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CLOUD COMMUNICATIONS

Can Relieve the Pain in Care Coordination

WHITE PAPER

Prepared by

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ABOUT THE AUTHOR

Zeus Kerravala is the founder and principal analyst with ZK Research. Kerravala provides tactical advice and strategic guidance to help his clients in both the current business climate and the long term. He delivers research and insight to the following constituents: end-user IT and network managers; vendors of IT hardware, software and services; and members of the financial community looking to invest in the companies that he covers.

INTRODUCTION: HEALTHCARE IS NOW COMMUNICATIONS CENTRIC

No industry is untouched by digital transformation; it is disrupting all corners of the world faster than ever. Digital technologies provide unrivaled power and are utilized wisely by successful companies. Those that find a way to harness digital technologies will thrive and sustain their market leadership, while those that don't seize the digital mantle will struggle and may not survive.

The Future of Healthcare Is Digital

Of all the industries dealing with digital disruption, healthcare will be among the most affected because of its highly competitive nature. Facing changing regulations and incentives, healthcare companies are constantly looking to improve patient outcomes and provide better values to gain an advantage. Consequently, healthcare is among the top industries embracing digital transformation.

Healthcare is composed of three groups that provide a variety of services, each of which can be greatly improved by digital communications:

Healthcare providers: Hospitals, group physician practices, long-term care facilities

Healthcare payers: Health insurance and aligned BPO firms, managed care organizations

Life sciences: Biotechnology, research and pharmaceutical companies

Key Trends

Several trends are combining to increase the focus on the digital transformation of healthcare:

An aging population: According to the [U.S. Census Bureau's 2017 National Population Projections](#), "by 2030, all baby boomers will be older than age 65. This will expand the size of the older population so that 1 in every 5 residents will be retirement age." Therefore, the aging population will need greater and more frequent access to healthcare services.

Accountable care: This includes shared risk models for reimbursement and places higher collaboration demands on providers and payers to avoid duplicative testing, unnecessary labs and procedures. It also requires increased patient engagement post-discharge and post-treatment, with the goal of reducing hospital readmissions and missed follow-up appointments as well as ensuring adherence to discharge and sequential treatment plans.

Healthcare consumerism and patient satisfaction: Patients are engaging with providers beyond voice interactions. Nontraditional channels include in-app messaging, social media and web chat via patient portals. Each channel is regulated and requires the use of best practices for capturing and measuring patient satisfaction.

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The need for faster, more efficient services: As people age and the population grows, the need to make healthcare services faster and more efficient, without adding significant numbers of new providers, will become more acute.

A focus on patient safety: The entire healthcare industry is focused on ensuring the patients they treat are safe at every step. This means minimizing errors, injuries, accidents and infections.

Rising healthcare costs: Providers, payers and those in life sciences are all looking to slow the continual rise of healthcare costs.

Each one of these trends requires communication, and no industry is more dependent on fast and seamless communications and collaboration than healthcare. Whether simple conversations with a patient, provider-to-provider consultations, appointment setting or review of lab results, all of these interactions require communications tools.

Grappling with Challenges

Even as they address communications challenges, each healthcare stakeholder group also must grapple with specific issues. For example, healthcare providers are facing an aging patient population along with staff shortages. Among healthcare payers, there is a massive consolidation underway with a constant drive to increase market share. In addition, pharmaceutical companies that invest billions of dollars in drug formulations are facing significant pressure from generic brands. Moreover, they must navigate an increasingly complex drug approval pipeline. Perhaps most alarmingly, according to the ZK Research 2019 Healthcare IT Study, 35% of healthcare costs stem from non-patient care activities such as approving referrals and paying claims.

To add to the complexity, other communications challenges interfere with patient care. The ZK Research study found that calls to patients are unsuccessful on the first attempt almost 90% of the time. And therefore, because they must call patients multiple times, care teams spend up to a third of their time on communications-based activities.

However, the healthcare industry hasn't been standing still. In fact, according to the ZK Research 2019 Healthcare IT Study, 97% of physicians use text messaging. And, in an attempt to modernize and improve information flow, many healthcare companies have invested in online systems, electronic health records (EHR) and archiving systems.

Healthcare providers were required to make "meaningful use" of EHR by January 1, 2014, in order to maintain their reimbursement levels for Medicaid and Medicare. The term "meaningful use" simply means using digital medical and health records to improve the quality, safety and efficiency of patient care and to reduce health disparities. In addition, this initiative aims to better engage patients and their families as well as to improve care coordination along with population and public health. Finally, it aims to maintain the privacy and security of patient health information.

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The healthcare industry has turned to communications systems that are often geared toward supporting a single organizational silo rather than the whole organization, which leads to inefficiencies, bottlenecks and delays in care for patients. Fixing the communications challenges we've outlined is critical to the digital transformation of healthcare.

SECTION II: LEGACY COMMUNICATIONS IMPACTS HEALTHCARE PRODUCTIVITY

When everyday processes are inefficient, they can easily drag down productivity, as staff members devise workarounds to get from point A to point B. When those inefficient processes are related to communications, they can halt productivity because workers don't get what they need when they need it. In healthcare, such delays can be the difference between life and death.

An Overburdened System

The ZK Research 2019 Healthcare IT Study found that nurses, already overburdened with patient-focused obligations, spend up to 60 minutes a day finding doctors, clinicians and other staff members. This means that out of an eight-hour day, nurses spend 12.5% of their time looking for other people. In addition, patients miss one-third of their appointments, often because they didn't receive a reminder. Missed appointments cost insurance companies millions and wastes clinicians' time—and consequently, patients don't get the care they need when they need it. However, according to the ZK Research study, automated patient reminders cut no-shows by 50%.

Even when they do make it to appointments, sick patients often must drive long distances to have a face-to-face meeting with a doctor. [Pew Research](#) found that rural Americans “live an average of 10.5 miles from the nearest hospital, compared with 5.6 miles for people in suburban areas and 4.4 for those in urban areas.”

But even before they go to their appointments, patients face communications challenges. The ZK Research 2019 Healthcare IT Study found that patients often spend 30 minutes or more communicating with an insurance company contact center to get approval for their visit.

Issues that arise from the human element are not limited to nurses searching for other staff members. In the pharmaceutical industry, the process of testing new drugs and getting feedback is often lengthened by “human delays,” which are frequently caused by poor communication. Clearly, it's time to modernize communications to improve all aspects of healthcare.

SECTION III: TRANSFORMING HEALTHCARE WITH CLOUD COMMUNICATIONS

So, what can healthcare industry players do to transform their communications? First, they must understand that new tools and technologies, with a particular focus on communications technologies, are required to improve service delivery and reduce the occurrence of medical errors. Then they need to pick a path: on-premises or cloud. They could choose to upgrade their legacy on-premises

solutions to newer on-premises gear, or they could move to cloud communications-as-a-service (CCaaS) and unified communications-as-a-service (UCaaS) solutions.

Some organizations are more comfortable with an on-premises solution because it's physical, it's sitting in a facility and you can actually see it. But upgrading an on-premises solution can quickly dispel that notion. Such upgrades can be time consuming, often taking years (that's right, years!). Moreover, on-premises upgrades often require significant up-front investments—something that healthcare organizations facing rising costs are reluctant to make.

Quick Implementation, Manageable Costs

Unlike on-premises solutions, cloud solutions can be implemented almost immediately. In addition, with UCaaS and CCaaS, the costs align closely with the organization's needs. For example, in healthcare, UCaaS and CCaaS can scale to add seats during an open enrollment period and remove those seats after open enrollment is complete.

To say that UCaaS and CCaaS are growing fast in healthcare is an understatement. In the past five years, the number of healthcare companies using cloud services has experienced dramatic growth—from 8% of the market to 71%—according to the ZK Research 2019 IT Priorities Survey ([Exhibit 1](#)).

Exhibit 1: Growth of Cloud Technology Utilization in Healthcare



ZK Research 2019 IT Priorities Survey

The reasons for this nearly ninefold increase are simple: Now that the IT organization is freed from the burden of an on-premises system, it also is spared the long testing and deployment process. Cloud solutions provide a simple and risk-free approach to modernizing communications and are a fast track to innovation.

Even more important than innovation is the ability to address the top concerns of the healthcare industry. Cloud communications technologies do just that, as outlined in [Exhibit 2](#).

Cloud communications will improve the quality of patient care and patient satisfaction while simultaneously increasing security and compliance.

Delivering the Ultimate Patient Experience

Several elements are involved in delivering the ultimate patient experience, where the patient is at the center of the process instead of other factors such as regulation and money. It starts with providing a seamless scheduling experience in which patients can reach live staff thanks to extra extensions and a contact center, for example. They can take advantage of fast appointment scheduling and short message service (SMS) reminders that increase patient satisfaction, patient capacity and staff utilization.

A secure and flexible platform comes in next, with UCaaS and CCaaS utilizing the Health Information Trust Alliance (HITRUST) Common Security Framework (CSF) within Health Insurance Portability and Accountability Act (HIPAA)–compliant environments. The system should also support bring your own device (BYOD), so that staff can use the devices they’re comfortable with

Exhibit 2: Top Concerns in Healthcare, the Role of UCaaS/CCaaS and the Key Technologies

	 R&D	 Operations	 Delivery	 Customer Service
Top Concerns	Rapid advancement of clinical research	Improving efficiencies	Enhancing care delivery process	Improving patient management
The Role of UCaaS/CCaaS	Enables better collaboration among constituents	Streamlines processes and helps find people and info faster	Facilitates better collaboration between caregivers and external stakeholders	Enables personalized/self-service
Key Technologies	Voice, meetings, team collaboration, video	Chat, presence, text, voice, mobile communications	Team collaboration, mobility, video, meetings	Omnichannel CC, AI capabilities, bots, IVR

ZK Research, 2019

CCaaS and UCaaS offer several benefits for healthcare industry stakeholders.

and the organization can maintain security wherever staff members may be. (In this scenario, an employee's device has both a personal profile and a business profile, and each profile has a different phone number.) Moreover, the cloud communications system should integrate with most systems and offer a robust selection of apps.

Achieving the goal of faster care and shorter stays can happen when the care teams use voice, video and messaging on any device, from any location, which CCaaS and UCaaS should support. Such a system will facilitate fast decisions and actions related to patient care. Follow-up is just as critical as the initial care a patient receives. With CCaaS and UCaaS in place, patients can connect with live staff to discuss aftercare, get answers to prescription questions and discuss other pressing matters. In addition, providers can use SMS to follow up on patient satisfaction surveys.

Improving Patient Flow

Communications can make clinical workflows more efficient and automate repetitive tasks. Along the way, patient evaluations happen faster and more efficiently, while treatments, transfers and discharge planning all happen seamlessly.

While at the bedside, clinicians have one-click access to a distributed array of specialists. Plus, a stakeholder who might not be nearby can be summoned quickly for consultations. Such fast and simple access can better inform patient evaluations, diagnoses and treatment decisions—but quick and easy access doesn't mean the communication lines are not secure. On the contrary, whenever needed, clinicians can use UCaaS or CCaaS as a secure platform to collaborate with colleagues via voice, video, text or any other available medium, regardless of location or device.

With multiple communication channels available, rather than just voice, patient care coordination is simplified, as are transfers, handoffs and discharges. Consequently, repetitive tasks, which are often subject to error because of the complexity involved, are simplified and accelerated.

In addition, UCaaS and CCaaS solutions that can adapt one medium to another (e.g., converting a voice message to text or a text message to voice) can be invaluable in improving communications efficiency and reducing bottlenecks at transition points. As a result, care coordinators have the information they need to make efficient, accountable, patient-centered decisions.

The Benefits of Modern Cloud Communications

CCaaS and UCaaS offer several benefits for healthcare industry stakeholders such as patients, providers and payers.

With significant pressure on staffing in healthcare, whether due to a labor shortage or a lack of funding, being able to increase the patient-to-doctor ratio without reducing the level of safety or the quality of care is critical. Therefore, technologies such as CCaaS and UCaaS that can be utilized to help a doctor serve more patients more efficiently are essential. Video capabilities that accompany a cloud communications system enable remote doctor/patient meetings, so sick patients no longer must travel long distances to get the care they need. For clinicians who are not in the office, cloud

communications provides access to the information they need no matter where they are. In the pharmaceutical sector, the improved communication that comes with CCaaS and UCaaS means companies can get field trials back faster, which translates into quicker U.S. Food and Drug Administration (FDA) approvals and enables them to get therapies into patients' hands sooner.

SECTION IV: KEY CAPABILITIES TO LOOK FOR IN A SOLUTION PROVIDER

So, how can companies address the communications challenges in healthcare? The key is to find a solution provider with a robust product portfolio that covers voice, video, chat, mobile tools, meetings and team collaboration.

In addition, any solution should have a full suite of application programming interfaces (APIs) to enable click-to-talk within clinical applications. Such interfaces enhance the ability of physicians and other clinicians to speak promptly with patients while reviewing critical information. As diagnoses and other patient-related information make their way through clinical workflows, it's important that a solution provider be able to adapt at every step of the way. In that process, having access to capabilities such as text-to-speech is also important.

Also, because healthcare organizations are so heavily dependent on communications, a key feature for a cloud service provider is the ability to operate even in the event of a client-side internet outage. To ensure operations can continue, the service provider must offer emergency calling, extension-to-extension calling, and inbound and outbound calling even when the internet connection to the building is unavailable.

The Better Way

Several other important aspects are necessary to support team collaboration. At the top of the list is ensuring that UCaaS can be utilized within HIPAA-compliant environments, as any HIPAA-covered entity organization must comply with HIPAA. Although software-as-a-service (SaaS) vendors are not audited for HIPAA compliance, the covered entities are. Nonetheless, SaaS vendors should demonstrate industry best practice certification of their service via HITRUST CSF certification.

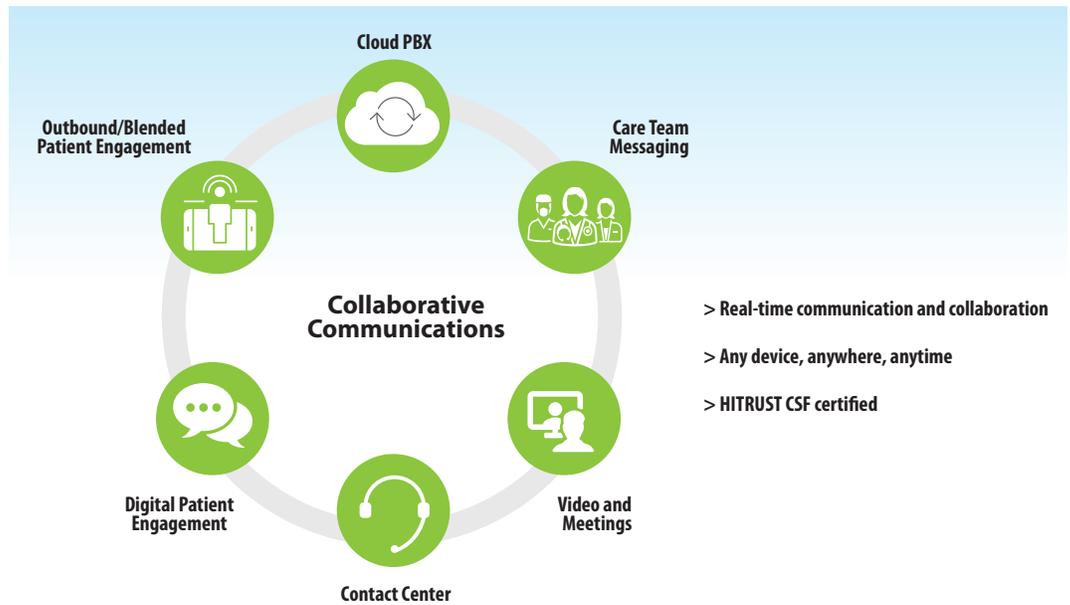
With HIPAA and HITRUST protections in place, a solution should also permit safe content sharing, guest access for patient management, task management and easy calendaring. In addition, the cloud communications solution should enable contact center capabilities, such as "call me now," self-service tools, chat and other personalized services.

[Exhibit 3](#) highlights some of the key capabilities healthcare companies should expect from a cloud communications system such as UCaaS and CCaaS.

Case Study: ChenMed Utilizes Cloud Communications to Improve Patient Outcomes

ChenMed operates primary care medical practices for seniors in Florida, Georgia, Illinois, Kentucky, Louisiana, Pennsylvania and Virginia. The company deployed RingCentral Office and RingCentral Contact Center cloud communications solutions to more than 2,000 seats.

Exhibit 3: The Better Way—UCaaS and CCaaS



ZK Research, 2019

“Our number one priority is to provide excellent patient care, and we’ve achieved this through improved patient communications,” said Hernando Celada, CIO at ChenMed. “RingCentral plays a mission-critical role in helping us build strong relationships with the patients we serve, while also allowing us to keep their information confidential and secure in accordance with HIPAA. We also found RingCentral’s platform to be completely seamless with its integrated contact center solution and open platform APIs to customize workflows.”

In the next phase, ChenMed will utilize RingCentral’s open platform APIs to provide its team with customized day-to-day workflows and drive operational efficiencies. RingCentral’s fax APIs will enable direct upload and download without the need for email—all while maintaining strict confidentiality.

SECTION V: CONCLUSION AND RECOMMENDATIONS

ZK Research offers a few recommendations to organizations looking to move to cloud communications or improve their technologies in this space:

Anticipate coming trends, like the aging population, the need for faster and more efficient services, the focus on patient safety and rising healthcare costs. Each of these challenges requires better, more efficient communication. Together, UCaaS and CCaaS help bridge the chasm and ensure that providers, payers and other players all communicate seamlessly.

Look for a solution that you can implement quickly and cost effectively. Cloud solutions can be up and running almost immediately. Plus, the costs associated with UCaaS and CCaaS

align closely with the changing needs of the organization—scaling up as an organization reaches peak capacity for open enrollment and then scaling down afterward.

Aim to deliver the ultimate patient experience. A cloud communications system should enable faster decisions and actions related to patient care. Patients should be able to connect directly with live staff to set up appointments, discuss aftercare, get answers to prescription questions and discuss other pressing matters.

Look for a vendor with HITRUST CSF certification. Covered entities are audited for HIPAA compliance, but SaaS vendors aren't. Only vendors with HITRUST CSF certification can support the HIPAA compliance initiatives of cloud-enabled organizations using the industry's most recognized and robust security risk management framework.

ZK RESEARCH EVALUATION

After evaluating the key capabilities that a healthcare organization needs in a UCaaS or CCaaS solution, ZK Research has determined that RingCentral meets or exceeds the expectations in this area.

For example, RingCentral is certified by HITRUST CSF, which

ensures that a HIPAA-covered entity can utilize its services within HIPAA-compliant environments. Also, the cloud provider recently added a feature called RingCentral Persist that maintains communications services when the internet connection has failed. This ensures that critical phone services

are always available. Therefore, RingCentral solutions for UCaaS and CCaaS would be a smart choice for healthcare organizations.

As ChenMed's CIO pointed out, RingCentral is more than a technological solution; it helps healthcare providers serve pa-

tients effectively and efficiently while keeping information safe and secure. Its APIs are a critical link to helping an organization connect disparate technologies and keep a dispersed organization operating as one unit.

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