Practical Alternatives for Remote
Neurotherapy:
How Do We Reach the
Home, School, and Office?

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Our Intent - 1

- To facilitate an order of magnitude (or more) increase in the global availability of neurofeedback
- Reduce client costs by an order of magnitude or more
- Create a natural extension of clinical practice
- Overcome geographical, time barriers
- Provide simplicity, confidence, effectiveness for remote training

Conventional Wisdom

- "There is no reason for anyone to have a computer in their home"
  - James Olson, CEO, digital equipment corporation (DEC) – 1978

- "Home neurofeedback training will never be practical"
  - Anonymous clinician - 2002

Our Intent - 2

- Open the doors to homes, schools, businesses.
- Empower clinicians, extend & expand their practices.
- Enlist the support of HMO's, insurance providers.
- Get to or below the cost of other alternatives.
- Work within the intent of the FDA, etc.
- Increase overall awareness, acceptance of neurofeedback.

Facts - 1

- Neurofeedback machines are prescription devices by federal law.
- Devices may be deployed only by or on the order of a clinical practitioner.
- The supervising clinician is responsible for activities & outcomes.
- "Roll your own" remote neurofeedback is not an answer.

An Opportunity to Rethink Things

- Old model – clinic based
- New model – clinic and remote based
- New way of approaching clinical practice
- New model for clinical, financial issues
- New opportunities for clinicians and clients
- A clinician can reach >40 clients/week and maintain quality, professionalism

Facts - 2

- There is no fundamental reason we cannot get neurofeedback into homes, schools, offices.
- Telemedicine is the future of medicine.
- Teleneurofeedback is the future of neurofeedback.

Issues - Clinicians

- "I would never send a neurofeedback system home."
- "I have no idea how I would control it."
- "How would I protect myself and my clients?"
- "I don't have the time for all the extra training, monitoring, reviewing, etc.
- "How would I get paid for all this?"

Issues - Clinicians

- "I sent a system home, and now I don't know what they are doing with it"
- I'm not sure they are doing what I recommended
- I think they are now (or also) working with clinician (or non-clinician!) Jones
- How do I know they are not sharing protocols with others? Am I responsible?

Issues - Clients

- "I checked with someone else, and they told me to …"
- I heard that this was a good protocol…
- I read … on the internet so I thought I'd try it out on my son
- Now I want to sell my equipment

Issues - Clients

- "I thought my clinician told me to…"
- "Now which one is the blue one?
- "I don't know what I'm looking at"
- "It was so complicated, I don't remember all the details"
- "I think I'll just try something different"
- "I don't think I need to go back to Dr. Smith"

Old Model

- Send a clinical instrument home
- Train users to become mini-clinicians
- Surrender control
- Sacrifice confidence, peace of mind
- Lose ability to track progress
- How to follow up, manage changes or completion of training?

Think of It As a Dispenser

- A low-cost vehicle for delivering sessions
- Rental/service vs. Purchase/training
- Simple, safe, efficacious
- Versatile, flexible – like a bottle of pills
- Client can do what they need, with confidence
- Need "use as needed" option for HW/SW

It's About Empowerment

- Empower clinicians to enable remote training
- Empower clients to have safe, effective training at their location & within their schedule
- Give everyone what they need when they need it
- Not forcing anyone – clinician has options, makes decisions

Clinical Practice

- Must be simple, easy to:
  - Preprogram sessions
  - Send sessions to remote location
  - Keep track of progress
  - Ensure compliance, reporting
  - Make changes as necessary
  - Increase client base by an order of magnitude

Basics

- Simple control & communication methods.
- Integrated with software & procedures.
- Do not depend on "live" internet.
- Can use pc-anywhere, GoToMyPC, etc. If desired – generic PC solution.
- Accommodate a range of methods.
  - Email, floppy disks, ftp, sst, etc.
  - Provide variety of simple tools, procedures.

Details - 1

- Think of a digital clinical folder
- Foundation for remote methods
- Contains settings, protocols, doses
- Contains results, summaries, reports
- Provide simple tools for packaging, transfer, use of folders both at clinic and at remote location
- Easy to send back & forth

Summary

- It's not that difficult.
- Software is the key.
- If we can send insulin home, we can send neurofeedback home.
- We can share a vision, accept common principles.
- It can be good for everyone involved.
- We can move together to the next level.

Details - 2

- Provide methods to maintain clinical control.
- Provide ways to authorize, control sessions.
- By minutes, by date, whatever.
- Ensure client complies with type and amount of feedback.
- Ensure client reports back to clinician.
- Ensure clinician can easily modify, update parameters.