AAC STRATEGIES FOR USE WITH LIMITED ENGLISH PROFICIENCY HOSPITALIZED PATIENTS.

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SCOPE OF PROBLEM

• 20% of the US population over the age of five does not speak English in the home.
• Approximately 44% of these individuals rated their English proficiency as less than “very well”.
• Number of individuals who might have limited English proficiency (LEP) is 24,395,573.
• The census of US hospitals revealed an average daily inpatient census of 641,000.
• Thus over 128,000 of the daily inpatient population would fall into the LEP group and require professional interpreter services.
A CASE EXAMPLE

• The University of Iowa Hospitals & Clinics
  – 729 staffed beds
  – 30,982 acute care admissions in 2008-09,
  – average length of stay of 6.33 days
• In 2010, UIHC provided
  – 11,772 translation services
  – 37 different languages.
    • Spanish accounted for 74%
    • Sign Language (ASL, SE & SEE) accounted for 9%
CHALLENGE AND RESTRICTIONS

• Providing quality professional interpreting services for a wide range of languages
• Some hospitals need to rely on phone and video services for less frequently spoken languages.
• Professional interpreters cannot be at the bedside around the clock to interpret most of the interactions between the patients and their nurses.
• Many hospitals have instituted rules that
  – preclude the use of family members, children
  – bar cyber translation applications (e.g. Babel Fish) because of the high risk of translation errors
CONSEQUENCES OF POOR PATIENT-PROVIDER COMMUNICATION

• Inadequate patient-provider communication is responsible for a range of adverse events including death.

• LEP patients were almost twice as likely to experience adverse events (49.1%).
  – 52.4% of these adverse events were likely the result of errors in communication.

• The Joint Commission has set standards requiring hospitals to address the communication needs of all patients (JC, 2010; Blackstone et al., 2011a).
THE ROLE OF THE SLP

• The role of the Speech Language Pathologist in meeting the communication needs of all patients should include solutions for the growing LEP population.
• Speech generating AAC devices can offer LEP patients a means of communicating with their caregivers and to more actively participate in their care.
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BILINGUAL TEMPLATES

• We developed bilingual templates for use with low to high tech AAC devices and on tablets like the iPad.
• These templates were developed to specifically enhance the patient-nurse bedside interactions.
• The templates cover a range of material from vital signs, bedside cares, and pain management to feelings and emotions.
• The content was developed with input from patients, nurses and family members.
Each template is divided into a patient and a nurse/caregiver part.

- On the patient’s side the individual selections (buttons) are labeled in the patient’s language and when selected produce the professionally translated English equivalent.

- On the caregiver’s side the buttons are labeled in English and when selected produce the professionally translated version in the patient’s language.
TEXT-TO-SPEECH VERSUS DIGITIZED SPEECH AND SIGN LANGUAGE VIDEOS

• Use a text-to-speech (TTS) engine if it is available in the patient’s language.

• If no TTS engine is available, we have made native speaker audio recordings of the translated phrases.

• For Deaf patients we created an application that displays the signed translation of the selected template phrase.
BILINGUAL TEMPLATE
SGD DEVICES AND iPAD APPS

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TEMPLATE FOR DEAF SIGNING PATIENTS

VITALS | POSITION | CARES | FEELINGS | FOOD | CARE MGMT | FAMILY | ENTERTAIN

VITALS | TEMPERATURE | CHECK VITALS | BLOOD SUGAR

BLOOD PRESSURE | MEDICINE | TEMPERATURE | BLOOD

ICE CHIPS | SHOT | MEDICINE

INTERPRETER | YES | NO | HIGH | NORMAL | LOW

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SIGNING TEMPLATE VOCABULARY FOR TOUCHCHAT APP

<table>
<thead>
<tr>
<th>VITALS</th>
<th>POSITION</th>
<th>CARES</th>
<th>FEELINGS</th>
<th>FOOD</th>
<th>CARE MGMT</th>
<th>FAMILY</th>
<th>ENTERTAIN</th>
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</thead>
<tbody>
<tr>
<td>VITALS ?</td>
<td>TEMPERATURE ?</td>
<td></td>
<td></td>
<td></td>
<td>CHECK VITALS</td>
<td>BLOOD SUGAR</td>
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<tr>
<td>BLOOD PRESSURE?</td>
<td>MEDICINE</td>
<td></td>
<td></td>
<td></td>
<td>TEMPERATURE</td>
<td>DRAW BLOOD</td>
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<td>ICE CHIPS</td>
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<td>ICE CHIPS</td>
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</tr>
</tbody>
</table>

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INSTRUCTIONS FOR PARTNER AIDED SCANNING

To assist patient in making choices:

- Establish a consistent Yes/No response.
- First, point to each row in turn asking, “Is it in this row?”

- When the patient makes a row selection, point to each successive box in the row and ask, “Is it this one?”

- Be sure to modify your speed according to the individual patient’s needs.
- The message board at the bottom is for you to keep track of spelled selections.
KOREAN-ENGLISH FEELINGS TEMPLATE

감정 Feelings

긴장돼요 anxious

꽁짝해요 awful

모르겠어요 confused

혼란스러워요 disoriented

 좌절해요 frustrated

외로워요 lonely

↘️가나요 mad

괜찮아요 okay

슬퍼요 sad

무서워요 scared

피곤해요 tired

불편해요 uncomfortable

통증 pain
KOREAN-ENGLISH BILINGUAL PAGES

- **Vital Signs** (혈압/체온)
- **Adjustments** (조절)
- **Physical Needs** (신체적 필요)
- **Food** (음식)
- **Requests** (요청)
- **Feelings** (감정)
- **The hospital visit** (병원방문)
- **Finances** (병원비)
- **Where are you?** (어디십니까?)
- **I’m finished. See you later!** (I'm finished. See you later!)
- **I’m finished. See you later!** (I'm finished. See you later!)

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SPANISH-ENGLISH BILINGUAL PAGES

Senas Vitales: Vital Signs
Ajustos: Adjustments
Necesitas Fisicas: Physical Needs
Comida: Food
Pedidos: Requests
Sentimentos: Feelings
La visita en el hospital: The hospital visit
Finanzas: Finances

Como se siente?: How do you feel?
He Terminado. Nos vemos!: I'm finished. See you later!

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Spanish-English
Vital Signs Page

Cuáles son las señas vitales?

I am going to check your vital signs.

The vital signs are normal.

The vital signs are abnormal.

Cerrar

Close
SPANISH-ENGLISH HOSPITAL STAY QUESTIONS
EFFECTIVE COMMUNICATION REQUIRES TEAM WORK

• A key element of each template is to provide the patient with an effective means to request an interpreter if they feel the need to go beyond what is available on the templates.

• The template content was developed with input from patients, nurses and family members.

• We continue to adapt our templates to meet the specific communicative needs associated with the medical needs of patients across the hospitals (e.g. the needs of urology as opposed to trauma patients).

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SUMMARY

• SLPs working to implement bilingual AAC solutions with hospitalized LEP patients must adopt a dynamic assessment approach to insure that changes in the patients’ medical status can be accommodated to insure optimal patient-provider communication.

• To accomplish this it is essential to work collaboratively with the nursing staff and the facility’s interpreter service.
REFERENCES


REFERENCES


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