

## Classification of Functional Capabilities

This classification of groups is one way of providing an overview of augmentative communication needs in the ALS population based on these critical factors; however, one should always consider the progressive nature of ALS, that capabilities change over time, and that people will move from group to group as their speech, hand function, or mobility changes.

### Adequate Speech and Adequate Hand Function

<b>Group 1</b>	<b>AAC Options:</b> <input type="checkbox"/> <b>Message Banking</b> (using Audacity software)   <input type="checkbox"/> <b>Voice Banking</b> (using ModelTalker)   <input type="checkbox"/> <b>Creating a Life Legacy</b>
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### Adequate Speech and Poor Hand Function

<b>Group 2</b>	<b>AAC Options:</b> <input type="checkbox"/> <b>Alternative Writing</b> (using Orthotic Aids)   <input type="checkbox"/> <b>Alternative Typing &amp; Mousing</b> (using Accessible Keyboard, Keyguard, On-Screen Keyboard, or Accessible Mouse—Track Ball, Joystick, Finger Mouse, Head Mouse, Oral Joystick, Chin Joystick, Radar)   <input type="checkbox"/> <b>Speech-Recognition Software</b> (Dragon Naturally Speaking, Siri, OK Google, Windows speech engine)
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### Poor Speech, Adequate Hand Function, and Adequate Mobility

<b>Group 3</b>	<b>AAC Options:</b> <input type="checkbox"/> <b>Writing</b> (Memoing)   <input type="checkbox"/> <b>Gestures &amp; Pantomime</b>   <input type="checkbox"/> <b>Alphabet Board Spelling</b>   <input type="checkbox"/> <b>Communication Boards</b> (Vidatak EZ Board, Vidatak Picture Board, Healthcare Communication Board)   <input type="checkbox"/> <b>Low-Tech SGD</b> (with Simple Features, can Record Digitized Voice Messages for Needs/Wants, using Direct Selection)   <input type="checkbox"/> <b>High-Tech SGD</b> (with Complex Language System & OS, using Direct Selection)   <input type="checkbox"/> <b>Touch Screen Mobile Device</b> (with Complex AAC Apps & OS, Keyboard & Stylus are optional)   <input type="checkbox"/> <b>Typing</b> (Texting, E-mail, Memoing)   <input type="checkbox"/> <b>Call System</b>
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### Poor Speech, Adequate Hand Function, and Poor Mobility

<b>Group 4</b>	<b>AAC Options:</b> Similar to Group 3 except that <b>AAC options can be mounted and transported on a rollator or wheelchair.</b> (Access to AAC may need to be integrated with power wheelchair.)   <input type="checkbox"/> <b>Mounting System for AAC</b>
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### Poor Speech, Poor Hand Function, and Adequate Mobility

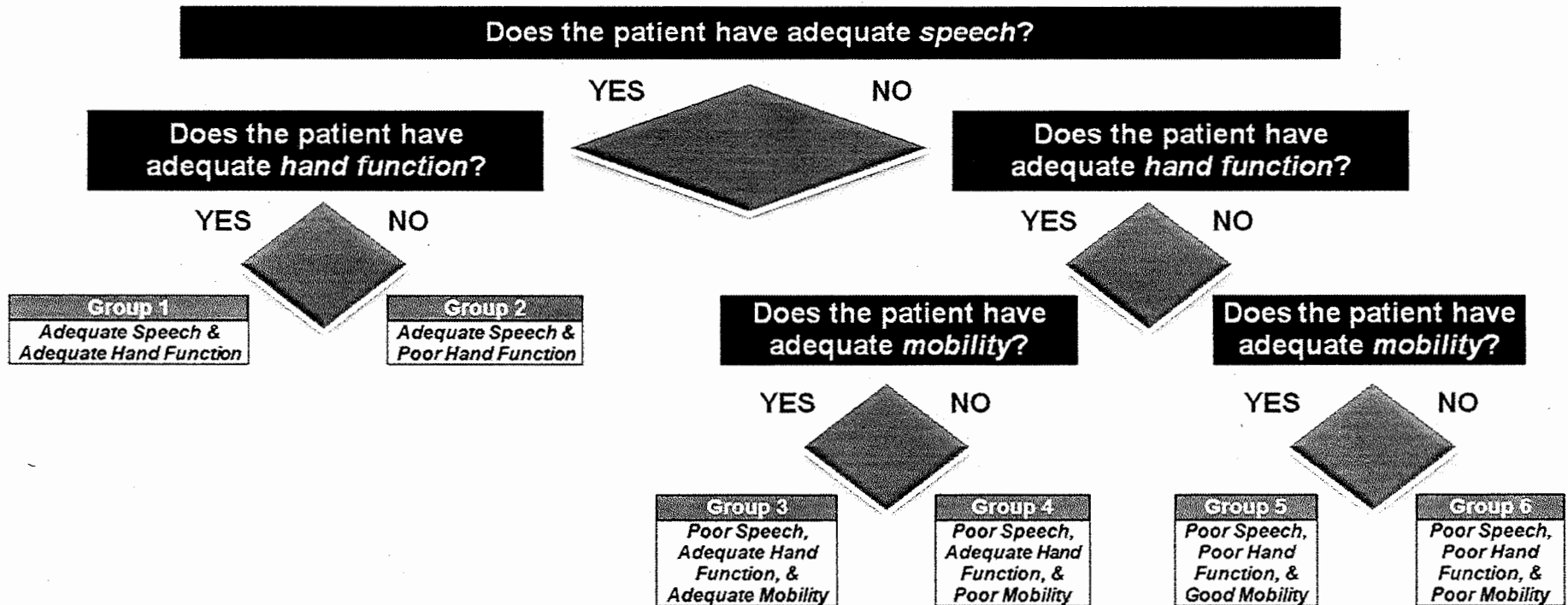
<b>Group 5</b>	<b>AAC Options:</b> <b>AAC options need to be portable and lightweight and may need to be mounted to allow for alternative access methods</b>   <input type="checkbox"/> <b>Alphabet &amp; Whole-Message Communication Boards</b> (using Orthotic Aids, Direct Selection with Body Part, Hand-Held Laser Pointer, Head Pointing with Laser Pointer, Partner-Dependent Scanning)   <input type="checkbox"/> <b>Writing</b> (using Orthotic Aids)   <input type="checkbox"/> <b>Typing</b> (using Accessible Keyboard, Keyguard, On-Screen Keyboard, or Accessible Mouse—Track Ball, Joystick, Finger Mouse, Head Mouse, Oral Joystick, Chin Joystick, Radar)   <input type="checkbox"/> <b>E-Tran Board</b> (“Eye Transfer” Board)   <input type="checkbox"/> <b>Encoding Board</b> (using Eye Transfer or Partner-Dependent Scanning)   <input type="checkbox"/> <b>High-Tech SGD</b> (with Complex Language System & OS, using Alternative Access Method: Keyguard, Head Pointing, Eye Tracking, Accessible Mouse—see above, Scanning)   <input type="checkbox"/> <b>Mobile Device</b> (with Complex AAC Apps & OS, using Alternative Access Method—see above)   <input type="checkbox"/> <b>Portable Mounting System for AAC</b>   <input type="checkbox"/> <b>Call System</b>
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### Poor Speech, Poor Hand Function, and Poor Mobility

<b>Group 6</b>	<b>AAC Options:</b> Similar to Group 5 except that <b>AAC options do not need to be lightweight because the system can be mounted on a wheelchair.</b> (Access to AAC may need to be integrated with power wheelchair.)   <input type="checkbox"/> <b>Wheelchair mounting System for AAC</b>   <input type="checkbox"/> <b>Communication Signals Chart</b> (Natural Communication Signals: Attention-Getting Signals, Signals for Requests, Response Signals)   <input type="checkbox"/> <b>Yes/No Questions</b> (using Yes/No communication signals or Tagged Yes/No ?s)   <input type="checkbox"/> <b>Simplified Partner-Dependent Scanning</b>
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## Classification of Functional Capabilities

Selection of appropriate augmentative communication systems depends on a variety of factors. Among the most important of these factors in the ALS population is the user's level of mobility and hand function. For example, can the person access an augmentative communication system via a keyboard? Is handwriting an acceptable means of resolving communication problems in face-to-face situations? Is the person walking normally or with assistance of devices such as walkers or canes? Is the person wheelchair dependent? The functional capabilities of individuals with ALS vary along a number of dimensions. *Speech adequacy*, *hand function*, and *mobility* are critical when considering augmentative communication intervention. **Individuals with ALS can be divided into the following six groups based on their functional capabilities** (Yorkston et al., 1993).



Yorkston, K., Strand, E., Miller, R., Hillel, A., & Smith, K. (1993). Speech deterioration in amyotrophic lateral sclerosis: Implications for the timing of intervention. *Journal of Medical Speech-Language Pathology*, 1(1), 35-46.