Managing a challenging Eyegaze Edge evaluation

Prior to any evaluation, but especially when the client has a complex injury, gather as much info as possible from the family in advance:

* Their diagnosis
* How they communicate yes and no
* What their interests are/were
* Their preferences – sitting in a wheelchair, recliner or bed
* Do they /did they wear glasses and are the glasses available to try

**The psychology of an evaluation**

1. You and the client are equal partners in the evaluation process. It’s a collaboration.
2. An adult always wants to be treated as an adult. Always assume the client’s IQ is 120 until proven otherwise.
3. A person who has sustained a sudden change in their physical status, particularly a catastrophic injury such as a stroke or brain injury, will often become depressed and hopeless. If they have been in that locked-in state for a significant period of time it’s not uncommon for them to regress and exhibit “learned helplessness”, no longer making any attempt to communicate.
4. Connect with the client as soon as you meet him.
   1. Always speak directly to them: others in the room will hear you without you talking directly to them.
   2. They have the choice to cooperate or shut their eyes. Give them information about what you’ll be doing so they see a purpose in trying his best.
   3. Acknowledge there may be problems with their eyes, but you may have solutions that will work. Tell them you’ll stick with them until you’ve exhausted every possible solution.
5. What’s the client’s “currency”? It may be something as simple as being able to control the television, or play music. If you’re able to find out from their family what their interests are be sure to mention how the Eyegaze Edge might help the client engage in things they’re interested in. Offer to show them those features later.
6. Limit the audience and require silence. If two people are speaking to you at the same time you’ll hear neither of them. Try it!
7. Get the client into the system as quickly as possible. Nothing is more motivating than some instant success.

**The mechanics of an evaluation**

1. Knowing the client’s diagnosis is critical. Spend a little time before you see the client reviewing what can happen to them based on the diagnosis. You’ll be better prepared when you know what to expect.
2. With any type of injury to the brain make these assumptions unless you know otherwise:
   1. Poor vision is possible: either blurry or double
   2. A dysconjugate gaze is possible, even though you might not see it looking at the eyes.
   3. Nystagmus is possible.
   4. Visual field-cuts (homonymous hemianopia) are possible: the client may be unable to see a part of the screen.
3. Do everything you can to maximize success.

**Calibrating a client with a brain injury**

1. Start with the C6 camera! It’s designed to work with one eye, and there’s a pretty good chance it will work better for someone with a complex injury affecting the eyes than the Encore camera. It’s also a bit easier to manage – you can try either eye by merely moving the screen a few inches left or right.
2. Point to the calibration dot with your finger. That may help the client focus on the calibration point.
3. If 9-point calibration isn’t working well after a very brief try, switch to the 5-point. Avoid animated calibrations with adults – it can be insulting to the user and perceived as treating them like a child.
4. Know the difference in those 2 calibrations including accuracy requirements, and how long the client must fix his gaze on a point. This information is in the user’s manual.
5. On the first try at calibrating skip points (fn-F2) as needed. Remember you want to get the client into the system quickly. Keep your hand on the spacebar so you can review the calibration results.
6. Be prepared to accept a less-than perfect calibration. Even if you are only able to get 2 points accept the calibration and try it out. You want to show the client instant success in order to keep them motivated.

**You’ve accepted a calibration…now what?**

1. Manually put the client into a Phrases screen. (They may not be able to target the menu keys on the Main Menu screen.) Even if the calibration wasn’t very accurate, they should still be able to make *something* happen by looking at a Phrases screen. Don’t underestimate the power of giving someone who is locked-in a voice, no matter what it says!
2. Avoid starting with the Numbers, Food or Drinks screen. They may not be able to eat or drink, and probably doesn’t care about counting. Use a screen with meaningful messages to best demonstrate what kinds of messages they’ll be able to communicate with their eyes.
3. Explain, explain, explain! The client needs to know you’re trying to get some data, especially if the calibration is minimally accurate. Ask them to look all over the screen so you can see what parts they’re able to target.
4. The fixation requirement for a 5-point calibration is about 1/3 second. If the client has trouble holding their fixations while calibrating you may have to set the gaze duration faster when they run the system. Explain!
5. Stay away from Grid software until you have a good calibration, and be sure your Grid cursor is set to dot in center of key, and not too slow (.5 or .6 seconds). The consistency of the red dot, matching the Main Menu programs, will often make it easier for a new user. When you use the center dot cursor in the Grid you’ll find there’s no need to slow down the gaze duration. We all know a slower gaze duration is more fatiguing, not really easier.