

Technology in Language Access

BUYER BEWARE!

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Savior or Demon?



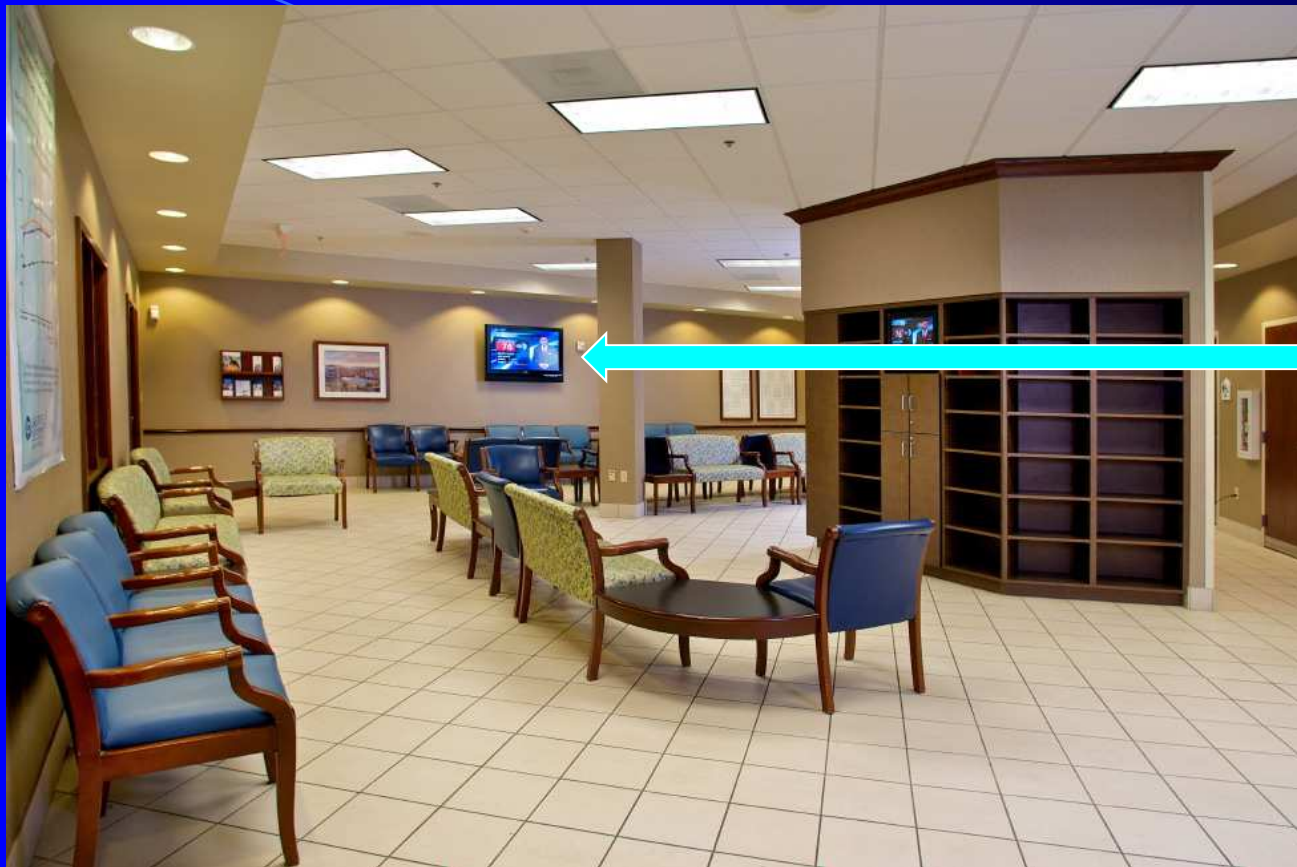
Range of Uses

Link to Interpreters



Range of Uses

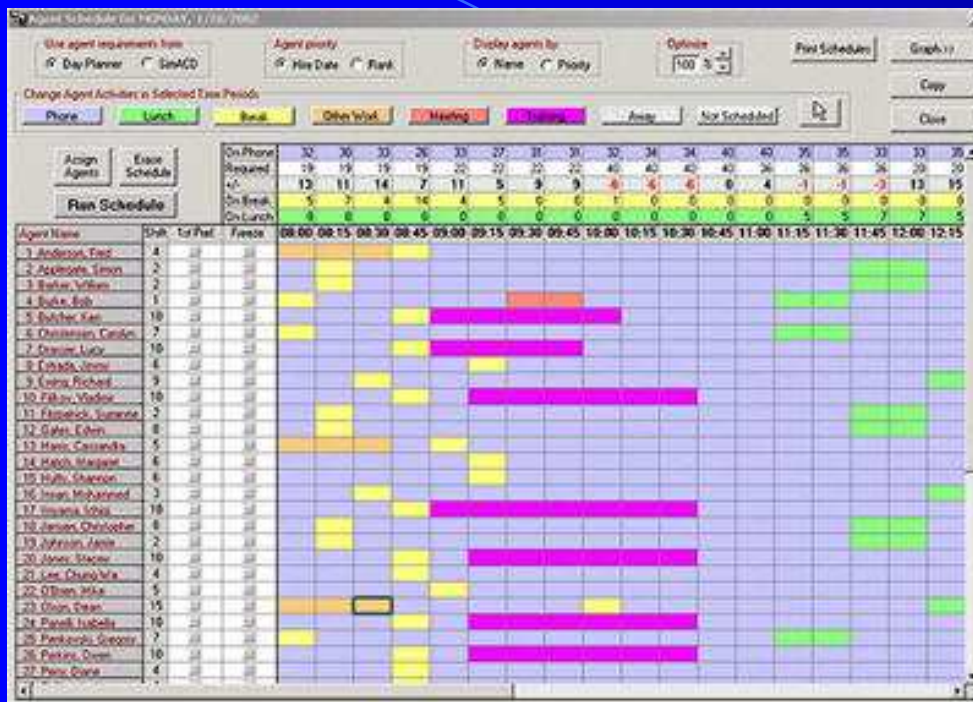
Provision of Static Information



Video

Range of Uses

Interpreter Scheduling



Fluency

www.gofluently.com

ScheduleInterpreter

www.scheduleinterpreter.com

Range of Uses Translation of Discharge Instructions

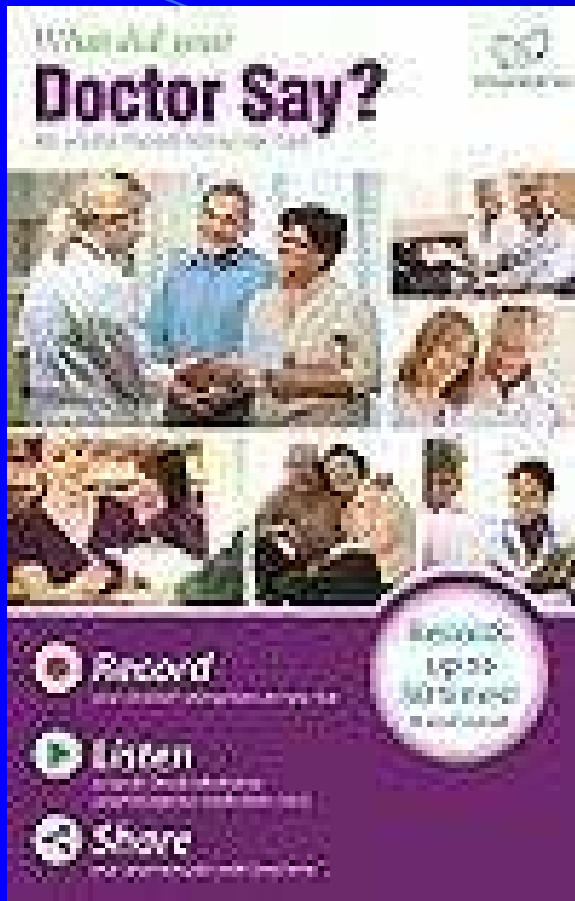


MeducationDC

www.pgssi.com

Range of Uses

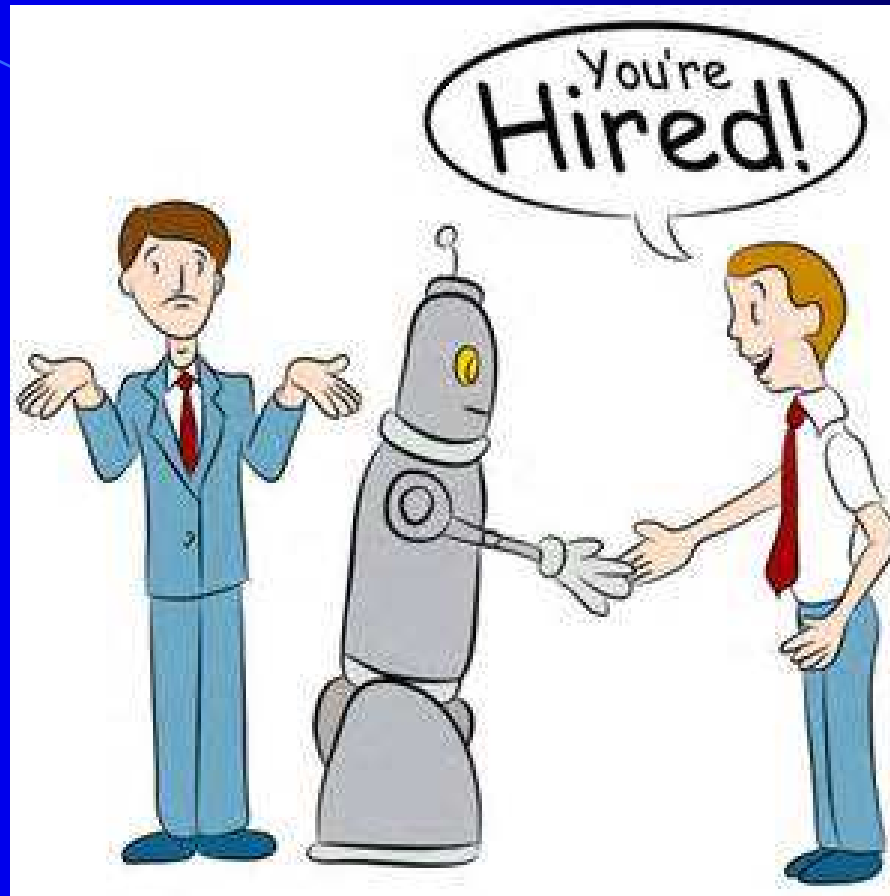
Recorded Discharge Instructions



Talking Health Cards
www.talkinghealthcards.com

Range of Uses

Replace the Interpreter



Criteria for Evaluation

- Easily accessible by busy healthcare staff
- Easy to use
- Acceptable to patients
- Works every time
- Low maintenance
- Appropriate to the need
- Accurate

Electronic Communication

Universal Doctor Speaker

- Doctor clicks on pre-recorded interview questions.
- Patient responds yes, no, with a number or a name.
- Covers admission, history, symptoms, physical exam, diagnosis, treatment
- www.universaldoc.com

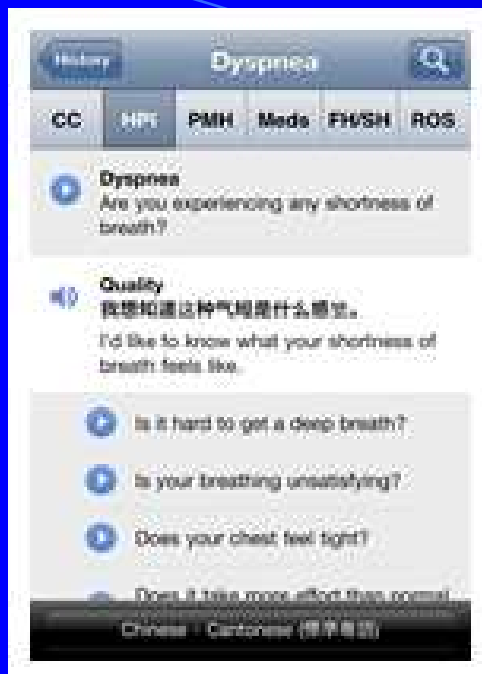
Electronic Communication Phrazer



- Handheld device developed by GeaCom.
- A touch screen runs video of a culturally-relevant provider welcoming the patient to the health center and guiding the patient through a registration and triage process in which answers are typed into the device and transferred directly to the EMR.
- Phrazer also provides education regarding a series of healthcare protocols.
- <http://www.myphrazer.com/>

Electronic Communication

MediBabble



- I-phone app developed by two former medical residents at UCSF
- Uses pre-translated and pre-recorded options to ask yes/no questions.
- Downloadable for free.
- <http://medibabble.com/features.html>



Electronic Communication Phraselator

- A small device designed to aid interpreting.
- Users select the phrase they wish to convey from an English list on the screen or speak into the device.
- Voice-recognition software links to the appropriate MP3 sound file.
- Unclear how the listener can answer.
- The accuracy of the speech recognition software is over 70 percent according to software developer Jack Buchanan.
- http://www.voxtec.com/?page_id=26

Electronic Communication Ectaco Speechguard



- Hand-held voice-activated two-way audio phrasebook and smart phone designed for travelers
- Picture translation (translates signs)
- 2 -way radio
- Waterproof, shockproof and dustproof
- Can address over 200 languages, but each unit addresses only one.
- <http://www.ectaco.com/info/tlx-series/>



Electronic Communication Converser

- Write, type, click, or dictate a message.
- Converser translates it immediately.
- Verify the translation and fix any errors.
- Then share the translated output with the Spanish speaker: Spanish text appears onscreen and is automatically pronounced.
- The Spanish speaker responds in kind.
- A bilingual transcript can be saved for future reference.
- <http://www.spokentranslation.com/demo.swf>

Electronic Communication

S-MINDS

Speaking Multilingual Interactive Natural Dialog System

- 2-way Speech-to-speech translation system developed by Fluential with DARPA funding.
- Uses speech recognition, multiple ARS engines, multiple translation engines; leverages the strengths of both statistical and grammar/rules-based systems.
- Developed over 3 months with Kaiser; provided 93% accuracy in a test with nursing interactions.
- Test done in 2008: where did it go?
- <http://www.aclweb.org/anthology/W06-3708>
- <http://www.aclweb.org/anthology/W08-1510>

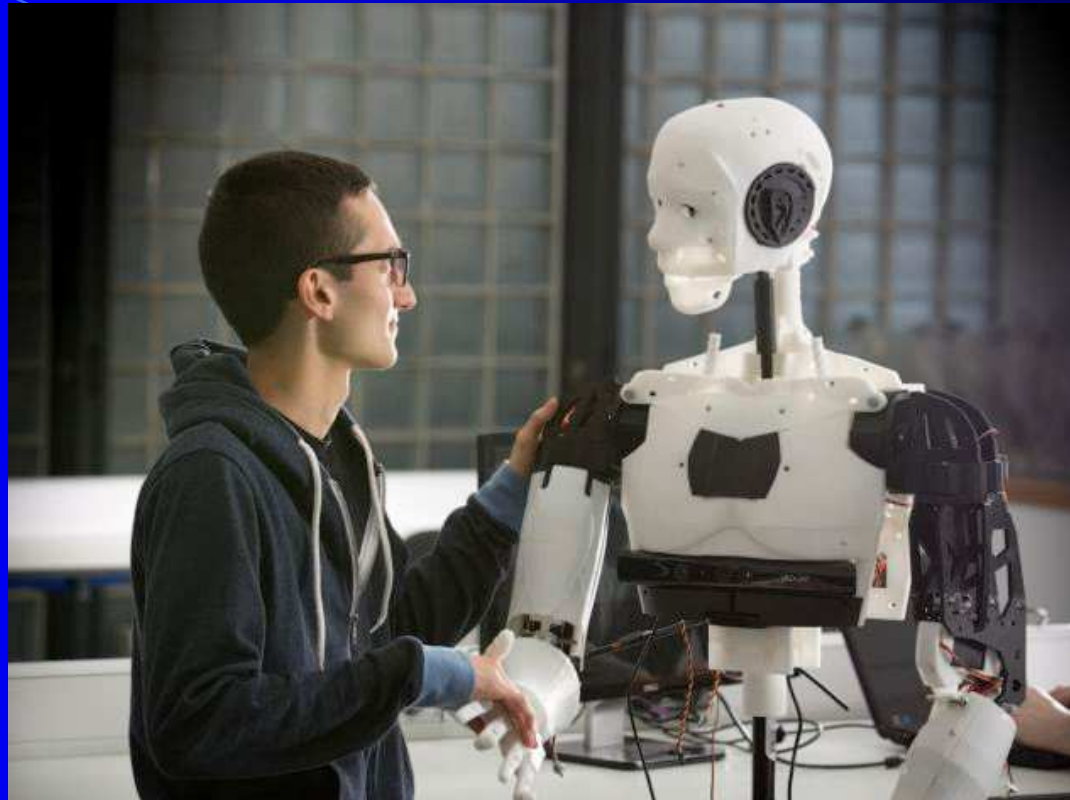
Electronic Communication Others

- Medbridge
- Universal Translator

Keys to Implementation

- The technology must be seen as part of a comprehensive and integrated language solution.
- Test in your office, test in the clinic, then pilot.
- IT Department must be on board.
- Train, train, train your staff.
- Create one place to call with difficulties.
- Create protocols for disinfection, for troubleshooting and for replacement.

Chosen carefully and used correctly,
technology can be a powerful friend.



For more information,
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