TALKING EARLY MOBILITY: GET MOVING WITH AAC

Tami Altschuler, MA, CCC-SLP
Daniella Klein, PT, DPT, NCS
Amanda Tesoriero, MSOT, OTR/L
Ashley Carr Scully, MSOT, OTR/L
Disclosures

Tami Altschuler
Full-time, salaried employee at NYU Langone Medical Center;
Member, Patient-Provider Communication Forum

Daniella Klein
Full-time, salaried employee at NYU Langone Medical Center

Amanda Tesoriero
Full-time, salaried employee at NYU Langone Medical Center

Ashley Carr Scully
Full-time, salaried employee at NYU Langone Medical Center
THERE ARE STRANGER THINGS

THAN THE ABCDEF BUNDLE
ABCDEF Bundle

A - Assess, prevent, and manage pain

B - Both spontaneous awakening and spontaneous breathing trials

C - Choice of analgesia and sedation

D - Delirium: assess, prevent, and manage

E - Early mobility and exercise

F - Family engagement and empowerment
A – assess, prevent, and manage pain

- Patients are assessed for pain by all disciplines
- Pain scale > 4 requires re-assessment of pain after 30 minutes
- PT/OT/SLP manage pain with repositioning, distraction techniques, deep breathing
- Nonpharmaceutical approaches
B – Both Spontaneous Awakening and Breathing Trials

• “Wake up and breathe”

• Setting a time aside each day stop sedation, orient the patient, conduct SBT to attempt to liberate patient off the ventilator

• May prevent ventilator associated PNA, reduce length of stay
C- choice of analgesia and sedation

- Sedation vacations allow for rehab interventions (passive ROM, "dangling", sit to stand, OOB to chair, ambulating)

- Titrate sedation down to lowest dose possible while minimizing agitation
D - Delirium

- Sudden severe confusion and rapid changes in brain function that occur with physical or mental illness
- Hyperactive – agitation, combativeness, heightened arousal, restlessness
- Hypoactive – fatigue, decreased level of consciousness, inattention, disordered thinking
- Mixed – fluctuations between hyperactive and hypoactive
- PT/OT/SLP screen for delirium with the CAM, CAM-ICU, CAPD
- Rehab provides education/training with families on delirium
I DON'T ALWAYS GET DELIRIUM IN THE ICU

BUT WHEN I CAN COMMUNICATE WHILE INTUBATED, I'M CAM NEGATIVE!
E. Early Mobility and Exercise

- 18 hours for non-intubated patients
- 48 hours for intubated patients
- Nurses trained by therapy staff on transfer training and safe guarding during ambulation
- Use of algorithm to determine patient readiness for mobility
- Automatic order set for PT/OT for all PICU patients
F - Family engagement and empowerment

• Empower families to have a hands on role

• Encourage parent family engagement in therapy sessions

• Working towards patient and family goals

• Family Advisory ICU Council
EARLY MOBILITY

NO LION AROUND
Risks/Benefits

• Immobilization results in:
  - decreased QOL
  - muscle atrophy
  - impaired cardiopulmonary endurance
  - overall decrease in mobility

• Mobility improves:
  - function
  - enhances QOL post discharge
  - decreases length of stay
Contraindications

- Elevated intracranial pressure > 15mmHg (or otherwise specified by medical team)
- Uncontrolled seizures
- Acute change in mental status
- Positive end expiratory pressure >/= 10
- Fraction of inspired oxygen >/= 0.60
- Richmond Agitation Scale </= -3, >/= +4
Contraindications Continued

- Hemodynamic instability (significant/multiple pressure support agents, anything uncontrolled)
- Open chest/abdomen
- Unstable fractures
Precautions

- Difficult or insecure airway
- Richmond Agitation Scale -2, +2, +3
- Continuous dialysis
- Vasopressor medication
- Lumbar drain or EVD (need to re-calibrate with movement)
- Severe osteopenia
Signs of Intolerance (Do not resolve within 5-10 minutes)

• O2 sat below range established by medical team

• Increased work of breathing
  - accessory muscle use
  - cyanosis
  - diaphoresis
  - breath holding
  - nasal flaring

• Change in vitals deemed to be excessive as defined by medical team
Signs of Intolerance (Do not resolve within 5-10 minutes)

• Change or alteration in mental status

• Increased agitation

• Attempts to self-extubate
PT/OT Session

• Initial evaluation
  - Assess strength, sensation, proprioception, arousal
  - Perform bed mobility and sitting at EOB
  - Progress to OOB if appropriate
  - ADL’s (e.g. toileting, oral care)

• Daily follow-up sessions
  - Progress mobility as appropriate
  - Assess/provide appropriate seating equipment when needed

• When are PT/OT co-treat utilized?
  - When patient requires more than 1 person assist
  - Patient can’t tolerate multiple therapy sessions a day
Culture Change in the PICU

• Historically, inconsistent orders (mostly post-op)

• QI project to promote early mobilization

• Automatic order sets for PT/OT/SLP (however, can get ”unclicked” by physician)

• Need to request orders at times

• Activity orders for all patients

• Staff training and education (therapists, nurses, MDs)
Culture Change in the PICU Continued

- Increased advocacy for SLP services
- Introduction of Communication Toolkit
PATIENT PROVIDER COMMUNICATION

Let's TACO BOUT IT
Communication Vulnerabilities

- Medical treatment (intubation, trach, BIPAP)
- Neurogenic difficulties (aphasia, dysarthria, TBI)
- Sensory: hearing and vision
- Limited English proficiency / language difference
- Difficulty reading and/or writing
- Health literacy
- Inability to produce intelligible speech
- Pre-existing speech/language difficulties
- Altered mental status
Communication Risks

• Serious medical events
  (Cohen, et al., 2009)

• Sentinel events
  (The Joint Commission, 2007)

• Increased diagnosis of psychopathology
  (The Joint Commission, 2007)

• Poor medication compliance
  (Andrulis et al., 2002)

• Leaving Against Medical Advice
  (Flores, 2003)
Communication Risks Continued…

• Fear, stress, sleep disturbances
  (Happ, et al., 2004)

• Loss of ability to participate in own care
  (Garrett, et al., 2007)
Communication Access Benefits

- Received less sedation
- Transitioned quicker
- Increased patient satisfaction scores
- Felt more in control… generally do better…

Joint Commission Standards

- Effective scoring in 2012
- Guidelines for AAC access on admission, assessment, and intervention guidelines
New Joint Commission PC Requirements

**PC.02.01.21** The hospital effectively communicates with patients when providing care, treatment, and services.

**Rationale for PC.02.01.21**
This standard emphasizes the importance of effective communication between patients and their providers of care, treatment, and services. Effective patient-provider communication is necessary for patient safety. Research shows that patients with communication problems are at an increased risk of experiencing preventable adverse events, and that patients with limited English proficiency are more likely to experience adverse events than English speaking patients.

Identifying the patient’s oral and written communication needs is an essential step in determining how to facilitate the exchange of information with the patient during the care process. Patients may have hearing or visual needs, speak or read a language other than English, experience difficulty understanding health information, or be unable to speak due to their medical condition or treatment. Additionally, some communication needs may change during the course of care. Once the patient’s communication needs are identified, the hospital can determine the best way to promote two-way communication between the patient and his or her providers in a manner that meets the patient’s needs. This standard complements RI.01.01.01, EP 5 (patient right to and need for effective communication); RI.01.01.03, EP 2 (provision of language interpreting and translation services); and RI.01.01.03, EP 3 (meeting needs of patients with vision, speech, hearing, or cognitive impairments).

**EP 1**
The hospital identifies the patient’s oral and written communication needs, including the patient’s preferred language for discussing health care. (See also RC.02.01.01, EP 1)

*Note: Examples of communication needs include the need for personal devices such as hearing aids or glasses, language interpreters, communication boards, and translated or plain language materials.*

**EP 2**
The hospital communicates with the patient during the provision of care, treatment, and services in a manner that meets the patient’s oral and written communication needs. (See also RI.01.01.03, EPs 1-3)
Patient Satisfaction

• Hospital Value Based Purchasing Program adjusts what Medicare pays hospitals for **patient experience**.

• Reimbursement of up to 2% in 2018 which equals approximately $1.8 billion.

• Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. Patient satisfaction is 25% of the equation.

• 10 out of 32 questions on the survey focus on **communication**.
6. During this hospital stay, how often did doctors listen carefully to you?

1  Never
2  Sometimes
3  Usually
4  Always

7. During this hospital stay, how often did doctors explain things in a way you could understand?

1  Never
2  Sometimes
3  Usually
4  Always
“I Understand When My Patient is Mouthing Words to Me"

- Only about 30% of all speech is visible on the lips

- Now consider:
  - ETT
  - Facial droop
  - Bell’s Palsy
  - Oral motor weakness limiting ROM
  - Edentulous
  - Facial hair

- May result in accidental extubation

- Ineffective and frustrating for the patient
  (Etchels, et al., 2003)
The Lip Reader

https://youtu.be/R2F5vzsYwVw?t=169
Opportunity Barriers
(Beukelman and Mirenda, 1988)

- Policy
- Practice
- Knowledge
- Skill
- Attitude
1474: Bedside AAC Service Delivery by SLPs in Acute Care - Current Practice and Call to Action (Seminar 1-hour)

**Details**
- **Location:** CC207 (Lv 2)
- **Date:** Friday, Nov 16 2:30 PM
- **Duration:** 1 hour
- **Format:** Seminar 1-hour
- **Code:** 1474
- **PDH(s):** 1 Hrs

**Authors**

| Presenting Author | Rachel Santiago  
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<td>Boston Children's Hosp</td>
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| Presenting Author | Tami Meki Altschuler  
|                   | NYU Langone Med Ctr |

**About**
SLPs have a vital role in establishing and increasing bedside AAC service delivery in ICU/acute care settings. Despite hospital standards and performance requirements, multiple barriers impact implementation. Outcomes of a survey distributed to SLPs in acute care hospitals will be reviewed as well as the current state of practice. AAC strategies, considerations, and potential action plans will be discussed.

**Learner Outcome(s):**
- Review survey results and implications for bedside AAC practice
- Describe example tools and strategies SLPs and/or hospitals may consider to enhance inpatient service delivery
- Discuss potential plans of action for SLPs and acute care hospital settings

**Keywords:** AAC, Hospital, ICU, acute care, patient-provider communication

**Audience(s)**
- Health Professionals  
- Researchers  
- Students
Innovation Adoption Lifecycle

- Innovators: 2.5%
- Early Adopters: 13.5%
- Early Majority: 34%
- Late Majority: 34%
- Laggards: 16%
Communication Toolkit

ALWAYS REFER THE PATIENT FOR A SPEECH/LANGUAGE EVALUATION
Vidatak Boards
Alphabet Board

Alphabet Board - AEIOU

REPEAT
START AGAIN
END OF WORD
END OF SENTENCE

1 2 3
4 5 6
7 8 9
0
Breaking Bad

https://youtu.be/FGQapTlrsR4
Single Message Device
Multi Message Speech Generating Devices
Boogie Boards
iPads
Apps

• Verbally

• Sounding Board

• Yes/No

• GoTalk Now

• Touch Chat

• Dictation Pro
High Tech Eye Gaze Device
Other Items to Include

- Voice amplifier
- Magnifying glass
- Pocket Talker (assistive listening device)
- Dry erase boards
- Clipboards
- Adaptive writing utensils
Is the patient emerging from sedation and alert?

- Yes
  - Work on establishing yes/no signals
  - Continue to assess alertness

- No
  - Is the patient responding to yes/no questions?
    - Yes
      - Work on visual tracking horizontally and vertically
      - Can the patient write or type?
        - Yes
          - Use the dry-erase board or “Boogie Board” or text to speech app on iPad
        - No
          - Use one of the GoTalk devices
    - No
      - Use the eye gaze board with picture symbols or letters
      - Use partner assisted scanning (auditory/visual)

Communication Board (picture, phrase, alphabet)
Profile/Phases of Communication Vulnerable Patient

Phase 1: Emerging from Sedation

Phase 2: Increase Wakefulness

Phase 3: Need for Broad and Diverse Communication Access

(Costello, Patak, and Pritchard, 2010)
Phase 1 – Emerging from Sedation

- Yes – No – I don’t know
- Pain scale and body board
- Call for nurse – modified access to call bell
- Gain attention of loved ones/staff with simple voice output

(Costello, Patak, and Pritchard, 2010)
Phase 2 – Increased Wakefulness

• All of Phase 1 strategies
• More relevant vocabulary
• Picture boards – needs, body/comfort, personal interests
• Alphabet boards
• Multi-message voice output devices with digital or synthetic messages
• Voice amplification

(Costello, Patak, and Pritchard, 2010)
Phase 3 – Broad and Diverse Communication Access

- All options from phases 1 and 2
- Generative communication with alphabet and sophisticated page sets
- Word and grammar prediction
- Encoding strategies
- Music and video files
- Internet access
- Telephone access

(Costello, Patak, and Pritchard, 2010)
Co-Treat Benefits

- Sedation vacations
- Clustered care
- Fewer disturbances for sleep hygiene
- Interdisciplinary team goals for mobility and communication
PT/OT/SLP

- PT/OT in first and assess alertness level ➔ request SLP orders ➔ coordinate scheduling

- PT/OT assess for optimal positioning for alertness, safety, access to communication devices
  - Tilt table
  - Sitting EOB
  - Wheelchair
  - OOB to chair

- OT provides UE functional assessment and assists in adaptive equipment
Trifecta

- Positioning
- AAC
- Access
Positioning Options

- Upright in bed
- Tilt table
- Edge of bed
- Out of bed to chair
- Ambulating
Upright in Bed – Patient Pic
Edge of Bed – Patient Pic
Tilt Table – Patient Pic
OOB to Chair – Patient Pic
Ambulating – Patient Video
Adaptive Call Bells

• Fine motor difficulties = difficulty accessing call bell

• Often addressed by OT or Engineering

• SLPs can address options to call for help or gain attention

• Single message speech generating devices for use in pods
Switch Access
Adaptive Writing Tool
Adaptive Stylus
Mounting
9 years old, Septic Shock, s/p ECMO – Patient Pic
16 years old, Guillain Barre Syndrome – Patient Pic
19 years old, Duchenne Muscular Dystrophy – Patient Pic
Patient Video
"Well, I feel very thankful. It is making this process which is in fact very dreadful, I will not lie, a breeze. Not only can I call the attention of my mom and nurses, but come on now, I can actually communicate again."
Get Involved

ECMO
# Get Involved

## 4 Minute PICU Safety Huddle

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**Safety Huddle**

NYU Langone Health
Barriers to Implementation

• Staffing
  - Nursing
  - SLP

• Scheduling
  - Coordinating with RT, RN, perfusionist (for ECMO) and PT/OT/SLP

• Equipment access
  - Limited options
  - Stored in other locations

• Family buy-in
Future Growth

- Expand to all ICUs
- Equipment access
- Scheduling
- Delirium initiative
- Sedation protocol
Patient-Provider Communication Forum

• Patientprovidercommunication.org
• Communication tools
• Past presentations on PPC
• Participants list
• Bibliography
Patient-Provider Communication: Roles for SLPS and other Health Care Professionals

- Chapter 1. Building Bridges to Effective Patient-Provider Communication
- Chapter 2. Issues and Challenges in Advancing Effective Patient-Provider Communication
- Chapter 3. Medical Education: Preparing Professionals to Enhance Communication Access in Health Care Settings
- Chapter 4. Enhancing Communication in Outpatient Medical Clinic Visits
- Chapter 5. Integrating Emergency and Disaster Resilience Into Your Everyday Practice
- Chapter 6. Adult Acute and Intensive Care in Hospitals
- Chapter 7. Pediatric Acute and Intensive Care in Hospitals
- Chapter 8. Patient-Provider Communication in Rehabilitation Settings
- Chapter 9. Residential Long-Term Care
- Chapter 10. Enhancing Communication in Hospice Settings
- Chapter 11. Making It Happen: Moving Toward Full Implementation
Patient-Provider Communication

Communicating with your patients should be easy, right? After all, we are communication disorder experts. However, even OTRs and audiologists have trouble communicating complex medical information about anatomy, physiology, diagnoses, and treatment options. Here are some resources to help.

Patient-Provider Communication
- Patient Provider Communication book
- Patient Provider Communication Forum
- Patient-provider Communication Bibliography from the Institute for Healthcare Improvement
- Habermas Juricke Language Policy and Practice in Health Care
- Information for your patients on how to improve health communication
- AAC RERC podcasts on patient/provider communication
- Communication passport for accident and emergency, from the Royal Berkshire NHS Foundation Trust
- Hospital procedure symbols, from Sheffield Children’s NHS Foundation Trust

Health Communication
- Healthy People 2020 Health Communication and Health Information Technology
- Making Health Communication Programs That Work (the "Pink Book")

Working with Interpreters
- Collaborating with Interpreters and Translators

The ASHA Leader Articles
- Communicating Effectively with Elders and Their Families
- Effective Patient Communication: Enhancing Learning Styles and Language Yields Better Outcomes

Related Resources
- Health Literacy

- PPC Forum
- PPC Book
- Bibliography
- AAC RERC podcasts
- ASHA Leader articles
- Joint Commission info
- Health literacy info
“…hospital staff are of two kinds: the majority who would not dream of leaving the room without first attempting to decipher my SOS messages; and the less conscientious minority, who make their getaway pretending not to notice my distress signals…”

(page 40)
Contact Us

Tami Altschuler, M.A., CCC-SLP
Clinical Specialist in Patient-Provider Communication
Department of Speech-Language Pathology
NYU Langone Health
Tami.Altschuler@nyulangone.org

Daniella Klein, PT, DPT, NCS
Senior Physical Therapist
Rusk Rehabilitation
NYU Langone Health
Daniella.Klein@nyulangone.org

Amanda Tesoriero, MSOT, OTR/L
Staff Occupational Therapist
Rusk Rehabilitation
NYU Langone Health
Amanda.Tesoriero@nyulangone.org
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THANK YOU