Rationale
• LTACH units serve a wide range of individuals with serious medical problems requiring intense, special treatments for an extended period of time.
• Some LTACH patients have CCN
  — Symptom of primary medical condition
    • TBI, stroke, chronic Buillain-Barre’ Syndrome, ALS, oral-laryngeal cancer
  — Result of intervention
    • Surgery, intubation, or tracheostomy

Incidence
• Incidence of patients with CCN is not known
• Eskildsen (2007) reviewed 30 outcome studies and reported more than 25% of patients admitted into LTACH were ventilator dependent
• 34 to 65% of patients were weaned from ventilator while in LTACH
• Extended stays in LTACH were associated with physical disabilities requiring extensive care

Communication
• Most LTACH patients need to communicate regularly with
  — Hospital Staff: Doctors, nurses, respiratory therapists
  — Family: finances, operation of business, care of dependent children, end of life issues and decisions
  — Social Network: Extended family, friends, acquaintances, volunteers (face-to-face & distance)
AAC Options

• Low Tech
  – Communication books and boards
  – Written communication

• High Tech
  – SGD for chronic or degenerative conditions: TBI, brainstem stroke, chronic Guillain Barre’,
  – Mobile technology ??????

Acceptance of Mobile Technology

• Preferences of staff
  • Preferences of patients
  • Capability of technology

Purpose

• To survey personnel groups who routinely work in LTACH units regarding their preferences related to three communication options:
  • 1. iPad only,
  • 2. iPad with a flat screen that mirrored the iPad screen, and
  • 3. iPad with a projected image that mirrored the iPad screen.

Participants

• Participants from three groups (N = 30) of professionals who routinely worked in an LTACH unit:
  • 1. registered nurses and nursing assistants,
  • 2. allied health professionals including respiratory, physical, and occupational therapists, and
  • 3. Speech Language Pathologists
Procedures

• Following a demonstration session, participants completed surveys for three different AAC strategies involving iPad mobile technology. Each of the strategies contained the same content, 27 representative communication boards developed to support communication in intensive care settings (Hurtig and Downey, 2009).

• Each survey consisted of questions rated as 1= very poor, 2= poor, 3= okay/neutral, 4= well, 5= very well.
  • 1. overall communication accuracy
  • 2. compatibility with other equipment
  • 3. relative ease of use for family members
  • 4. relative ease of use for staff members, and
  • 5. relative ease of use for patients.
  • 6. Rank order according to overall preference for the three strategies.

Mean Rankings for SLPs, Allied Health, & Nurses

Mean Ratings for SLPs
Conclusions

• There was general preference of the iPad technology alone across all three groups of participants
• The small portable nature of this technology appeared to lead both groups to rate iPad technology as highly compatible with medical equipment within an LTACH environment—as compared to the iPad with a flat screen or projector displays

Future Research

• Future research should investigate the preferences of LTACH patients with CCN.
• Also, preferences of staff and patients for mobile technology options, such as the iPad, should be compared with low technology communication books that contain similar information.
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