

Free Tools for Communicating During Disasters and Emergencies
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First responders can now access a rapidly growing body of free and downloadable communication boards, communication tip guides and mobile apps that are useful in overcoming communication barriers in a wide variety of emergency settings, from emergency shelters, to emergency rooms, to ambulances, to trauma centers, *etc.* These communication barriers impact a far larger proportion of the population that first responders must deal with than most people realize (disabilities, language barriers, temporary communication impairments, cultural barriers, *etc.*). Many of the boards can be easily laminated or printed on heavy stock.

The communication boards provide a variety of alternatives, from simple alphabet boards with a few key vocabulary items to elaborate boards with symbols, pain scales and alternative languages. The mobile apps have the special appeal of ease of access and convenience in situations where time so often is of the essence, and space is so often limited (*e.g.*, inside ambulances). The apps listed below represent just the tip of the iceberg of the resources that are now so quickly becoming available, but they illustrate the broad range of purposes that can be met by mobile apps in emergency settings, for people with language and cultural differences, for people with transitory or long-term communication difficulties, for those with low health literacy, and for other significant segments of the population.

A. Downloadable Paper Resources

- **Queensland Emergency Medical Situation Communication Board**
 1. **What is it?** This double-sided board contains vocabulary to help the patient and first responder to express and understand messages relating to the medical situation. It was developed as a tool to enhance communication between paramedics and patients with communication vulnerabilities at the first point of contact in an emergency medical situation in Queensland, Australia.
 2. **Why is it useful?** Includes a visual pain scale, body outlines to help locate sources of pain, tips for interacting with injured individuals, illustrate

equipment/materials first responders might use, uses symbols to help explain what might happen next.

3. How much is it? Free, and can be downloaded on a single, double-sided 8.5x11" sheet.

4. How can I get it? You can download it at:

<http://www.communities.qld.gov.au/resources/disability/community-involvement/communication/documents/medical-signing-board.pdf>

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- **Communication 4 All in English, Spanish and Haitian (Creole) (Freely downloadable Temple University communication boards**
(<http://www.temple.edu/instituteondisabilities/aacvocabulary/e4all/EprePictureAid.pdf>)
 - **[Paramedic & EMS Symbol Board](#) (Widgit Health)**
Developed with SPEAK Unlimited Inc. This symbol communication board was created as a tool to assist Paramedics and those in the Emergency Medical Services in interacting with any individual for whom clear speech is difficult or impossible. Available in British English and dual-language American / Spanish.
<http://www.widgit-health.com/downloads/paramedic-board.htm>
 - **Tips for First Responders (5th edition)** is a 15-page, color-coded, laminated 4.5 x 5.5-inch field guide, incorporating "tip sheets" that provide information that first responders can use during emergencies as well as routine encounters. They are not meant to be comprehensive, but contain specific information that can be read quickly either before or while responding to an incident, and can be downloaded free or purchased in laminated field guide form. Tips are included for persons with a wide range of disabilities, as well as Seniors, People with Service Animals, People with Mobility Challenges, People with Mental Illness, Blind or Visually Impaired People, Deaf or Hard of Hearing People, People with Autism, People with Multiple Chemical Sensitivities, People with

Cognitive Disabilities, and Childbearing Women and Newborns. May be purchased on the website (Laminated copy suitable for EMC vehicles @ \$5.75), or downloaded in English and Spanish for free at:

<http://cdd.unm.edu/dhpd/pdfs/FifthEditionTipsSheet.pdf>

- **The Hospital Communication Book**: Although it was designed specifically for communication in hospitals, the Hospital Communication Book is a fantastic (and free) resource for anyone who may need to support someone who requires communication enhancement supports. This 24 page book is full of information and will be equally useful for first responders, hospital staff, and people who need communication supports to read before an emergency situation hits. It is full of useful communication tips and has good illustrations which make it fun to read. Best of all you can download and use the information, including the sheets of symbols, for free. Have a look at this book, download it, and tell others about it.

http://www.cuh.org.uk/resources/pdf/patient_information_leaflets/communication_guide/hospital_communication_book_section1.pdf broken link

http://www.cuh.org.uk/sites/default/files/publications/hospital_communication_book_section1.pdf

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- **Patient Communication Board**: This communication board was originally developed as a means to support two-way conversation in hospital emergency rooms and other hospital areas. But, like the Hospital Communication Book, it can be readily adapted to trauma centers and emergency first aid triage situations. It is in both English and Spanish, and includes a pain chart and yes/no indicators on both sides, plus key first aid and health vocabulary.

To gather information from a person who cannot communicate easily, simply show the individual the board, point to an appropriate picture and verbally ask the question that fits the symbol.

It is important to consider that the individual, although nonverbal, may be able to read, write or use a keyboard to answer questions. Assume competence. Offering access to a keyboard, Ipad, paper and pencil/pen could provide the best possible response to questions.

Place the board directly in front of the patient or hand it to him/her. Then ask them to point to a selection whilst asking an appropriate question. The patient may just point without comment or gesture, you need to be alert to this possibility.

Interacting with persons with a communication difficulty can be frustrating, but with your use of the communication board, such interaction can be easier and more efficient.

[http://www.patientprovidercommunication.org/userfiles/file/Hospital_symbol_board_US-ES-Letter%20\(1\).pdf](http://www.patientprovidercommunication.org/userfiles/file/Hospital_symbol_board_US-ES-Letter%20(1).pdf)

- **Language Identification Flashcard:** The U.S. Department of Commerce, Bureau of the Census, uses this Language Identification Flashcard, containing 38 languages, to help identify the language of their respondents. It can be used by first responders to determine the language of their patients. The card can be downloaded for free at <http://www.lep.gov/ISpeakCards2004.pdf>

- **The Toby Churchill Basic Communication Board** contains the letters of the alphabet, common words and emotions. The PDF contains 4 choices of keyboard – QWERTY, qwerty, ABCD or abcd. Just make your choice and print it yourself. Once printed, you are ready to go, it's totally portable and it is best to keep it handy at all times. You could also laminate it in order to make it sturdier and longer lasting. If you lose or damage it you can just print out another. It is a useful item to keep for first responders, in critical care units, doctor's surgeries, schools, day centres, hospices, private homes. It can be used by anybody literate who is unable to speak such as those with vocal cord damage, swallowing difficulties, stroke survivors, MS, MND, Cerebral Palsy, Autism, Parkinson's disease, dyspraxia and other conditions affecting speech. It is also useful when communicating with people with hearing problems. (http://www.toby-churchill.com/assets/downloads/alphabet_board_toby_churchill.pdf)
- **Communication Tool English and translation** developed through a partnership of Mount Carmel Health, Ohio State University Medical Center and OhioHealth. Health Information Translations provides

education resources in multiple languages for healthcare professionals and others to use in their communities. Resources are easy to read and culturally appropriate. Available for use as a public service without copyright restrictions at www.healthinfotranslations.org.

- English Communication Sheet at:
<https://www.healthinfotranslations.org/pdfDocs/CommunicationSheet.pdf>
- Spanish Communication Sheet at
[:https://www.healthinfotranslations.org/pdfDocs/CommunicationSheet_Sp.pdf](https://www.healthinfotranslations.org/pdfDocs/CommunicationSheet_Sp.pdf)
- Russian Communication Sheet at
https://www.healthinfotranslations.org/pdfDocs/CommunicationSheet_Rus.pdf
- Somali Communication Sheet
at:https://www.healthinfotranslations.org/pdfDocs/CommunicationSheet_So.pdf
- Disaster Preparation Sheets, available from the same source (see above)at:https://www.healthinfotranslations.org/topic/disaster_preparedness/26123/) in the following languages:
- American Sign Language
- Arabic
- Bosnian
- Chinese Simplified
- Chinese Traditional
- English
- French
- Hindi
- Japanese
- Korean
- Marshallese
- Multilingual
- Portuguese
- Russian
- Somali
- Spanish
- Tagalog
- Ukrainian
- Vietnamese

B. Free Mobile Apps

Better to make a note here that all apps are free and run on iOS rather than repeat?

1. **ICE app** (<http://itunes.apple.com/us/app/ice-app/id327155819?mt=8#>) link does not work

(<https://itunes.apple.com/us/app/ice-standard-smart911-official/id412786820?mt=8>)

different app, same idea

- What is it? This app is a reference for first responders and emergency room personnel. The user stores name, contact, medical, allergy and insurance information so that emergency responders have quick access to it.
- How much is it? Free
- Platforms: iPhone, iPod Touch, iPad. Requires iOS 3.0 or later.
- Reviews: One user writes that “this app takes care of all the basics.” Some users say that the app crashes, however.



2. **NeoSpeech:**
NeoPaul(<http://itunes.apple.com/us/app/neopaul/id334254353?mt=8#>),

NeoJulie (<http://itunes.apple.com/us/app/neojulie/id334272012?mt=8>),
NeoKate (<http://itunes.apple.com/us/app/neokate/id332623803?mt=8>)

- **What is it?** These NeoSpeech apps are natural-sounding, text-to-speech devices. Paul has the voice of a US male; Julie and Kate have the voice of a US female. The app also permits text-to-speech in Japanese, Korean, Mandarin Chinese and Spanish. Texts may be typed or pasted, and can be stored in a library.
- **How much is it?** Free
- **Platforms:** iPhone, iPod Touch, iPad. Requires iOS 3.0 or later.
- **Reviews:** Many users have noted that this app is ideal for people who cannot speak. Others like the “natural” voices and how users can adjust the speed and volume of the sound.



3. *Phrase Board* (<http://itunes.apple.com/us/app/phrase-board/id380424676?mt=8#>)

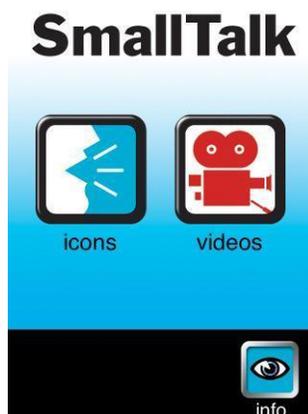
- **What is it?** This iPad app is designed for people with speech difficulties. Users can indicate where and how much they hurt with scrollable lists and a chart of the human body. Phrase Board also lets users type custom messages, or even draw messages. The app is text-only.

- How much is it? Free
- Platforms: iPad. Requires iOS 3.2 or later.
- Reviews: Reviews have been favorable, especially since the app is free. One user said Phrase Board “has all of the basic functions needed for a patient’s communication needs when speaking is not an option.” The main downside is the lack of a speech functions, but as one user noted, “what makes it worth looking at is the free hand 'draw' feature that lets you draw with your finger if you don’t know a word.”



4. *SmallTalk Aphasia* (<http://itunes.apple.com/us/app/smalltalk-aphasia/id310102858?mt=8#>)

- What is it? This app contains phrases and images to help people who have difficulty speaking. Users select the word or phrase, then let the app “speak.” The categories include doctor’s appointments and emergencies. Users can personalize the vocabulary as well. There is also a mouth-positioning feature that helps the user practice speaking at his or her own pace.
- How much is it? Free
- Platforms: iPhone, iPod Touch, iPad. Requires iOS 3.0 or later.
- Reviews: Users call this app “a real find for folks with communication challenges.” Although the vocabulary is “limited,” and there is no gender option, reviewers agree that the app is easy to use and facilitates communication for those with special needs.



5. **SmallTalk Dysphagia** (<http://itunes.apple.com/us/app/smalltalk-dysphagia/id337184701?mt=8>)

- **What is it?** A communication app specifically intended for people with dysphagia; it contains a bank of 50 phrases and words based on eating equipment, meal assistance, diet, medication and other treatments. There are 4 video demonstrations of treatment techniques for swallowing.
- **How much is it?** Free
- **Platforms:** iPhone, iPod Touch, iPad.Requires iOS 3.0 or later.
- **Reviews:** A user with dysphagia says that it “fills an important void.” Equally appealing is the ability to customize the app to one’s needs.



6. **SmallTalk Pain Scale** (<http://itunes.apple.com/us/app/smalltalk-pain-scale/id403058256?mt=8>)

- **What is it?** This app contains a series of images and pain descriptions that let the user communicate the type and level of pain. It is designed for people with aphasia, apraxia and dysarthria.
- **How much is it?** Free
- **Platforms:** iPhone, iPod Touch, iPad. Requires iOS 3.0 or later.
- **Reviews:** Some reviews mentioned that this app does not allow for sentence construction, or any editing. However, it does allow for a great deal of specificity by offering vocabulary for “body parts, positional words, and pain-related adjectives (dull, sharp, aching, radiating, etc.).”



Others?

- **SpeakPad**
Free text-to-speech app can speak a typed message in 22 languages and 42 voices, will read aloud web pages, emails, other documents, let users save, edit, share & tweet their texts
<http://itunes.apple.com/us/app/speakpad/id367250475?mt=8#>
no longer available
alternative?
- **iSpeech- Text to Voice**

Free text-to-voice app. Simply enter any text and iSpeech will instantly read the words.

<https://itunes.apple.com/us/app/ispeech-text-to-speech/id322329515?mt=8>)

- **iTranslate**
translation tool that helps break down language barriers. State of the art technology allows you can speak any language in a second.
<http://itunes.apple.com/us/app/itranslate-universal-translator/id288113403?mt=8>)

add?

- **Medical Spanish App**
Free app for English speaking health providers for asking medical questions to Spanish speakers in a yes/no format with audio.
<https://itunes.apple.com/us/app/audio-medical-spanish/id358738229?mt=8>)

Are the below apps relevant to this theme? Should we make a separate list of emergency preparedness and response apps?

- **ping4Alerts!**
Free alert app to keep you informed and up to date on all your important local emergency alerts, critical news and events.
<https://itunes.apple.com/us/app/ping4alerts!-public-safety/id501990409?mt=8>)

add?

- **HelpBridge**
Free app that connects people to their loved ones and opportunities to help in a time of disaster. With just a few clicks, you can quickly send emails and texts to co-workers, family, or friends, and post an emergency message to your Facebook wall.

add? <https://itunes.apple.com/us/app/helpbridge/id576543879?mt=8>)