

Voceras: In the Hospital Setting, Does the Use of Voceras Compared to not Using Voceras Decrease Patient Response Time and Improve Staff Communication?



Taylor Kaspala, ADN, RN; Thomas McDaniel, ADN, RN; Megan Perry, ADN, RN

Background

- A study at Beaumont Hospital has found that using Vocera voice badges dramatically reduces alarm response times from 9.5 minutes to 39 seconds.
- Voceras are devices that provide immediate two-way communication that is activated by a push of a button and voice response.
- Voceras improve communication and working environment: less noise, better handovers and improved staff resource use.

Purpose

Assess patient response times and survey staff about a variety of different communication techniques used on different floors of the hospital to analyze which technique is most efficient for patient response times and most convenient for staff.

Methods

- Administer surveys to RNs on multiple units.
 Different surveys will be used based on what form of communication the staff uses (Voceras or not).
- Administer flyers and present education during shifts to RNs on said units.
- Administer call logs to unit secretaries to track response times.

Measures and Results

Vocera Educational Flyer

How is the Communication on your floor? Vocera

Hands free wearable badge that allows you to call anyone you might need at the touch of a button from wherever you are in the hospital!



- ScheduleReminders
- * Receive secure voice messages
- Broadcast to groups of people!

Do you find it hard to communicate with other staff members on your floor?

Would you like an easier way to get help when you need it?

We want to hear your input about how you communicate! Please fill out a survey that can be found at the nurses station!

Results

Survey for Staff without Voceras

N = 30	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
"Others on my unit can contact me easily"	4	6	7	9	4
	13%	20%	24 %	30%	13%
"I can rapidly contact anyone I need"	6	12	8	2	2
	20 %	40%	27 %	6%	6%
"It is easy for me to find other staff members"	2	8	12	8	0
	6%	27 %	40%	27 %	0%
"When I am in a patient room it is easy for me to get help I need"	3	8	8	10	1
	10%	27 %	27%	33%	3%

Survey for Staff with Voceras

•					
N = 31	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
"Others on my unit can contact me easily"	0	0	5	14	12
	0%	0%	16%	45 %	39%
"I can rapidly contact anyone I need"	1	4	6	12	8
	3%	13%	19%	39%	26%
"It is easy for me	0	4	5	14	8
to find other staff members"	0%	13%	16%	45 %	26%
"When I am in a patient room it is easy for me to get help I need"	1	0	5	16	9
	3%	0%	16%	52%	29%

Summary/Discussion

- Our first step was hanging up flyers on floors that did not use Voceras and provide education this communication tool.
- Our next step was to provide units with surveys to determine their perceived effectiveness of their communication tools.
- Finally, we provided unit secretaries with call logs to track response times.

Feedback with Voceras

- "Voceras are easy to use and I call for help in an emergency without leaving my patient."
- "Sometimes, the Vocera doesn't understand what I am saying due to background noise."
- "You can contact staff without having to look for telephone extensions/numbers."
- "What I like is that you can call providers from bedside and use the location tool to locate staff."

Feedback without Voceras

- "I don't [like our form of communication] it is very inefficient and unsafe"
- "I dislike having to call into patients rooms when they are sleeping"
- "I like how we can track where people are"

Conclusion

- Overall, the majority of staff that utilized Voceras felt that communication between staff was quick and efficient where as staff on floors that didn't have Voceras mostly felt neutral on their form of communication, with majority stating they could not rapidly contact anyone they needed.
- We were unable to obtain an accurate call light log due to lack of participation.

References

- Friend, T. H., Jennings, S. J., Copenhaver, M. S., & Levine, W. C. (2016). Implementation of the Vocera Communication System in a Quaternary Perioperative Environment. *Journal of Medical Systems*, 41(1). doi:10.1007/s10916-016-0652-9
- Guarascio-Howard, L. (2011). Examination of Wireless Technology to Improve Nurse Communication, Response Time to Bed Alarms, and Patient Safety *HERD: Health Environments Research & Design Journal*, 4(2), 109-120. doi:10.1177/193758671100400209

 Richards, J. D., & Harris, T. (2010). Beam me up Scotty! Impact of personal wireless communication devices in the emergency department. *Emergency*
- Medicine Journal, 28(1), 29-32. doi:10.1136/emj.2009.082370
 Williams, J. S. (2008). Vocera Voice Badges Cut Response Times. Biomedical Instrumentation & Technology, 42(3), 193-194. doi:10.2345/0899-8205(2008)42[193:vvbcrt]2.0.co;2