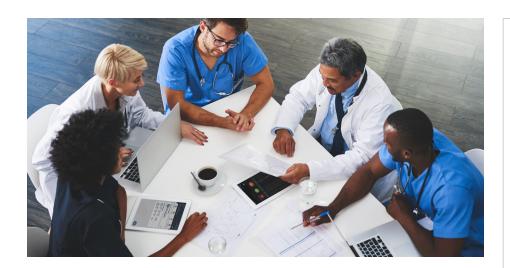
## **SPACELABS**HEALTHCARE

# Closed-loop Communication: An Essential Health Care Tactic



# The importance of closed-loop communication in healthcare.

Effective communication is essential in any business, but especially so in healthcare, where patient safety is at stake. Healthcare environments can be unpredictable, complicated, and stressful. Patient circumstances change frequently and unexpectedly. The unpredictability and urgency that occur when caring for patients can lead to unplanned communication or fragmented interactions between care team members, which in turn can lead to communication breakdowns.<sup>(1)</sup>

Because caring for patients is a team activity, effective teamwork and communication are key to patient safety. At the same time, poor communication can negatively affect patient care. According to a recent study analyzing four years of data, miscommunication is to blame for up to 30% of malpractice awarded lawsuits, where the patient is harmed or dies as a result.<sup>(2)</sup>

The Joint Commission has acknowledged miscommunication as a leading cause of sentinel events, the most serious adverse events. Fifty-three percent of claims with communication failures involved provider-patient miscommunication, and 47% involved provider-provider miscommunication. The information types most frequently miscommunicated were contingency plans, diagnosis, and illness severity. Forty percent of communication failures involved a failed hand-off.<sup>(3)</sup>

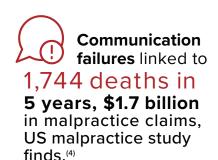


### What is closed-loop communication?

Closed-loop communication can help reduce medical errors and promote care team collaboration. The model is a process of recognizing the receipt of information and confirming with the message sender that the information received is correct and the same as the original. More simply, it is the process of validating and cross-checking information for accuracy.

### This paper discusses:

- Importance of closed-loop communication in healthcare
- 2. What can be done to enhance closed-loop communication practices
- 3. Facilitating closed-loop communication





## When and where does miscommunication most likely occur?

Communication failures can happen anytime during the delivery of care. Most commonly, however, communication failures occur during shift changes, when the treatment of a patient is handed over to a different care team member. When inadequate, erroneous, or ambiguous information is supplied at the changeover, it increases the probability of medical mistakes occurring.<sup>(5)</sup>

## Why do miscommunications happen in healthcare settings?

Miscommunications happen in healthcare settings for many reasons, including but not limited to the following:<sup>(6)</sup>

- Workload pressure and burnout
- Ineffective hospital procedures
- Hospital hierarchy and other conflicts between staff
- Language barriers
- Problems with electronic medical records (EMRs)
- Lack of social skills

While some of these reasons may come into play, miscommunication is more likely to happen due to systemic issues, such as when a hospital is short-staffed, or when there are weaknesses in the protocols for observing and recording patient symptoms. These flaws are meant to be addressed by electronic medical records (EMRs) and electronic health records (EHRs), which provide a more comprehensive view of patient history. However, problems can happen when healthcare providers fail to properly enter data into the EMR or do not forward it promptly to the right physician.<sup>(6)</sup>

## What can be done to enhance closed-loop communication practices?

Many hospitals are still reliant on outdated communication technologies such as pagers and fax machines for care team communication, while more updated means such as mobile phones or other communication technologies are not integrated with the EMRs in use.

Messaging platforms that offer alarm notification, text messaging, quick messages, and audio recordings greatly improve communication among care team members. Integration with EMRs needs to be considered as well as the ability to use communication features on mobile devices anywhere in the hospital, so that staff is not tied to one location as they manage their patients. Leadership should be supportive of the use of communication tools between care team members and investigate what will work best for their teams. (7) Once updated tools and processes are in place to minimize the patterns of poor communication, safe, patient-centered care is more easily facilitated.

## Hospitals that have adopted updated messaging platforms and processes have managed to do the following:

- Improve patient safety
- Enhance the patient experience
- Improve patient satisfaction scores
- Reduce medical errors
- Increase productivity
- Reduce patient wait times
- Increase patient throughput
- Increase employee satisfaction
- Significantly cut costs<sup>(8)</sup>







# Communication between central monitoring and the telemetry care team.

Successful telemetry monitoring relies on timely clinical response to potentially life-threatening concerns. Specifically, communication breakdowns between clinicians, technicians and other care team providers can be a common contributing factor related to telemetry monitoring events. And while patient safety events associated with telemetry monitoring generally do not lead to harm, those events that do most often result in death.<sup>(9)</sup>

Telemetry units with centralized monitoring are complicated care areas with different locations for patients, care givers, monitoring technicians, and remote equipment. In addition to the key communication benefits outlined previously, other communication capabilities that can improve communication and the use of data in telemetry care areas include:

- ✓ Immediate review of events by appropriate care team members
- Manager access to instant and specific event reporting
- ✓ Manager access to device tracking
- ✓ Event reporting to other appropriate parties
- ✓ Conversation recording and tracking

Accountability and timely communication are key to running a successful telemetry unit and hospital. A lack of these can erode quality of care, frustrate staff, and decrease patient safety, impacting patient outcomes and the organization's reputation.

### Facilitating closed-loop communication.

The future of patient safety and prevention of medical errors should be based upon tools that build in error prevention, as opposed to sole dependence on a healthcare organization's care team vigilance. Successful communication strategies and implementation of communication tools are essential to maximize efficiencies, collaboration, and task completion, as well as improve patient safety and outcomes.<sup>(10)</sup>

Sender initiates message

Receiver accepts message, provides feedback confirmation

Sender verifies message was received

Closed-loop communication builds a complete story around each patient. This not only supports patient-centric care, but also allows for timely communication and accountability.

Spacelabs Enterprise Software offers features that support a closed-loop communication model such as:

- Text-to-voice
- Communications dashboard
- Patient dashboards that compile patient data from numerous devices into one view
- Click-to-call
- Desktop notifications
- Patient monitoring notifications
- Mobile app

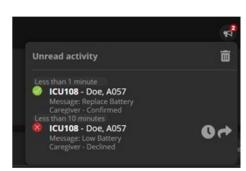
The text-to-voice feature allows a monitor tech to contact any caregiver with a quick two-click process. This allows the monitor tech to send out standard notifications for 'low battery' or 'leads off' events resulting in a 20-second plus reduction in time the caregiver would spend talking to the monitor tech and also eliminates a 30-second plus delay the monitor tech would spend trying to call the caregiver.

The click-to-call feature makes contacting the right caregiver much easier by letting the user select the patient, then click "Call" on the caregiver name the user wants to communicate with. All records of the call are tracked and recorded for further review if needed.



### Quick Messages

One click contact immediately notifies caregiver of events such as low battery or leads off.







### Click to Call

Voice over IP allows monitor tech to contact any caregiver with a quick two-click process as well as receive incoming calls.



### Location Notification

Caregivers can easily notify monitor tech where a patient is located with a click of a button.



### Let's go mobile.

Enterprise Software mobile apps also offer features that are designed to manage patient monitoring information, coordinate care, and track metrics aimed at improving quality, throughput, and efficiency, all in an easy-to-use format. When and where the care team member needs it.

### Mobile app features include:

### **Dashboard**

Provides an overview of current patients and historical alarms with the ability to manage tasks and access secure messaging.

#### **LiveView**

Provides a near-real-time view of the patient's heart rate, blood pressure, respiratory, and  $SpO_2$  vitals along with up to four waveforms.



### **Bedside**

Allows a user to admit and discharge the patient to and from a Spacelabs device along with managing the patient's temporary location if they go to CT, surgery, or other departments.

#### Waveforms

Allows a user to view up to 14 days of retrospective waveforms, all saved events, and approval of those saved events.

### **Caregivers**

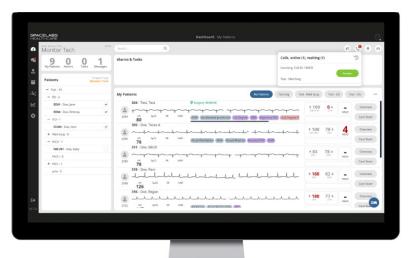
Displays a list of all caregivers associated to the patient with links to send a direct message or call the caregiver via an app.

# The importance of having a communication dashboard.

Enterprise Software also includes a communication dashboard.

This dashboard identifies what notifications have been addressed and what needs to be addressed, and records all of it in case there's a need to go back and review the information. All to assist with closing the communication loop.

Spacelabs Enterprise Software offers tools and features that drive closed-loop communication, bringing together data for easy analysis and offering a suite of comprehensive reports that facilitate and document care team communications.





### Greater efficiencies using Enterprise Software.

As healthcare organizations increasingly seek technology that facilitates evidence-based, data-driven decisions, caregivers are turning to Spacelabs Enterprise Software. Enterprise Software offers much more than alarm management and reporting, with real-time reports on communications and throughput management as well as detailed retrospective information on patient events, providing valuable insights to care team members.

If you are interested in learning more about our Enterprise Software, please contact us at 1-800-522-7025. We can arrange an on-site discussion or video conference at your convenience.

#### References

- (1) https://www.hipaajournal.com/effects-of-poor-communication-in-healthcare
- (2) https://www.ca https://www.candello.com/Insights/Candello-Reports/Communications-Report dello.com/Insights/Candello-Reports/Communications-Report
- (3) https://pubmed.ncbi.nlm.nih.gov
- (4) https://www.statnews.com/2016/02/01/communication-failures-malpractice-study
- (5) https://www.ncbi.nlm.nih.gov/pmc/articles
- (6) https://www.galfandberger.com/2021/08/09/link-poor-communication-malpractice
- (7) https://www.healthstream.com/resource/blog/the-impact-of-poor-communication-patterns-between-nurses-and-providers
- (8) https://www.hipaajournal.com/effects-of-poor-communication-in-healthcare
- (9) Telemetry– Related Events Patient Safetyhttps://patientsafetyj.com > article > download
- (10) https://pubmed.ncbi.nlm.nih.gov/31751089/

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