

# Rose Medical Systems

Picture the following scenario:

One of your loved ones has just been admitted to the hospital with an acute medical problem or with a serious injury due to an accident. Because of the severity of the situation, your loved one has been intubated and put on a ventilator (which prevents the patient from speaking) or may simply be too weak to produce speech. He or she is still capable of thinking and feeling, but is simply unable to speak. The patient needs to communicate very badly, but becomes frustrated and panicky because he/she is unable to get his/her thoughts, needs and desires through to you. In turn, you as well as the patient's doctors, nurses and caregivers become frustrated and discouraged.

In addition to the above, temporarily losing one's ability to communicate has been linked to Delirium and Post Traumatic Stress Disorder. Delirium or acute confusional state is a common and severe neuropsychiatric syndrome with core features of acute onset and fluctuating course, attentional deficits and generalized severe disorganization of behavior. (Wikipedia) "Delirium is probably the single most common acute disorder affecting adults in general hospitals. It affects 10-20% of all hospitalized adults, and 30-40% of elderly hospitalized patients and up to 80% of ICU patients". (Ely EW, Shintani A, Truman B, et al. (2004). "Delirium as a predictor of mortality in mechanically ventilated patients in the intensive care unit". JAMA 291 (14): 1753–62.. [doi:10.1001/jama.291.14.1753](https://doi.org/10.1001/jama.291.14.1753). [PMID 15082703](https://pubmed.ncbi.nlm.nih.gov/15082703/).) Over 20% of all patients who have been in an ICU suffer from some form of Post Traumatic Stress Disorder requiring additional post ICU treatment. (Oct. 2008, "General Hospital Psychiatry")

Published survey results from patients who have undergone ventilation procedures and have been unable to communicate, show great patient frustration and dissatisfaction. Pay for performance reimbursement for hospitals is growing and one of the most significant elements of pay for performance criteria is patient satisfaction. Hospitals want to improve the perception of patient satisfaction and Instant Voice can be a big factor for this particular type of patient.

More than five million patients in intensive care units (ICUs) in the United States each year are unable to speak, in large part because of the presence of artificial airways and assisted ventilation, (ie, mechanical ventilation). Communication ability may be further impaired during critical illness by sedation, fatigue, delirium, or neurological disease. Communication difficulty is the most commonly reported distressing symptom for ICU



patients receiving mechanical ventilation and is associated with anxiety, panic, anger, frustration, sleeplessness, and distress. Nurses also report frustration when patients are unable to verbally report their symptoms, pain levels, and needs. (2006 by the Society of Critical Care Medicine and Lippincott Williams & Wilkins)

These are the problems that Rose Medical Systems, Inc and the Instant Voice system address.

The Instant Voice System is a patented system that allows patients who have temporarily lost their ability to speak due to intubation, tracheotomy, stroke, surgery or other causes to be able to fully communicate with their doctors, nurses, caregivers, family and friends.

When ICU, CCU, and rehabilitation staff at eight major hospitals in the greater San Diego area have been shown the fully functional Instant Voice prototype, they have unanimously indicated that adoption of Instant Voice would result in a significant improvement in the care of their patients and an increase in nursing efficiency. In addition, when asked if they would want the product in their hospital if it were available as a product today, every participating nurse and hospital executive attending the presentation said yes.

While the ICU and the critically ill patient is the initial focus for RMS and Instant Voice, other markets not included in the above figures are long-term care hospitals (LTCHs) and rehabilitation hospitals. We plan to expand into these markets as we grow the hospital business as well as launch Instant Voice in selected international markets. Instant Voice has a translation mode suitable for most languages, which is currently available in English and Spanish. This translation mode also helps to reduce costs in many cases by eliminating the need for professional translators.

Instant Voice is designed to allow patients to communicate with hospital staff and family members in the patient's room, as well as to send messages to the nurses' station. By doing so, it provides non-speaking patients, for the first time, with the same opportunity as speaking patients to indicate their pain levels as well as their medical, physical, and emotional needs.

The primary component is the Instant Voice Patient Module, which is a medical grade, 15 inch touchscreen PC together with proprietary electronics and synthetic speech engine.

A secondary component of the Instant Voice System is the Nurses' Station Module, which allows non-speaking patients to communicate their pain levels and medical and



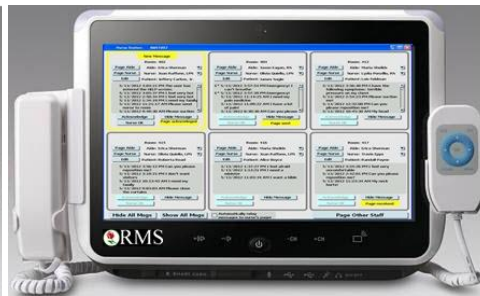
emotional needs directly to the nurses' station. It consists of a panel PC with touch screen display, and uses a wireless link to receive communications from the Patient Module and, as necessary, to relay these communications to the relevant staff member's pager, cell phone, or PDA.

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PATIENT MODULE



NURSES STATION