A Digital Transformation Report:

5 Emerging Trends in Healthcare



A Digital Healthcare Revolution

The pace of change and growth in the healthcare industry is showing no signs of slowing anytime soon. Global healthcare spending is expected to rise 5.4% annually to just over \$10 trillion between 2017-2022. Fueled by an aging and growing population



and an increasing prevalence of chronic diseases, the trend of rapid growth is putting increasing pressure on healthcare organizations in the U.S. to provide greater care while managing ballooning costs. Compounding this is an exponential rise in innovative but expensive new healthcare treatments and technologies.

\$10 TRILLION

Global healthcare spending is expected to rise 5.4% annually to just over \$10 trillion between 2017-2022.1

Even as healthcare organizations struggle to manage the operational and financial challenges of exponential growth, they must also accommodate an increasingly engaged and informed patient community. Patients now have a plethora of choices for where and how they get care. They research their options online — and they share their healthcare experiences online too, with everything from reviews of providers and

ratings of hospitals, to discussions of treatments and medications, and more. For healthcare organizations, the imperative to do more with less is increasingly at odds with the need to keep patient satisfaction front and center and provide improved patient experiences.

To remain competitive, healthcare organizations need to adopt new digital technologies that allow them to optimize organizational efficiency and productivity, attract and retain the best talent, and manage increasingly complex regulatory and insurance processes — all while maintaining strict industry compliance.

"When it comes to the end goal of improving patient satisfaction and well-being, this industry cannot afford to lag behind and forgo the advantages of new technology," says Ashley Mattison, a healthcare industry expert at Smartsheet. "As the pressure increases to find new efficiencies while maintaining HIPAA compliance, healthcare information technology (HIT) gives organizations a leg up to be better prepared to serve their patients, employees, vendors, and diverse business needs in a secure environment."

Why Healthcare Lags Behind

Protecting patient data security and privacy is imperative for healthcare organizations, which must meet stringent federal regulations for safeguarding medical information. Organizations necessarily scrutinize all new technologies through this lens. This applies to electronic health records (EHR), which store and transmit patient data, as well as other HIT that helps manage everything from hospital operations, clinical trials, provider certifications, insurance claims, scheduling and employee on-boarding, mergers and acquisitions, and more.

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 Ashley Mattison, a healthcare industry expert at Smartsheet

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1. Deloitte, 2019 US and Global Healthcare Industry Trends Outlook

But technology can actually help *reduce* risk by providing more control over and transparency into processes, resulting in fewer errors. "Instead of avoiding technology because of security concerns, organizations should look at how the data is encrypted, privacy settings, and patient identity confirmation," says Lee Barrett, executive director and CEO of Electronic Healthcare Network Accreditation Commission (EHNAC), which develops standards for healthcare organizations. The potential for significant improvements in productivity and efficiency make it worth the effort to vet technologies for security.

Cost can also be a barrier for some organizations, especially smaller or regional systems, says Barrett. "Even though there are compelling financial benefits to using healthcare technologies for more efficient workflows, many organizations do not purchase them because of the money already spent to develop legacy systems."

"Everyone in healthcare is cautious when it comes to spending and cost of care," agrees Nizar Kifaieh, MD, CEO of Hudson Regional Hospital in Secaucus, New Jersey. "Everything ultimately adds to the cost of care for patients."



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Average amount of work day physicians spend entering data into EHRs and completing clerical work²



Average amount of work day physicians spend interacting with patients²

How Tech Can Improve Patient Experience

Almost 50% of provider executives from the largest organizations in the U.S. rank improving the patient experience among their top three priorities,³ and it's easy to see why: Happier patients result in better health outcomes, more successful organizations, and more satisfied providers and staff.

Technologies that streamline operations and administration can free up valuable time for higher-value activities that directly impact the patient experience, such as doctors spending more time with patients, and administrators proactively providing information about scheduling and costs. And the right HIT can create huge efficiencies around insurance claims, says Barrett: "If we can create a more efficient workflow to get patient data, review it, submit it to the payer, and then get the claim paid electronically, healthcare organizations save time and money. Even more importantly, the patient knows exactly what the provider costs, what they need to pay, and what is covered."

^{2.} Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties, Annals of Internal Medicine, Dec. 2016

^{3.} PWC, Top Health Industry Issues of 2018





While the quality of the in-person experience with a provider is key, dozens of other, smaller interactions can negatively impact a patient's overall satisfaction. If checking on an insurance claim requires three phone calls, and no one is able to explain the current status, the disorganization can cause the patient to question the overall quality of care. Appointment delays or cancellations, difficulty in getting information, and lack of follow-up can all leave a lasting impression.

Optimizing processes and projects with HIT can help healthcare systems become more responsive and even more proactive in providing patients with a positive experience. Five trends are emerging that present opportunities for healthcare systems to improve their efficiency, as well as employee and patient satisfaction, with the help of technology.

Trend 1:

The Rise of Healthcare Project Management

As healthcare and related industries grow and become more complex, it's increasingly critical that organizations develop efficient project-management processes to handle everything from employee on-boarding, to facilities management, regulatory compliance, staff certifications, insurance claims, scheduling, and more. In a 2019 survey of Smartsheet users in the healthcare industry, nearly 80% reported that effective project management is important to achieving business goals. Yet traditional work structures and siloed, decentralized processes are still prevalent in the industry, and are increasingly a hindrance to productivity.

Because of limited budgets and lean staffing, employees with no project management training are often tasked with project management responsibilities. An emerging new category of cloud-based software-as-a-service (SaaS) technologies — called "collaborative work management" — offer low-cost, easy-to-use solutions that can help.

Many projects that are not directly related to patient care, such as hiring and facilities management, require cooperation among multiple departments. Many healthcare systems have multiple locations, which can make collaboration more challenging and cause delays that can impact patient care. Cloud-based collaboration tools empower teams to work together across organizations, regardless of location or time zone. Some of these tools offer real-time information in dashboards and reports, so organizations can quickly spot and respond to trends in everything from patient satisfaction to facilities operations.

Make Technology Work for You

Manage facilities and construction. The right technology can make it easier to organize and manage complex captial expense (CAPEX) projects — like new offices — and keep track of inventory. Leaders can gain the ability to make better decisions, faster, with real-time visibility into progress via dashboards. Forms can be used to track capital purchases and link them to budgets. Automated workflows can reduce downtime and keep construction projects moving forward.

Optimize IT operations. More than ever, hospitals and other care facilities rely on finely-tuned IT to help them meet their goals for patient care. A work execution platform can help organize IT operations management, improving visibility into IT projects, enhancing accountability, and improving insight into IT budgets and spending in real time.

Streamline insurance processing. By keeping the process organized, everyone involved — provider, business manager, claims agent — can see the status of each claim. Healthcare systems use work execution platforms for everything from approval processing, record management, claim denials, and tracking claims per provider. Because all the information is in a single location for each claim and patient, employees spend less time looking for information. Teams can also provide a higher level of patient service with timely answers to patient questions about the status of their claims.

Manage compliance across the organization. The right technology can help teams manage compliance-related projects more effectively and keep track of compliance initiatives to mitigate risk. Create compliance cause-and-action plans, manage audit processes, and track implementation and compliance-related changes more efficiently by tracking objectives, metrics, and budgets related to compliance projects.

Before You Buy

Consider the following when purchasing technology to improve healthcare project management:

Look for flexibility. With so many use cases and roles in healthcare, versatility and flexibility are key. Look for tools that are robust enough to be used for everything from collaborating on clinical trials to planning marketing initiatives and IT management. By purchasing adaptable technology instead of multiple products, organizations can save money on technology and reduce training time. The Smartsheet work execution platform is flexible and extensible enough to handle hundreds of healthcare use cases, and our growing portfolio of pre-built solutions can help with the biggest projects. Roll out new locations with Smartsheet Control Center, which provides consistent project components and processes, along with real-time visibility across the portfolio. The Smartsheet Accelerator for IT PMO enables IT organizations to rapidly deploy a full project lifecycle system.

The efficiencies that we gained from Smartsheet are incredible. We saw a 30% efficiency gain from my entire team.

—Shannon Lingwall, Revenue Cycle Support Services, University of Utah Health

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Choose a connected platform, not a single tool. When organizations select a single tool for a single task, they create a silo, which makes it impossible to share information across processes and projects. Using a cloud-based platform that can handle work execution, enable collaboration between employees, providers, and other stakeholders, automate workflows, and do all of this in real time can transform your organization's productivity and efficiency. And Smartsheet seamlessly integrates with other enterprise applications, such as Tableau, Dropbox, JIRA, and Salesforce, and offers premium add-ons that enable granular analysis and sharing of data, such as Dynamic View, Data Uploader, and Pivot App.

Ensure HIPAA compliance. The Health Insurance Portability and Accountability Act (HIPAA) sets forth strict requirements for the sharing of protected health information (PHI) between independent parties; therefore Smartsheet, along with other cloud-service providers, has adopted a shared responsibility model. Customers on our Enterprise plan can use Smartsheet to securely share, store, and access PHI while meeting HIPAA's regulatory requirements. Smartsheet offers a business associate agreement (BAA) which meets the requirements of HIPAA, for our HIPAA-subject customers that choose to upload PHI in Smartsheet. Customers that have not executed a BAA with Smartsheet cannot collect or store PHI in the application.

Trend 2:

Consolidation

Hospital mergers and acquisitions are increasing at a rapid rate. In 2017, healthcare organizations announced 115 merger and acquisition transactions, the highest number in recent history.⁴ According to Deloitte, only half of the current healthcare systems will exist in ten years as they do today.⁵ The Commonwealth Fund found that this level of merger activity has resulted in high consolidation in 90% of healthcare markets.⁶



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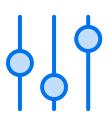
- 4. Kaufman Hall, 2017 in Review: The Year M&A Shook the Healthcare Landscape
- 5. Deloitte, 2014; The Great Consolidation: The Potential for Rapid Consolidation of Health Systems
- 6. The Commonwealth Fund, 2017; Healthcare Market Concentration Trends in the U.S.: Evidence and Policy Responses

After the ink dries, the time- and labor-intensive job of merging two or more healthcare organizations begins. Blending multiple systems means multiple projects dedicated to merging different processes and departments, IT systems, people, data, and real estate. Each of these projects must be completed collaboratively by multiple stakeholders. Because time is often short, adhering to a schedule is critical. Many organizations are now turning to technology to manage the multiple types of projects that are involved with a merger or acquisition.

Make Technology Work for You

Get insight into the entire process. Look for a work execution platform that covers the entire deal process, from target identification, through due diligence, integration planning and execution, while ensuring that the business case is clearly visible, communicated, and managed every step of the way.

Reduce time to deal closure. Accelerate deal closure by enabling real-time collaboration that is easily adopted by all stakeholders.



Give stakeholders better transparency. Provide status updates and insights into deal closure and integration processes to stakeholders at any level with rollup reports and dashboards. Improve integration success by leveraging proven solutions that give corporate development leaders the real-time visibility they need to optimize integration processes and accelerate ROI.

Before You Buy

Make sure you get all the functionality and security you need:

Seek out proven solutions. Mergers are complex, time-consuming, high-stakes projects. Look for technology that reduces the time needed for closing the deal, improves integration between the healthcare systems, and helps bring order to the chaos. The Smartsheet Accelerator for Mergers & Acquisitions is a pre-built solution that provides easy-to-use, pre-loaded content and configured fields, forms, and reports that provide status updates into deal closure and integration processes to stakeholders with rollup reports and dashboards.

Verify security and controls. Make sure you can confidently deploy large-scale portfolio management initiatives with security and control that meets the stringent requirements of healthcare IT. Smartsheet was built from the ground up to meet strict security requirements and protocols to secure data, provide control of user access, and provide methods to safely share information inside and outside of organizations.

Granular admin controls. To share only the information each stakeholder needs — and no more — find technology that provides granular sharing permissions. Smartsheet has extensive administrator controls available that allow you to manage and audit access, ownership, and usage. The Smartsheet premium add-on, Dynamic View, enables even more granular sharing, so a stakeholder can be shared to a single project row without visibility into the rest of the project.

Manage change. Healthcare employees often work with multiple systems and tools, and they need to be able to quickly learn new tools without lengthy training. Look for a platform that has an intuitive and easy-to-use interface. Technology only improves processes if it's accessible to all team members. Smartsheet offers the ability to set a language preference, so more team members can easily share information.

Trend 3:

Increasingly Complex Initiatives

The complex process of getting new drugs to market requires pharmaceutical companies to adhere to strict regulatory requirements. Conducting clinical trials requires careful design, formal approval of testing by the appropriate national regulatory agency, such as the Food and Drug Administration (FDA) in the U.S., and training and certification at each clinical site where trials will be conducted. The progress of the trials must also be carefully documented.

Many organizations conduct hundreds, or even thousands, of trials, and each trial involves many different components that need to be managed. To make it even more challenging, different employees and providers work on each trial, meaning that many people, locations, and often healthcare organizations are involved in a single trial. Delays at any point in the process can ultimately delay the drug's review and approval for commercial availability.

For global health NGOs, managing a growing portfolio of initiatives that span the world can require tracking and reporting on everything from research to treatments, travel, funding, and more. Technology that empowers these organizations to streamline reporting to donors, gain real-time visibility into project status, and collaborate in real time across multiple time zones can result in efficiencies that have real impact on the lives of the people they serve.



Smartsheet not only allows me to visualize the entire program, but it has given me a purpose and a platform to optimize how our company functions in a way that I never thought was possible.

—Oscar Gonzalez, Senior Program Planning Manager, Karyopharm Therapeutics

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Make Technology Work for You

Manage clinical trials. Centralizing information about trials in a work execution platform enables clinical teams to provide their own real-time updates on key components such as site readiness, patient enrollment, progress toward deadlines, or side effects that patients may experience during the course of a trial. Dashboards aggregate data from different sheets, giving project managers of specific trials a consolidated view of vital status updates, such as whether a site has met its enrollment target or is running short of supplies. Trial teams can also set up automated notifications, so researchers immediately receive a message when a result is not as expected.

Manage complex health programs. NGOs can use cloud technology to track their research portfolio from start to finish, consolidate key program information, more effectively report on research and program activity to donors and partners, and visualize research data for better decision making. By using one platform for all of their work, teams can cut down on repetitive, manual tasks and time-consuming reporting, and focus more on their research and program delivery.

Manage grant money and data. Grants are the lifeblood of nonprofit healthcare organizations, which must carefully manage and report on the use of that money. Smartsheet enables organizations to pull information from multiple program sheets into a single report or dashboard to provide instant visibility into where the money is going.



Through the use of Smartsheet, we are getting closer towards global disease elimination targets set by the World Health Organization. I'm doing project management on 188 projects that touch the lives of millions of people around the world.

—Allison Snyder, Project Support Specialist The Task Force for Global Health





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Before You Buy

Seeking technology to streamline complex initiatives? Here are a few things to consider:

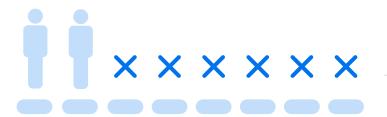
Make sure it's robust enough for the job. Choose technology that can handle the complexity of even the most challenging healthcare initiatives, and has a strong mobile component, so decision makers have ready access to critical information, anywhere, anytime. Smartsheet offers the ability to switch between views of any given project — from grid view, to Gantt, card, and calendar views — to keep diverse teams on track. And the Smartsheet enterprise-grade administrator controls keep data access narrow, so each collaborator sees only the information they need to see — and nothing more.

Insist on dashboards and reports. Exponentially improve on program success by providing access to dashboards and reports that pull in information from multiple projects. With a shared view of key performance indicators such as program status, at-risk items, inventory, and budget, Smartsheet makes it easy to track and respond to trends across a project portfolio in real-time.

Trend 4:

Skills Shortage

The healthcare industry faces a critical shortage of employees at all levels, and recruiting and retaining physicians is expected to become even more critical in coming years. The Association of American Medical Colleges estimates that there will be a shortage of between 61,700 and 94,700 physicians in the US by 2025. Because of this anticipated shortage, many hospitals are increasing their focus on aligning with providers to ensure they have sufficient care for their patients.



The Association of American Medical Colleges estimates that there will be a shortage of between 61,700 and 94,700 physicians in the US by 2025.⁷ Healthcare organizations must actively recruit and retain employees in a manner not previously required. According to Deloitte,⁸ more than one-third of human resource departments, including those in healthcare, now use data for recruiting, hiring, and managing employees.

However, data-driven recruiting requires tracking more details than traditional recruiting methods. One common strategy is to gather data from current employees to create a profile for candidates likely to be successful in the organization. This requires compiling data on employees and recruits, and then comparing that data to find a match with the appropriate profile for the job.

When human resource departments use tools such as Microsoft Word and Excel for this type of work, the largely manual data entry provides multiple opportunities for human error and delay. Many organizations are turning to automated tools to organize and manage data-driven recruiting, and other critical HR functions.

Make Technology Work for You

Power up people and provider management. A work execution platform can provide critical tools for enabling better planning, visibility, communication, and accountability across departments. Make essential HR tasks, such as managing the recruiting and hiring pipeline, more efficient. Manage employee on-boarding and training programs in a centralized location, where it's easy to track progress and be alerted to missed deadlines and next steps. Gather and track critical provider feedback from patients and limit the sharing of the information to the people that need it.

Manage the employee lifecycle. When an employee is hired or leaves the organization, the tasks required to complete those processes extend to many different departments beyond HR, such as IT, facilities, and legal. By having an organized and efficient process, employees begin their new roles with all the information they need to be successful. Additionally, an organization's termination process can ensure that all information and property owned by the system is returned intact and no longer accessible.

Track certifications. Healthcare workers must maintain certification in order to continue holding their licenses. Organizations often provide training courses for certifications and other skills, such as use of HIT and other technologies. The right technology allows organizations to track and update personnel records with training completions, notifies staff of mandatory trainings, and automatically alerts the HR team when a training is overdue.

Before You Buy

Give your recruiting and HR teams a digital edge with these new capabilities:

Automate tasks and actions. The on-boarding process is an employee's first experience with an organization, and can set them up for success — or frustration. Setting up an automated workflow in Smartsheet can help keep the process moving, alerting the employee when it's time for the next step, and alerting her manager when a task is overdue or needs attention.

Make sure the platform integrates with current tools. Evaluate technology options to find one that integrates with existing technologies to avoid creating more silos and barriers to collaboration. Smartsheet seamlessly integrates with numerous business platforms and applications, including Slack and Salesforce, and, in late 2019, will integrate with DocuSign, which can greatly streamline the on-boarding process.

Trend 5:

Expanding Mobile Workflows

Because healthcare projects and processes often involve multiple teams across locations and time zones, real-time collaboration and communication can be a challenge. But as operational complexity grows, so does the need to be nimble and mobile. Healthcare providers are increasingly using mobile devices for administrative tasks, operations, and patient-related workflows. Because most tasks at a hospital or provider's office take place away from a desktop or laptop computer, mobile is becoming crucial for keeping projects and programs moving, increasing efficiency and accuracy for non-patient tasks and projects, and freeing up resources better spent on improving patient care and outcomes.

Make Technology Work for You

Don't overlook the mobile component when assessing work execution technology:

Look for mobile functionality. Look for technology that empowers mobile collaboration with mobile dashboards and portals, so team members all have access to critical KPIs and information, regardless of location or time zone. With real-time information available from mobile devices, everyone can know the current status of projects at any time, and update with just the click of a button. Because employees work different shifts, mobile also allows people to keep up with project status when off-hours and communicate regarding key project points, decreasing project lags and duplication of tasks.

Before You Buy

Improve mobile workflows. The best work execution technology will give teams the power to automate workflows to keep projects moving on the fly. With Smartsheet, remote teams can receive and respond to automated update and approval requests in seconds on their mobile devices, or fill out Smartsheet forms that send data directly into a working sheet. Mobile workers who are rolling out a new location or documenting facilities upgrades, for example, can take photos with their phones and attach them directly to a sheet.

Transform inventory management. Apps like Smartsheet that include barcode scanning capability can simplify inventory management of supply carts and other assets. With Smartsheet Data Mesh, it's easy to map inventory data across sheets while maintaining data consistency.

Building Your Healthcare Organization for Tomorrow

As healthcare practitioners and organizations continue to increase technology adoption, the industry will see massive changes both in processes and patient expectations. Healthcare systems that use technology to increase productivity and efficiency will likely have higher patient satisfaction ratings, because staff can more effectively focus on patient care and relationships.

Healthcare IT is rapidly evolving, and organizations building their processes and infrastructure today should focus on tools and platforms that are customizable to the needs and capabilities that will be developed in the future. By creating a scalable technological framework today, healthcare systems can position themselves to be ready to capture tomorrow's opportunities.

Smartsheet is the work execution platform that leading healthcare organizations rely on to increase productivity and performance, enable collaboration, and track every step of every project. Leading healthcare organizations using Smartsheet are making better decisions faster, and improving patient outcomes while complying with HIPAA and privacy regulations. For additional information on how Smartsheet can help your healthcare system increase efficiency and productivity, visit www.smartsheet.com/industries/healthcare.

