AAC in Acute Care

Maximizing Communication and Dysphagia Management

Lingraphica

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Financial Disclosure

Teresa Thompson is an employee of Lingraphica and thereby receives financial compensation from the Lingraphica Company.

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Learning Objectives

01 Identify three benefits of having AAC available in acute care

02 Describe common barriers to use of AAC in the acute care setting

03 Discuss the importance of patient involvement in decisions regarding dysphagia management

Agenda

- Patient Profiles
- Research Review
- Case Study
- Light and High Tech AAC options
- Barriers and Solutions
- Conclusion

Patient Profiles

Patient Profile A: 20 y/o male

- Cerebral palsy and severe dysarthria
- Admitted to ICU with COVID
- Initially only light-tech AAC available at bedside
- SLP consult placed
  - Used SGD at baseline

(Santiago et al., 2021)

Patient Profile A: 20 y/o male

- Establishing high-tech AAC allowed the patient to:
  - Initiate conversations with staff and family
  - Express needs and preferences
  - Direct music therapy and share music preferences
  - Ask questions and communicate successfully with medical staff

(Santiago et al., 2021)

Patient Profile B: 32 y/o female

- Admitted s/p acute myocardial infarction
  - Subsequently developed multiple brain infarcts, hemiplegia, mental status changes, acute respiratory failure requiring tracheostomy
- Displayed agitation and uncontrolled pain
- Palliative care consulted
  - Initiated SLP consult

(Radtke et al., 2011)

Patient Profile B: 32 y/o female

- Topic notebook
  - Patient able to communicate hygiene needs
- Alphabet Board
  - Patient spelled her occupation and job location
- Written Choice
  - Patient signaled Y/N or pointed to most accurate answer

(Radtke et al., 2011)

Patient Profile B: 32 y/o female

- Required breaks and frequent cueing
- PMV initiated, able to produce single words, phrases mostly unintelligible
- Communication facilitated with combination of AAC and verbalization with PMV
- Strategies posted in room, reviewed with nursing and family

(Radtke et al., 2011)

Research Review

Risk Factors

Patients without adequate communication in acute care:
- Three times more likely to have preventable adverse events
- Experience feelings of:
  - Frustration
  - Isolation
  - Anxiety
  - Insecurity
  - Panic

(Downey et al, 2006; Hurtig, 2018)

Risk Factors

- Nursing literature notes the primary modes of communication used by critical care patients are:
  - Mouthing words
  - Gestures
  - Head nods
- Can lead to confusion and frustration for critically ill patients

(Downey et al, 2006)

The Joint Commission

"Effective communication between health care providers and patients and their families is essential to safe, quality care. Studies have clearly shown that poor or missing communication between providers and patients can lead to patient harm or even death."

The Joint Commission. (2025)

The Joint Commission

Standard RI.01.01.03
- The hospital respects the patient's right to receive information in a manner the patient understands.

Standard RI.01.02.01
- The hospital respects the patient's right to participate in decisions about their care, treatment, and services.

The Joint Commission. (2025)

AAC in Acute Care

- Allows patients to alert health-care staff of physical and emotional needs
- Reduces misinterpretation of pain/symptoms
- Reduces the need for restraints and sedation

(Downey et al, 2006; Happ et al, 2014)

Educating staff is, is really important because here was,

Patient Profile

"Why didn't I have this in the hospital?"

Case Study

Patient Profile: Leonard, 83 y/o male

- Chart review
  - Imaging
    - MRI: L frontal lobe CVA
    - Chest x-ray: RLL infiltrate, possible aspiration pneumonia
  - Prior Level of Function
    - Independent, driving, tolerating general diet with thin liquids. Lives with wife.

Patient Profile: Leonard, 83 y/o male

- Chart review (MD Assessment)
  - Coughed with liquids in Emergency Room Bedside Swallow Screening
  - Limited verbalizations, perseverative responses
  - R facial weakness and R hemiparesis, tongue deviation to R
  - Decreased attention to the R side
  - Following 2 step commands, comprehension breaks down with longer directives

"It can be difficult to find enough time in a day to address all the complex communication needs in addition to their dysphagia needs."
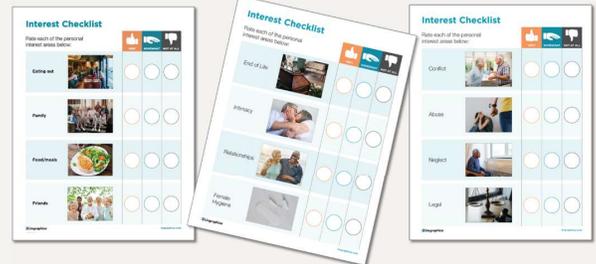
(Gormley and Light, 2019)

Light and High Tech AAC Options

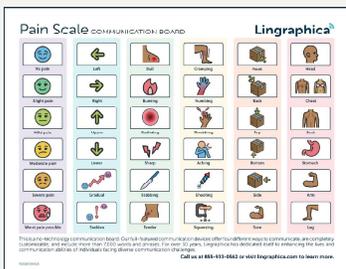## Using Your Resources

- Light Tech AAC
  - Interest Inventory
  - Communication Boards
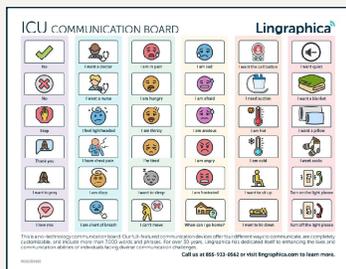- High Tech AAC
  - Apps
  - High Tech AAC

Interest Inventory

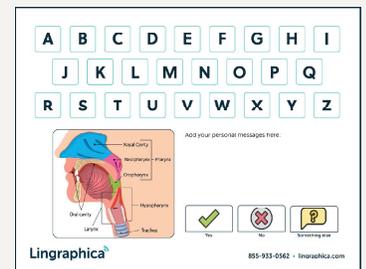## Communication Boards

Pain Scale Communication Board

ICU Communication Board

https://lingraphica.com/free-communication-boards/

Communication Boards

Dysphagia Communication Board

Patient-Provider Communication Boards

I'm okay	I'm tired	I feel like I'm choking	I feel something stuck
I need suction	I feel short of breath	My mouth is dry	I need oral care
My throat hurts	I feel nauseous	I need a break	Letter board

MAYBE	DON'T KNOW	LATER

Created by Tami Altschuler, NYU Langone Health (2025)

Nothing by mouth (NPO)	Oral care	Ice chips	Water
Applesauce	Pudding	Crackers	Juice
Stop	More	Something else	Letter Board

Maybe	Don't Know	Later

Created by Tami Altschuler, NYU Langone Health (2025)

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https://www.patientprovidercommunication.org/dysphagia-communication-tools/

(Atschuler, 2025)

Patient-Provider Communication Boards

Oral Care Schedule

Time	Oral Care	Completed
8:00		☐
12:00		☐
4:00		☐
8:00		☐

Created by Tami Altschuler, NYU Langone Health (2025)

https://www.patientprovidercommunication.org/dysphagia-communication-tools/

(Atschuler, 2025)

Communication Boards

Speak Up and Be Safe From Abuse Communication Boards

- Body-specific vocabulary to support accurate communication about physical experiences

- Designed to facilitate disclosure of maltreatment, neglect, or abuse

- Supports patient safety and advocacy, especially for vulnerable or non-verbal patients

https://www.speakupandbesafe.com.au/communication-aids-download

(Speak Up and Be Safe from Abuse, n.d.)

Communication Boards

Eastern Health Communication Boards

- Available in ~70 languages
- Promotes equitable communication access for non-English-speaking patients and care partners
- Supports immediate communication needs in high-acuity settings

https://www.easternhealth.org.au/patients-and-visitors/language-services/cue-cards-in-community-languages/

(Eastern Health, n.d.)

Clinical Swallow Evaluation (Case Study)

With use of AAC tools and Supported Conversation patient reported:
- Difficulty swallowing solid food
- Food sticks in throat, pointing to vallecula
- Coughing or gagging when eating or drinking

Clinical Swallow Evaluation (Case Study)

- Early detection can occur when an individual alerts others to the symptoms of dysphagia.
- Must have functional communication to answer questions and be involved in assessments in a meaningful way.

(Hemsley and Balandin, 2009)

Dysphagia Recommendations (Case Study)

- Based on Clinical Swallow Evaluation a Video Fluoroscopic Swallow Study (VFSS) was recommended
- VFSS Recommendations:
  - Soft and Bite Sized, Slightly thick liquids
  - Medications: whole in puree
  - Set-up assistance, intermittent supervision, compensatory strategies
  - Dysphagia treatment

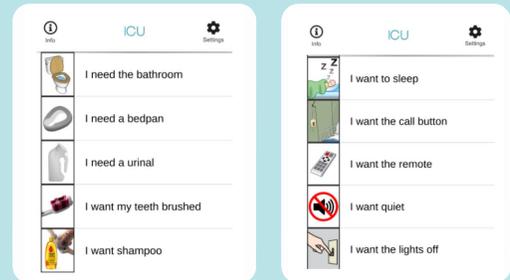## Benefits of High Tech AAC

- Increased Communication Options
  - Use when activating call light
  - Communicate over the phone/video chat
- Dynamic and easily customizable
  - Modify as patient needs change
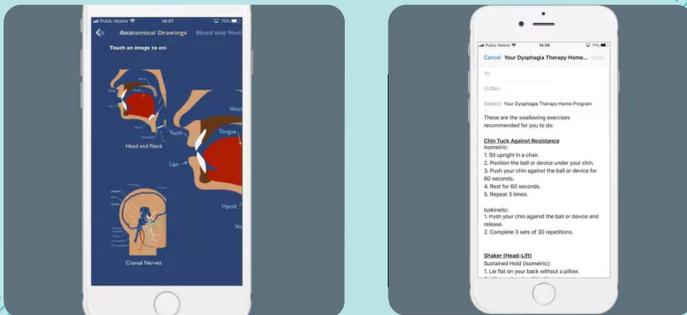- Multiple modes of communication

Lingraphica's Apps

Lingraphica's Apps
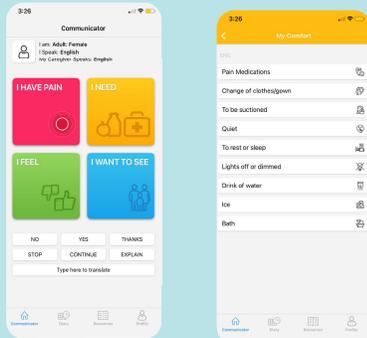

Tactus Dysphagia App

https://tactustherapy.com/app/dysphagia/

(Tactus Therapy Solutions Ltd., 2025)

Dysphagia by Northern Speech Services, Inc

https://www.northernspeech.com/applications/swallowphysiology

(Northern Speech Services, Inc.., 2025)

Patient Communicator App

AT Elements ICU App
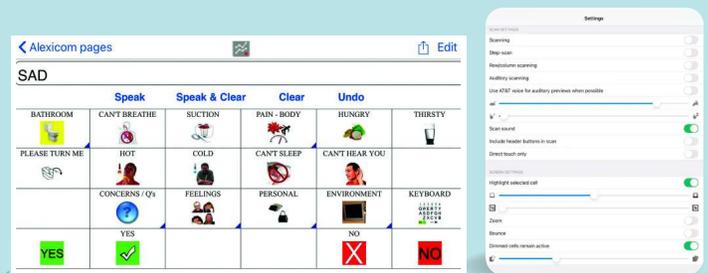
Dysphagia and AAC

Effective communication system required to discuss
- Consent
- Quality of life
- Impact of dysphagia on health and well-being
- Facilitate involvement in dysphagia management decisions
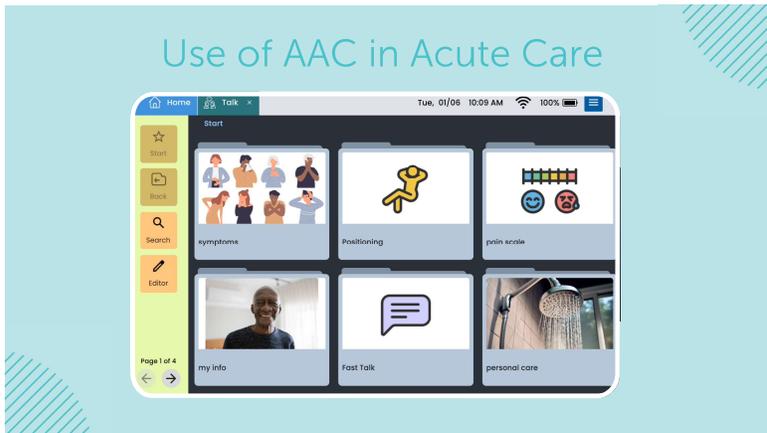
(Hemsley and Balandin, 2009)

"All efforts should be made to involve the person with dysphagia and complex communication needs. They are an important participant…and may require access to a variety of AAC modes in order to participate in discussions related to their assessment, intervention and management."
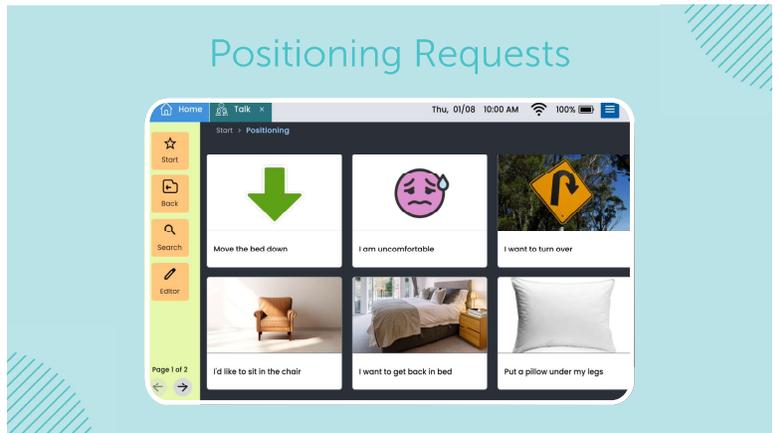
(Hemsley and Balandin, 2009)

High Tech AAC Devices

Lingraphica AAC Devices

Home — Thu, 01/08 10:02 AM — 100%

Good Morning Leonard — Volume — Help

| Talk | Type | Draw |
| Media | Scenes | Therapy |

Use of AAC in Acute Care

Home — Talk — Tue, 01/06 10:09 AM — 100%

Start

| Star | Back | Search | Editor |

| symptoms | Positioning | pain scale |
| my info | Fast Talk | personal care |

Page 1 of 4

Positioning Requests

Home — Talk — Thu, 01/08 10:00 AM — 100%

Start > Positioning

| Star | Back | Search | Editor |

| Move the bed down | I am uncomfortable | I want to turn over |
| I'd like to sit in the chair | I want to get back in bed | Put a pillow under my legs |

Page 1 of 2

Communication of Symptoms

spasticity

short of breath

hyperventilation

itchy

dry eye

depression

Personal Needs

I need to have my mouth cleaned well before and after I eat

I need my dentures

I need my glasses

I need my hearing aid

I need to be sitting upright, at 90 degrees, in a chair for meals

I should not eat in bed
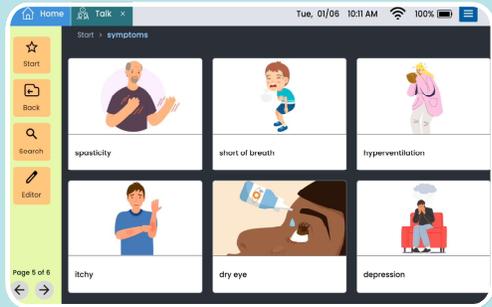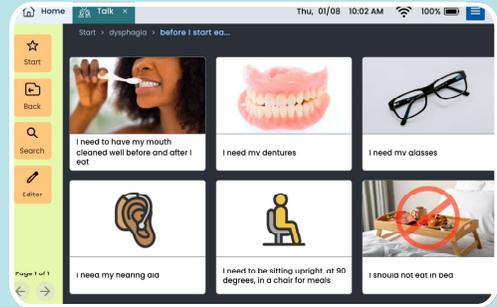
Communication with the room

patient's room

turn the t...

bed

chair
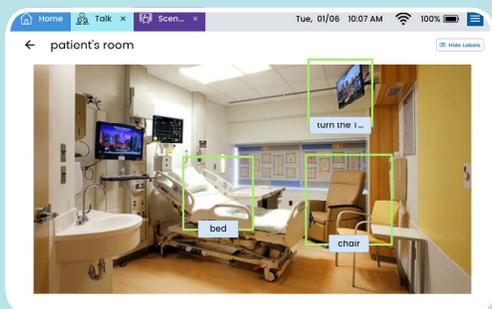
Barriers and Solutions
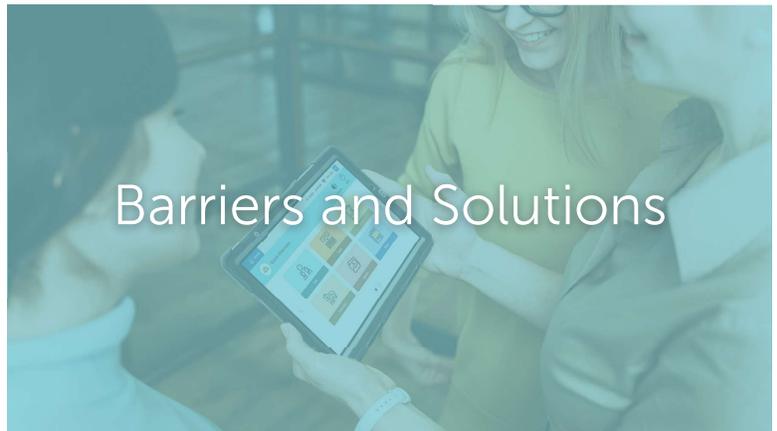
Barriers

- Continuum of Rehabilitation Care
- Time Constraints
- Funding
- Limited AAC policies

(Gormley et al., 2019)

System & Workflow Barriers
(Factors that make implementing AAC challenging on a day-to-day basis)

- Rapid patient turnover and short lengths of stay
- Competing medical priorities in high-acuity environments
- Limited time for assessment, setup, and training
- Inconsistent AAC follow-through across care transitions

(Gormley et al., 2019)

Resource, Knowledge, & Policy Barriers
(Factors that limit sustainability)

- Limited access to AAC materials at the bedside
- Inconsistent staff training and confidence with AAC tools
- Funding constraints for devices
- Lack of standardized AAC policies or protocols
- Unclear ownership (Who initiates? Who maintains? Who educates?)

(Gormley et al., 2019)

Strategies to Reduce AAC Barriers

- Access to loaner AAC systems
- Ability to continue AAC trials across levels of care/clinical setting
- Structured patient and caregiver training
- Ongoing communication coaching or follow-up support
- Multidisciplinary education and training

Take-Aways from one Hospital System implementing a hospital-wide culture of communication

The Project

- Concerted effort to expand AAC consultations and services within hospital system
- Barriers Identified
  - Patient specific
  - System specific
  - Training and implementation
  - Technology

(Marshall & Hurtig, 2019)

Patient Profile

- Jason, 28 y/o, admitted with severe Guillain-Barré Syndrome
  - Total body paralysis, prolonged intubation, unable to communicate or open eyes
    - AAC assessment revealed slight head tilt to R as only reliable gesture.
    - Use of AAC with switch mounted at R temple and auditory scanning introduced
    - ICU Nurse and family trained on system (had 1:1 nurse)

(Marshall & Hurtig, 2019)

Challenges

- When transferred to step-down unit, reduced availability of nursing staff for training and implementation
- As physical status improved, he was in differing positions throughout the day
- Combination of reduced staff time and frequent position changes limited accessibility, which led to decreased use
- Device often not charged, incorrectly positioned

(Marshall & Hurtig, 2019)

Solutions

- Bedside signage
  - Self Advocacy: "Please speak directly to me and involve me in decision making"
  - Positioning: Bedside photographs of proper positioning of device
- Family encouraged to direct providers to speak directly to Jason
- When able, constructed messages prior to calling nurse to allow for immediate communication of message
- Developed a signal to give staff when he needed access to his AAC and wasn't receiving it

(Marshall & Hurtig, 2019)

Interdisciplinary Collaboration

- SLP team utilized multiple ways to encourage consistent use of AAC:
  - Physician involvement
  - Communication in team meetings
  - Nurses orders
  - Empowering patient to self advocate
  - Escalation with repeated lack of access to AAC

(Marshall & Hurtig, 2019)

Increased AAC awareness led to emerging culture of communication

- Increased consults from initial ICU
  - Prior to Jason, an order for a similar consult had not been placed from that ICU for several years
  - Within 6 month, consult orders were placed for an additional four patients
- Hospital-wide growth
  - Went from 4-8 AAC consult requests per year in 2017 to average of 4 AAC consult requests per month in 2019
  -

(Marshall & Hurtig, 2019)

Key Take-Aways

- Multiple sessions were required to determine optimal communication systems
- Modifications as patient needs changed were crucial to success
- Additional education was needed for staff on AAC and need for continued services from SLP/OT
  - Crucial to educate staff to not deem patients "unable to use" or "inappropriate for" AAC solutions without evaluation
- For widespread system change the following was recommended:
  - Combo of e-learning modules, in person training, SLP participation in rounds and unit huddles

(Marshall & Hurtig, 2019)

Conclusion & Next Steps

Conclusion

- Functional communication in acute care is critical for patient safety.
- AAC enhances care by reducing miscommunication and patient distress.
- AAC supports patients in providing informed consent for treatments and procedures

Questions & Answers

Thank you!

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