

- Title:** SPEACS 2: Improving Patient Communication and Quality Outcomes in the ICU
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- Purpose:** To test the impact of a unit-wide program (SPEACS-2) of nurse training, speech language pathologist collaboration and “low tech” communication materials on nursing care quality, clinical outcomes, and cost. This brief examines effects on patient experience of communication, nurse and family outcomes, and cost-utilization outcomes (secondary aims).
- Background:**
- Each year, in the U.S., more than 800,000 critically ill patients are unable to speak with artificial airways and ventilators during treatment.
  - Unmet communication needs are the most common source of distress reported by patients, leading to anxiety, panic, and frustration, placing them at greater risk for preventable adverse events.
- Methods:**
- Cluster randomized control stepped wedge design; 1440 patients who received mechanical ventilation for two or more days and met awake criteria were enrolled from six intensive care units (ICUs). The study was conducted over 24 months with implementation of the intervention staggered.
  - ICU nurses completed a one-hour on-line communication training program. A speech language pathologist conducted weekly bedside teaching rounds. Researchers also provided the ICUs with low-tech communication tools.
  - Data were collected on nursing care quality indicators (days in heavy sedation, pain management, physical restraint use, ICU-acquired pressure ulcers, unplanned extubation) and patient clinical outcomes (ventilator-free days, ICU length of stay, hospital length of stay). Patients and families completed surveys about communication satisfaction and difficulty before and after the intervention. Nurses completed surveys on communication perceptions and knowledge before and after the intervention and participated in focus groups on this topic.
- Key Findings:**
- Nursing knowledge, comfort, and satisfaction regarding communicating with mechanically ventilated patients showed improvements after the SPEACS-2 program was implemented.
  - There was no change in patient-family perceptions of communication difficulty or satisfaction with communication. Families reported use of communication boards more often after the intervention but with low frequency.
- References:** Barnato AE (2011, Sept 29). “SPEACS-2. Primer on the stepped wedge cluster randomized trial design” INQRI video on YouTube. [http://www.youtube.com/watch?v=oWVVoX\\_Fka0w](http://www.youtube.com/watch?v=oWVVoX_Fka0w)
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- Happ, M.B., Sawicki, J.M., Ricci, F.G. (2010). “Practice change and culture change in implementing geriatric care initiatives” *Geriatric Nursing*, 31(6):452-4.[PMID: 21051103]