

## Developing a Culture of Successful Communication in Acute Care Settings

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## Speaker Disclosures


Sarah Marshall, MA, CCC-SLP is affiliated with the University of Wisconsin's Communication Aids and Systems Clinic (CASC) where she provides AAC evaluations and treatment. She also provides inpatient AAC consultation at University of Wisconsin Hospitals and Clinics (UWHC) and American Family Children's Hospital (AFCH).

Sarah Marshall has no Non-Financial Relationships to disclose.

Sarah Marshall has the following Financial Relationships to disclose.

- Employed by University of Wisconsin-Madison who assisted in funding registration and travel to ATiA.
- Receive salary funding from Voxello to serve as Principle Investigator (PI) on Noddle Nurse Call Study at the University of Wisconsin-Madison.

Note: Will discuss various AAC/AT tools and devices; however, I receive no financial gain from any product. This presentation does not promote one product over another.



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## Speaker Disclosures

Richard Hurtig, Ph.D. is Professor Emeritus in the department of Communication Sciences & Disorders at The University of Iowa and is a Fellow of the American Speech & Hearing Association. He directs the UI Assistive Devices Laboratory and is also the Chief Scientific Officer of Voxello.

Richard Hurtig has no Non-Financial Relationships to disclose

Richard Hurtig is a Founder of Voxello and has a financial stake in the company.



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Chelsea Bilskemper for assistance implementing technology



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## Learning Objectives



- Develop three action steps to overcome barriers for successful implementation of AT/AAC technology in the inpatient setting.
- Describe at least three features of newly available technology to enable patients to summon their caregivers and effectively communicate with them.
- Identify at least three assessment and intervention approaches to support patients in meeting their communication needs via selected AT/AAC solutions.



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## Defining the need

- AAC Candidacy
  - 7% of hospital's total population requested AAC services.
  - 33% of patients in ICU met candidacy criteria
- AT Candidacy
  - 14% of hospital's total population could not access nurse call.
  - 33% of patients in ICU required AT services.
- Combined Candidacy (requiring increased expertise to treat)
  - 4% of total hospital population.
  - 19% of patients in ICU required both AAC and AT services.



(Zubow & Hurtig, 2013)

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### Why it matters

- **Communication Impacts Outcomes**
  - 63% of injuries to patients are preventable<sub>3</sub>
  - 3x more likely to experience an adverse medical event<sub>2</sub>
  - 27% of readmission could have been prevented<sub>6</sub>
  - Among the top 4 reasons why adverse events occur<sub>3</sub>
- **Lack of access to communication can negatively impact:**
  - Ability to explain basic needs (e.g., repositioning, toileting, pain)
  - Participation in diagnosis and management
  - Length of Stay<sub>1</sub>
  - Patient satisfaction with care



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### Why it matters

- **Joint Commission Requirements**
  - "Support the provision of care, treatment, and services in a manner that is sensitive and responsive to individual patient needs."
  - Provision of Care, Treatment, and Services (PC)
  - Rights and Responsibilities of the Individual (RI)
- **Hospitals must absorb the costs associated with preventable adverse medical events**
  - Addressing communication barriers can reduce risk of preventable adverse effects and save \$6.8 billion annually<sub>4</sub>



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### Current state of AAC/AT at UWHC/AFCH

- **Historical offerings**
  - Low-tech picture and alphabet boards
  - White boards
  - Soft touch nurse call
- **Role of inpatient SLP team**
  - **Swallow team**
    - Completion of bedside and instrumental swallow studies
    - Ongoing treatment of dysphagia
  - **Speech team**
    - Assessment and treatment for cognitive communication, speech, and language disorders
    - Identification and implementation of low-tech AAC supports



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### Role of Communication Aids and Systems Clinic (CASC)

- Specialty AAC Center
  - Occupational Therapists and Speech Language Pathologists
- Housed across the street from UWHC/AFCH
- Library of high-tech tools
  - Mounting and switch options
  - iPad loaners
  - Speech generating devices
- Most commonly consulted by IP speech team for evaluation of high-tech options



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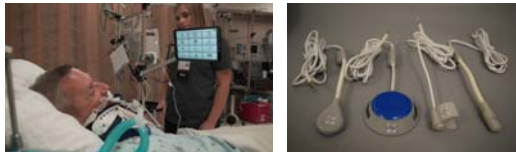
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### Partnership with Voxello

- Provide an integrated system that can be implemented in acute care settings to serve the patient population with significant CCN .
- Expanded loaner library of high-tech tools
  - Switch technology to allow patients who may only have the smallest voluntary gesture to access the nurse call system.



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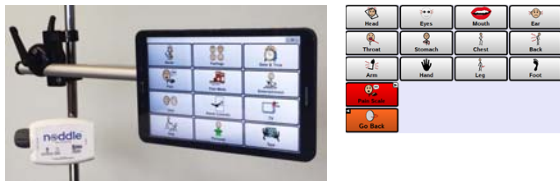
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### Partnership with Voxello

- Provide an integrated system that can be implemented in acute care settings to serve the patient population with significant CCN .
- Expanded loaner library of high-tech tools
  - Speech Generating app designed to meet the communication needs of hospitalized patients



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## Overview of Case Presentations

- Series of case studies from 2018



- Highlight barriers encountered
- Offer solutions
- Discuss next-steps

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## Barriers

- Patient specific**
  - Physical
  - Language
  - Cognitive
  - End of Life
- System**
  - Physical location
  - Consult identification
  - Scheduling
  - Discharge planning and awareness
- Training and implementation**
  - Shift changes
  - Staff time/knowledge/openness
  - Room/Unit changes
  - Positioning Changes
- Technology**
  - Role of low-tech
  - Availability of equipment
  - Lost/damaged equipment
  - Charging

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## Patient 1

- 25 y/o male admitted for severe Guillain-Barre following a bone marrow transplant.
- Intact cognition and total body paralysis requiring mechanical ventilation.
- Unable to open eyes but intact hearing.
- Only movement was slight turn of his head to the R.
- Spent 2 months in ICU and 2 months in step-down unit before d/c to SNF.

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### Patient 1 –Barriers & Solutions

- Patient specific – physical
  - Noddle and Noddle-Chat
  - Jelly Bean switch at Left temple
  - Mounted via Modular Hose
  - 2-switch auditory scanning
    - 1-hit to move/listen
    - 2-hit to select choice
    - 3-hit to activate nurse call




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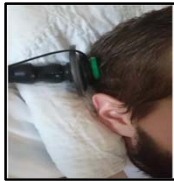
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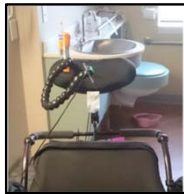
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### Patient 1 –Barriers & Solutions



- Barrier -Training/Implementation
  - Shift changes
  - Staff time/openness
  - Room/Unit changes
  - Positioning changes



#### Solutions

- Bedside signage
- Incident reporting
- Physician support
- Family training
- Self-advocacy
- Team meetings
- Additional equipment

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### Patient 1- Takeaway

- Self advocacy was the strongest driving force in consistent implementation and use of the system.
- Experiencing success through a single patient has the power to change perspective.

Please talk directly with me to include me on my medical care plan.

I am capable of my own decision making and would like to be involved in discussions surrounding my care.

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## Patient 2

- 60 y/o male admitted for hemorrhagic stroke.
- Speaks Polish.
- No family in the United States.
- Inconsistent orientation and command following.
- Damage to optic nerve resulting in blindness.
- Total body weakness requiring mechanical ventilation.
- Only intentional & consistent gesture = tongue click

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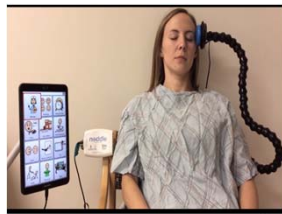
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## Patient 2—Barriers & Solutions

- **Patient specific –physical**
  - Noddle and Noddle-Chat
  - Microphone switch mounted via headband
  - 2-switch auditory scanning
- **Patient specific – language**
  - Polish interrupter recorded auditory cues
  - Voice output in English
- **Patient specific – cognitive**
  - Learning tool through interpreter
  - Focus on nurse call
  - Use of low-tech boards



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## Patient 2 - Takeaway

- It takes a village



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### Patient 3

- 23 y/o male admitted following a MVA.
- Suffered spinal cord injury (SCI).
- Intubated and quadriplegic.
- At time of consult presented with the follow options:
  - Receive tracheostomy and go to rehab
  - Withdraw care
- Family and medical team under impression that patient desired to withdraw care.

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### Patient 3—Barriers & Solutions

- **System – Consult Identification**
  - Increasing presence on rounds
  - Partnership with chaplains
- **Technology – Role of low-tech**
  - No time for high-tech assessment
  - Structured conversation through use of low-tech boards

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### Patient 3 - Takeaway

- The ability to only respond “Yes/No” is not enough to participate in medical decision making.

Ventilation			
What am I on a ventilator?	When will I come off the ventilator?	Can I come off the ventilator?	I want to come off the ventilator.
What happens if I am taken off the ventilator?	I understand what can happen if I am taken off the ventilator.	I understand that if I wish to live I must stay on teh ventilator.	I understand that without the ventilator I would die.
I want to be taken off the ventilator.	Don't take me off the ventilator.	Can I have a ventilator at home?	Can I have a ventilator in a nursing home?
I understand.	I don't want to talk about this right now.	When do I have to decide?	I do not understand.

Created by the Communication Arts and Systems Clinic (Pilot project), adapted from the Needle Chat Communication System, property of Novartis.

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### Patient 4

- 33 y/o male admitted with terminal brain cancer.
- At time of consult, patient was verbal and presented with intact vision and motor skills.
- Neurology projected patient would lose ability to speak, see, and control upper extremities in 2-3 weeks secondary to rate of tumor growth and location.
- Patient preparing to transition to hospice.

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### Patient 4 – Barriers & Solutions

- **Patient specific – End of Life**
  - Introduced Noddle-Chat medical decision making boards
  - Co-treatment with hospice and hospital chaplain
  - Generated and saved questions before rounds

Reaction to Prognosis				
I would like to talk to my family.	What are my treatment options?	This is a difficult decision	Please leave me alone.	Don't leave me alone.
Please tell me more.	Is it normal to feel this way?	I have accepted my current status.	I have not accepted my current status.	I want to discuss spiritual matters.
I am ready to talk about this.	I am not ready to talk about this.	I have a positive outlook.	I am experiencing negative emotions.	I will not give up.
Yes	No	Maybe	Later	

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### Patient 4 – Barriers & Solutions

- **Patient specific – Change in Status**
  - Pre-programmed messages with patient before decline
    - Cares, sentiments, preferences, etc.
  - Nurse and family training on PAS
- **Technology – role of low-tech**
  - No high-tech tool available at Hospice
  - Patient more successful with PAS
  - Printed Noddle-Chat boards for d/c

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### Patient 4 – Takeaway

- Early consult led to increased autonomy in End of Life decision making.
- Intervention before decline supported communication and ability to sustain relationships throughout disease progression.



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### Patient 5

- 13 y/o male admitted for malignant brain tumor.
- Surgical resection resulted in cerebellar edema and posterior fossa syndrome requiring endotracheal intubation.
- Unable to open eyes.
- Movement limited to R thumb wiggle & hand squeeze.
- Patient presents with autism spectrum disorder.
- Planned 3 month admission for chemo/radiation.

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### Patient 5–Barriers & Solutions

- **Technology – availability of equipment**
  - Grasp switch unavailable
  - Adapted trigger switch



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### Patient 6 – Barriers & Solutions

- **System – Physical location (Scheduling/Patient Availability)**
  - Immediate Solution - Collaboration with other professions to schedule SLP first
  - Next Steps - Modification of outpatient template
  - Next Steps - Identification of equipment storage at UWHC/AFCH
- **System – Discharge planning/awareness**
  - Immediate Solution - Coordination of care with local rehab centers
  - Next Steps – Adding CASC to “inpatient team” to increase communications
- **Technology – Lost/Broken Equipment**
  - Creation of discharge checklist
  - Use of extra-long charging cords
  - Use of IV poles with charging capabilities



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### Patient 6- Takeaway



- Barriers ≠ Failure
- So much progress has been made, but there is so much more change that can happen!
- Facing the biggest barriers lead to identifying and implementing the most critical solutions.



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### Current & Next Steps

- Identifying space for equipment storage
- Funding for additional IP specific equipment
- Ongoing training to increase IP SLP capacity
- Role of inter-professional training and practice
  - LEND program involvement
- Involvement in rounds
- Expanded nurse education opportunities
- Adjusting outpatient templates
- Role of split Clinical Fellow (CF)



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## Final Thoughts

- **Overcoming communication barriers is critical to improving patient outcomes and reducing unnecessary costs associated with preventable adverse events.**
- Solution is not a function of getting the right equipment.
- Expanding toolbox is important, but must also create culture of communication through:
  - ↑ trained SLPs and other AT providers
  - ↑ trained nurses and other hospital staff
  - ↑ patient and family involvement
- **Build and sustain a culture of communication**

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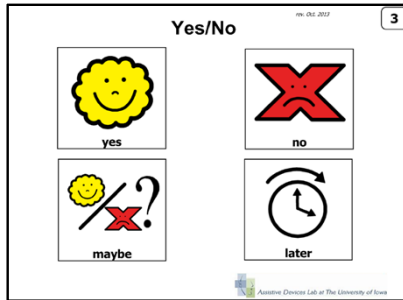
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## Questions?




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