HALO COMMUNICATIONS™

SECURE TEXTING TOP 10

10 ESSENTIAL FEATURES FOR A CLINICAL COMMUNICATION SOLUTION

White Paper

A secure, HIPAA-compliant text messaging platform isn't optional anymore.

With HIPAA audits on the horizon and fines reaching into the millions for violations, health organizations are now acutely aware that it's time to lock down their systems. To recap just a few recent high-profile examples [1] :

- New York-Presbyterian Hospital and Columbia University were fined $4.8 million after records for more than 6,800 individuals were inadvertently made accessible online.
- Stanford Hospital & Clinics was fined $4 million after data from 20,000 patient records was found posted online.
- AvMed in Gainesville, Fla., was fined $3 million when more than 1 million patient records were compromised following the theft of two unencrypted laptops.
- St. Joseph Health in Irvine, Calif., was ordered to pay $7.5 million to be divided among the 31,000 patients whose personal health information was exposed on the Internet. [2]

These and other violations prompted Russell Branzell, CEO of the College of Healthcare Information Management Executives (CHIME), to declare that "healthcare is ground zero for cyberattacks." While a financial identity can be worth anywhere from $1 to $3 on the black market, he noted, a medical identity can be sold for as much as $10. [3]

With *HIPAA Journal* reporting that an estimated 80% of medical professionals now use personal mobile devices as part of their workflow [4], clinical communication presents an obvious risk for HIPAA violations.

Preventing doctors and nurses from texting, however, has proved to be an ineffective strategy. Texting bans are often ignored, particularly by residents and hospitalists. And the workaround—limiting texts to vague details such as room number—can lead to dangerous medical errors.

A secure communication platform can help minimize the HIPAA risk, reduce medical errors and improve workflow efficiency—provided it offers the following 10 essential features. This is what you should expect from a secure text messaging solution.

01

Security

Security is half of the HIPAA-compliance equation. It's largely about encryption, or the conversion of data into a form that cannot be easily understood by unauthorized people.[5] For a texting app in healthcare, this should apply to messages both at rest and in transit. This means that encryption should be in place, according to federally validated standards, at all levels including database, transmission and within the app.

A secure data center is an important component. Healthcare organizations typically store patient information in either onsite or offsite (cloud) data centers. HIPAA requires these centers to be protected by a high level of physical security, with policies in place for reviewing controls and conducting risk assessment on an ongoing basis. While there are several ways to meet the specifications, a secure private server is the most reliable way to know you are in control of your patients' data. Make sure where your data is stored is SOC1 (SSAE16) certified and your provider is SOC2 certified.

02

Auditing and Control

HIPAA compliance goes beyond security and encryption, however. The HIPAA privacy law was enacted "to protect the privacy of an individual's health information and govern the way certain healthcare providers and benefits plans collect, maintain, use and disclose protected health information (PHI)"[6]. HIPAA compliance, then, really comprises security, control and auditing.

Look for these features to ensure your secure texting solution has proper auditing and control measures in place:

- **REMOTE-WIPE CAPABILITY** If a smartphone is lost, you can keep PHI safe by locking the application and deleting all information from the device. This provides an added layer of protection for patient data.
- **AUDITING** The app should let you know who has sent a message, who has read it and when it was read. In the case of a potential data breach, this feature makes it possible to know exactly what data has been seen. Without this feature, the assumption is generally that all information has been compromised, and public notification requirements may apply.

- **SECURE NETWORK** Any application that lets you send a message outside the secure network is not HIPAA compliant. Some applications let you send unsecured links that contain "secure" payloads. This is not HIPAA compliant. Security and control must work together for an application to be HIPAA compliant.
- **MANAGEMENT OF ATTACHMENTS** Keeping the data within the application is part of control. Copying and pasting data should be restricted, as should the ability to save photos and attachments outside the application. At the very least, organizations should be able to turn these functions on or off at the network level.
- **AUTHENTICATION** A HIPAA-compliant app will not allow users to access or interact with any data unless they've been authenticated. Certainly this applies to the initial sign-in to the app, but it also extends into other functionalities, as well. Users, for example, should not see push notifications until they are logged in, and they should be prompted to sign in again after a period of inactivity.

03 Standard Integrations

A clinical communication platform is only useful if everybody is on it. Look closely at a vendor's proficiency at provisioning users onto the platform, accommodating various authentication protocols, and unifying health organizations that have acquired hospitals with disparate systems.

A secure communication provider must demonstrate numerous enterprise-level integrations methods including VoIP, Single Sign-On, Active Directory, LDAP, SMTP and more. Explore a vendor's experience with organizations of varying size and configuration.

Also standard, expect a clinical communication platform to integrate with:

- **PHONE DIRECTORIES** Department and network contacts should be immediately accessible to all users. This is essential for strategic physician alignment. If providers have to work hard to find in-network colleagues, they won't refer to them.

- **OPERATORS AND CALL CENTERS** Operator and after-hours call center integration represents a dramatic leap over pager service. On a clinical communication platform, providers can receive messages that include complete patient information. With no need to call in for more details, providers can respond to patients or call in orders much more quickly.

PHONE DIRECTORY
Department, network and national database contacts

OPERATOR CONSOLE
Receive complete messages with patient details

VOIP
Compatible with in-house phones

EHR
Push notes to EHRs; receive your selected notes on mobile

LABS
Receive only the critical results you need

PACS
View CT scans and MRIs on your smartphone

04 Clinical Integrations

Once implemented, an effective clinical communication platform must be at the center of all the clinical systems in the hospital. Patient care is integrally tied to lab results, call schedules and emergency alerts, so all of those systems need to be accessible from the platform.

Expect the following clinical integrations from a secure messaging vendor:

- **EHRS** Providers should be able to push notes out to the EHRs and receive selected notes on mobile. They don't need everything; make sure you can limit EHR notifications to what individual providers need to see.
- **LABS** Again, providers shouldn't be inundated with every available lab result. Your communication platform should have the capability to send only the STAT or critical labs each provider needs.
- **PACS** Integration with a Picture Archiving and Communication System allows CT scans and MRIs to be sent to physicians for immediate viewing on their mobile devices.

05 Alarm Management

Blogging for KevinMD.com, an internal medicine physician recently described a frenzied scene at a nurse's station where he was charting amid ringing phones and shrill alarms. Beside him was a case filled with a dozen pagers that buzzed whenever a patient needed assistance.

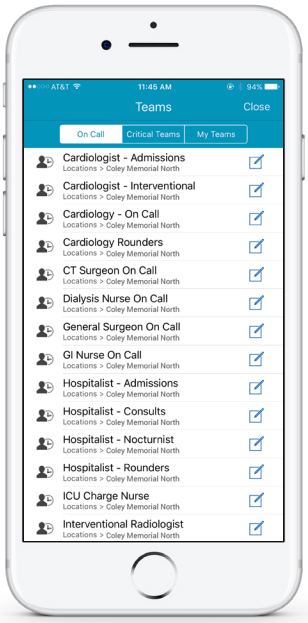
"Every 30 seconds a chorus: rattling, chirping, beeping, or chimes," wrote Jordan Grumet, MD. After an excruciating hour enduring the barrage of alerts, he noted: "I had not seen one definitive action taken in response to the buzzing pagers, besides turning them off." [7]

The time is now to manage alert fatigue in hospital systems. Your clinical communication platform should:

- Consolidate alerts onto one mobile device.
- Significantly reduce ambient noise by replacing beeps and alarms with text messages.
- Differentiate the alerts that are truly critical so physicians and nurses can respond immediately.
- Allow customization to adjust sounds and alerts according to user preferences.

06 Scheduling and Messaging

Outside of healthcare, few people are aware of this alarming fact: Sometimes it's nearly impossible to find the on-call physician in a given service line. Providers describe going down the hall searching for a paper schedule pinned up on the wall. And when they find it, it's generally outdated as physicians routinely trade call at the last minute.

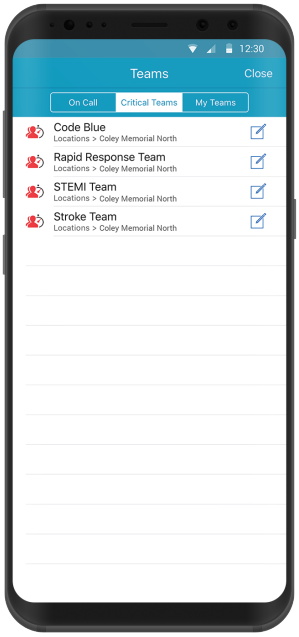


Halo Smart Scheduling and Teams is healthcare's only fully integrated schedule management module. It allows schedules to be made locally and published systemwide, which means everyone in a health system can see immediately who is on call in every service line. Schedules can be made in the built-in online scheduler, or they can be imported into Teams from any legacy scheduling tools that are already ingrained

in the health system. From there, one-touch messaging allows users to contact their on-call colleagues immediately by text or phone call. Closing this basic communication gap will reduce time to treatment and dramatically improve patient care.

07 Complete Pager Elimination

Many secure texting companies promise to replace pagers with their messaging technology. While they can effectively replace some pager activity, complete elimination of pagers is possible only if the platform can be used to call a Code.



The Critical Teams feature in Halo Smart Scheduling and Teams, Halo Communications' schedule management module, automatically pulls up-to-date Critical Teams lists from the on-call schedule. With a touch or click of the screen, anyone in the health system can view Critical Teams (such as Code, STEMI or Stroke) and activate the team at the onset of an emergency.

Without Teams, Critical Team members will still pass around pagers, and health systems will still be forced to pay for two communication technologies.

08 Team Care Tools

Direct communication from one provider to another is the cornerstone of basic secure messaging technology. A robust clinical communication platform, however, takes it to the next level by facilitating coordinated team care.

Coordinated care is a requirement in today's healthcare landscape. Studies have shown that poor care coordination increases the chance that a patient will suffer from a medication error or other healthcare mistake by 140%.[8]

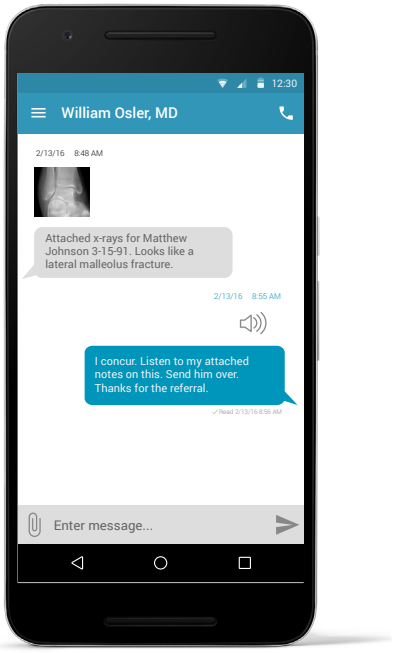
Look for collaboration tools that allow providers to:

- Create custom contact lists to assemble members of the same patient care team.
- Build and share patient rounding lists.

- Sign out to a colleague, including the ability to auto-forward messages.
- Hand off care to the next attending physician with detailed notes on the status of each patient.
- Coordinate Clinical Teams, such as Palliative Care or Wound Care teams.
- Activate Critical Teams, such as Code, STEMI and Stroke teams.

09 Safe Text™

Beyond the security aspects related to protecting private patient information, healthcare messaging must also address patient safety. Healthcare-specific texting features will provide a level of functionality you won't see in features adapted from non-healthcare apps.



When using standard texting, for example, all messages are grouped together in one thread according to the contact. That's convenient for personal texting, but it leaves dangerous room for error when discussing patient orders.

Halo's Safe Text™ technology enables providers to start new threads when they begin discussing new patients. Grouping message threads by patient or by topic instead of by contact ensures that there will never be confusion that could result in a medical error.

10 Patient Engagement

While patient portals have garnered mixed reviews on their success in engaging patients, secure texting platforms are showing real promise for improving compliance with treatment plans and improving clinical outcomes.

According to a May 2014 report from the HHS[9], patient text messaging programs have led to behavior changes that improve short-term smoking cessation outcomes, as well as short-term diabetes management. Research has also shown that text messaging improves appointment

attendance and immunization rates. And, a recent study published in *JAMA Internal Medicine* found that rates of medication adherence among chronic disease patients rose between 50 and 67 percent with mobile messaging.[10]

Unlike patient portals, which require patients to log in to access messages and information, text messages reach patients on the device they carry with them everywhere. As of January 2014, 90 percent of American adults owned a cell phone, according to the Pew Research Center[11], and almost half of them are so dependent on the technology they admit to having slept with the phone next to the bed because they didn't want to miss a call or text message during the night. Cell phones are also a lifeline for low-income adults, several of whom have extremely limited access to other online service options.

Make sure your secure communication platform offers options for direct patient communication. Nurse navigators can employ text messaging to monitor patients following hospital discharge—confirming, for example, that they were able to pick up their prescriptions and that they have transportation to follow-up appointments. Timely reminders can also improve compliance with well-care screenings such as mammograms and routine physicals.

Security is a key concern for patient messaging. While most patients would be happy to communicate with their providers using standard text messaging, the health system is still subject to HIPAA regulations—even with a patient's implicit permission—and must ensure the platform is compliant.

Finally, look for functionality that allows a health system to have complete control over which providers or nurse navigators can be contacted directly by patients. Different care situations will necessitate different communication configurations; there is no one-size-fits-all solution for patient engagement.

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About Halo Communications

Halo Communications' clinical communication platform, Halo, is transforming patient care by streamlining real-time communication and coordinating care among physicians, nurses and staff. The mobile app and online console provide secure, HIPAA-compliant texting for the safe transmission of protected patient information. Robust care coordination tools—including the Smart Scheduling and Teams on-call management system, Voice options, and Alerts notifications—integrate with all hospital systems to allow instant access to systemwide schedules, critical and clinical teams, EHRs, call center messages, labs and directories. Exclusively designed for healthcare, the Halo clinical communication platform is used by several of the most prestigious organizations in the country.

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