AAC Intervention in the Intensive and Acute Care Settings

Jennifer Pritchard, MS, CCC-SLP
Augmentative Communication Program

Communication Vulnerability
- Inability to hear or understand speech INCLUDING language of the medical environment even with amplification
- Inability to produce speech that is intelligible
- Inability to see or read, even with corrective lenses
- Altered mental status

Patak, Wilson-Stronks, Costello 2008

National and international focus
- New changes to standards for hospital accreditation
- Increased attention to Joint Commission Standards

Impact on Patients
- Loss of control of environment, sense of self, ability to participate in own care (Garrett et al., 2007)
- Inability to speak closely linked to: Insecurity, panic, worry, fear, anger, stress, and sleep disturbances (Happ et al., 2004)
- These feelings of low mood can lead to withdrawal from family and care givers. This impacts participation in care and recovery (Magnus and Turkington, 2005).
Impact on Parents

- Afraid child will not be able to communicate wants or needs
- Concern that child will not be able to call for them and may feel abandoned
- Distress over temporary loss of child’s personality (Costello, 2000)

Impact on Nursing Staff

- Can impact delivery of nursing care
- Often have limited time to try to “figure out” what patient is trying to communicate
- Leads to frustration and disappointment
- May lead to limiting communication attempts beyond what is essential (Costello, 2000 and Garrett et al., 2007)

Comments from nurses…

“It sucks!”

“Everything is one sided. You are making assumptions about what you are doing without confirmation. You can make assumptions based on heart rate and blood pressure, but if they can’t talk to you, you really don’t know.”
Comments from nurses…

"It makes me feel inadequate because I don’t know what they need or what I’m doing that’s good or bad so I can’t do my job adequately."

Population

- Communication vulnerable at baseline
- Acute onset communication vulnerability
- At risk for communication vulnerability

Communication Vulnerable at Baseline

- Significant speech and/or language delay or disorder
- Intellectual disability
- Trach or other form of mechanical ventilation
- Language difference
- Limited motor skills that restrict use of standard call bell system

SLP role

- Assist with adding medical related vocabulary to current system
- Design and construct new communication supports
- Explore access options
- Set up adapted call button
- Identify patients who are appropriate for referral to our outpatient department
- Disseminate information about how patient communicates

Population

- Communication vulnerable at baseline
- Acute onset communication vulnerability
- At risk for communication vulnerability

Acute Onset Communication Vulnerability

- Intubation or other form of mechanical ventilation
- New trach
- Aphasia
- Dysarthria
- Aphonia
- Change in mental status
- Psychiatric disorder
- Decreased motor control to activate standard call bell system
SLP role

- Evaluate communication
- Design and construct new communication supports
- Explore access options
- Set up adapted call button
- Identify patients who are appropriate for referral to our outpatient department
- Disseminate information about how patient communicates

Population

- Communication vulnerable at baseline
- Acute onset communication vulnerability
- At risk for communication vulnerability

Potential Risk for Communication Vulnerability

- Risk for intubation or other form of mechanical ventilation
- Medical procedure or treatment
- Degenerative condition

SLP role

Voice and Message Banking (Costello 2000)

- Allows for...
  - Patient to participate in selection of tools and messages in less acute, critical time when able to process and remember information easier
  - Promotion of more functional use of selected communication strategies
  - Increased opportunity for control and active participation in own care

Mark

- 27 year old male
- Muscular Dystrophy
- Planned admission for trach
- Limited movement of hands and head
- Anxious about not being able to communicate after trach
Pre-op Process

- Received referral from pre-op nurse practitioner
- Mom also contacted clinician by phone
- Met with Mark for 45 min during pre-op appointment
- Identified appropriate tools and access
- Message and voice banking
- Training on how to set-up and use MessageMate
- Emailed Mark completed overlay
- Given contact info if wanted to make changes

Post-op

- Brought tools to bedside
- Educated staff on set-up and use

Next day:
- Followed up

Mother’s Reflection

- He usually nearly hyperventilates before surgery. I usually go in with him, but he went in okay this time. It gave him a measure of control knowing he would not have to be so helpless.
- He just was much more calm with the idea of surgery. This gave him a constructive way of overcoming the tube. We went into surgery thinking if he needed the tube, he would be able to communicate.
Sample Bedside Signs

Please offer me choices using your hands...

- Ask me a question.
- Hold up YOUR right hand and give me my first choice.
- Then hold up YOUR left hand and give me my second choice.
- I will look at the one I want.

Sample Bedside Signs, Cont.

I understand what you are saying.
Please speak directly to me.
I move the fingers on my RIGHT hand to indicate YES.
I move the fingers of my LEFT hand to indicate NO.

Sample Bedside Signs, Cont.

Messages I Frequently Communicate:
- I need to be suctioned.
- I’m tired.
- I need to go to the bathroom.
- I need the bed pan.
- I need to roll over.
- I need cough assist.
- Move my leg in.
- Move my leg out.
- Move my hips to the right.
- Move my hips to the left.

Communication Boards
Video Case Study

Dry Erase Board

- Offers ability to write or draw
- Receptive AND expressive language
- No training is generally needed
**Boogie Board**
- Used to write messages
- Can use fingernail to write
- Small and lightweight
- Tends to be motivating to use

**Video Case Study**

**Step-by-Step**
- Allows for recording and playback of series of messages
- Used for:
  - gaining attention
  - social scripts
  - participation in motivating activities
  - etc., etc. (options are endless)
JellyBean Switch
- Used for access to communication tools and switch toys
- Can be attached to mounting arm for more secure placement
- Used for adapted call button

Adapted Call Button

Powerlink Timer
- Timer for switch operated toys and appliances
- Offers opportunities for control
- Bring a little fun into the hospital environment

Patient's Father…
I was ecstatic! I was so excited to see her actually triggering something in a meaningful way. You could see her realize... like, “I just did this!” It was very cool.

MessageMate 40
- Speech Generating Device (SGD)
- Digitized voice
- Holds up to 40 messages
- Can be accessed via direct selection or switch scanning

Video Case Study
Jennifer Pritchard
Children's Hospital Boston 2011

Video Case Study

GoTalk
- Speech Generating Device (SGD)
- Digitized voice
- Lightweight and portable
- Multiple levels and storage for overlays

LightWriter
- "Speaks" aloud typed messages
- Synthesized speech
- Dual screen
- Ability to store frequently typed messages
Voice amplifier

- Amplifies weak voices
- Helpful for patients with vocal cord dysfunction and/or who have been intubated for extended period

INTRODUCING....
My New ‘Toys’!

Some closing thoughts from a mother...