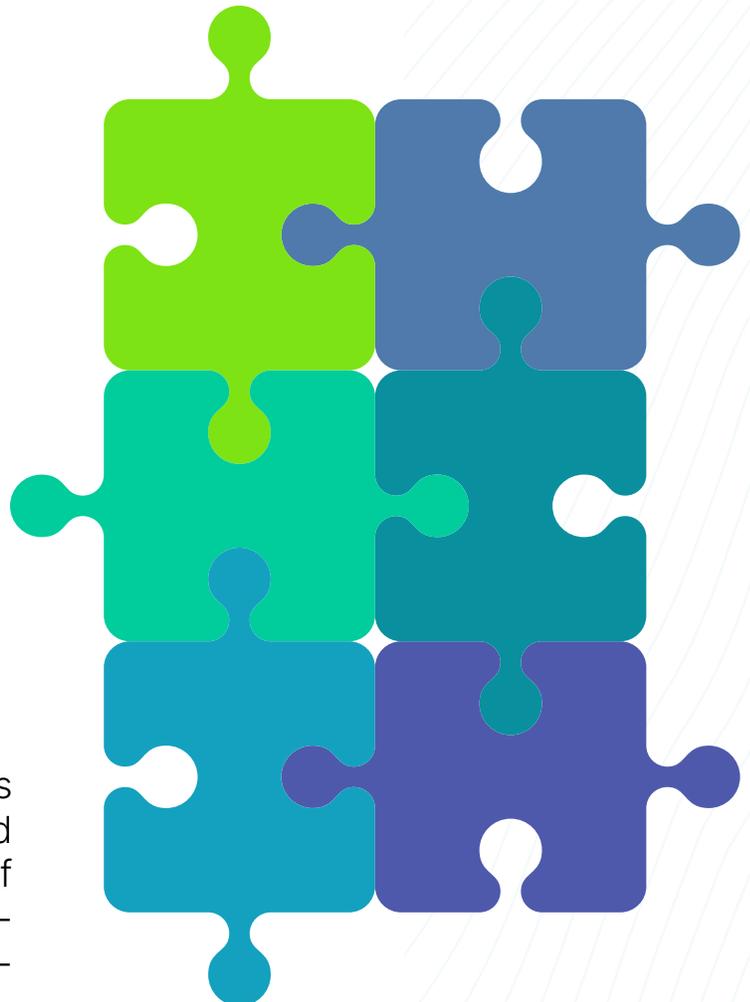
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An evolving workforce with different learning styles and hybrid work models

Hospitals have spent millions of dollars buying and implementing EHR, ERP, and HRMS applications. But, the tracking of Return on Investment (ROI) on these applications is not done well. Andreas Andersen of EdCast puts it in a very succinct manner. He says, “*Low adoption*

rates hurt the total cost of ownership of enterprise software. It is expensive to invest in and keep hardware and software up-to-date. In addition, the indirect costs of training employees on how to use the improved tech-stack add to the total.”

Healthcare Digital Adoption Platforms have emerged as a powerful solution that can drive application adoption, improve user satisfaction and give complete insight into the ROI of each enterprise application.



Understanding a Healthcare DAP

 Users	 Clinicians	 Non-clinical Users	 Leadership Team	 Patients	
 Healthcare DAP	 Microlearning Videos	 Knowledge Management	 Alerts & To-dos	 Test-outs & Surveys	 Analytics
 Applications	 Clinical (EHR, PACS, etc.)	 Non-clinical (ERP, HRMS, etc.)		 Patient-facing Apps (Later Stage)	

Microlearning Videos

Short videos, typically upto 2 minutes long, and designed to solve “how-to” problems. These videos focus on task-based training and support instead of skill-focused training.

Alerts & To-dos

Enterprises need the ability to convey critical information, push new content, and share information about new developments with their users. Often, there is also a need to ensure that a set of users complete some specific task(s). Digital Adoption Platforms do a fantastic job of fully tracking who has not seen a piece of information or completed a task.

Knowledge Management

Software can have user manuals, but what about your workflows? How do you record the knowledge of how you do things in your organization? A Healthcare Digital Adoption Platform will allow you to capture and share this knowledge quickly.

Analytics

An essential part of a good Digital Adoption Platform is reporting and analytics. Who accessed what, when, and from where? These questions will lead to actionable information that will become the input for your journey to continuous improvement and excellence.

04 What Exactly Is a Digital Adoption Platform (DAP)?

Test-outs & Surveys

A good Digital Adoption Platform should allow you to conduct test-outs and surveys to assess users' grasp of various topics or collect their feedback on a particular topic.



Use-cases of a Healthcare DAP

01

Application Support

A Healthcare Digital Adoption Platform should provide in-application, in-workflow support for various applications in your hospital.

02

Remote Employee Training

The Healthcare DAP could be an excellent application training tool for employees who cannot participate in classroom training.

03

User Onboarding

You can use a Healthcare DAP to create personalized learning paths for your new employees, introducing them to the various applications and enabling rapid feature adoption.

04

User Assessment

You could also use a Healthcare DAP to conduct online assessments with multiple-choice questions to measure learning progress on various applications, tasks, and workflows.

05

Digital Transformation and Change Management

A Healthcare DAP can facilitate a smooth transition to a new software/version upgrade for your users. It can quickly become your hospital's strategic communication tool since all users use it, and there is full tracking.

06

Product & Training Feedback

Analytics from the Healthcare DAP will provide you with factual information about the application, workflow, or topic on which users seek the most help. This information will allow you to assess the situation and improve where it matters most.

Key Benefits of a Healthcare DAP



Reduces support tickets by providing in-application self-help tools

01



Reduces training costs through faster content creation

02



Improves user satisfaction due to time-saving and increased user productivity

03



Reduces errors due to handy reference of training material

04



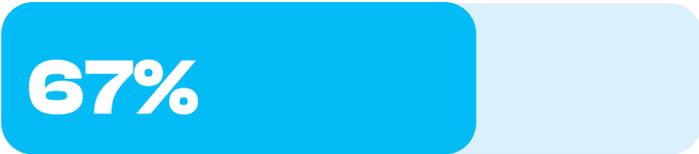
Reduces EHR fatigue and physician burnout

05

Not Just Any DAP, You Need a Healthcare DAP

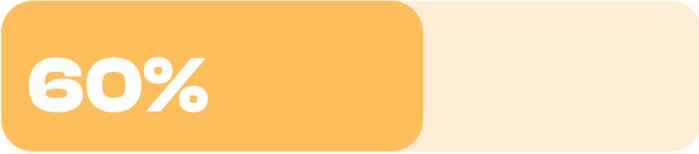
Most Digital Adoption Platform (DAP) vendors are horizontal industry-agnostic software companies. But, healthcare is different. Digital adoption in healthcare is more challenging than in any other industry, considering the complex processes and applications that are used in our industry. Hospitals noticeably struggle with maintaining hundreds of IT systems and applications in compliance with the latest IT standards and regulations. Thus, hospitals search for efficient opportunities to discover and integrate useful digital health innovations into their existing IT landscapes. Industry agnostic DAP vendors don't understand the nuances of HIPAA, data privacy, and compliance which can be a significant risk for your organization.

In a 2022 survey of Hospital CIOs conducted by 314e:



67%

Over 67% of hospital CIOs reported that they still relied on EHR service desk as an integral part of their EHR application support strategy.



60%

Nearly 60% said they had absolutely no or only a vague idea about the Return on Investment (ROI) on their EHR application support strategy.



61.5%

61.5% of CIOs said they are either using or are open to trying out in-application contextual video-based support tools before the EHR users get to the service desk.

05 Not Just Any DAP, You Need a Healthcare DAP

Clearly, there is a need and willingness to adopt a Healthcare Digital Adoption Platform for your application support. Choose a Healthcare Digital Adoption Platform vendor who has experience working with hospitals and healthcare delivery organizations. It takes time to understand healthcare, so the more experience your vendor has with healthcare, the better it is.

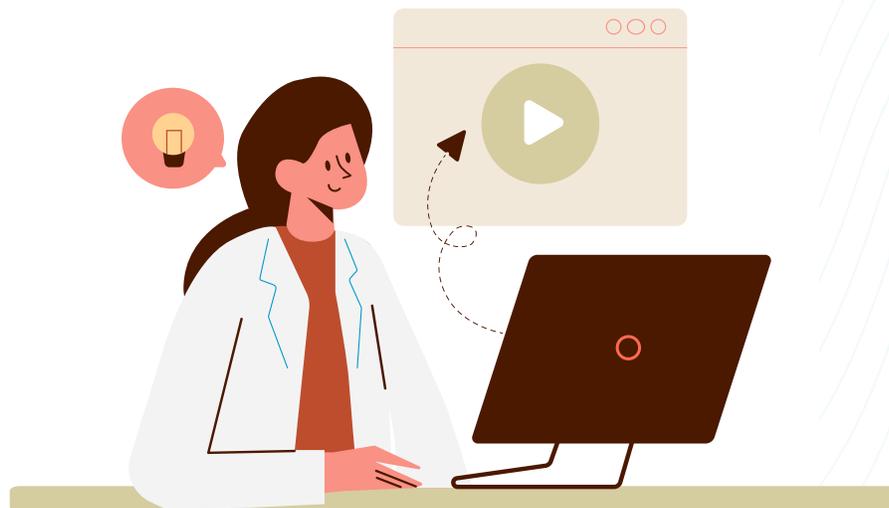
Another crucial aspect of a healthcare DAP is its ability to integrate with your hospital's core applications. These core applications include your EHR(s), ERP, and HRMS.

For EHR integration, SMART on FHIR® is the gold standard. SMART is an acronym for "Substitutable Medical Applications, Reusable Technologies." It started in 2010 with a \$15M grant

from the ONC for building a standard framework that allows the development of interchangeable healthcare applications.

The benefit of integrating with your EHR using SMART on FHIR® is that all your user management is handled within the EHR and needn't be duplicated in the Digital Adoption Platform. The EHR is the single source of truth about users, attributes, and privileges.

Good healthcare DAPs also offer Single Sign-on (SSO) and OAuth-based user authentication with leading EHRs like Epic and Cerner. Permission management within DAP can be directly mapped to the user's role in the EHR and can be automatically updated as the user's role within the EHR changes.



Ten Questions to Ask When Selecting a Healthcare DAP Vendor

01 Healthcare Experience

As mentioned at the beginning of this chapter, the more healthcare experience the vendor has with healthcare provider organizations, the better it is for you. Their knowledge, learnings, best practices, and mistakes made earlier would work in your favor.

02 Proprietary Formats

The vendor should not restrict which content formats will be used on the platform. They should support common industry-standard file formats like MP4 for videos and PDF for documents. A vendor with proprietary formats will severely limit your ability to scale your support content strategy.



03 Technology Expertise

You must have heard of first-mover advantage. In the technology world, however, the late-mover advantage is well known. Product companies that started several years ago will have a product built on old technology. New-age companies use cutting-edge technology that is scalable, agile, and cost-effective.

04 HIPAA Business Associate Agreement

Are they willing to sign a HIPAA Business Associate Agreement with your hospital?



05 Integration Capability

Do they have SMART on FHIR® integration capability? Is their Digital Adoption Platform listed on any significant EHR app marketplace? Epic and Cerner perform extensive reviews before listing apps on their marketplaces. So, a listing on Epic App Orchard or Cerner Code platform means that the vendor has been thoroughly vetted, saving you a lot of time and effort.

06 Reference Customers

Nothing succeeds like success. If they have worked with other hospital customers, you should speak to these references. Learn about the vendor's capabilities, processes, support policies, flexibility in case of change, and hidden charges.

07 Content Creation Capability

The proposed solution must allow semi-technical and non-technical clinical users to create content that can pass through a governance process and be deemed fit for consumption by the user base. The ability to create content easily is a critical deciding factor.

06 Ten Questions to Ask When Selecting a Healthcare DAP Vendor

08 Product Focus

Unless the vendor's focus is on being a healthcare-only Digital Adoption Platform, they will not be able to keep up with the ever-changing healthcare regulatory landscape. And that would mean you will either spend a lot of money & time to do it yourself, or you will not reap the benefits of the changes.

09 Pricing Model

Digital Adoption Platform vendors may charge by application, user-count, usage-based, or lump-sum. Always understand the pricing structure and project it to at least five years in the future to see if you will be able to support the project financially or not. Also, check if the vendor is willing to do a pilot with your organization so that you can get a first-hand feel with limited risk exposure.

10 Contract Terms

The terms and conditions of the DAP vendor should be reasonable and not lopsided. It should allow you to scale your support strategy with or without the vendor's intervention. Some vendors enforce that content creation services can only be outsourced to them. Such a clause can be potentially limiting, expensive, or both!



In the next chapter, we will help you plan to get executive buy-in for adopting a Healthcare Digital Adoption Platform.

Getting Executive Buy-in

Investing in a Healthcare Digital Adoption Platform is a long term commitment and, therefore, can only be successful if you have the buy-in from the entire executive leadership - from the CEO to the CIO, and from the clinical informatics leaders to the IT leadership team.

Here is a six-step process to get an executive buy-in for a Healthcare Digital Adoption Platform

1 Identify the trigger for a Healthcare DAP adoption

2 Assess the current & desired state

3 Write a business case for the desired outcome

4 Assess internal capability to reach desired state

5 Create a project plan and resource list

6 Calculate the proposed investment and estimated ROI

1 Identify the Trigger for a Healthcare DAP Adoption

The idea of Healthcare Digital Adoption Platform adoption could either be a well-thought-through enterprise strategy or a trigger-driven outcome. In the case of the former, the outcomes of implementing a Healthcare DAP are well-defined, and the implementation process is well-planned. If, however, the idea is triggered by an event like a new EHR implementation or a major EHR upgrade, the scope and ROI may be limited.

In either case, your executive team should be in sync with the problem assessment and the generic need for a solution.

2 Assess the Current & Desired State

Based on the current and desired state, evaluate both the performance and capability delta. It must be understood that there may be several possible paths to the desired state. The actual execution path should consider the business impact of outcomes, implementation capability, existing workforce resources, availability of funds, etc.

Based on the assessment of your unique situation, propose the best possible execution path.

3 Write a Business Case for the Desired Outcome

The business case must clearly measure and document the current state of cost-benefits vs. the cost-benefit analysis if we achieve the desired outcome. It should consider support and training costs, size of the user base, usage volume, application complexity, potential increase in user productivity, and reduction in user fatigue/burnout.

You will need to identify a list of all clinical and non-clinical enterprise applications in your organization and decide which ones to prioritize for Digital Adoption Platform implementation based on the above factors. Needless to say, focus where you may get the most bang for the buck!

4 Assess Internal Capability to Reach Desired State

Based on the desired outcome state, you will need to compile a list of all resources that are needed to get to the desired state. There are five key things to look at - the organization's vision & culture, prior experience in a large-scale implementation of applications, talent availability, technological competence, ability to create/source training, and support content.

Do this assessment realistically, and proceed with the next step only if you and your team feel highly confident at this stage. If you do not have the internal capability, you should evaluate the vendor's ability and willingness to support you for the same.

5 Create a Project Plan and Resource List

Based on whether your organization is centralized or decentralized in its structure and whether the risk appetite is low or high, you can define the amp-up or tone-down the aggression in your project plan.

Like any other project management plan, include the planning phase, the pilot strategy, scaling up, and steady-state operations in your plan. Don't forget to include the time and approvals required for necessary integrations from the EHR and ERP vendors. They may have their own due diligence process.

Implementing the Digital Adoption Platform by department and application is highly recommended to avoid chaos.

6 Calculate the Proposed Investment and Estimated ROI

Based on your project plan, get a budget estimate for the proposed investment. At the same time, it is critical to calculate and present the estimated Return on Investment (ROI).

It is recommended to plan conservatively and execute aggressively! Ask the Healthcare DAP vendor if they can provide any guidance, playbooks, or templates to help you in the planning process.

With these details documented, you are ready to present the plan to your leadership team and secure their buy-in.

Closing the Deal

It is important to dot the i's and cross the t's at this stage. You should ask the selected vendor to specify:

1

Governance plan for the implementation of the Healthcare Digital Adoption Platform

2

Workflow and communication strategy between your organization and the vendor

3

Collaboration and project management tools to be used

4

Team structure, with SLAs and escalation matrix

5

Exception handling

6

Payment terms and frequency

Identify all documents that need to be signed and have the appropriate approvals. The list of documents can include but is not limited to a Non-disclosure Agreement (NDA), Master Services Agreement (MSA), a Scope of Work (SoW), and HIPAA Business Associate Agreement (BAA). Check with your legal and compliance teams to see if any other documents need to be signed.

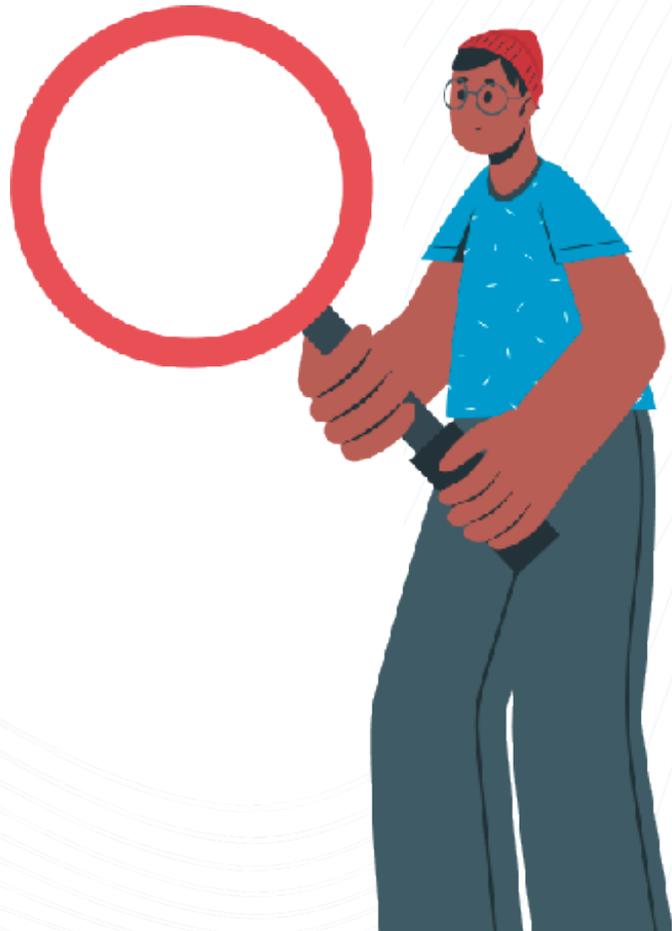
Your procurement team will need to jump in at this stage, so keeping them updated will expedite the process.



Red Flags

Some examples of the red flags include:

-  The Healthcare Digital Adoption Platform vendor looks too desperate to get started without ensuring a good plan.
-  The vendor says yes to everything you say without analyzing it thoroughly.
-  Their project plan is unclear, and responsible people are not listed for each step.
-  They are too rigid and unwilling to accommodate your situation.
-  They are slow to respond.



Rolling Out the DAP for Your End-users

So, you have got the executive buy-in and have also done the contractual paperwork. But that is only half the battle won. The next big challenge is the actual rollout and change management.

You may run into various hurdles based on rolling out your Healthcare Digital Adoption Platform, especially beyond the pilot stage when you start scaling the solution to multiple departments and locations. Some common issues are:

Incomplete or Incorrect Understanding of a Healthcare DAP

DAP is relatively new in the industry, and healthcare organizations may not understand the concept entirely on day one. There is a need to educate everyone about the capabilities of the Healthcare Digital Adoption Platform and the problems that it will solve. All direct and indirect benefits should be documented and socialized.





Not Having All Stakeholders Involved on Board With the Rollout Plan

A Healthcare Digital Adoption Platform will often touch on business processes owned by different departments. For example, suppose the DAP provides in-application support for the EHR. In that case, the Chief Informatics Officer (CIO), Chief Medical Informatics Officer (CMIO), Chief Nursing Informatics Officer (CNIO), Chief Digital Officer (CDO), IT leadership, and the clinical leadership will all be involved. All the stakeholders must give their input and approval for the rollout plan.



Expectation Mismatch

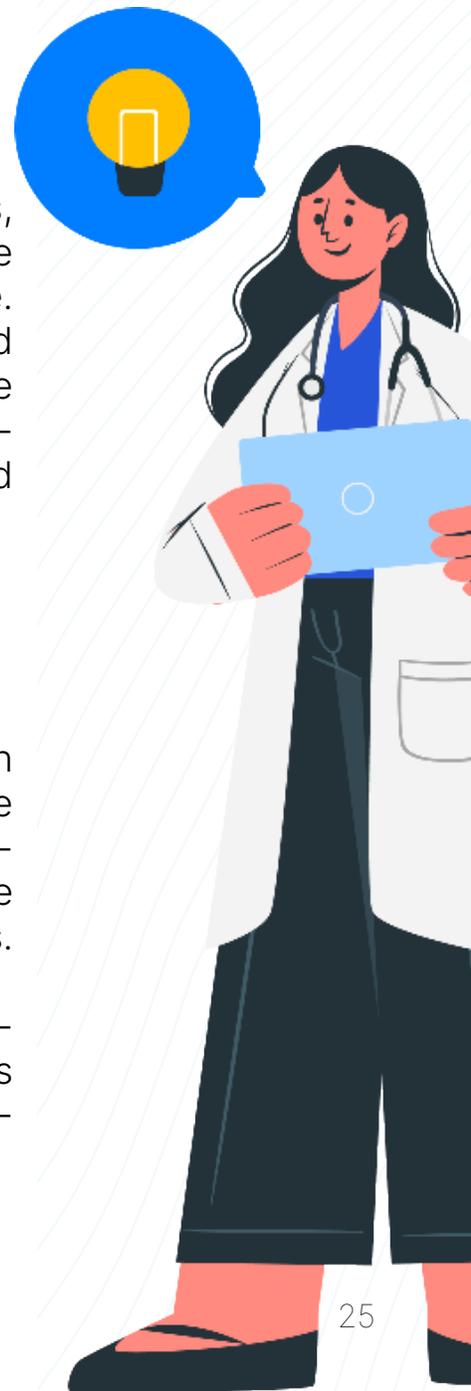
If there is a lack of understanding in the stakeholders' minds, they can create assumptions about the capabilities of the Digital Adoption Platform and the problems that it may solve. These assumptions can sometimes be too far from reality and can lead to a distorted perspective of what the Healthcare DAP will do for the organization. Therefore, it is critical to ensure that the deliverables are well defined and communicated to everyone involved.



Content Creation and Governance Issues

Creating the right content is the first step, creating enough content is the second step, and maintaining the quality of the existing content is the final step in getting your content strategy right. Design the authoring workflow as per the governance plan with necessary checks and balances built in the process.

When developing content in-house, ensure consistent guidelines and procedures across departments and locations. It is best if the DAP vendor creates the content as third-party vendors may lack the expertise and could be more expensive.



Not Focusing on Metrics

Lastly, always keep an eye on the key metrics. Which users are using the Digital Adoption Platform most? Is their work more complex, or is their training insufficient? Which are the most viewed training assets? Is it because they are well done or very confusing? Future content improvement and user experience will depend on what the metrics tell you. So, never lose focus on your metrics.

Happy DAP to you!



SME Generated Content - a New Scaling Up Strategy?

A Digital Adoption Platform without content is like a silver platter with no food on it. Your content creation strategy must complement the DAP implementation plan so that you can roll out both of them in sync.

Most hospitals have adopted new applications and, at the same time, reduced training budgets due to COVID-19. Close to 40% of CIOs in a survey admitted they didn't have enough training budgets after the COVID-19 pandemic. Now they have to support more applications with a lesser training team.

In a 2022 survey of Hospital CIOs, **almost 50% said that training budget cuts are a reality,**

and almost 60% said they were open to letting Super-users or SMEs from their clinical team create EHR training content.

The SMEs know the EHR inside out, and they use it every day. They could create content that could be peer-reviewed for brevity and reviewed by the training team for compliance. User-generated content could be a great way to counter the lack of training budgets, as long as a robust governance plan and authoring workflow are implemented.



Meet the Team



Supriya Sen
Product Manager

Supriya is the product manager of Jeeves at 314e. She has competence in the fields of user research, product design, and development, along with prototyping and stakeholder communication. She possesses the technical abilities and the business acumen for analyzing requirements and designing solutions to fit those requirements.



Nahid Noushathu
UX Designer

Nahid is a UX designer at 314e. Previously, he was a brand experience designer at Spread Design & Innovation and RED. He is a graduate in Communication Design from NIFT and has Google UX design certification. He is also a freelance illustrator whose passion and focus revolve around brand illustration systems and experience designing.



Shweta Chakraborty
Content Writer

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References

- 01** Laurenza, E., Quintano, M., Schiavone, F., & Vrontis, D. (2018). The effect of digital technologies adoption in healthcare industry: a case based analysis. *Business process management journal*. Referred from: <https://www.academia.edu/download/57053861/BPMJ-04-2017-0084.pdf>
- 02** Stone, K. W., Kintziger, K. W., Jagger, M. A., & Horney, J. A. (2021). Public health workforce burnout in the COVID-19 response in the US. *International Journal of Environmental Research and Public Health*, 18(8), 4369. Referred from: <https://www.mdpi.com/1660-4601/18/8/4369/pdf>
- 03** Gardner, R. L., Cooper, E., Haskell, J., Harris, D. A., Poplau, S., Kroth, P. J., & Linzer, M. (2019). Physician stress and burnout: the impact of health information technology. *Journal of the American Medical Informatics Association*, 26(2), 106-114. Referred from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7647171/>
- 04** Melnick, E. R., Dyrbye, L. N., Sinsky, C. A., Trockel, M., West, C. P., Nedelec, L., ... & Shanafelt, T. (2020, March). The association between perceived electronic health record usability and professional burnout among US physicians. In *Mayo Clinic Proceedings* (Vol. 95, No. 3, pp. 476-487). Elsevier. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0025619619308365>
- 05** Wenzel, R. P. (2019). RVU medicine, technology, and physician loneliness. *N Engl J Med*, 380(4), 305-307. Referred from: <https://www.richardpwenzel.com/uploads/9/7/1/3/97130942/nejmp1810688.pdf>
- 06** Kharrazi, H., Gonzalez, C. P., Lowe, K. B., Huerta, T. R., & Ford, E. W. (2018). Forecasting the maturation of electronic health record functions among US hospitals: retrospective analysis and predictive model. *Journal of medical Internet research*, 20(8), e10458. Retrieved from: <https://academic.oup.com/jamia/article/26/2/106/5230918>
- 07** A. Afaq and L. Gaur, "The Rise of Robots to Help Combat Covid-19," 2021 International Conference on Technological Advancements and Innovations (ICTAI), 2021, pp. 69-74, doi: 10.1109/ICTAI53825.2021.9673256. Retrieved from: <https://ieeexplore.ieee.org/abstract/document/9673256>
- 08** Freshdesk.com (2022). The safest help desk for healthcare organizations. Retrieved from: <https://freshdesk.com/industries/helpdesk-software-healthcare>
- 09** Openmind.in (2022). The need for a outsourced medical call center in a hospital. Retrieved from: <http://www.openmind.in/why-your-hospital-needs-a-help-desk.php>
- 10** Jennifer Dawkins. 5 Steps To Set SMEs Up For Content Creation Success. Retrieved from: <https://www.trewmarketing.com/smartmarketingblog/sme-content-creation-success>
- 11** Focus SME.com. Retrieved from: <https://www.focussme.com/top-3-benefits-of-user-generated-content/>
- 12** Gleiss, A., & Lewandowski, S. (2022). Removing barriers for digital health through organizing ambidexterity in hospitals. *Journal of Public Health*, 30(1), 21-35. Retrieved from: <https://link.springer.com/article/10.1007/s10389-021-01532-y>
- 13** Lin, R. T., Lin, Y. T., Hsia, Y. F., & Kuo, C. C. (2021). Long working hours and burnout in health care workers: Non-linear dose-response relationship and the effect mediated by sleeping hours-A cross-sectional study. *Journal of occupational health*, 63(1), e12228. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8101694/>
- 14** Healio.com (2016) <https://www.healio.com/news/primary-care/20160905/physicians-spend-nearly-50-of-their-time-on-ehr-desk-work>
- 15** Mantzaris, G., Gatopoulou, A., Christodoulou, D., Katsanos, K., Mouzas, I., Tzouvala, M., ... & Tampaki, M. (2019). P611 A real-world assessment of golimumab effect on quality of life, healthcare resource utilisation and work productivity in patients with ulcerative colitis in Greece: interim results from the GO-LIFE study. *Journal of Crohn's and Colitis*, 13(Supplement_1), S422-S422. Retrieved from: https://academic.oup.com/ecco-jcc/article-pdf/13/Supplement_1/S422/27599874/jjy222.736.pdf